STATE OF MICHIGAN
CENTRAL PROCUREMENT SERVICES
Department of Technology, Management, and Budget
320 S. WALNUT ST., LANSING, MICHIGAN 48933
P.O. BOX 30026 LANSING, MICHIGAN 48909

CONTRACT CHANGE NOTICE

Change Notice Number **49**

to

Contract Number **071B6200168**

CONTRACTOR	
	CLIENT NETWORK SERVICES, INC.
	1600 Tyson Blvd
	McLean, VA 22120
	Linda Mras
	(240) 243 2804
	linda.mras@cns-inc.com
	CV0059061

STATE			
	Program Manager	Crystal Kline	MDHHS
		517-284-1184	
		KlineC1@michigan.gov	
	Contract Administrator	Katelyn LaHaye	DTMB
		(517) 388-7422	
		lahayek@michigan.gov	

CONTRACT SUMMARY

MICHIGAN COMMUNITY HEALTH AUTOMATED MEDICAID PROCESSING SYSTEM (CHAMPS)

INITIAL EFFECTIVE DATE	INITIAL EXPIRATION DATE	INITIAL AVAILABLE OPTIONS	EXPIRATION DATE BEFORE
March 14, 2006	September 30, 2011	20 - 1 Year	September 30, 2026

PAYMENT TERMS	DELIVERY TIMEFRAME

ALTERNATE PAYMENT OPTIONS			EXTENDED PURCHASING	
☐ P-Card	☐ PRC	☐ Other	☐ Yes	☒ No

MINIMUM DELIVERY REQUIREMENTS

DESCRIPTION OF CHANGE NOTICE

OPTION	LENGTH OF OPTION	EXTENSION	LENGTH OF EXTENSION	REVISED EXP. DATE
☒		☐		September 30, 2026

CURRENT VALUE	VALUE OF CHANGE NOTICE	ESTIMATED AGGREGATE CONTRACT VALUE
$1,009,747,359.00	$0.00	$1,009,747,359.00

DESCRIPTION

Effective 9/13/2022, the following amendment is hereby incorporated into this contract, per the attached Statement of Work. Additional cost for this amendment is $2,350,512.00. Existing funds from CNSI Master Agreement 071B6200168 will be utilized.

Due to the Bridges and CHAMPS database mismatch issues caused by the current proprietary flat files which are directly responsible for several audit findings, provider/beneficiary billing complaints, beneficiary access to care problems and Medicaid overpayment issues, revisions have been made to:

• Convert the flat files to the more flexible xml format with change only processing to increase file creation and processing efficiency.

All other terms, conditions, specifications, and pricing remain the same. Per contractor and agency agreement, and DTMB Central Procurement Services approval.

CHAMPS CIMS Process Re-Design
Statement of Work

Prepared For:
State of Michigan
Behavioral and Physical Health and Aging Services Administration
400 South Pine Street
Lansing, Michigan 48909

Prepared By:

CNSI
6465 Millennium Drive, Suite 150
Lansing, MI 48917

September 1, 2022

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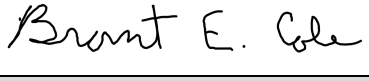
CHAMPS CIMS Process Re-Design Project
Statement of Work

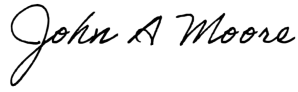
September 1, 2022

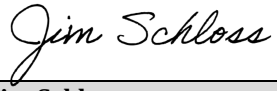
Approved By:

Jamy Hengesbach **BPHASA CHAMPS Subsystem Lead**	**Date** 09/06/2022

Karen Scott **BPHASA MMIS Director**	**Date** 9/6/2022

	
Brant Cole **BPHASA Director of Medicaid Systems Operations**	**Date** 09/07/2022

	
John Moore **DTMB Business Relationship Manager**	**Date** 09/06/2022

	
Jim Schloss **CNSI Michigan Program Director**	**Date** 9/07/2022

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Section 1: Introduction and Purpose

The purpose of this project is to re-design the daily CHAMPS Client Information Management System (CIMS) process, which is central to maintaining beneficiary eligibility and related data. The current design relies on multiple files in a legacy format which includes data fields that are no longer needed and is missing data fields that are needed. The existing design is not only a heavy processing burden on the Bridges and CHAMPS systems, but also can cause database mismatch issues between Bridges and CHAMPS, resulting audit findings, provider/beneficiary billing complaints, beneficiary access-to-care problems and Medicaid overpayment issues.

This re-design will significantly improve file generation and processing efficiency by merging multiple files into one daily update file, converting the format to XML, and changing the process from a full-file refresh to processing only those records that were added, changed, or deleted. The result will help BPHASA reduce audit findings, provider & beneficiary billing complaints, beneficiary access-to-care problems and Medicaid overpayment/recoupment issues.

Section 2: Scope, Schedule, and Deliverables

This section summarizes the scope of work and schedule for the CIMS Process Re-Design project.

2.1 Scope of Work

The high-level scope of work for this project includes the following changes for the daily files that are transmitted from Bridges to CHAMPS:

- Convert propriety legacy files to XML.
- Combine multiple daily files into one daily XML file.
- Remove unnecessary legacy coding and data fields no longer needed in CHAMPS.
- Add new data elements:
    - Physical address
    - Primary and secondary race codes
    - Migrant indicator
    - Head of household
    - Other data fields determined during requirements
- Convert the process from a daily full-file refresh to receiving and processing only records that were added, changed, or deleted since the previous update cycle. Currently, Bridges sends all beneficiary data in the file regardless of the actual data set that was updated within the individual beneficiary record. CHAMPS then needs to evaluate every record to determine what data set is new, modified or deleted and then process the records. With this change, Bridges will only send the beneficiary data that has been updated along with an update code to identify if the data is new, modified or deleted. This will reduce file sizes and allow CHAMPS to process the files more efficiently.
- Update all affected CHAMPS outbound interfaces and/or downstream processes.
- Update all affected EDI transactions.
- Update all affected CHAMPS, CRM, myHealthButton and myHealthPortal screens.

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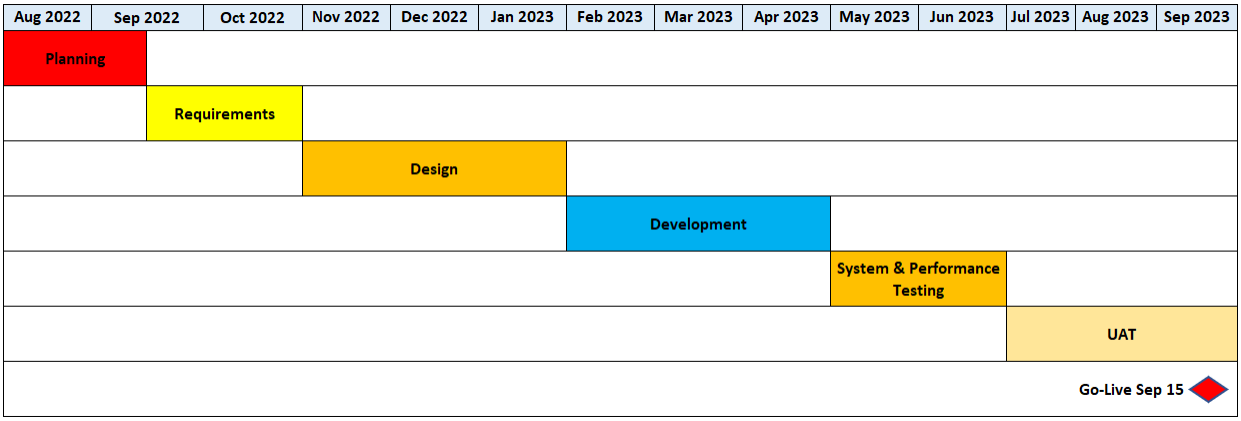
2.2 High Level Timeline

Table 1 provides the project milestones for the CIMS Process Re-Design project:

Table 1. CIMS Process Re-Design Timeline



2.4 Deliverables

The following payment deliverables are planned for the CHAMPS CIMS Process Re-Design project.

- Functional Requirement Specification Document (FRSD)
- Project Detailed Design Document (PDSDD)
- System Test Results Report
- Deployment to Production

Section 3: Assumptions, Constraints, Risks

3.1 General Assumptions

CNSI has identified and provided the following general assumptions regarding the project:

1. CNSI can begin work on this project upon receipt of an approved Statement of Work.
2. CHAMPS Initiative Development and Testing environments are available to support this project.
3. There are no changes to the currently used CHAMPS source = MA eligibility assignment factors.
4. This project does not include migrating to Type-of-Assistance (TOA) codes.
5. BPHASA, DTMB, Bridges and Hub teams will provide access to and time commitment from subject matter experts who understand their programs and systems.
6. Enterprise-level project coordination will be managed by DTMB.
7. BPHASA will plan and execute user acceptance testing pursuant to the approved schedule.

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8. Any changes to the project scope or schedule will be managed through the project's change management process for assessment to scope, schedule and cost.

3.2 Constraints

1. The project must begin in FY22.

3.3 Risks

1. There are high resource demands for both BPHASA, Deloitte and CNSI throughout the duration of this project due to the need to support this project, the Managed Care Modernization and Home Help Payment Migration projects along with normal CHAMPS quarterly enhancements and Bridges releases during the same time. Careful planning of activities and schedules across these efforts will help mitigate this risk.

Section 4: Project Cost

The cost for the CHAMPS CIMS Process Re-Design project is **$2,350,512**.

Table 2 provides the payment schedule for the CHAMPS CIMS Process Re-Design project.

Table 2. CIMS Process Re-Design Payment Schedule

Item	Amount	Invoice Date
Requirements Approved	$587,628	11/30/2022
Design Approved	$587,628	1/31/2023
System Testing Approved	$587,628	6/30/2023
Production Deployment	$587,628	9/29/2023

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STATE OF MICHIGAN
CENTRAL PROCUREMENT SERVICES
Department of Technology, Management, and Budget

320 S. WALNUT ST., LANSING, MICHIGAN 48933
P.O. BOX 30026 LANSING, MICHIGAN 48909

CONTRACT CHANGE NOTICE

Change Notice Number **48**

to

Contract Number **071B6200168**

CONTRACTOR	
	CLIENT NETWORK SERVICES, INC.
	1600 Tyson Blvd
	McLean, VA 22120
	Linda Mras
	(240) 243 2804
	linda.mras@cns-inc.com
	CV0059061

STATE			
	Program Manager	Crystal Kline	MDHHS
		517-284-1184	
		KlineC1@michigan.gov	
	Contract Administrator	Katelyn LaHaye	DTMB
		(517) 388-7422	
		lahayek@michigan.gov	

CONTRACT SUMMARY

MICHIGAN COMMUNITY HEALTH AUTOMATED MEDICAID PROCESSING SYSTEM (CHAMPS)

INITIAL EFFECTIVE DATE	INITIAL EXPIRATION DATE	INITIAL AVAILABLE OPTIONS	EXPIRATION DATE BEFORE
March 14, 2006	September 30, 2011	20 - 1 Year	September 30, 2026

PAYMENT TERMS	DELIVERY TIMEFRAME

ALTERNATE PAYMENT OPTIONS			EXTENDED PURCHASING	
☐ P-Card	☐ PRC	☐ Other	☐ Yes	☒ No

MINIMUM DELIVERY REQUIREMENTS

DESCRIPTION OF CHANGE NOTICE

OPTION	LENGTH OF OPTION	EXTENSION	LENGTH OF EXTENSION	REVISED EXP. DATE
☐		☐		September 30, 2026

CURRENT VALUE	VALUE OF CHANGE NOTICE	ESTIMATED AGGREGATE CONTRACT VALUE
$1,009,747,359.00	$0.00	$1,009,747,359.00

DESCRIPTION

Effective 8/15/2022, the following amendment is hereby incorporated into this contract, per the attached Statement of Work. Cost for this amendment is $1,478,795.00 but will be utilized by existing funds.

The CHAMPS Managed Care (MC) Modernization project is comprised of four critical updates needed to improve the efficiency, effectiveness, and the functionality of the Contract Managements (CM) subsystem within CHAMPS. One update also impacts Fee-for-Service (FFS), Facilities Settlement (FFS) and Electronic Health Record (HER) gross adjustments. Managed care rates and gross adjustments are the two main pieces of functionality being revised to make the system more effective and efficient. Also included is a re-write of the Managed Care Payment use cases to provide better alignment with the evolution of the CM subsystem functionality.

The primary enhancements covered in this project are:
• Automate Recoup/Repay for MC Rate Changes,
• End-date an MC Rate Cohort,
• Create a Recovery GA against Parent GA

• Re-write Managed Care Capitation and Payment Use Cases

Failure to perform this work will require CHAMPS to continue operating with legacy Managed Care systems, reducing efficiency, effectiveness, and the functionality.

All other terms, conditions, specifications, and pricing remain the same. Per contractor and agency agreement, and DTMB Central Procurement Services approval.

CHAMPS Managed Care Modernization Project
Statement of Work

Prepared For:
State of Michigan
Department of Health & Human Services
400 South Pine Street
Lansing, Michigan 48909

Prepared By:

CNSI
6465 Millennium Drive, Suite 150
Lansing, MI 48917

July 28, 2022

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CHAMPS Managed Care Modernization Project
Statement of Work

July 28, 2022

Approved By:

Samantha K. Rutledge-Wolf 7/28/22	
Samantha Rutledge-Wolf **Manager, Managed Care Data and System Support Section**	**Date**

Karen D. Scott	
Karen Scott **MDHHS MMIS Director**	**Date** 7/28/22

Brant E. Cole	
Brant Cole **MDHHS Director of Medicaid Systems Operations**	**Date** 07/29/2022

John A Moore	
John Moore **DTMB Business Relationship Manager**	**Date** 07/29/2022

Jim Schloss 8/2/2022	
Jim Schloss **CNSI Michigan Program Director**	**Date**

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Section 1: Introduction and Purpose

The CHAMPS Managed Care (MC) Modernization project is comprised of four critical updates needed to improve the efficiency, effectiveness, and the functionality of the Contract Managements (CM) subsystem within CHAMPS. One update also impacts Fee-for-Service (FFS), Facilities Settlement (FFS) and Electronic Health Record (EHR) gross adjustments. Managed care rates and gross adjustments are the two main pieces of functionality being revised to make the system more effective and efficient. Also included is a re-write of the Managed Care Payment use cases to provide better alignment with the evolution of the CM subsystem functionality.

The primary enhancements covered in this project are summarized below:

Automate Recoup/Repay for MC Rate Changes – Currently this job requires manual planning, coordinating and intervention for both State and CNSI staff. A newly created job will identify impacted rates and impacted payments and provide the system with the functionality to automatically recoup and repay all of the previously made payments impacted by the rate change. This applies to all MCO programs and impacts capitation payments for all MCO programs.

End-date an MC Rate Cohort – This enhancement provides the functionality to end-date an MC Rate Cohort. Empty rate cells for certain cohorts are created because the State does not have the ability to end-date the rate cohorts (only rate factors). This prevents payments from being made timely to all the Medicaid Health Plans and currently requires a time and labor-intensive work around.

Create a Recovery GA against Parent GA – This new functionality allows the State to make corrections to Gross Adjustments and provides a link between the two Gross Adjustments similar to the line between the Original Transaction Control Number (TCN) and the Child TCN for claims and capitation payments. Updates to related functionality for FFS, FS, and EHR gross adjustments are included in this project.

Re-write Managed Care Capitation and Payment Use Cases – Re-write and restructure all capitation and managed care payment use cases.

Section 2: Scope, Schedule, and Deliverables

This section summarizes the scope of work and schedule for the Managed Care Modernization Project.

2.1 Scope of Work

The following list provides the details related to the five JIRA tickets included in the scope of work.

1. MIPRO-841: Automate Recoup/Repay for MC Rate Changes.
    a. Create a job to automatically recoup and repay impacted capitation payments when rate sheets are loaded retroactively.
        i. The system reviews the changed rates, then identifies the impacted payments to recoup and repay all the previously made payments impacted by the rate change.
    b. This update is applied to all MCO programs.

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2. MIPRO-1056: End-date a Rate Cohort.
    a. Updates implemented in CM, ODS, DW, and Cognos.
3. MIPRO-984 & MIPRO-970: Develop the functionality to create a recovery GA against a parent GA.
    a. Provides a link between the two Gross Adjustments similar to the link between the Original TCN and Child TCN for claims and capitation payments
    b. MIPRO-984 defines the enhancement for the Contracts Management subsystem to enable the State to make corrections to GA's and have an audit trail to track the changes.
    c. All MCO programs are included in this change.
    d. MIPRO-970 mirrors MIPRO-984 and defines the work for the Claims subsystem for FFS, FS, and EHR gross adjustments.
4. MIPRO-1096: Re-write and re-structure MC capitation and MC payment related use cases.
    a. The following Managed Care Payment use cases related to payments, capitation and recoupment that are currently in CHAMPS-DSDD-CE-LG2 will be rewritten and/or restructured by merging them into fewer, more cohesive use cases:
        - Approve or Reject Manual MCO Maternity Case Rate Transactions
        - Create Automated MCO Maternity Case Rate Transactions
        - Create Automated Batch for Members Eligible for Multiple MCO Programs
        - Create Manual Capitation Payment, MCR or Recoupment
        - Create Manual MCO Mass Payment
        - Create Manual MCO Mass Recoupment
        - Generate Manually Reviewed and Expedited Transactions
        - Generate Capitation, Maternity Case Rate (MCR), and Case Management Payment Transactions
        - Generate Death Recoupments
        - Generate Eligibility Factor Change Based Retro Adjustments for HSW
        - Generate Gross Adjustment Payment Transactions
        - Generate Dis-Enrollment-Based Retro Recoupments
        - Generate ICO Dis-Enrollment-Based Retro Recoupments
        - Generate Maternity Case Rate (MCR) Payment Transactions
        - Generate Rate-Based Retro Adjustments
        - Generate Recurring Payment Transactions
        - Encounter Based Recoupment
        - HSW (HAB) Medicaid Eligibility/Recoupment Look-Back - RETIRED
        - MCR Encounter Recoupment
        - MC Prepare for Account Coding
        - MC To OFIN Outbound
        - Manage MC Payment Transaction Generation
        - Managed Care Payments – Assign MC Rate Changes
        - Manual Review – Refer Transactions for Resolution
        - Manual Review – Resolve Pended Payment Transactions

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- OFIN/MAIN Reconciliation
- View Payments
- View Payment Detail
- Recycle Pended Payments
- Generate Capitation from User Submitted Member List
- Upload Member List to Generate Capitation with Specified Program Eligibility Group
- Create Automated Batch for Members Eligible for Multiple Behavioral Health Programs
- Generate Eligibility Factor Change Based Retro Adjustments for HSW-MC
- HSW-MC Recoupment or Payment Based on Medicaid Eligibility

2.2 High Level Timeline

Table 1 provides the project milestones for the Managed Care Modernization enhancements:

Table 1. Managed Care Modernization Timeline

Milestone	Start	Finish
Planning	6/6/2022	8/19/2022
Requirements	8/15/2022	9/2/2022
Design	9/6/2022	10/14/2022
Development	10/17/2022	12/16/2022
System Testing	12/19/2022	2/3/2023
UAT	2/6/2023	3/23/2023
Production Deployment	3/24/2023	

2.4 Deliverables

The following payment deliverables are planned for the CHAMPS Managed Care Modernization Project.

- Functional Requirement Specification Document
- Project Detailed Design Document (PDSDD)
- System Test Results Report
- Deployment to Production

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Section 6: Assumptions, Constraints, Risks

6.1 General Assumptions

CNSI has identified and provided the following general assumptions regarding the project:

1. CNSI can begin work on this project upon receipt of an approved Statement of Work.
2. The CHAMPS Initiative Development and Testing environments are available to support this project.
3. There is no impact to other systems external to the CHAMPS enterprise.
4. MDHHS and DTMB will provide access to and time commitment from subject matter experts who understand their programs and systems.
5. MDHHS will plan and execute user acceptance testing pursuant to the approved schedule.
6. Any changes to the project scope or schedule will be managed through the project's change management process for assessment to scope, schedule and cost.

6.2 Constraints

1. The project must begin in FY22 in order to utilize the FY22 IT General surplus funds.

6.3 Risks

2. MDHHS's key Contracts Management subject matter expert is retiring soon after this project starts. Her replacement has already been identified and engaged in this project early to mitigate this risk.
3. There are high resource demands for both MDHHS and CNSI throughout the duration of this project due to the need to support this project, the CIMS File Redesign project and normal CHAMPS quarterly enhancements during the same time period. Careful planning of activities and schedules across the three efforts will help mitigate this risk.

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Section 7: Project Cost

The cost for the CHAMPS Managed Care Modernization project is **$1,478,795**.

Table 4 provides the payment schedule for the CHAMPS Managed Care Modernization project.

Table 2. Managed Care Modernization Payment Schedule

Item	Amount	Invoice Date
Requirements	$369,699	9/30/2022
Design	$369,699	10/28/2022
System Testing	$369,699	2/28/2023
Production Deployment	$369,699	3/31/2023

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STATE OF MICHIGAN
CENTRAL PROCUREMENT SERVICES
Department of Technology, Management, and Budget
525 W. ALLEGAN ST., LANSING, MICHIGAN 48913
P.O. BOX 30026 LANSING, MICHIGAN 48909

CONTRACT CHANGE NOTICE

Change Notice Number **47**

to

Contract Number **071B6200168**

CONTRACTOR	
	CLIENT NETWORK SERVICES, INC.
	1600 Tyson Blvd
	McLean, VA 22120
	Linda Mras
	(240) 243 2804
	linda.mras@cns-inc.com
	CV0059061

STATE			
	Program Manager	Crystal Kline	MDHHS
		517-284-1184	
		KlineC1@michigan.gov	
	Contract Administrator	Jennifer May	DTMB
		(517) 242-6664	
		mayj7@michigan.gov	

CONTRACT SUMMARY

MEDICAID PROCESSING SYSTEM (CHAMPS)

INITIAL EFFECTIVE DATE	INITIAL EXPIRATION DATE	INITIAL AVAILABLE OPTIONS	EXPIRATION DATE BEFORE
March 14, 2006	September 30, 2011	20 - 1 Year	September 30, 2026

PAYMENT TERMS	DELIVERY TIMEFRAME

ALTERNATE PAYMENT OPTIONS			EXTENDED PURCHASING	
☐ P-Card	☐ PRC	☐ Other	☐ Yes	☒ No

MINIMUM DELIVERY REQUIREMENTS

DESCRIPTION OF CHANGE NOTICE

OPTION	LENGTH OF OPTION	EXTENSION	LENGTH OF EXTENSION	REVISED EXP. DATE
☐		☐		September 30, 2026

CURRENT VALUE	VALUE OF CHANGE NOTICE	ESTIMATED AGGREGATE CONTRACT VALUE
$1,009,747,359.00	$0.00	$1,009,747,359.00

DESCRIPTION

Effective 6/1/2022, the following amendment is hereby incorporated into this contract, per the attached Statement of Work. Cost for this amendment is $0.00.

- CHAMPS evoBrix X Upgrade Project

All other terms, conditions, specifications, and pricing remain the same. Per contractor and agency agreement, and DTMB Central Procurement Services approval.

CHAMPS evoBrix X Upgrade Project
Statement of Work

Prepared For:
State of Michigan
Department of Health & Human Services
400 South Pine Street
Lansing, Michigan 48909

Prepared By:

CNSI
6465 Millennium Drive, Suite 150
Lansing, MI 48917

May 12, 2022

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CHAMPS evoBrix X Upgrade Project
Statement of Work

May 12, 2022

Approved By:

Karen D. Scott	
Karen Scott **MDHHS MMIS Director**	**Date** 5/13/22

Brant E. Cole	
Brant Cole **MDHHS Director of Medicaid Systems Operations**	**Date** 05/17/2022

John A Moore	
John Moore **DTMB Business Relationship Manager**	**Date** 05/17/2022

Jim Schloss	
Jim Schloss **CNSI Michigan Program Director**	**Date** 5/18/2022

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Figure 1. Key Benefits for MDHHS moving to a Single Product Platform 1
Figure 2. Key Benefits of evoBrix X Upgrades for MDHHS 2

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Section 1: Introduction

As part of the latest CHAMPS Operations SOW, the CHAMPS application will be upgraded to the latest CNSI evoBrix X platform.

Technical evoBrix X platform upgrades (September 2022 Release) and enhancements to the HealthBeat™ application (October 2022 Release) are included in this upgrade and are presented and explained in detail in this SOW.

evoBrix X Capabilities

CNSI's evoBrix X solution leverages a comprehensive set of components that are certified, federally compliant, and meet all federal and state security requirements. As an early adopter of CMS' modularity vision, CNSI's evoBrix X is cloud and SOA-enabled and is the most advanced modular claims processing platform on the market. Using this platform, CNSI provides claims processing support for fee-for-service (FFS), Medicare, Medicaid, and managed care.

CNSI has a long-term strategy to provide continuous modernization of the evoBrix product and provide the opportunity for the State of Michigan to leverage and take advantage of features that are developed in other states and are made available as part of the evoBrix X product.

It is important to note that CHAMPS Operations handles ongoing support for existing configuration and versions. Upgrades from software vendors represent additional work and are handled outside of CHAMPS Operations.

evoBrix X Options, Business Drivers, and Key Benefits for MDHHS

CNSI has a long-term strategy to provide a single product platform that meets the needs of the State of Michigan. Implementing modular product upgrades (Technical and Functional upgrades) provides continuous modernization, feature growth and provides enhanced functionality to business users.

Figure 1 shows the key benefits for MDHHS to moving to a single product platform.

Figure 1. Key Benefits for MDHHS moving to a Single Product Platform

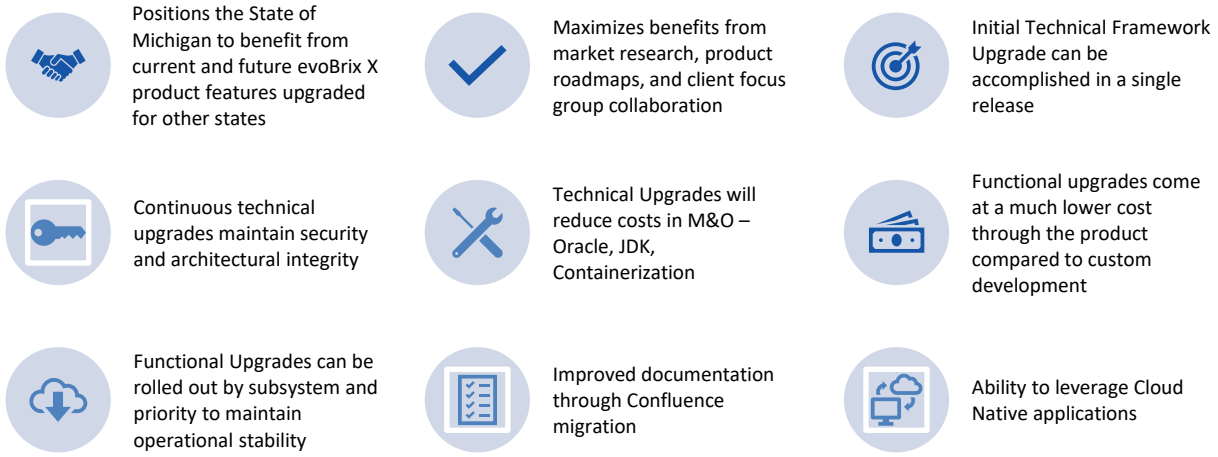

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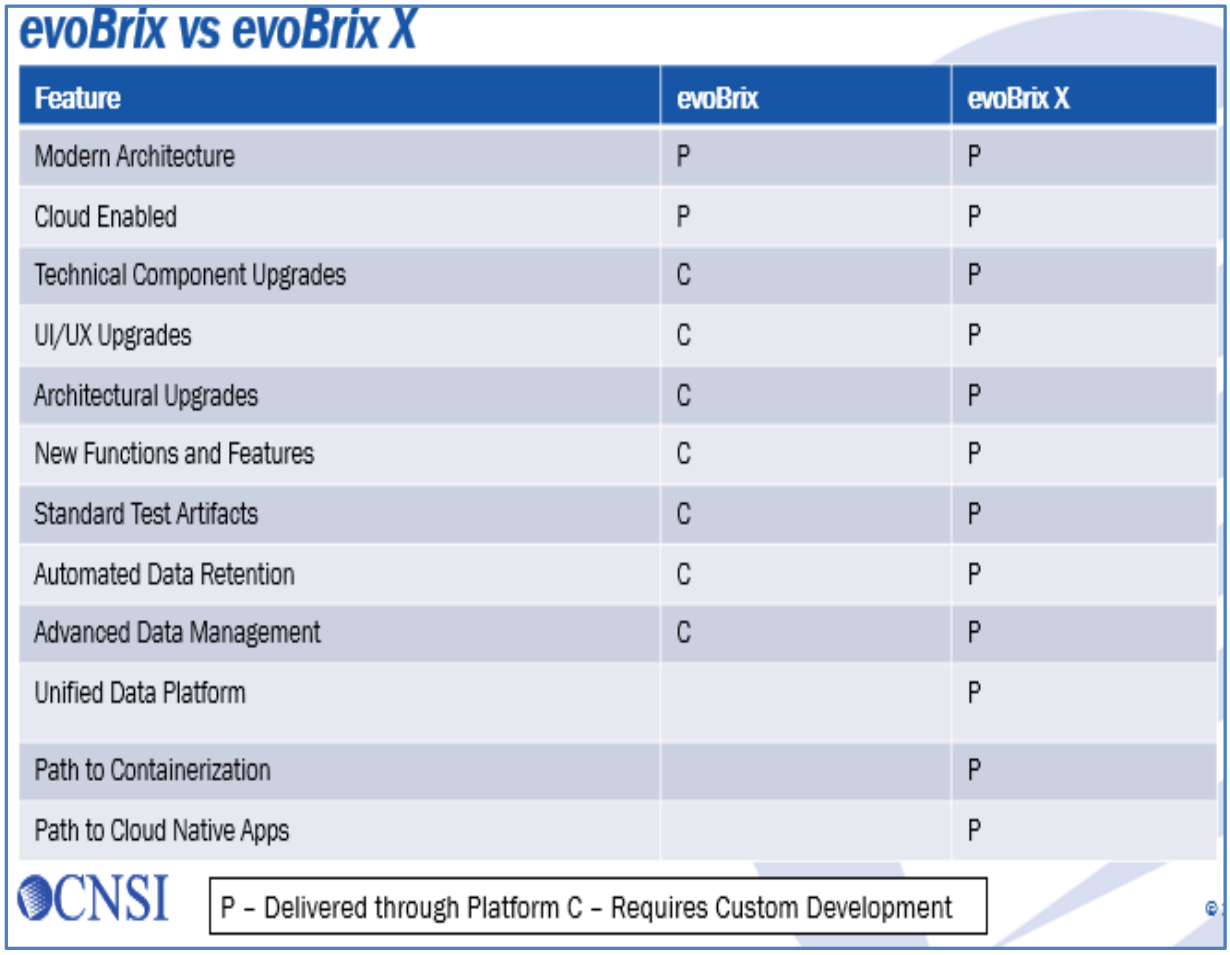
Figure 2 shows additional clarification of key benefits for MDHHS related to evoBrix X upgrades.

Figure 2. Key Benefits of evoBrix X Upgrades for MDHHS



Section 2: Scope, Schedule, and Deliverables

An evoBrix X product upgrade (Technical and Functional) is needed to modernize CHAMPS to meet market requirements and provide richer functionality to business users. Technical and Functional Upgrades are defined here:

- A Technical Upgrade focuses on minimum mandatory changes to lay the foundation for enhancing business value through functional upgrades.
- A Functional Upgrade builds on technical upgrades with added scope to take advantage of new business functionality.

Performing these Technical and Functional upgrades provides CNSI the ability to add new business capabilities, features and innovations to the CHAMPS application, which in turn and as part of the overall roadmap are offered periodically to MDHHS for further evaluation and implementation.

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Future Functional Upgrades will be implemented as part of the regular planning, prioritization, and scheduling of the CHAMPS quarterly releases in collaboration with MDHHS, DTMB & CNSI.

2.1 Scope of Work

The following section summarizes the scope of work and schedule for Phase 1 and the September 2022 and October 2022 releases, which are technical upgrades to the evoBrix X framework and enhancements to the look and feel of the HealthBeat application.

The evoBrix X Technical upgrades are upgrades to the evoBrix platform as a whole. These upgrades provide continuous modernization and feature growth to meet market requirements and provide richer functionality to business users. Technical upgrades to the framework impact almost every CHAMPS sub-system and the Facility Settlement application. The FHIR module and related functionality are not impacted.

Successful implementation of these technical upgrades puts CHAMPS on the most updated version of CNSI's platform, evoBrix X.

2.2 evoBrix X Technical and Functional Upgrades Defined

Phase 1 of the evoBrix X Technical and Functional upgrades will directly impact all CHAMPS sub-systems including Facility Settlement, ClaimsSure, PCS and HealthBeat.

Table 1 provides a list of the 16 Technical and Functional upgrades included in the September 2022 and October 2022 releases, a brief description of each.

Table 1. Phase 1 Upgrades to the evoBrix X Framework and HealthBeat

#	Technical Upgrade	Description	Test
1	Build re-organization/Modernization – Part I and II	Framework components are versioned, built and pushed into Artifactory. Provider Credentialing Services (PCS) is re-built using Apache Maven.	MDHHS and CNSI
2	Remove "Forgot Login Info" Hyperlink and update copyright.	Remove the "Forgot Login Info" Hyperlink in the Login Page and replace the 2017 copyright year with 2019.	MDHHS and CNSI
3	Maven Projects separation/re-organization	Inbox and Admin are separated from the Common Components module.	MDHHS and CNSI
4	Externalize environment-specific properties required for framework components.	Consolidation of CHAMPS environment specific properties into a single file. This allows for easier maintenance and release activities.	CNSI

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#	Technical Upgrade	Description	Test
5	Streamline support for tenant-specific logos.	evoBrix X product logos are moved from framework to the Common Components module to enable tenant-specific logos without requiring changes to framework source code.	CNSI
6	Enable configurable System Notifications or Latest Update Notifications.	System Notifications or Latest update Notifications are configurable. The notifications are displayed or suppressed based on a configurable flag.	MDHHS and CNSI
7	Remove duplicate Message Management Framework (MMF) messages.	As part of the evoBrix X roadmap, CHAMPS MMF messages have been revisited and corrected for easier code management and release activities. This change is seamless to the Users.	CNSI
8	Consolidation of CHAMPS environment properties	As part of the evoBrix X upgrade, CHAMPS application configurable properties are consolidated into one single file for better code and release maintenance and capabilities.	CNSI
9	Configurable ClaimsSure integration build-level changes	As part of the evoBrix X framework upgrade, this feature allows decoupling ClaimsSure from Adjudication based on a configurable property.	CNSI
10	Logging Enhancement	Streamline the evoBrix X logging approach. Log4J API replaced with SLF4J API which addresses the recently reported Zero-day security vulnerability.	CNSI
11	ADA Compliance Enhancements and SonarQube Enhancements	There are two different enhancements being delivered as part of a common rollout out from the evoBrix X upgrade. ADA Compliance Enhancements: Pronounce the field name upon mouse-hover or key board tabbing on the screen fields. These updates are part of the evoBrix X technical upgrade, limited screens are included in the modification. These will be listed in the Change Log. SonarQube Enhancements: SonarQube is a Code Quality Assurance tool that employs correct JavaScript variable declaration after usage so that variables are declared before they are used. This is included as part of the evoBrix X	CNSI

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#	Technical Upgrade	Description	Test
		product upgrade. Files/impacted pages will be listed in the Change Log.	
12	Spring Framework Meta Data Query Optimization	A performance enhancement for the Spring Framework Meta Data Query. This is included as part of the evoBrix X platform upgrade and impacts all CHAMPS Screens data retrieval.	CNSI
13	Online Help Integration	Modularize Online Help bundle to align with CHAMPS evoBrix X framework to enable smooth release and maintenance activities.	CNSI
14	Browser Titles for evoBrix X UI Pages	Introducing Browser Title for all UI Pages. This feature enables every UI in evoBrix X to have a browser title corresponding to its functionality and page ID. This update is included in the evoBrix X framework upgrade.	MDHHS and CNSI
15	Enhancements – Part I	• saveToXLS Enhancement • Latest Update Notification. This is part of an enhancement feature that is rolled out in the evoBrix X platform.	MDHHS and CNSI
16	HealthBeat Upgrade	The HealthBeat Application will be upgraded to the latest version with JDK 1.8 support. HealthBeat features such as Configuration of Menu's, Sub-Menus, and Core framework standardization are included, Metrics standardization, Security compliance along with JDK 1.8 are also part of the upgrade.	MDHHS and CNSI

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2.3 High Level Timeline

Table 2 provides the project milestones for the evoBrix X framework upgrades.

Table 2. evoBrix X Framework Upgrade Timeline

Milestone	Start	Finish
Framework Upgrade Activities	6/1/2022	7/22/2022
System Testing	7/25/2022	8/18/2022
UAT	8/19/2022	9/15/2022
Production Deployment	9/16/2022	

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Table 3 provides the project milestones for the HealthBeat application enhancements.

Table 3. HealthBeat Application Enhancements Timeline

	Start	Finish
HealthBeat Enhancement Activities	7/18/2022	9/9/2022
System Testing	9/12/2022	9/23/2022
UAT	9/26/2022	10/13/2022
Production Deployment	10/14/2022	

Please note: The environment planned for HealthBeat testing is the regular HCI UAT environment.

2.4 Deliverables

The following deliverables are planned for the CHAMPS evoBrix X Upgrade project.

- Regression Test report for CHAMPS screens
- Performance Test report for CHAMPS & Facilities Settlement (FS) screens, including a comparison to the HCI Performance Test report
- A Michigan-specific HealthBeat User Guide
- HealthBeat Test report

2.4.1 HealthBeat Test Report Format

Included in the HealthBeat Test Report is the following:

- Dashboard – View and Validate all charts displayed correctly
- Business tab – View and Validate all charts displayed correctly
    - Business Relationship Management
    - Care Management
    - Eligibility and Enrollment
    - Financial Management
    - Member Management
    - Operations Management
    - Plan Management
    - Provider Management
- Admin tab – View all admin tab pages
    - Manage Users
    - Manage Charts
    - Chart Role Association
    - Other Tables
- Calendar tab – Create and view events in the Calendar

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- Covid-19 tab – View and Validate all charts displayed correctly
    - Public Health Data Metrics
    - Program Data Metrics (COVID Utilization, Medicaid Beneficiary information, Expenditure & Care Summary, Factors impacting Treatment)
    - Covid-19 Interface jobs
- Telehealth Utilization tab – View and Validate all charts displayed correctly
- Preference tab – View and update the information
    - Update Profile
    - Widget Subscription
- Healthy Michigan Plan tab – View and Validate all charts displayed correctly
- Flint tab – View and Validate all charts displayed correctly

Section 3: General Assumptions

CNSI has identified and provided the following general assumptions regarding the project:

1. CNSI can start work on this project upon receipt of an approved Statement of Work.
2. MDHHS UAT testing is limited to the items checked in the "Test" column in Table 1 – Phase 1 Upgrades to the evoBrix X Framework and HealthBeat.
3. The upgrade to HealthBeat includes configuration, UI, and other security changes. No new functional changes are included as part of the upgrade.
4. DTMB will provide the F5 junctions as needed for HealthBeat. These junctions are used for load-balancing and routing.
5. The database refreshes for the HCI System Test and the HCI UAT environments will be rescheduled to support the HealthBeat release.

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Section 4: Project Cost

The cost for the CHAMPS evoBrix X Upgrade project is **$725,000.00** as reflected in the CHAMPS 5-year Statement of Work.

Table 4 provides the payment schedule for the CHAMPS evoBrix X Upgrade project.

Table 4. Project Payment Schedule

Invoice Date	Amount
12/31/2021	$181,250.00
7/29/2022	$181,250.00
8/31/2022	$181,250.00
9/30/2022	$181,250.00
Total	**$725,000.00**

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STATE OF MICHIGAN
CENTRAL PROCUREMENT SERVICES
Department of Technology, Management, and Budget
525 W. ALLEGAN ST., LANSING, MICHIGAN 48913
P.O. BOX 30026 LANSING, MICHIGAN 48909

CONTRACT CHANGE NOTICE

Change Notice Number **46**

to

Contract Number **071B6200168**

CONTRACTOR	
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	McLean, VA 22120
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	Contract Administrator	Jennifer May	DTMB
		(517) 242-6664	
		mayj7@michigan.gov	

CONTRACT SUMMARY

MEDICAID PROCESSING SYSTEM (CHAMPS)

INITIAL EFFECTIVE DATE	INITIAL EXPIRATION DATE	INITIAL AVAILABLE OPTIONS	EXPIRATION DATE BEFORE
March 14, 2006	September 30, 2011	20 - 1 Year	September 30, 2026

PAYMENT TERMS	DELIVERY TIMEFRAME

ALTERNATE PAYMENT OPTIONS			EXTENDED PURCHASING	
☐ P-Card	☐ PRC	☐ Other	☐ Yes	☒ No

MINIMUM DELIVERY REQUIREMENTS

DESCRIPTION OF CHANGE NOTICE

OPTION	LENGTH OF OPTION	EXTENSION	LENGTH OF EXTENSION	REVISED EXP. DATE
☐		☐		September 30, 2026

CURRENT VALUE	VALUE OF CHANGE NOTICE	ESTIMATED AGGREGATE CONTRACT VALUE
$1,009,747,359.00	$0.00	$1,009,747,359.00

DESCRIPTION

Effective 5/26/2022, the following amendment is hereby incorporated into this contract, per the attached Statement of Work. Additional cost for this amendment is $669,754.00. Existing funds from CNSI Master Agreement 071B6200168 will be utilized.

- Adding CHG-P-NEMT-0002.1 and CHG-P-NEMT-0003 as a modification in scope and funding to Contract Change Notice 33 and Contract Change Notice 38.

All other terms, conditions, specifications, and pricing remain the same. Per contractor and agency agreement, and DTMB Central Procurement Services approval.

CNSI Proprietary

Change Request Number:	CHG-P-NEMT-0002.1
Change Request Title:	Postpone the NEMT September Release
Response Date	10/03/2021

CNSI Response to Customer Issues Change Request

Change Request Description:

The purpose of this change request is to postpone the planned NEMT September 2021 release to March 2022.

Reason for Change Request:

Required Hub system changes cannot be completed in time for the September release.

CNSI Response:

Design and Development for the September release is complete. CNSI will incorporate any design changes required to support integration with the Hub and move the testing and production activities to the March release.

Schedule

The NEMT schedule for the March release will follow the CHAMPS R10c-1.17 schedule as show below:

Milestone	Start	End
Design Sessions	11/8/2021	11/23/2021
Finalize Design Documents	11/24/2021	12/10/2021
Design Approval	12/13/2021	12/22/2021
Development	12/20/2021	1/28/2022
System Testing	1/31/2022	2/24/2022
User Acceptance Testing	2/25/2022	3/24/2022
Go-Live	3/25/2022	

Cost

The Payment Schedule below reflects the revised overall cost for the NEMT project.

Payment Schedule

Deliverable	Amount	Invoice Date
Phase 1: Design for CHAMPS	$248,667	4/23/2021
Phase 1: Development for CHAMPS	$132,049	9/30/2021
Phase 1: Design for Bridges Integration	$264,226	9/30/2021
Phase 1: System Test	$264,226	9/30/2021
Phase 1: Deployment to Production	$264,226	9/30/2021
Design for March release, including Hub and Bridges Changes	$111,401	12/30/2021
System Test - March Release	$111,401	2/28/2022
Deployment to Production - March Release	$111,401	3/31/2022
Total Project Cost:	**$1,507,597**	

Assumptions (Assumptions take precedence over the Change Request Requirements):
1. No FileNet architecture changes are required. 2. MDHHS will provide any required user training to State and County staff. 3. MDHHS and DTMB will coordinate and manage all required integration changes with Bridges and the Enterprise Service Bus (Hub).

Approvals:		
Jason Werner **MDHHS Business Owner**	Jason Werner	Date: 10-11-2021
Karen Scott **MDHHS MMIS Director**	Karen D. Scott	Date: 10/12/2021
Brant Cole **MDHHS Director of Medicaid Systems Operations**	Brant E. Cole	Date: 10/12/2021
John Moore **DTMB Business Relationship Manager**	John A. Moore	Date: 10/12/2021
Jim Schloss **CNSI Michigan Program Director**	Jim Schloss	Date: 10/12/2021

Change Request Number:	CHG-P-NEMT-0003 V3
Change Request Title:	Postpone NEMT Release to September 2022 and Add Requirements
Response Date	3/21/2022

CNSI Response to Customer Issues Change Request

Change Request Description:

The purpose of this change request is to postpone the planned NEMT release to September 2022 and add the following requirements:

- myHP/myHB must integrate with Bridges Azure using real-time web service via the Health Services Enterprise Service Bus (ESB) to download denial correspondence.
- myHP/myHB must display denial correspondence to the member.
- CHAMPS must store information about documents uploaded by myHP/myHB to Bridges FileNet for reconciliation process.
- CHAMPS must send a batch interface to Bridges with information about documents uploaded by myHP/myHB for reconciliation.
- CHAMPS must ingest and map the Travel Origin, Explanation of Necessity of Service Requiring PA, and List of the PA Reasons to PA Comments.

Reason for Change Request:

- Required Hub and Bridges system changes cannot be completed in time for the March 2022 release.
- Integration between MyHealthButton/MyHealthPortal and the Bridges FileNet is required to archive documents received via MyHealthButton/MyHealthPortal in Bridges FileNet and allow Bridges users to review the documents for the NEMT approval process.
- Integration between MyHealthButton/MyHealthPortal and Bridges Azure is required to retrieve documents for NEMT denial correspondence that Bridges sent to the beneficiary.
- CHAMPS must ingest Travel Origin, Explanation of Necessity of Service Requiring PA, and List of the PA Reasons, and map them to PA Comments for the PA approvals.

CNSI Response:

CNSI will conduct design session to incorporate any design changes required to support the requirements added above and move the production deployment to the September 2022 CHAMPS release.

CNSI will use the NGDI Initiative environments for Development and System Testing per the dates below. The code will be merged into the new HCI System Testing and UAT environments for the September R10c-1.19 release.

	Start	Finish
Development	3/28/2022	7/22/2022
System Testing	5/2/2022	7/27/2022

Cost:

The Payment Schedule below reflects the revised overall cost for the NEMT project and includes the previously approved costs and amounts paid to date.

Payment Schedule

Deliverable	Amount	Amount Approved DOIT1 210000001658 v2	Net Increase	Invoice Date	Amount Paid
Phase 1: Design for CHAMPS	$248,667	$248,667	$0	4/23/2021	$248,667
Phase 1: Development for CHAMPS	$132,049	$132,049	$0	9/30/2021	$132,049
Phase 1: Design for Bridges Integration	$264,226	$264,226	$0	9/30/2021	$264,226
Phase 1: System Test	$264,226	$264,226	$0	9/30/2021	$264,226
Phase 1: Deployment to Production	$264,226	$264,226	$0	9/30/2021	$264,226
Design for September 2022 release	$223,251	$0	$223,251	4/30/2022	$0
System Test for September 2022 Release	$223,251	$0	$223,251	8/31/2022	$0
Deployment to Production - September 2022 Release	$223,251	$0	$223,251	9/30/2022	$0
Totals:	**$1,843,148**	**$1,173,394**	**$669,754**		**$1,173,394**

Assumptions (Assumptions take precedence over the Change Request Requirements):

1. No Bridges FileNet architecture changes are required.
2. MDHHS will provide any required user training to State and County staff.
3. MDHHS and DTMB will coordinate and manage all required integration changes with Bridges and the Enterprise Service Bus (Hub).
4. The CHAMPS NEMT design will be approved by 3/28 to meet the planned 9/16/22 production deployment date.
5. This change log will be fully approved by 3/28 to meet the planned 9/16/22 production deployment date.

Approvals:		
Jason Werner MDHHS Business Owner	Jason Werner	Date: 3-23-22
Karen Scott MDHHS MMIS Director	Karen D. Scott	Date: 3/23/22
Brant Cole MDHHS Director of Medicaid Systems Operations	Brant E. Cole	Date: 03/22/2022
John Moore DTMB Business Relationship Manager	John A Moore	Date: 03/22/2022
Jim Schloss CNSI Michigan Program Director	Jim Schloss	Date: 03/24/2022

STATE OF MICHIGAN
CENTRAL PROCUREMENT SERVICES
Department of Technology, Management, and Budget
525 W. ALLEGAN ST., LANSING, MICHIGAN 48913
P.O. BOX 30026 LANSING, MICHIGAN 48909

CONTRACT CHANGE NOTICE

Change Notice Number ***45***

to

Contract Number **071B6200168**

CONTRACTOR	
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	Linda Mras
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	CV0059061

STATE			
	Program Manager	Crystal Kline	MDHHS
		517-284-1184	
		KlineC1@michigan.gov	
	Contract Administrator	Jennifer May	DTMB
		(517) 242-6664	
		mayj7@michigan.gov	

CONTRACT SUMMARY

MEDICAID PROCESSING SYSTEM (CHAMPS)

INITIAL EFFECTIVE DATE	INITIAL EXPIRATION DATE	INITIAL AVAILABLE OPTIONS	EXPIRATION DATE BEFORE
March 14, 2006	September 30, 2011	20 - 1 Year	September 30, 2026

PAYMENT TERMS	DELIVERY TIMEFRAME

ALTERNATE PAYMENT OPTIONS			EXTENDED PURCHASING	
☐ P-Card	☐ PRC	☐ Other	☐ Yes	☒ No

MINIMUM DELIVERY REQUIREMENTS

DESCRIPTION OF CHANGE NOTICE

OPTION	LENGTH OF OPTION	EXTENSION	LENGTH OF EXTENSION	REVISED EXP. DATE
☐		☐		September 30, 2026

CURRENT VALUE	VALUE OF CHANGE NOTICE	ESTIMATED AGGREGATE CONTRACT VALUE
$1,009,747,359.00	$0.00	$1,009,747,359.00

DESCRIPTION

Effective 2/7/2022, the following amendment is hereby incorporated into this contract, per the attached Statement of Work. Additional cost for this amendment is $2,861,102.00. Existing funds from CNSI Master Agreement 071B6200168 will be utilized.

- Adding Statement of Work for Community Health Automated Medicaid Processing System (CHAMPS) Hyper Converged Infrastructure (HCI) Migration Project & Oracle 19c Upgrade.

All other terms, conditions, specifications, and pricing remain the same. Per contractor and agency agreement, and DTMB Central Procurement Services approval.

CHAMPS Hyper Converged Infrastructure (HCI) Migration Project
Statement of Work

Prepared For:
State of Michigan
Department of Health & Human Services
400 South Pine Street
Lansing, Michigan 48909

Prepared By:

CNSI
6465 Millennium Drive, Suite 150
Lansing, MI 48917

November 10, 2021

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CHAMPS HCI Migration Project
Statement of Work

November 10, 2021

Approved By:

Karen D. Scott	
Karen Scott **MDHHS MMIS Director**	**Date** 11/15/21

Brant E. Cole	
Brant Cole **MDHHS Director of Medicaid Systems Operations**	**Date** 11/15/2021

John A. Moore	
John Moore **DTMB Business Relationship Manager**	**Date** 11/15/21

Jim Schloss	
Jim Schloss **CNSI Michigan Program Manager**	**Date** 11/15/2021

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Section 1: Introduction

DTMB and MDHHS have determined that the current State of Michigan Next Generation Digital Infrastructure (NGDI) has been in production 5-years and is at end of life. The State has decided to host a new on-prem infrastructure called Dell Hyperconverged Infrastructure (HCI) and has requested CNSI to migrate the Community Health Automated Medicaid Processing System (CHAMPS) and corresponding COTS applications to the new infrastructure. With the migration effort, CNSI will also upgrade the CHAMPS databases (DB) from Oracle 12c to 19c since Oracle 12c support will be ending in March of 2022 and 19c is now required for Oracle Platinum support. Infrastructure operating systems will also need to move from Solaris to Linux and WebSphere Application Servers (WAS) will be updated to the latest version per the DTMB request to the move to Red Hat 8.

Section 2: Scope and Schedule

This section summarizes the scope of work and schedule for the CHAMPS HCI Migration project.

2.1 Scope of Work

The following list contains the high-level tasks and specific system upgrades that will be implemented for the first release to production in July 2022 and post-production stabilization and release August – September 2022.

Requirements

1. **CHAMPS application and corresponding COTS products will be migrated from the NGDI infrastructure to the new HCI Infrastructure.**
    a. High-level tasks/milestones:
        i. Migrate CHAMPS and COTS to HCI Hardware
            1. Work with DTMB to Open Firewalls and resolve any environment related issues.
        ii. HCI Performance Testing
        iii. HCI System Testing with the R10c-1.17 March release code (Tested on both NGDI and HCI)
        iv. HCI UAT DB refresh from NGDI Production
        v. HCI UAT Testing with the R10c-1.17 Code
        vi. HCI Disaster Recovery Testing
        vii. HCI UAT Refresh (With R10c-1.18 changes, if any)
        viii. HCI UAT State validation (For any delta R10c-1.18 code changes, if any)

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ix. HCI Dry Run 1 (with R10c-1.18 changes, if any)

x. HCI Dry Run 2

xi. HCI Smoke Test

xii. HCI Production Go / No-go

xiii. HCI Hardware migration – R10c-1.18.0.1 July operations release

2. **Upgrade CHAMPS and COTS Databases from Oracle 12c to 19c.**

    a. CNSI will upgrade databases to Oracle 19c and test for inconsistencies.

    b. During the migration CNSI will modify configurations and queries not compatible with 19c to ensure those queries and configurations are producing the correct results.

3. **Infrastructure operating systems will move from Solaris to Linux.**

    a. CNSI will migrate the CHAMPS and COTS applications from Solaris to Linux Hardware

    b. CNSI will upgrade applications software to the latest versions compatible with Linux RHEL8.

    c. Applications software not compatible with RHEL8 with remain on RHEL7 as identified in the HCI hosting document shared with DTMB.

        i. Note: Edifecs version will be upgraded (From 9.2/Hotfix 4 to Hotfix 5) to be compatible with RHEL8.

4. **Update WAS Application Servers.**

    a. CNSI will upgrade applications software to the latest versions compatible with Linux RHEL8.

    b. Applications software not compatible with RHEL8 with remain on RHEL7 as identified in the HCI hosting document shared with DTMB.

2.2 High Level Timeline

Table 1 through 4 provides the project milestones for the CHAMPS HCI Migration project.

Table 1. High-Level Timeline – *DTMB HCI Hardware Proposed Delivery Dates*

Task Description	Migration Completion
Performance Environment (Priority 1)	12/06/2021
All Lower Environments (Priorities 3-8)	1/24/2022

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Production Environment (Priority 9)	2/28/2022
Initiative1 System Test Environment (Priority 10)	1/24/2022
Initiative1 UAT Environment (Priority 10)	1/24/2022
Stabilization Period (6 weeks)	07/24/2022 to 09/2/2022

Table 2. High-Level Timeline – ***CNSI Ops HCI Application Load and Set Up Schedule***

Task Description	Start Date	End Date
Planning Phase	10/1/2021	11/30/2021
HCI Performance Environment Data & App Load (WAS) with 19c	12/06/2021	12/30/2021
HCI Performance Environment App Load (COTS Setup)	01/3/2021	1/24/2021
HCI Performance Environment Application validations	1/25/2021	1/31/2021
HCI Performance Testing	2/1/2022	4/01/2022
HCI System Test Environment Data and App Load (WAS) with 19c	1/24/2022	2/11/2022
HCI System Test Environment App Load (COTS Setup & Validations)	2/7/2022	2/18/2022
HCI UAT Environment Data and App Load (WAS) with 19c	2/14/2022	3/4/2022
HCI UAT Environment App Load (COTS Setup &Validations)	2/28/2022	3/11/2022
NGDI June R10c-1.18 Design finalization complete (Limited Content)	2/25/2022	2/25/2022
HCI Production Environment Data & App Load (WAS) with 19c	3/7/2022	3/25/2022
HCI Production Environment App Load (COTS Setup & Validations)	3/21/2022	4/8/2022
R10c-1.17 March Operations release on NGDI	3/25/2022	3/25/2022
HCI System Test DB refresh from NGDI Production	4/4/2022	4/8/2022
HCI UAT DB refresh from NGDI Production	4/11/2022	4/15/2022
HCI Development & Initiative1 Development Environment Data and App Load (WAS) with 19c	4/11/2022	4/22/2022

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Task Description	Start Date	End Date
HCI Development & Initiative1 Development Environment App Load (COTS Setup & Validations)	4/18/2022	4/22/2022
HCI B2B Environment Data and App Load (WAS) with 19c	4/25/2022	5/6/2022
HCI B2B Environment App Load (COTS Setup & Validations)	5/2/2022	5/6/2022
HCI Operations Training DB Refresh & App Load	5/9/2022	5/13/2022
HCI Operations QA Data & App Load (WAS) with 19c	5/16/2022	5/27/2022
HCI Regression Environment Data and App Load (WAS) with 19c	5/23/2022	6/10/2022
HCI Regression Environment App Load (COTS Setup & Validations)	6/6/2022	6/17/2022
HCI Disaster Recovery Environment Data load	5/30/2022	6/10/2022
Conduct HCI Disaster Recovery Testing	6/13/2022	6/17/2022
HCI CHAMPS Production Readiness	6/20/2022	7/15/2022
HCI Go-live (R10c-1.18.0.1)	7/24/2022	7/24/2022

Table 3. High-Level Timeline - *CNSI Initiative Application Load and Set Up Schedule - Post Go-Live activities*

Task Description	Start Date	End Date
Post Go-Live Support	7/24/2022	9/2/2022
HCI Initiative1 System Test Environment Data and App Load (WAS) with 19c & SOA	8/15/2022	8/26/2022
HCI Initiative1 System Test Environment App Load (COTS Setup & Validations)	8/22/2022	8/26/2022
HCI Initiative1 UAT Environment Data and App Load (WAS) with 19c & SOA	8/29/2022	9/9/2022
HCI Initiative1 UAT Environment App Load (COTS Setup & Validations)	9/5/2022	9/9/2022
HCI Initiative2 System Test/UAT Environment	On Demand	N/A

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Table 4. High-Level Timeline – *Key CHAMPS Release Milestone Activities*

Task Description	Start Date	End Date
HCI Performance Testing	2/1/2022	4/01/2022
HCI System Testing	3/14/2022	4/15/2022
Operations UAT DB refresh from NGDI to HCI Hardware	3/28/2022	4/1/2022
HCI UAT State Testing with 1.17 code	4/11/2022	5/20/2022
DR Testing in HCI environment	6/13/2022	6/17/2022
1.18 June Production Release in NGDI (Limited Content)	6/17/2022	6/17/2022
HCI UAT Refresh with R10c-1.18 (Snapshot Date = 6/18)	6/20/2022	6/24/2022
HCI UAT 2 State validation (for any delta R10c-1.18 code changes, if any)	6/27/2022	7/8/2022
HCI Dry Run 1 (with R10c-1.18 changes, if any) - Integration Testing	7/4/2022	7/7/2022
HCI Dry Run 2 - Integration Testing	7/11/2022	7/14/2022
HCI Smoke Test	7/18/2022	7/20/2022
HCI Production Go / No-go	7/21/2022	7/21/2022
HCI Go-live (R10c-1.18.0.1)	7/22/2022	7/24/2022
Post Go-Live support	7/24/2022	9/2/2022

Section 3: General Assumptions

CNSI has identified and provided the following general assumptions regarding the project:

1. DTMB will manage the overall HCI project and integrated schedule.
2. DTMB will HCI perform hosting and software licensing and be responsible for all related tasks and SLAs.
3. DTMB will be responsible for HCI SSO and firewalls rules setup and ensuring the HCI infrastructure and system meets all security requirements.

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4. DTMB will ensure all the HCI firewall rules and MILogin junctions are setup and working prior to delivering environments to CNSI.
5. CNSI migration estimates include only efforts related to the CHAMPS migration from NGDI to HCI, upgrade from Oracle 12c to 19c on HCI, the move from Solaris (NGDI) to Linux OS (HCI) and the WebSphere upgrade on HCI.
6. NGDI environments will not be decommissioned until after the HCI production go-live and stabilization.
7. Any defects targeted for the June R10c-1.18 release will be released to production on the NGDI hardware and then migrated to the HCI hardware for additional regression testing.
8. Any State project initiatives targeted for the June R10c-1.18 release or beyond will be developed and tested on the existing NGDI infrastructure and then migrated to the new HCI once the new HCI initiative 1 environment is ready after the July R10c-1.18.0.1 HCI Production go-live and stabilization period.
9. The last CHAMPS scheduled release on NGDI will be on 06/17/2022 and content will be restricted to critical defects only or access to care/emergency issues.
10. The first production release on HCI hardware will be labeled as R10c-1.18.0.1
11. CNSI can start work on this project upon receipt of an approved DOIT1.
12. HCI Performance Testing will overlap with HCI System Testing due to the HCI Performance environment delivery date being pushed from 11/15/2022 to 12/06/2022.
13. The CHAMPS Oracle 12c databases are required to be updated to Oracle 19c by 3/31/2022, due to Oracle Critical support ending. Per DTMB, NGDI hardware is not compatible with Oracle 19c, so the DB upgrade must happen on the new HCI infrastructure.

Section 4: Risks

CNSI has identified and provided the following risks regarding the project:

1. DHHS management has been notified that a slip in this schedule could result in a delayed production release and additional change requests with associated cost.
2. The State proposed window to complete the migration activity is 7 months. The schedule is at risk if the HCI environments are not delivered to CNSI on time for application load and upgrades. Note: CHAMPS and COTS applications are moving from Solaris to Linux along with the 19c and WebSphere Application Server (WAS) upgrades. The schedule cannot afford any delays that may impact the migration and upgrade schedule.
    a. Mitigation: CNSI is working with DTMB to ensure environment specification are finalized so DTMB can deliver the Performance environment to CNSI for application load.
3. The remaining HCI lower environment are all being released to CNSI for Application load on 1/24/2022 and need to be ready for system testing on 3/14/2022, which is a very aggressive time frame.
    b. Mitigation: CNSI is working closely with DTMB to see if the lower environments can be released earlier than end of January.

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   c. Mitigation: DHHS management has been notified that a slip in this schedule could result in a delayed production release and additional change requests with associated cost.
4. HCI Performance Testing will overlap with HCI System Testing due to the HCI Performance Test environment delivery date being pushed from 11/15/2022 to 12/06/2022. As a result, CNSI may not know all the Oracle 19c or HCI infrastructure impacts before moving forward with System Testing on HCI. Also, CNSI will also not be able to produce the final Performance testing report for sign off before System Test & UAT testing begins.
   a. Mitigation: Performance Testing and System Testing happen in Parallel with a two-week overlap.
5. Since the current NGDI infrastructure does not support Oracle 19c, the database upgrade from Oracle 12c to Oracle 19c must take place on the new HCI Infrastructure during the migration and cannot be implemented earlier.
6. Any potentials delay to the 7/24/2022 HCI Production go live dates will impact and potentially push the R10c-1.19 September release milestone dates and also delay the Oracle 19c upgrade and decommissioning of the NGDI environments which will still be on Oracle 12c with no Oracle Critical Support.
7. If the data purge does not take place in the NGDI production environment prior to the start of the HCI migration effort in the lower environments, there is a potential risks of higher data transfer times and also the possibility of reduced performance in each of the lower HCI environments during testing.

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Section 5: Proposed Project Cost

Table 5 provides the cost for the CHAMPS HCI Migration project.

Table 5. Proposed Project Cost

Migration	Cost
HCI Migration (Includes efforts for WebSphere upgrade and Solaris to Linux migration)	$1,585,901
Oracle 19c Upgrade	$1,275,201
Project Total	**$2,861,102**

Table 6 provides the payment schedule for the CHAMPS HCI Migration project.

Table 6. Project Payment Schedule

Item	Amount	Invoice Date
Planning Phase Complete	$429,165	11/30/2021
Performance Data and App load Complete	$286,110	12/30/2021
Performance Setup Complete (COTS)	$286,110	1/31/2022
System Test App Load Complete	$429,165	2/28/2022
System Test Complete	$572,220	4/29/2022
UAT Test Complete	$214,583	5/31/2022
DR Complete	$214,583	6/30/2022
Production Go Live	$286,110	7/29/2022
Initiative Environment Complete	$143,055	9/30/2022

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STATE OF MICHIGAN
CENTRAL PROCUREMENT SERVICES
Department of Technology, Management, and Budget
525 W. ALLEGAN ST., LANSING, MICHIGAN 48913
P.O. BOX 30026 LANSING, MICHIGAN 48909

CONTRACT CHANGE NOTICE

Change Notice Number **44**

to

Contract Number **071B6200168**

CONTRACTOR	
	CLIENT NETWORK SERVICES, INC.
	1600 Tyson Blvd
	McLean, VA 22120
	Linda Mras
	(240) 243 2804
	linda.mras@cns-inc.com
	CV0059061

STATE			
	Program Manager	Crystal Kline	MDHHS
		517-284-1184	
		KlineC1@michigan.gov	
	Contract Administrator	Jennifer May	DTMB
		(517) 242-6664	
		mayj7@michigan.gov	

CONTRACT SUMMARY

MEDICAID PROCESSING SYSTEM (CHAMPS)

INITIAL EFFECTIVE DATE	INITIAL EXPIRATION DATE	INITIAL AVAILABLE OPTIONS	EXPIRATION DATE BEFORE
March 14, 2006	September 30, 2011	20 - 1 Year	September 30, 2026

PAYMENT TERMS	DELIVERY TIMEFRAME

ALTERNATE PAYMENT OPTIONS			EXTENDED PURCHASING	
☐ P-Card	☐ PRC	☐ Other	☐ Yes	☒ No

MINIMUM DELIVERY REQUIREMENTS

DESCRIPTION OF CHANGE NOTICE

OPTION	LENGTH OF OPTION	EXTENSION	LENGTH OF EXTENSION	REVISED EXP. DATE
☐		☐		September 30, 2026

CURRENT VALUE	VALUE OF CHANGE NOTICE	ESTIMATED AGGREGATE CONTRACT VALUE
$1,009,747,359.00	$0.00	$1,009,747,359.00

DESCRIPTION

Effective 12/20/2021, the parties add the attached “MI CHAMPS Operations Amendment Fiscal Year 2022–2026” statement of work to the contract, utilizing existing contract funds, which modifies and extends the previously executed operations agreement titled “CHAMPS Ops FY 2020 – 2021” between the parties. All other terms, conditions, specifications, and pricing remain the same. Per contractor and agency agreement, and DTMB Central Procurement Services approval.

MI CHAMPS Operations Amendment
Fiscal Year 2022-2026

Prepared For:

State of Michigan
400 South Pine Street
Lansing, Michigan 4890

Prepared By:

CNSI
6465 Millennium Drive
Lansing, Michigan 48917

MI-CHAMPS-OPS-FY2022-2026
December 16, 2021

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MI CHAMPS Operations Amendment
Fiscal Year 2022-2026

MICHAMPS-OPS-FY2022-2026
December 16, 2021

Accepted By:

Brant E. Cole	John A Moore 12/17/21
Brant Cole	**John Moore**
MDHHS Director **Date** 12/18/2021	**DTMB Project Manager** **Date**
Karen D. Scott	John Harding
Karen Scott	**John Harding**
MDHHS Functional Manager **Date** 12/17/2021	**CNSI Senior Vice President** **Date** 12/18/2021

Jim Schloss
Jim Schloss
CNSI Program Director **Date** 12/18/2021

Revision History

Revision Level	Date	Description	Change Summary
MICHAMPS-OPS-FY2022-2026	012/16/2021	Final	N/A

Section 1 – Introduction

The "MI CHAMPS Operations Amendment Fiscal Year 2022–2026" modifies and extends the previously executed operations agreement titled "CHAMPS Ops FY 2020 – 2021" between the State of Michigan (hereafter, "the State") and CNSI. This amendment represents the implementation of CNSI's Information Technology Infrastructure Library (ITIL)-based Managed Services model for the Michigan Community Health Automated Medicaid Processing System (CHAMPS). This model enables the State and CNSI to achieve a streamlined and efficient model for operations, and to support the business and program goals of the State.

The amendment contains the sections detailed in Table 1.

Table 1. Sections

Section	Description
1 – Introduction	Introduction of the amendment and period of performance
2 – Service Categories	Description of service categories within the scope of the amendment
3 – Services	Description of the services to be performed within the amendment
4 – Performance Standards	Performance standards for services performed in the amendment including associated Service-Level Agreements (SLA)
5 – Upgrades	Description of upgrades performed within the scope of the amendment
6 – evoBrix X Platform Upgrade	Description of evoBrix X upgrades performed within the scope of the amendment
7 – Fraud Waste and Abuse (FWA)	Description of FWA performed within the scope of the amendment
8 – Software Licensing	List of software licensing included in the amendment
9 – Service Delivery Model	Description of the service delivery model
10 – Assumptions and Constraints	Assumptions and constraints for the performance of services in the amendment
11 – Pricing	Pricing for services performed in the amendment

The period of performance for this amendment is October 1, 2021 to September 30, 2026

Section 2 – Service Categories

CNSI has worked with the Michigan Department of Health and Human Services (MDHHS) to map the services performed for CHAMPS Operations into industry-standard Service Categories developed through a long history of performing operations services on multiple contracts. Table 2 contains brief descriptions of the Service Categories as defined for the CHAMPS Operations amendment and the scope that they apply to.

Table 2. Service Categories

Category	Description	Scope
Monitor System Operations	Compare and evaluate actual system performance to system specifications in the areas of response times, outputs, application data, and other performance characteristics; and to initiate resolution of any anomalies. Includes proactive Availability and Capacity Management disciplines to achieve SLA objectives.	CHAMPS Applications o evoBrix modules o Provider Enrollment o Claims and Encounters o Prior Authorization (PA) o Eligibility and Enrollment o Third-Party Liability (TPL) o Managed Care o Benefits Administration (BA) o CHAMPS evoBrix Add-Ons o Provider Credentialing Service (PCS) o Site Visit Pro (SVP) o myCareVisit o myHealthPortal o myHealthButton o Operational Data Store (ODS) o eMIPP
Provide Client Support	Interact with the client in a timely manner to perform support activities that do not affect the application software baseline or production data. Includes handling on-demand requests for problem investigation, providing answers to questions, and performing parameter and schedule changes.	
Perform Incident Management	Detect and resolve incidents (an “incident” is defined as an event that is not part of the normal operation of a service and that causes or may cause interruption to or reduction in the quality of that service).	
Perform Problem Management	Detect and remove problems (a “problem” is defined as a significant incident or multiple incidents with common symptoms that indicate a single root cause) from the information technology (IT) infrastructure (including applications) by performing root cause analysis to minimize the occurrence of incidents and maximize efficiency.	
Perform System Maintenance	Make modifications to an existing application to correct faults, to improve performance or maintainability, to adapt the application to a modified environment, and to meet new client requests (enhancements).	

Category	Description	Scope
		o ClaimsSure o HealthBeat o Fast Healthcare Interoperability Resources (FHIR) CHAMPS commercial off-the-shelf (COTS) modules o Siebel o Doc1 Correspondence o Pitney Bowes Universal Address Module (UAM) o Oracle Financials o Cognos Reporting o Grouper Software o (Note: May need to move to GPCS which is the web-based version of the grouper software) o Edifecs o Compumax State-Specific Modules (CHAMPS) o Document Management Portal (DMP) o Facility Settlement CHAMPS Interfaces and Data Warehouse (DW) Extracts CHAMPS Application Server and Web Server Software CHAMPS Databases and Database Software Other possible/future Integrations:

Category	Description	Scope
		o Michigan Department of Corrections (MDOC) o Electronic Visit Verification (EVV)
Business Operations	Perform operations for business processes aligned to established Operating-Level Agreements (OLA) and in accordance with defined policies and procedures. Examples include the following: • Claims resolution	ClaimsSure claims review

These Service Categories reflect industry best practices aligned to the services performed by CNSI for CHAMPS operations.

Section 3 – Services

This section describes the services that CNSI will provide to the State under this amendment, grouped by Service Category. The activities performed within each Service ID definition are described in detail, including any exclusions from CNSI's scope and expectations from the State.

3.1 Monitor System Operations

This category focuses on comparing and evaluating actual system performance to system specifications and SLAs in the areas of response times, outputs, application data, and other performance characteristics. This includes initiating resolution of any anomalies.

Table 3. Monitor System Operations

Service ID	Activity	Description	Details
MSO-01	System Monitoring	Verify that the CHAMPS applications perform correctly and that other requirements are met. Any critical jobs, tasks, or transactions that must be completed within a particular timeframe are monitored and verified for successful completion within the specified time. The processes listed in the "Details" cell of this table are monitored, tracked, and escalated with corrective action in the event of an incident.	CNSI Operations Support team monitors and supports 24 hours per day, 7 days per week, 365 days per year Daily system health check for production servers (for example, disk space, central processing unit (CPU) loads, memory usage, killed sessions) HealthBeat monitors system performance and activities to produce real-time support Batch/transaction and real-time service management • Planning and coordination with stakeholders • Daily batch and real-time transaction monitoring, reporting, review, and analysis CNSI works closely with DTMB to perform capacity planning for infrastructure (for example, data storage, server disk space, network bandwidth usage, system, and infrastructure log review) • Constantly examine the operation and execution of individual applications and the overall environment • Monitor and identify performance-tuning opportunities crucial to maintaining the needs of the business and to extend the

Service ID	Activity	Description	Details
			hardware investment; recommend action when necessary • Review database query performance and make recommendations for improvement • Identify performance trends and tuning opportunities for existing batch queries Monitor backup solutions and recovery to support business continuity, data loss, and audit regulations
MSO-02	Track Service Level Agreements	Compare system performance with SLAs and report any exceptions or anomalies.	Services are tracked and reported via HealthBeat reporting dashboard Generate Monitoring and SLA report
MSO-03	Database Monitoring	Monitor automatically scheduled maintenance jobs across all databases in all environments to keep the database in a healthy status.	CNSI Operations Support team monitors and supports 24 hours per day, 7 days per week, 365 days per year The database monitoring repository includes the following features: • Hourly stats jobs for core real-time tables • Daily or weekly transactional and optimizer table maintenance jobs • Monthly purge and archive jobs during a specified downtime • Frequent data usage reports, which help to analyze system data usage and plan future usage • Alert mechanism to trigger alerts to respective teams during any issues Continually monitors system data including, but not limited to, the following database monitoring tools: • **Oracle Enterprise Manager (OEM):** Monitors database space management, database performance, and database availability. OEM sends an alert when thresholds are met or during critical events, such as space exhausted or high resource usage

Service ID	Activity	Description	Details
			• **Server-Level Tools:** Reside on all database servers and send alerts during an incident, such as services are down or network failures • **Custom Reports:** Continuously monitor the database size and report the relevant group if there is any unexpected growth in the data

3.2 Provide Client Support

Interact with the client and systems in a timely manner to perform operations and support activities across modules.

Table 4. Provide Client Support

Service ID	Activity	Description	Details
PCS-01	Initiate Request Processing	Document each State request or any incident or problem that requires a production change with sufficient information to categorize the request, identify the requestor, and fully define the request. Whenever possible, provide an immediate response to the client. If the client's request can be completely satisfied, then update the request documentation with the response and mark the request as complete. If the request cannot be completely addressed at this point, then acknowledge the request, update the request documentation, and forward the request to an appropriate subject matter expert (SME). Update the organization's incident	Requests are logged and tracked via the Jira Incident Management (IM) Jira (IM) is the first step for logging and reporting a request or issue. Jira (IM) is used for managing incoming operation requests and issues Every ticket generated by the system has persistence (or "history") showing what happened to the ticket within its life cycle The Operations Application Services team triages the ticket to determine a course of action, reviews the ticket with the State team if necessary, and responds accordingly Tickets requiring more information are reviewed by the Tier 1 Change Control Board (CCB)

Service ID	Activity	Description	Details
		and problem tracking mechanism to reflect the status of any incidents or problems.	
PCS-02	Perform Necessary Support (General Operations and Support)	Interact with the client to understand the request, problem, or incident; and provide any information about the request that is readily available. Assemble any documentation needed to accurately and efficiently address the request. Based on a review of the available information, determine the best approach to satisfying the request. Document the steps taken. Determine whether the request is an incident or a problem. Update JIRA (IM) to reflect the status of any incidents or problems. Use when additional information is needed to process the client request.	Ongoing support for the CHAMPS subsystems and processes: • Reference table management support o Perform creation and maintenance of application reference tables in Production and lower environments • Support from CNSI staff o Provide support for operations team and end users o Reference table changes required to support functionality o Release implementation support ▪ Support development to finalization of production implementation plan ▪ Provide technical support for business validation during Go-Live o Batch support ▪ Implement environment requests for multiple environments ▪ Schedule and execute batch, database (DB), and real-time jobs using the Service Oriented Architecture (SOA) framework o Emergency release support ▪ Create and manage emergency release plan ▪ Monitor testing status and take necessary steps to successfully meet implementation timeline o Security support and setup

Service ID	Activity	Description	Details
			o Functionality changes: Impact to CHAMPS ▪ Perform impact analysis on existing CHAMPS application functionality o Configuration Management support ▪ Plan, schedule, and coordinate builds in Production and lower environments o Functionality changes: Impact to Interfaces ▪ Perform impact analysis on interfaces impacted to CHAMPS • Subsystem Application Team support: Provide user support, including the following: o Answering questions regarding the functionality of the System o UAT support, including assisting the State with questions related to mock test file creation, running files as needed, data set-up, and other topics as needed o Participate, provide input and discuss issues and concerns in weekly Tier 1 meetings between State and CHAMPS subsystem team o Provide impact analysis and recommend prioritization for any anomalies that are identified during the monitoring process • CHAMPS HealthBeat Kiosk Support o Daily monitoring activities of the application and the underlying database tables o Application support, impact analysis and research for any issues related to the hardware and software reported by MDHHS or the Department of

Service ID	Activity	Description	Details
			Technology, Management & Budget (DTMB) ▪ For any hardware issues reported, liaison with State staff to fix the issue o Support for applications (such as HealthBeat) that currently function on the kiosks o Support to the CHAMPS team for access rights and privileges to systems and tools; and password resets o Provide support when needed for operating system, antivirus, and network upgrades • System Monitoring Support for CHAMPS o Assist MILogin with support for user access control ▪ Manually granting/revoking roles to CNSI users in the lower environments. o Monitor ongoing batch processes frequently and exceptions on a regular basis ▪ Correct exceptions identified through the monitoring activities ▪ Monitor email inboxes to ensure that all email-related functionality is working o Monitor application performance for critical software parameters ▪ Track server performance ▪ Check availability of environments and servers o Log Remedy Tickets for each system release o Draft, review, and post banner messages as needed for system maintenance and release windows

Service ID	Activity	Description	Details
			o Provide impact analysis and research on CHAMPS issues and tickets • Application Support o Daily monitoring activities of the application and the underlying database tables ▪ Includes monitoring related to interfaces with trading partners such as Bridges, Maximus, and First Health o Provide support for COTS products • Configuration and administration of COTS components within CHAMPS scope o Provide impact analysis and research on COTS issues and tickets ▪ Evaluate and assign tickets to Application Services team if necessary ▪ Support to team for impact analysis and research activities o Release support, including planning, coordination, and delivery • Support business workgroups and conferences o Provide subject matter expertise to support MDHHS and user group o Present or support business presentations at conferences or to internal or external stakeholders
PCS-03	Perform Operations and Support (Interfaces and Data Warehouse)	Interact with the client to understand the request, problem, or incident; and provide any information about the request that is readily available. Assemble any documentation needed	Ongoing support for the CHAMPS Interface and DW extracts and processes: • Support Interfaces o Provide daily Interface and Oracle Service Bus (OSB) monitoring in Production

Service ID	Activity	Description	Details
		to accurately and efficiently address the request. Based on a review of the available information, determine the best approach to satisfying the request. Document the steps taken. Determine whether the request is an incident or a problem. Update JIRA (IM) to reflect the status of any incidents or problems. Use when additional information is needed to process the client request.	o Triage interface JIRA (IM) and email specific to interfaces o Support all lower environments o Provide release support, including release planning, coordination, and delivery o Attend Tier 1 CCB for interface facilitation o 24x7 on-call support • Support DW extracts o Monitor Daily Extracts sent to DW o Monitor DW Procedure statuses in CHAMPS/IMPACT production o Support DW JIRA (IM) ticket triaging o Support requests and questions from State users and DW staff regarding data flows from CHAMPS to DW, including modules EE, TPL, Claims and Encounters, Managed Care, Provider Enrollment, PA, FIN, BA, FHIR, and eMIPP o Assist and coordinate with certain modules (FHIR, EE, TPL, Claims, Encounters, Managed Care, Provider, PA, FIN, BA) on Jira (IM) tickets that have DW impact, including manual validations of extracts o Attend subsystem Tier1 meetings on required basis (for DW impacts only) o Work on special extracts on request o Work with cross-functional teams on extract failures for any data or code fixes o Monitor Recon Extracts sent to DWH o Coordinate with Operations Support team for manual processing of inbounds

Service ID	Activity	Description	Details
			received from Health Services Data Warehouse on demand
PCS-04	Perform Operations and Support (Claims Processing, Payment and Remittance Advice (RA))	Interact with the client to understand the request, problem, or incident; and provide any information about the request that is readily available. Assemble any documentation needed to accurately and efficiently address the request. Based on a review of the available information, determine the best approach to satisfying the request. Document the steps taken. Determine whether the request is an incident or a problem. Update JIRA (IM) to reflect the status of any incidents or problems. Use when additional information is needed to process the client request.	Ongoing support for the CHAMPS Payment and Remittance Advice (RA): • Support Claims Adjudication and Loading o Daily monitoring of Fee for Services (FFS) and Encounter volume o Monitor weekly pay cycle cut-off claims adjudication, and switch from FFS to ENC based on priority and volume o Prioritize mass adjustment claims and gross adjustment processing for ad hoc requests • Support FFS and MC payment processing o Monitor and initiate processes associated with the Weekly RA and 835 and 820 electronic RA processes o Support ad hoc requests and analyze issues • Monitor weekly loading cut-off Maintain pay cycle calendar Support integration with SIGMA for payment processing
PCS-05	Perform Operations and Support (Electronic Data Interchange (EDI))	Interact with the client to understand the request, problem, or incident; and provide any information about the request that is readily available. Assemble any documentation needed to accurately and efficiently address the request. Based on a review of the available information, determine the best approach to satisfying the request. Document the steps taken. Determine	Ongoing support for the CHAMPS EDI transaction and processing: • Support EDI processing o Daily 270/271 batch, and daily 834 and 820 monitoring o Daily CORE Real Time 270/271 and 276/277 monitoring, and CORE providers support for Production and business-to-business (B2B) environments o Monthly 834 Audit and First of Month (FOM) and End of Month (EOM) support

Service ID	Activity	Description	Details
		whether the request is an incident or a problem. Update JIRA (IM) to reflect the status of any incidents or problems. Use when additional information is needed to process the client request.	o EDI files FileNet Archival monitoring o Ad hoc requests for CORE 270/271, 276/277, and 834 transactions o Edifecs inbound and outbound batch validation, and translation monitoring for all EDI transactions o Edifecs CORE real-time profiles monitoring for Production and B2B environments o National Council for Prescription Drug Programs (NCPDP) support
PCS-06	Perform Operations and Support (Provider Credentialing (PCS))	Interact with the client to understand the request, problem, or incident; and provide any information about the request that is readily available. Assemble any documentation needed to accurately and efficiently address the request. Based on a review of the available information, determine the best approach to satisfying the request. Document the steps taken. Determine whether the request is an incident or a problem. Update JIRA (IM) to reflect the status of any incidents or problems. Use when additional information is needed to process the client request.	Ongoing support for provider credentialing: • PCS o Daily monitoring of the applications o Work with LexisNexis on data issues o Work with LexisNexis on change requests (CR) o Research and respond to Jira (IM) requests for PCS o Monitor monthly batch screenings with interface team o Collaborate on monthly files with MDHHS and DTMB teams o Create reports for monthly batch monitoring files o Contract renewals with different vendors, including follow-up and coordination o Weekly meeting with business users, including the State and other State clients o Weekly meetings with multiple vendors
PCS-07	Perform Operations and	Interact with the client to understand the request, problem, or incident; and provide any	Ongoing support for the Security and Audits:

Service ID	Activity	Description	Details
	Support (Security/Audits)	information about the request that is readily available. Assemble any documentation needed to accurately and efficiently address the request. Based on a review of the available information, determine the best approach to satisfying the request. Document the steps taken. Determine whether the request is an incident or a problem. Update JIRA (IM) to reflect the status of any incidents or problems. Use when additional information is needed to process the client request.	• Provide information, expertise, and artifacts in support of audits (including but not limited to OIG, OAG, CMS, IRS) o Help support user access management in CHAMPS Production, Development, System Test, UAT, and Production environments o Work closely with business security team to add and maintain business functions and roles o Support planning and research activities for audits such as Centers for Medicare and Medicaid Services (CMS) audit o Corrective Action Plan (CAP) management for CHAMPS and other supporting systems ▪ OAG single audits for CHAMPS ▪ OAG performance audits for CHAMPS/ and other eligibility systems ▪ Post-release reconciliation ▪ Database user review Recommend changes to policies and procedures Note: CNSI will continue to support IMPACT PE & eMIPP production audit requests for MI/IL shared module/activities from 9/30/2021 to 07/01/2023.
PCS-08	Perform Operations and Support (Consumer Engagement)	Interact with the client to understand the request, problem, or incident; and provide any information about the request that is readily available. Assemble any documentation needed to accurately and efficiently address the request. Based on a review of the available information, determine	Ongoing support for the myHealthButton and myHealthPortal: • Production support on State reported issues • Operations releases support • Production JIRA (IM) tickets

Service ID	Activity	Description	Details
		the best approach to satisfying the request. Document the steps taken. Determine whether the request is an incident or a problem. Update JIRA (IM) to reflect the status of any incidents or problems. Use when additional information is needed to process the client request.	
PCS-09	Perform Operations and Support (Facility Settlement)	Interact with the client to understand the request, problem, or incident; and provide any information about the request that is readily available. Assemble any documentation needed to accurately and efficiently address the request. Based on a review of the available information, determine the best approach to satisfying the request. Document the steps taken. Determine whether the request is an incident or a problem. Update JIRA (IM) to reflect the status of any incidents or problems. Use when additional information is needed to process the client request.	Ongoing support for the Facility Settlement: • Daily database-to-database (DB2DB) jobs monitoring • Daily external interfaces monitoring • Monthly payments monitoring for interim payments • Daily Jira (IM) ticket triaging • Provide support to testing team in test data setup and understanding the functionality • Support analyze the issues reported by State and provide the response • Interact with the development team to explain the design scope of defect and enhancement tickets • Work with all support groups and operations management • Develop Request For Change (RFC) scripts associated with Jira (IM)
PCS-10	Perform Operations and Support (Document Management Portal)	Interact with the client to understand the request, problem, or incident; and provide any information about the request that is readily available. Assemble any documentation needed to accurately and efficiently address the request. Based on a review of the available	Ongoing support for DMP: • Production Jira (IM) tickets • Operations release support • State weekly Tier 1 meetings

Service ID	Activity	Description	Details
		information, determine the best approach to satisfying the request. Document the steps taken. Determine whether the request is an incident or a problem. Update JIRA (IM) to reflect the status of any incidents or problems. Use when additional information is needed to process the client request.	
PCS-11	Perform Operations and Support (Report Services - ODS/Cognos)	Interact with the client to understand the request, problem, or incident; and provide any information about the request that is readily available. Assemble any documentation needed to accurately and efficiently address the request. Based on a review of the available information, determine the best approach to satisfying the request. Document the steps taken. Determine whether the request is an incident or a problem. Update JIRA (IM) to reflect the status of any incidents or problems. Use when additional information is needed to process the client request.	Ongoing support for ODS/Cognos: • Production Jira(IM) tickets • Operations release support • Participation in State Tier 1 meetings (across subsystems) and other State meetings / discussions • Coordination with business and technical leads in Operations • Meetings for coordinating with the operations team for identifying the downstream impacts for model and reference data changes as part of defect fixes and enhancements for Operations and follow up with subsystems • Documenting ODS Mapping, ad-hoc, and COGNOS, including scope defect document, change logs, Jira (CM) updates, and follow up • Performance tuning • Support for the following: o Monthly data refreshes o ODS o evoBrix daily reconciliations o Quarterly data refreshes in ODS o RFCs

Service ID	Activity	Description	Details
			o Ad hoc requests for data analysis • Sanity checks and follow-ups for the following: o DB monthly maintenance o All major and interim releases o Production release o Issues related to server, DB, or network restart • CHAMPS Annual Data Purge support (OLTP, ODS, DW impacts) • CHAMPS year-end activities (OLTP, ODS, DW impacts)
PCS-12	Perform Operations and Support (eMIPP)	Interact with the client to understand the request, problem, or incident; and provide any information about the request that is readily available. Assemble any documentation needed to accurately and efficiently address the request. Based on a review of the available information, determine the best approach to satisfying the request. Document the steps taken. Determine whether the request is an incident or a problem. Update JIRA (IM) to reflect the status of any incidents or problems. Use when additional information is needed to process the client request.	Provide support for eMIPP: • Production Jira (IM) tickets • Operations releases support • State weekly Tier 1 meetings
PCS-13	Provide Requested Services (Ad Hoc Support Needs)	Perform the requested service according to the established procedures for the client or application. If the request is for a small application change that	Provide existing ad hoc reports • Jira (IM) Ticket Reports • Jira (CM) Reports

Service ID	Activity	Description	Details
		does not affect the application software baseline (such as a change to an application parameter or a change to a production schedule), then provide the service as defined in the application support documentation. Consolidate the information and review it with or report it to the client.	
PCS-14	Monitor and Track Requests	Review open client requests on a regular basis to ensure that they are being addressed in a timely manner. If necessary, initiate follow-up-actions on requests that have been forwarded, but not recorded as complete. Ensure that all required measurement data is being accurately recorded and collected in accordance with organizational and client standards.	Review daily Jira (IM) ticket request Review Jira (CM) open tickets daily report Release content tracking sheet Track content targeted for a release
PCS-15	Technical Communication	Provide users with information related to system updates, system outages, and issues. Maintain user system documentation.	Maintain user system documentation, including but not limited to the following: • Detailed System Design Documents (DSDD) • On Line Help • User Guides • Frequently Asked Questions (FAQ) Maintain technical documentation related to the system to be shared as required by the State of Michigan (SoM)
PCS-16	Perform Operations and Support (FHIR Interoperability)	Interact with the client to understand the request, problem, or incident; and provide any information about the request that is readily	Ongoing support for the FHIR: • Daily database-to-database (DB2DB) jobs monitoring • Daily external interfaces monitoring

Service ID	Activity	Description	Details
		available. Assemble any documentation needed to accurately and efficiently address the request. Based on a review of the available information, determine the best approach to satisfying the request. Document the steps taken. Determine whether the request is an incident or a problem. Update JIRA (IM) to reflect the status of any incidents or problems. Use when additional information is needed to process the client request.	• Daily Jira (IM) ticket triaging • Provide support to testing team in test data setup and understanding the functionality • Support analyze the issues reported by State and provide the response • Interact with the development team to explain the design scope of defect and enhancement tickets • Work with all support groups and operations management Develop Request For Change (RFC) scripts associated with Jira (IM)

3.3 Perform Incident Management

Incident management is the formal process of addressing and tracking the progress of an identified issue. CNSI uses JIRA (IM) as the primary tracking tool when the system encounters an incident that results in impact to functionality or processing of data.

Table 5. Perform Incident Management

Service ID	Activity	Description	Details
INC-01	Detection and Recording	MDHHS business owners are responsible for the creation of JIRA (IM) ticket to report an incident. CNSI Tier 1 Support team monitors and triages each support ticket by assigning it to the appropriate queue as it is logged.	Jira (IM) is used for managing incidents logged by MDHHS and the Operations Support Center. The Jira (IM) system is a web-based portal and requires a named user account to access. • The CNSI Operations Support Center performs an initial analysis of the ticket and notifies the Application Services and Infrastructure teams for additional support, if needed. • The Operations Support team reviews the ticket and provides any necessary notes directly in

Service ID	Activity	Description	Details
			the Jira (IM) ticket details, discusses in Tier 1 CCB if needed, and performs next steps, based on requirements, until the incident is resolved and can be closed by Tier 2 CCB. If an interface issue occurs outside normal business hours, then CNSI communicates to the Tier 1 business owner and proceeds with any necessary actions.
INC-02	Tier 2 Support Ticket Analysis (CNSI Internal Support)	Analyze each escalated ticket details; validate that the Ticket Type, queue, and level are accurate; and assign the ticket to the appropriate support team.	Each Jira (IM) ticket is assigned to the appropriate queue and application owner, who then performs the following tasks: • Conduct analysis of the issue • Define an action plan to resolve the issue depending upon the severity level of the issue • If a change is needed, open a ClearQuest RFC ticket (via Application Services), which follows the RFC process • Implement the resolution (via Application Services) • Move Jira (IM) ticket to Resolved status for Tier 2 CCB review and closure
INC-03	Tier 3 Support Ticket Analysis (CNSI Internal Support)	Analyze each escalated ticket details; validate that the Ticket Type, queue, and level are accurate; and assign the ticket to the appropriate support team.	Each Jira (IM) ticket is assigned to the appropriate queue and application owner, who then performs the following tasks: • Conduct analysis of the issue • Define an action plan to resolve the issue depending upon the severity level of the issue • If a change is needed, open a ClearQuest RFC ticket (via Application Services), which follows the RFC process

Service ID	Activity	Description	Details
			• Implement the resolution (via Application Services) Move Jira (IM) ticket to Resolved status for Tier 2 CCB review and closure

3.4 Perform Problem Management

Detect and remove errors from the IT infrastructure, including applications, by performing root cause analysis to minimize the occurrence of incidents and maximize efficiency. A problem is a significant incident or multiple incidents that have common symptoms that indicate a single root cause. Use when tasked with identifying, resolving, and tracking application problems. JIRA (IM) and Jira (CM) are used for tracking incidents and changes respectively.

Table 6. Perform Problem Management

Service ID	Activity	Description	Details
PMT-01	Proactive Problem Analysis	Perform proactive analysis to determine whether problems or errors exist and whether they can be subjected to permanent fixes. Research previous incidents and problems to identify trends, volumes, and types to determine whether preventive action is needed. Create application change requests to correct the underlying cause of problems as needed.	Monitor connections and traffic between various servers such as web, application, FileNet, and database CNSI's HealthBeat application, email alerts, 24/7 support staff are the tools used for monitoring Perform and document root cause analysis to determine any preventative steps or permanent fixes Perform environment validations after a planned or unplanned outage Analyze repeat issues, patterns, and problems for related fixes to be permanent and

Service ID	Activity	Description	Details
			preventative in nature
PMT-02	Acknowledge and Prioritize Problems	Prioritize problem resolution based on impact and urgency. Use documented procedures to identify, minimize, or avoid the impact of problems. Determine schedule of resolving problems based on priority, skills available, competing requirements for resources, effort, and cost to provide the method of resolution, and elapsed time to provide a method of resolution.	Known defects are prioritized to be included in the next production release Production releases occur quarterly Defects are tracked using the Jira (CM) application. Non-code changes are reviewed and approved on a daily basis using a set review process Production environment issues are tracked using the Jira (IM) ticketing system
PMT-03	Investigate Problems	Investigate the underlying cause of the problem. If problem management identifies root causes of incidents and a method of resolving the incident, then classify the problem as a known error. Record known errors against the current and potentially affected services in addition to the configuration item suspected of being at fault. Ensure that up-to-date information on known errors and corrected problems is available to incident management. Submit application change requests where the resolution will result in a permanent change to the baseline application	Investigate problems that arise due to network, infrastructure, or COTS products
PMT-04	Perform Temporary Fix	Determine causes and provide temporary resolutions such as temporary firewall, security patch, upgrade patch, and other non-code changes	Coordinate and support code releases to multiple environments Maintain application environments and version control Proactive certificate management Database administration activities related to

Service ID	Activity	Description	Details
			infrastructure and application management File runs, application of scripts to resolve non-data issues, data need requests, testing support in lower environments
PMT-05	Management Problem Resolution	Monitor the progress of all open problems until completion and determine whether service levels are being met. Escalate if service levels are not being met, if management approvals or authorizations are required, or if management intervention or awareness is required; inform the requestor or client of the situation as well. Close the problem or known error once the corrective change has been successfully applied, or when the error is no longer applicable. Maintain information on problem resolutions and temporary fixes, including applicability and effectiveness.	Review system anomalies and system upgrade requirements identified via the monitoring activities, and escalate for prioritization Upgrades and resolutions to anomalies follow the established change management process

3.5 Perform System Maintenance

Maintenance is the process of supporting a system after implementation to maintain operational status, correct faults, improve performance or other attributes, adapt to a changed environment, and meet new client requests. Major enhancements to system functionality are implemented as separate initiatives/EPICs outside of Operations, with their own timeline, cost, and resource allocation. Major enhancements fall outside the scope of the maintenance activities discussed below.

Table 7. Perform System Maintenance

Service ID	Activity	Description	Details
MNT-01	Corrective Maintenance (Defect Fixes)	**Unscheduled**: Emergency Maintenance (break/fix) • Production issues that stop business operations and must be corrected as soon as possible. • Urgent issues that do not stop business operations but have a significant impact.	Defect fixes scoped through quarterly major releases and emergency releases as needed

Service ID	Activity	Description	Details
		Scheduled: Identify and remove non-break/fix defects; correct actual errors. These issues are identified and processed according to the Change Management and Release Management processes in place. They are grouped into planned, scheduled maintenance releases by priority status. Inclusion in the release is determined first by the priority set by the business, and then by CNSI analysis of resource requirements and dependencies.	
MNT-02	Perfective Maintenance	Improve the system without changing its functionality; improves performance, dependability, and maintainability, safety, reliability, efficiency, or cost-effectiveness of operation.	The following environments are supported: • Operations Development • Operations System Test • Operations UAT • Performance • Regression • Disaster Recovery (DR) • B2B • CRM Training • Production Server patching and validation Middleware patching, maintenance, tuning, and validation Database patching, maintenance, tuning, and validation Application performance tuning Application scanning and remediation Upgrades to system components and COTS applications
MNT-03	Adaptive Maintenance	Modify the system to keep it up to date with its environment; adapt to a new or upgraded environment by providing new functionality to address requirements that crop up due to changes in the environment (hardware, interfaces, operating system, middleware) or new regulations that impact business operations.	
MNT-04	Preventive Maintenance	Identify and detect latent faults. Includes changes to the existing system to reduce the risk of failure while operating.	

Service ID	Activity	Description	Details
			Data retention (purge and archive) Year-end maintenance activities
MNT-05	Enhancements	Changes to the system that alter the functionality and can be accomplished in one major release cycle (waterfall systems) or do not significantly impact integration partners. Any enhancement that is determined to exceed the scope of an enhancement may be implemented as a project outside the scope of this operations and maintenance amendment	Enhancements (CRs) scoped through quarterly major releases
MNT-06	IT Service Continuity Management	Maintenance and testing of the DR Plan Data replication (periodic backup)	Annual DR Test Periodic backup
MNT-07	Release and Deployment Management	The process of managing, planning, scheduling, and controlling a software build through different stages and environments. • Plan, configure, and execute builds through all environments to support timely and accurate application deployments • Develop scripts, utilities, and accompanying documentation for refreshing non-production environments • Document the UAT data setups/refresh information for each subsystem to ensure each UAT refresh brings forward the correct amount of data (ie. 24 mo. for Cap payment, 2 yrs. for Claims/Encounter, full refresh for EE, etc.) System Testing, UAT, Production Deployment • Sanity Testing	Build management Release deployment Post-release database refresh
MNT-08	Change Management/ Release Management	Release preplanning Requirements and prioritization Content review and freeze, design, and development System Testing, UAT, Production Deployment Sanity Testing	Tier 1 and Tier 2 CCBs Estimation process Change Logs, DSDD packets, and Defect Scope Documents

Service ID	Activity	Description	Details
			QA review, including internal peer review of code changes Development, System Testing, UAT (collaborate with the UAT Support team for UAT, emergency and initiative release planning, advise on test script preparations, data setups and interface runs), and Production Deployment Sanity Testing – Post Deployment Sanity checklist completed for each subsystem. This includes connectivity smoke testing and screen checks.

3.6 ClaimsSure Business Operations

Certified Professional Coders, Data Scientist/Modeler, along with a Registered Nurse, perform the task of medical review functions related to the FFS claims for prepayment editing, monitoring, auditing, and predictive modeling. Operational tasks including adjusting thresholds for Predictive Modeling, scenario fine-tuning, and predictive modeling data support and analysis.

Table 8. Business Operations

Service ID	Activity	Description	Details
BOP-1	ClaimsSure Module Maintenance and Enhancements	Provide improvement in quality of the ClaimsSure module with regular maintenance.	Module releases based on State approval
BOP-2	Technical Support to State Predictive Modeling Team on Ad-Hoc Basis	Supporting the State predictive modeling team for a specific claim or scenario.	Upon specific request, provide assistance with technical support

Service ID	Activity	Description	Details
BOP-3	Preliminary Claim Review	Review claims determined by the predictive modeling solution as possibly improperly billed claims.	Conduct prescreening of claims using scenarios with the predictive modeling solution Modify claim edits to support review decision
BOP-4	ClaimsSure Medical Review	The process of identifying the claim against medical documentation and supporting it through different stages of determination.	Daily, a team of medical reviewers, review both the medical claim and documentation submitted by the provider or facility requesting payment • If documentation supports, then payment is approved • If documentation is lacking information, then additional information is requested • If documentation fails to be produced within a specific timeframe, then claim is denied payment
BOP-5	Verifying Documentation Prior to Script Deny	The process of documentation review with the appropriate edit appended to identify possible errors.	Weekly process that provides a list of claims to be denied for exceeding a 45- or 10-day limit for submitted documentation

Service ID	Activity	Description	Details
BOP-6	Second Review of Denied Claims	A review process designed to revisit the claim and documentation, at the request of provider or client.	Furnish detailed rationale for the original determination and uphold the denial or to upend the original determination while informing the client that documentation supports new determination
BOP-7	Claims Appeals	The process to improve communication and possible provider performance.	Supply assistance and information, subject matter expertise, and rationale for claim denial reasoning
BOP-8	Technical Support	Improve the system, communication, correspondence, messaging, and reporting.	Maintain support and solutions with regards to the creation and generation of reporting functions
BOP-9	Reviews of Performance and Quality Assurance	Review of both performance and quality assurance of the team to verify that policies and procedures of State Medicaid are being followed and met.	Routine monitoring and performance review, while providing and meeting quality standards of policies and procedures
BOP-10	Reporting	Submitting required account details and statements of various data, including suspected fraud, waste, or abuse	Monthly requested reports that provide detailed information with regards to deliverables and activities that impact daily performance
BOP-11	Analytics	Deliver analytical guidance for claim monitoring, trending, or reporting beyond the scope of the everyday workload	Supply analysis with statistics obtained while observing progress or quality over a specific time period using data science and statistical modeling techniques

Service ID	Activity	Description	Details
BOP-12	Module Updates and System Configuration Changes	Improving the structure, principles, or procedures with changes that work collectively with the system adjustments or arrangement of elements that would affect flagged and suspended claims for review.	Provide upgrades, data purges, and enhancements that assist with gathering of correct data and sound support

Section 4 – Performance Standards

This section describes the performance standards that CNSI will adhere to for CHAMPS operations. CNSI's staffing and pricing model are designed to provide services that meet or exceed the standards below. The CNSI Operations Manager and MDHHS representative will schedule a monthly meeting to review performance against the standards using the reports specified in Appendix A – List of Performance Reports.

The parties agree that any delay or failure by CNSI to timely perform the services described in Section 3 or its obligations in accordance with the Performance Standards set forth in this Section 4 will interfere with the proper and timely operation of the system and services. The parties agree that, as a result of any delay or failure by CNSI to timely perform its duties, the State will incur costs to maintain the functions that would have otherwise been performed by CNSI and that the State will incur damages that will be difficult to measure. The parties understand and agree that the provisions in this Section 4 - Performance Standards – describe the liquidated damages CNSI will owe to the State as a result of any delay or failure of CNSI to perform its duties under this agreement; that the liquidated damages are enforceable compensatory damages and not in the nature of a penalty; and that CNSI will not claim at any time that the liquidated damages are unenforceable. The parties also agree that the liquidated damages described here are in addition to the liquidated damages described in section 2.073 of the contract between them.

The parties acknowledge and agree that CNSI will owe the State liquidated damages for any one failure to timely perform its obligations under this agreement. Any liquidated damages assessed are in addition to and not in limitation of any other rights or remedies of the State. The assessment of liquidated damages does not constitute a waiver or release of any other remedy the State may have under the agreement, but such damages will be reduced by the amount of liquidated damages assessed for the same events causing the actual damages.

The State and CNSI will meet on a monthly basis and the State will identify any deficiencies in CNSI failing to meet performance standards that may result in liquidated damages. But any failure by the State to raise any such deficiencies at these meetings will not waive the State's right to assess liquidated damages.

Undisputed amounts of liquidated damages assessed by the State may be deducted by the State from any money payable to CNSI under this agreement or the State may bill CNSI and CNSI will promptly pay those bills.

Exclusions

CNSI shall not be responsible for liquidated damages for unplanned outages and operations events related to the infrastructure, including but not limited to data center, hardware, network, storage, or telecommunications.

CNSI shall not be responsible for liquidated damages for unplanned outages and operations events related to DTMB enterprise applications, including but not limited to MILogin, FileNet, and SIGMA.

Definitions

For the purposes of this SOW the following terms are defined:

“Unplanned Outage” means occurrences that adversely affect the system and cause a condition where the system is completely unusable for its purposes in the daily operations of the system.

“Operations Event”: Occurrences that adversely affect the system but do not cause an Unplanned Outage, e.g., System performance problems.

“Deficiency” means an incident or problem resulting from a flaw in a deliverable or service that causes the deliverable or service to fail to perform in accordance with its applicable specifications or a failure of a deliverable to conform to reasonable commercial or industry standards for appearance, quality, functionality, or format.

4.1 Key Staff

Related services:

- All

Table 9. Key Staff

Performance Requirement	Liquidated Damages
CNSI must notify the MDHHS within 2 business days after CNSI learns about the departure of Key Staff. CNSI must replace Key Staff as defined in the contract with individuals who are acceptable to MDHHS within 30 calendar days of departure unless a longer period is approved in writing by MDHHS. CNSI must appoint an interim replacement Key Staff within 5 business days of departure of the Key Staff.	If the Key Staff is not replaced within 30 calendar days of Key Staff departure, or a longer period if approved in writing by MDHHS, then MDHHS shall assess $500 per business day for each day beyond 60 days until an acceptable replacement has been made.

4.2 System Enhancement As-Built Deliverables

Related Services:

- MNT-08 – Change Management / Release Management

Table 10. System Enhancement As-Built Deliverables

Performance Requirement	Liquidated Damages
CNSI and MDHHS will agree upon the due date for a System Enhancement As-Built Deliverable and the Production release date for its implementation in a Change Order. CNSI must incorporate and accept the tracked changes from the approved As-Built Deliverable to the appropriate parts of the system documentation (DSDD) within 30 business days of the date the as-built deliverable is released into production.	MDHHS shall assess $2,000 for each business day after the due date that an acceptable as-built deliverable is not received by MDHHS. If the as-built deliverable is received on time but the information is inaccurate or incomplete, then MDHHS shall assess $2,000 per business day until an acceptable as-built deliverable is received by MDHHS.

Performance Requirement	Liquidated Damages
	MDHHS shall assess $2,000 for each calendar day after the agreed-upon Production release date until the system enhancement deliverable is released into Production.

4.3 Change Request Response

Related Services:

- MNT-08 – Change Management / Release Management

Table 11. Change Request Response

Performance Requirement	Liquidated Damages
CNSI must deliver a CR response within 30 business days of receipt of an MDHHS Approved CR, unless otherwise agreed upon.	MDHHS shall assess $100 for each business day after the due date that a complete CR response is not received.

4.4 Unplanned Outage or Operations Event Response Time

Related Services:

- MSO-01 – System Monitoring
- MSO-02 - Track Service Level Agreements
- MSO-03 – Database Monitoring

Table 12. Unplanned Outage or Operations Event Response Time

Performance Requirement	Liquidated Damages
Response time requirements for Unplanned Outages or Operation Events are as noted in Table 13. CNSI will provide all responses via telephone call or email using the agreed-upon MDHHS Distribution List.	When notice, response, recommended resolution, or update is not received by MDHHS within the identified timeframe, MDHHS shall assess $350 per missed response time

Table 13. Response Time Requirements

Event	Response Time
Call or email to CNSI Operations Support team from MDHHS or DTMB regarding an Unplanned Outage	30 minutes

Event	Response Time
CNSI discovery of an Unplanned Outage	30 minutes
Call or email to CNSI Operations Support team from MDHHS or DTMB regarding an Operations Event (during business hours)	30 minutes
CNSI discovery of an Operations Event (during business hours)	30 minutes
Call or email to CNSI Operations Support team from MDHHS or DTMB regarding an Operations Event (non-business hours)	Prior to 8am on the next business day
CNSI discovery of an Operations Event (non-business hours)	Prior to 8 am on the next business day
CNSI provides status update for an Unplanned Outage or Operations Event, including next steps and (when available) the recommended resolution and estimated fix date and time for all system components	2 hours Once per hour thereafter (unless another timeframe agreed upon in writing via email)

4.5 Unplanned Outage or Operations Event Reports

Related Services:

- INC-03 – Ticket Analysis and Reporting

Table 14. Unplanned Outage or Operations Event Reports

Performance Requirement	Liquidated Damages
CNSI must provide MDHHS and DTMB with CNSI's completed analysis of the causes for any Unplanned Outage or Operations Event in the Production environment, excluding tickets owned by MDHHS or DTMB, within 5 business days of the resolution of the issue. The analysis will be documented in the CNSI Incident Report format and must include the following: • Title • Date and time of event • Summary of event • Root cause • Solution • Follow-up actions needed (if any)	MDHHS shall assess $200 for each business day after the due date the report is not received. If the report is received on time but the information is inaccurate or incomplete, then MDHHS will provide a written outline of the deficiencies, and CNSI will provide a corrected report within 5 business days, during which time liquidated damages will not be assessed until the sixth business day

4.6 System Maintenance

Related Services:

- MNT-01 – Corrective Maintenance

- MNT-02 – Perfective Maintenance
- MNT-03 – Adaptive Maintenance
- MNT-04 – Preventive Maintenance
- MNT-05 –Enhancements
- MNT-06 – IT Service Continuity Management
- MNT-07 – Release and Deployment Management
- MNT-08 – Change Management/Release Management

Table 15. System Maintenance

General Requirements
CNSI must provide production maintenance support and correct system Deficiencies, Unplanned Outages, and Operations Events for any and all CNSI system components installed and operated within CNSI and State of Michigan sites. System deficiencies (also referred to as “Deficiencies”) are categorized from Severity Level 1 to Severity Level 4, as set forth in Section 4.7 through 4.10, according to their impact on operations. Unplanned Outages and Operations Events are categorized as either Severity Level 1 or Severity Level 2. MDHHS and CNSI, in consultation, will determine the severity level assigned to a Deficiency, Unplanned Outage, or Operations Event. Each Deficiency, Unplanned Outage or Operation Event must be fixed within the required timeframes for the severity level and business criticality, as stated below. If a timeline is not met, then liquidated damages shall be assessed in accordance with Section 4 Performance Standards. Performance tracking will be via CNSI’s *Jira Reporting.*
Available Release Explanation
Available Release Definitions apply to CHAMPS software. For COTS or third-party software, CNSI may provide a workaround to the Deficiency taking into consideration available release schedules. The schedule for the long-term fix for the COTS or third-party software Deficiency will be planned by the Tier 2 CCB and assigned to a scheduled release. Available Release Definitions are based on the System Release Schedule established by the Tier 2 CCB and are relative to the date of discovery of a deficiency. • If a Deficiency is discovered when there are 10 or more business days left in the development cycle of the release, then the Next Available Release is the one currently in development. • If a Deficiency is discovered when there are 9 or fewer business days left in the development cycle of the release, then the Next Available Release will be the release following the one that is currently in development. • If a Deficiency is discovered during the period of the cycle in which there is no development underway (the planning period), then the Next Available Release will be the release that starts its development cycle immediately following the planning period. The Second Available Release is the release following the Next Available Release. The Third Available Release is the release following the Second Available Release. Note that MDHHS may request release deferral based on State resource constraints.

4.7 Severity Level 1 – Urgent

A Severity Level 1 event is one that causes the complete loss of one or more critical functions of the system, including the following:

- Provider Enrollment Screens
- Prior Authorization Screens
- Call Center Screens
- Claims Adjudication and processing
- Payment processing
- Eligibility Inquiry
- EDI processing
- Web Services processing
- Interface processing

HIPAA security breaches are also considered Severity 1 incidents.

Table 16 describes the requirements to repair or correct Severity Level 1 Deficiencies, Operation Events and Unplanned outages and the liquidated damages assessed by MDHHS for failure to comply with said requirements.

Table 16. Severity Level 1 Requirements and Damages

<table>
<tr><th>Severity Level 1 Performance Requirement</th><th>Liquidated Damages</th></tr>
<tr><td>
<table>
<tr><td>24 hours</td><td>CNSI must have corrected Deficiency, Unplanned Outage, or Operations Event</td></tr>
</table>
Exceptions for Infrastructure
CNSI is not responsible for downtime related to infrastructure, including but not limited to data center, hardware, network, storage, and telecommunications.
CNSI is not responsible for downtime related to DTMB enterprise applications, including but not limited to MILogin, Filenet, and SIGMA.
Exceptions for Maintenance and Deployment
One weekend per month, the System may be unavailable to MDHHS between the hours of 6:00 PM Eastern Time Saturday to 9:00 AM Eastern Time Sunday as a result of the System maintenance process.
Additional planned downtime may be scheduled as agreed between CNSI, MDHHS, and DTMB.
</td><td>
For CNSI’s failure to repair or correct a Severity Level 1 Deficiency, Unplanned Outage, or Operations Event within 24 hours, MDHHS shall assess liquidated damages in the following amounts:
<table>
<tr><td>$5,000</td><td>For each calendar day or any part of a calendar day, up to 10 calendar days</td></tr>
<tr><td>$10,000</td><td>For each calendar day between 11 and 20 calendar days</td></tr>
<tr><td>$20,000</td><td>For each calendar day or any part of a day thereafter, until the deficiency unplanned outage, or operations event is corrected</td></tr>
</table>
</td></tr>
</table>

4.8 Severity Level 2 – High

A Severity Level 2 event is one that causes the complete loss without availability of workarounds of one or more functions of the system that are not considered Severity 1 Critical functions.

- Table 17 describes the requirements to repair or correct Severity Level 2 Deficiencies Operation Events and Unplanned Outages and the liquidated damages assessed by MDHHS for failure to comply with said requirements.

Table 17. Severity Level 2 Requirements and Damages

<table>
<tr><th>Severity Level 2 Performance Requirement</th><th>Liquidated Damages</th></tr>
<tr><td>
Unplanned Outage or Operations Event
<table>
<tr><td>48 hours</td><td>CNSI must have corrected Severity Level 2 Unplanned Outage or Operation Event.</td></tr>
</table>
Exceptions for Infrastructure
CNSI is not responsible for downtime related to infrastructure, including but not limited to data
</td><td>
For CNSI’s failure to repair or correct a Severity Level 2 Unplanned Outage or Operations Event within 48 hours, MDHHS shall assess liquidated damages in the following amounts:
<table>
<tr><td>$2,500</td><td>For each calendar day or any part of a calendar day, up to 15 calendar days</td></tr>
</table>
</td></tr>
</table>

<table>
<tr><th>Severity Level 2 Performance Requirement</th><th>Liquidated Damages</th></tr>
<tr><td>center, hardware, network, storage, and telecommunications.

CNSI is not responsible for downtime related to DTMB enterprise applications, including but not limited to MILogin, Filenet, and SIGMA.

Exceptions for Maintenance and Deployment

One weekend per month, the System may be unavailable to MDHHS between the hours of 6:00 PM Eastern Time Saturday to 9:00 AM Eastern Time Sunday as a result of the System maintenance process.

Additional planned downtime may be scheduled as agreed between CNSI and MDHHS.</td><td><table><tr><td>$5,000</td><td>For each calendar day or any part of a day thereafter, until the Unplanned Outage or Operations Event is corrected</td></tr></table></td></tr>
<tr><td>Deficiency<table><tr><td>Next Available Release (Scheduled or Emergency Release)</td><td>CNSI must have corrected Severity Level 2 Deficiency</td></tr></table></td><td>For CNSI’s failure to repair or correct a Severity Level 2 Deficiency within the timeframe agreed upon, MDHHS shall assess liquidated damages in the following amount:<table><tr><td>$2,500</td><td>For each calendar day or any part of a calendar day thereafter, until the Deficiency is corrected</td></tr></table></td></tr>
</table>

4.9 Severity Level 3 – Medium

A Severity Level 3 event is one that causes a business function or system component to not work as required, but where a workaround that is acceptable to MDHHS is available.

Severity Level 3 events will be evaluated as high vs. low impact and priority by MDHHS staff, in consultation with CNSI, based on the level of impact the Deficiency has on the provider, client, or State users; or on the business impact to the State.

- Table 18 describes the requirements to repair or correct Severity Level 3 Deficiencies and the liquidated damages assessed by MDHHS for failure to comply with said requirements.

Table 18. Severity Level 3 Requirements and Damages

<table>
<tr><th>Severity Level 3 Performance Requirement</th><th>Liquidated Damages</th></tr>
<tr><td>High Impact or Priority Deficiency<table><tr><td>Next Available Release</td><td>CNSI must have corrected Deficiency</td></tr></table></td><td>For CNSI’s failure to repair or correct a high impact or priority Severity Level 3 Deficiency within the timeframe identified, MDHHS shall assess liquidated damages in the following amount:<table><tr><td>$5,000</td><td>For each calendar day or any part of a day thereafter, until the Deficiency is corrected</td></tr></table></td></tr>
</table>

<table>
<tr><th>Severity Level 3 Performance Requirement</th><th>Liquidated Damages</th></tr>
<tr><td>Low Impact or Priority Deficiency<table><tr><td>Second Available Release</td><td>CNSI must have corrected Deficiency</td></tr></table></td><td>For CNSI’s failure to repair or correct a low impact or priority Severity Level 3 Deficiency within the timeframe identified, MDHHS shall assess liquidated damages in the following amount:<table><tr><td>$2,500</td><td>For each calendar day or any part of a day thereafter, until the Deficiency is corrected</td></tr></table></td></tr>
</table>

4.10 Severity Level – Low

A Severity Level 4 event is one that causes a non-critical or cosmetic Deficiency that has a negative effect on one or more business functions or system components, and that does not qualify as any other Deficiency.

- Table 19 describes the requirements to repair or correct Severity Level 4 Deficiencies and the liquidated damages assessed by MDHHS for failure to comply with said requirements.

Table 19. Severity Level 4 Requirements and Damages

<table>
<tr><th>Severity Level 4 Performance Requirement</th><th>Liquidated Damages</th></tr>
<tr><td>Non-Critical or Cosmetic Deficiency<table><tr><td>Third Available Release</td><td>CNSI must have corrected Deficiency</td></tr></table></td><td>For CNSI’s failure to repair or correct a Severity Level 4 Deficiency within the timeframe identified, MDHHS shall assess liquidated damages in the following amount:<table><tr><td>$2,500</td><td>For each calendar day or any part of a day thereafter, until the Deficiency is corrected</td></tr></table></td></tr>
</table>

4.11 System Uptime

Related Services:

- MSO-01 – System Monitoring
- MSO-02 – Track Service Level Agreements
- MSO-03 – Database Monitoring
- INC-01 – Detection and Recording
- INC-02 – Tier 2 Support Ticket Analysis
- INC-03 – Tier 3 Support Ticket Analysis
- PMT-01 – Proactive Problem Analysis

- PMT-02 – Acknowledge and Prioritize Problems
- PMT-03 – Investigate Problems
- PMT-04 – Perform Temporary Fix
- PMT-05 – Management Problem Resolution

Table 20. System Uptime

<table>
<tr><th>System Uptime - Performance Requirement</th><th>Liquidated Damages</th></tr>
<tr><td>The required uptime for Production CHAMPS and the System components is 99.5% of the time, 24 hours per day, 7 days per week, on a monthly basis, excluding planned downtime.

Exceptions for Infrastructure

CNSI is not responsible for downtime related to infrastructure, including but not limited to data center, hardware, network, storage, and telecommunications.

CNSI is not responsible for downtime related to DTMB enterprise applications, including but not limited to MILogin, Filenet, and SIGMA.

Exceptions for Maintenance and Deployment

One weekend per month, the System may be unavailable to MDHHS between the hours of 6:00 PM Eastern Time Saturday to 9:00 AM Eastern Time Sunday as a result of the System maintenance process.

Additional planned downtime may be scheduled as agreed between CNSI, MDHHS and DTMB.</td><td>MDHHS shall assess liquidated damages as specified below for each hour or portion thereof in the month that the System fails to meet these uptime performance standards.

<table><tr><td>$1,000 per hour</td><td>Up to 24 hours</td></tr><tr><td>$2,000 per hour</td><td>From 24-48 hours</td></tr><tr><td>$3,000 per hour</td><td>More than 48 hours</td></tr></table>
Continuous

If an unplanned outage starts in one calendar month and continues into the following calendar month, then all of the continuous hours of that unplanned outage will count in the calculation of the liquidated damages without starting over for the hours in the new calendar month and without impacting the hours for calculating the uptime requirement for either month.</td></tr>
<tr><th>System Uptime –Performance Reporting</th><th>Liquidated Damages</th></tr>
<tr><td>CNSI will provide an Application uptime report as follows:

<table><tr><td>Monthly Application Uptime Report</td><td>Monthly, by the first business day on or after the 10th</td></tr><tr><td></td><td></td></tr></table></td><td>MDHHS shall assess $200 per calendar day for each day after the due date that an acceptable application uptime report is not received. If the system uptime report is received on time but the information is inaccurate or incomplete, then MDHHS shall assess $50 per calendar day until an acceptable system uptime report is received.</td></tr>
</table>

4.12 Data Warehouse

Related Services:

- PCS-03 – Perform Operations and Support (Interfaces and Data Warehouse)

Table 21. Data Warehouse

Performance Requirement	Liquidated Damages
CNSI must generate 100% of daily data warehouse extracts within 24 hours of the defined extract schedule within the approved DSDD. This excludes delays due to planned outages and releases.	MDHHS shall assess $500 per calendar day for each day the data warehouse extracts are not completed.

4.13 Data Maintenance

Related Services:

- PCS-02 – Perform Necessary Support

Table 22. Data Maintenance

Performance Requirement	Liquidated Damages
CNSI must obtain MDHHS approval through the change request or ticketing process before making any changes to database tables, structures and rules including edits, audits and business data contained therein.	MDHHS shall assess up to $10,000 per occurrence for failure to obtain MDHHS approval through the change request or ticketing process before making any changes to database tables, structures and rules including edits, audits and data contained therein

4.14 UAT Availability

Related Services:

- MSO-01 – System Monitoring
- MSO-03 – Database Monitoring
- INC-01 – Detection and Recording
- INC-02 – Tier 2 Support Ticket Analysis
- INC-03 – Tier 3 Support Ticket Analysis
- PMT-01 – Proactive Problem Analysis
- PMT-02 – Acknowledge and Prioritize Problems
- PMT-03 – Investigate Problems
- PMT-04 – Perform Temporary Fix
- PMT-05 – Management Problem Resolution

Table 23. UAT Availability

Performance Requirement	Liquidated Damages
During the scheduled Operations UAT Testing and Emergency release period, CNSI must make User Acceptance Testing (UAT) environments or Regression Test environments available at least 95% of the time during normal business hours (6:00 AM to 7:00 PM, Monday through Friday, Eastern Time.	MDHHS shall assess $250 per hour for each full hour during normal business hours that the UAT or Regression environments do not meet this uptime percentage or the hourly specifications.

4.15 System Security

Related Services:

- PCS-07 – Perform Operations and Support (Security/Audits)

Table 24. System Security

Performance Requirement	Liquidated Damages
CNSI must participate in and cooperate with MDHHS and DTMB in any required security design reviews of any part of the system. CNSI must maintain and document security features for all CNSI-supported automation systems to ensure that the system is protected against unauthorized access in alignment with the DTMB Security Office.	MDHHS shall assess $100 per full calendar day for each day CNSI does not participate in a security design review. MDHHS shall assess $100 per full calendar day for each day CNSI does not meet this requirement, unless CNSI is meeting the agreed-upon schedule in completing any follow-up action plan to bring the System into compliance with DTMB security standards. MDHHS shall assess $100 per full calendar day for each day after the due date that a milestone in any follow-up action plan to bring the system into compliance with the DTMB security standards is not met, until that milestone is completed.
System Security – Performance Reporting	**Liquidated Damages**
CNSI must share security reports (for example, app scan reports) periodically as required by DTMB.	MDHHS shall assess $100 per full calendar day for each day after the due date that requested security reports are not received.

4.16 Disaster Recovery

Related Services:

- MNT-06 – IT Service Continuity Management

Table 25. Disaster Recovery

Performance Requirement	Liquidated Damages
CNSI must prepare and submit to MDHHS and DTMB an updated and comprehensive Disaster Recovery (DR) Plan annually on the first business day of July.	MDHHS shall assess $500 per full calendar day for each day after the due date that an acceptable DR Plan is not received. If the DR Plan is received on time but the information is inaccurate or incomplete, MDHHS shall continue to assess $50 per full calendar day until an acceptable DR Plan is received.
The CNSI must coordinate and test DR capabilities and demonstrate disaster recovery capabilities annually in coordination with MDHHS and DTMB.	MDHHS shall assess up to $500 per full calendar day for each day after the due date that the scheduled DR testing is not conducted.
CNSI will provide MDHHS and DTMB with the DR testing results within 30 days of the completed DR test.	MDHHS shall assess up to $500 per full calendar day for each day after the due date that the DR testing results are not received. If the DR testing results are received on time but the information is inaccurate or incomplete, then MDHHS shall continue to assess $50 per full calendar day until acceptable DR testing results are received.

4.17 Claims Processing

Related Services:

- PCS-04 – Perform Operations and Support (Payment and Remittance Advice (RA))

Table 26. Claims Processing

Performance Requirement	Liquidated Damages
Claims will be adjudicated in real time through direct data entry. For batch claims, CNSI must perform a claims adjudication cycle at least once daily, excluding planned downtimes.	MDHHS shall assess $100 per full calendar day for each day that a claim adjudication cycle is missed.

4.18 Payment Processing

Related Services:

- PCS-04 – Perform Operations and Support (Payment and Remittance Advice (RA))

Table 27. Payment Processing

Performance Requirement	Liquidated Damages
CNSI must perform payment cycles in CHAMPS and produce and send the financial transaction details to the appropriate State financial system based on agreed upon schedules documented in the CHAMPS *Interfaces Detailed System Design Document (DSDD)*, unless the schedule for one or more specific payment cycles is changed by mutual agreement.	MDHHS shall assess $5,000 per full calendar day for each day a payment cycle for CHAMPS is late.

4.19 UAT Readiness

Related Services:

- MNT-01 – Corrective Maintenance (Defect Fixes)
- MNT-02 – Perfective Maintenance
- MNT-03 – Adaptive Maintenance
- MNT-04 – Preventive Maintenance
- MNT-05 –Enhancements
- MNT-07 – Release and Deployment Management
- MNT-08 – Change Management/Release Management

Table 28. UAT Availability

Performance Requirement	Liquidated Damages
During the scheduled Operations UAT Testing Period, CNSI will deploy a minimum of 95% of approved release content into UAT by the start of the first day of UAT as per the approved release schedule. Exceptions: • Content approved after the initial content freeze will be excluded. • Change Logs that have not been approved by the end of the design period defined in the approved release schedule.	MDHHS shall assess $500 per calendar day for each day the minimum content is not available for UAT testing.

4.20 UAT Environment and Deployment

Related Services:

- MNT-01 – Corrective Maintenance (Defect Fixes)

- MNT-02 – Perfective Maintenance
- MNT-03 – Adaptive Maintenance
- MNT-04 – Preventive Maintenance
- MNT-05 –Enhancements
- MNT-07 – Release and Deployment Management
- MNT-08 – Change Management/Release Management

Table 29. UAT Environment and Deployment

Performance Requirement	Liquidated Damages
CNSI will resolve UAT environment and deployment issues within 24 hours of notification of the issue by MDHHS: **Exceptions for Infrastructure** CNSI is not responsible for downtime related to infrastructure, including but not limited to data center, hardware, network, storage, and telecommunications. CNSI is not responsible for downtime related to DTMB enterprise applications, including but not limited to MILogin, FileNet, and SIGMA.	MDHHS shall assess liquidated damages of $250 per hour over the 24-hour period.

4.21 Eligibility Files (CIMS and Monthly 834)

Related Services:

- PCS-03 – Perform Operations and Support (Interfaces and Data Warehouse)

Table 30. Eligibility Files (CIMS)

Performance Requirement	Liquidated Damages
CNSI must complete processing of the daily Eligibility (CIMS) file received from Bridges and corresponding outbound files within 16 hours of receipt. CNSI must send the monthly 834 files according to the approved schedule	MDHHS shall assess $250 for each day the Eligibility file is processed late or the monthly 834 files are sent late.

4.22 CRM Training Environment Availability

Related Services:

- MSO-01 – System Monitoring
- MSO-03 – Database Monitoring

- INC-01 – Detection and Recording
- INC-02 – Tier 2 Support Ticket Analysis
- INC-03 – Tier 3 Support Ticket Analysis
- PMT-01 – Proactive Problem Analysis
- PMT-02 – Acknowledge and Prioritize Problems
- PMT-03 – Investigate Problems
- PMT-04 – Perform Temporary Fix
- PMT-05 – Management Problem Resolution

Table 31. CRM Training Environment Availability

Performance Requirement	Liquidated Damages
During the scheduled Maximus CRM Training periods, CNSI must make sure the CRM Training environment is fully available at least 95% of the time during normal business hours (8:00 AM to 7:00 PM), Monday through Friday, Eastern Time.	MDHHS shall assess $250 per hour for each full hour during normal business hours that the CRM Training environment does not meet this uptime percentage during the approved scheduled CRM Training periods. *The period of performance for this metric will start 01/2022.*

4.23 ClaimsSure Support

Related Services:

- PCS-04 – Perform Operations and Support (Payment and Remittance Advice (RA))
- BOP-3 Preliminary Claim Review
- BOP-4 ClaimsSure Medical Review
- BOP-5 Verifying Documentation Prior to Script Deny
- BOP-6 Second Review of Denied Claims
- BOP-7 Claims Appeals
- BOP-8 Technical Support
- BOP-9 Reviews of Performance and Quality Assurance
- BOP-10 Reporting
- BOP-11 Analytics
- BOP-12 Module Updates and System Configuration Changes

Table 32. ClaimsSure Support

Performance Requirement	Liquidated Damages
The CNSI ClaimsSure team will ensure that 99% of all inpatient and outpatient claims are reviewed and resolved within 65 calendar days. Note: The clock starts when CNSI receives documentation through the DMP portal and restarts if a secondary documentation request is initiated by CNSI.	MDHHS shall assess $500 per month for any month the performance standard is not met. *The period of performance for this metric will start 01/2022.*

Appendix A – List of Performance Reports

All CNSI reports are posted on the CNSI SharePoint web site.

Table 33. Performance Reports

Performance Standard	Performance Tracking Description or Name of Report	How Often and When Due (Except State Holidays)
4.2 System Enhancements As-Built Deliverables	DHHS spreadsheet based on due date and Production release date from Change Order CNSI's *R**-1.** Change Log Status MIPRO* Report for Production release date	At the end of the Release Design and DSDD incorporation.
4.3 Change Request Response	CNSI's *R**-1.** *Change Log Status MIPRO CR Tracking Report*	At the end of the Release Design and DSDD incorporation.
4.5 Unplanned Outage or Operational Event Reports	The analysis will be in either the CNSI Incident Report or the Operations Event Report (whichever is applicable) and will be attached to the ticket	Within 4 business days of resolution of the issue
4.6 System Maintenance	CNSI's *MICHOPR Report for IM tickets*	Monthly, by the first business day on or after the 10th
4.7 Severity Level 1 - Urgent	CNSI's *MICHOPR Report for IM tickets*	Monthly, by the first business day on or after the 10th
4.8 Severity Level 2 - High	CNSI's *MICHOPR Report for IM tickets*	Monthly, by the first business day on or after the 10th
4.9 Severity Level - Medium	CNSI's *MICHOPR Report for IM tickets*	Monthly, by the first business day on or after the 10th
4.10 Severity Level - Low	CNSI's *MICHOPR Report for IM tickets*	Monthly, by the first business day on or after the 10th
4.11 Application Uptime	CNSI's *Application Uptime Report for CRM Training, UAT & Production*	Monthly, by the first business day on or after the 10th
4.11 System Performance	CNSI's *Uptime Report for CRM Training, UAT & Production*	Monthly, by the first business day on or after the 10th
4.12 Data Warehouse	CNSI's *DW Notifications Email Report*	Weekly, on Monday

Performance Standard	Performance Tracking Description or Name of Report	How Often and When Due (Except State Holidays)
4.13 Reference Data Maintenance	*MI RFC Report for "Month*"	Ad hoc basis as required
4.14 UAT Availability	CNSI's *Uptime Report for CRM Training, UAT & Production*	Monthly, by the first business day on or after the 10th
4.15 System Security	*Periodic Security Report*	Based on State and CNSI agreed-upon schedule
4.16 Disaster Recovery	CNSI's *Disaster Recovery Plan*	Once per calendar year
	CNSI's *DR Testing Results*	Within 30 business days of the DR testing
4.17 Claims Processing	CNSI's *Claims Monthly Adjudication Report*	Monthly
4.18 Payment Processing	*Weekly SIGMA email Notifications*	Weekly
4.19 UAT Readiness	CNSI's *UAT Readiness Report*	At the start of the UAT phase
4.20 UAT Environment and Deployment	The analysis will be in the CNSI Incident Report	Within 4 business days of resolution of the issue
4.21 Eligibility Files (CIMS)	Daily Interface Acknowledgement Email	Daily
4.22 CRM Training Environment	*CNSI's Uptime Report for CRM Training, UAT & Production*	Monthly, by the first business day on or after the 10th
4.23 ClaimsSure Support	*CNSI's Monthly Resolution for ClaimsSure email report (Needs to now be a custom aging report that looks back 65 days)*	Daily at 7:00am

Section 5 – Upgrades

Continuous upgrades are required for CHAMPS to maintain a high level of service to stakeholders including citizens, providers, health plans, auditors, and other SoM integration partners/systems and to maintain compliance with State and Federal regulations and standards.

CHAMPS upgrades and enhancements are categorized in Table 34. An individual upgrade will be classified into one or more categories. All upgrades are approved by MDHHS before any work is performed.

Table 34. Upgrade Categories

Upgrade Categories
Access to Care
Audit Compliance
Cost Savings and Avoidance
Impact to Provider Payments
Technology Upgrades
State/Federal Policy Compliance
Visibility/Sensitivity Risk

Upgrades and enhancements are budgeted on an annual basis and are performed based on MDHHS approval of the detailed scope and hours associated with each upgrade.

The annual budget includes approximately 43,300 hours for CHAMPS upgrades and enhancements. Defect classification remains unchanged in this amendment and any associated effort and cost are not part of the upgrade hours.

The following staff perform upgrades and are included as part of the hourly rate:

- Operations Manager
- Application Service Manager
- Application Services Architect
- Business Analyst Lead
- Infrastructure Lead
- Project Managers
- Subject Matter Experts
- Business Analysts
- Systems Analysts

- Software Engineers
- Solutions Architects
- Enterprise Architects
- Software Quality Assurance Engineers
- Database Administrators
- Configuration Management Engineers
- System Administrators
- Security Analysts
- Quality Assurance Engineers
- Technical Writers

5.1 Proposed Technology Upgrades for FY2022/2026

The Operations and Maintenance agreement references upgrades known at the time of the SOW creation. Technology upgrades will be planned based on mutual agreement between DHHS, DTMB and CNSI. Each upgrade will need to be evaluated for scope, timeline, and cost. The results of these evaluations will be used to determine the approach for funding and executing each upgrade.

Upgrade	Current Version	New Version	Targeted Release	Targeted Date	Comment
Siebel Patch Set	19.4	19.x or 10.x based on the demand	TBD	TBD	Siebel Patch set will be applied based on demand and security compliance.
HCI Infrastructure Upgrade Scope included as part of a separate SOW	Solaris	Linux	TBD	TBD	Infrastructure upgrades required due to removal of DTMB support for the NGDI & Solaris operating system.
myCarevisit	Old App Store Versions	Latest App Store Version	TBD	TBD	Required App Store compatibility version.
MyHealthButton	Old App Store Versions	Latest App Store Version	TBD	TBD	Required App Store compatibility version.

Upgrade	Current Version	New Version	Targeted Release	Targeted Date	Comment
Oracle 19c Scope included as part of a separate SOW	12c	Latest Oracle Supported version	TBD	TBD	Oracle full Platinum support.
Grouper Software	Optum GPS	GPCS	TBD	TBD	Note: Planning in progress. Release date to be determined
HealthBeat	Java 6	Java 8	TBD	TBD	Note: Need to move to the latest version to ensure latest security features are enabled.
HCI Hardware Scope included as part of a separate SOW	Dell EMC	Dell EMC	TBD	TBD	Note: SOM is in the process of ordering hardware
SOA Upgrade	12.2.1.3	12.2.1.4	TBD	TBD	Note: Update to the latest version of SOA compatible with Oracle 19c

5.2 Upgrade Billing

Upgrades are billed and align to the quarterly release with 1/3 billed each month leading up to the production release month as the final 1/3 billable month.

Section 6 – evoBrix X Platform Upgrade

Technical Upgrade - Focuses on changes to lay the foundation for enhancing business value through functional upgrades:

- Enables a continuous patching and maintenance schedule
    - Security updates (Patches, code scanning/remediation)
    - Architectural improvements (New modules, frameworks, standards)
    - Underlying Component Compatibility (ex. Oracle, JDK, COTS)
    - Performance improvements
    - Implements containerization
    - Enables cloud native applications

Functional Upgrade - Builds on technical upgrades with added scope to take advantage of new business functionality:

- Leverages product innovations
- Adds new business capabilities
- Enhances user interface features
- Improves product usability and configurability

All upgrades come already developed and tested and only need to be integrated with the CHAMPS system and regression tested. The platform upgrade pricing includes 5,000 hours fixed priced annually to apply technical and functional upgrades and will be billed quarterly. The initial release will bring CHAMPS to the evoBrix X base platform level and subsequent releases will be used to apply technical upgrades to the platform and allow DHHS to select functional upgrades for implementation.

Section 7 – Fraud Waste and Abuse (FWA)

Enhancements for FWA system components are to be built into an annual FWA SOW. The SOW will outline the identified scope of changes and the release and payment schedules.

- CNSI will work with the DHHS prior to the start of each fiscal year to identify the changes to be included and tracked as part of the yearly SOW.
- CNSI changes called out in the yearly SOW will match the yearly CMS and State appropriated fund amounts called out in table 42 of *Section 11 - Pricing*.

Section 8 – Software Licensing

The Operations and Maintenance agreement includes the following software licenses:

Table 35. Annual Software License Costs

Licensing	SFY 2022	SFY 2023	SFY 2024	SFY 2025	SFY 2026
LexisNexis	$ 627,353	$ 680,420	$ 741,530	$ 811,078	$ 887,494
RuleIT	$ 223,071	$ 228,052	$ 234,267	$ 241,530	$ 249,114
evoBrix X Subscription	$ 297,273	$ 303,911	$ 312,193	$ 321,872	$ 331,979
CompuMax	$ 11,397	$ 11,651	$ 11,969	$ 12,340	$ 12,727
HealthBeat	$ 59,455	$ 60,782	$ 62,439	$ 64,374	$ 66,396
ClaimSure	$ 148,636	$ 151,955	$ 156,096	$ 160,936	$ 165,990
FHIR Subscription	$ 351,900	$ 356,265	$ 362,421	$ 370,029	$ 377,943
Total	**$1,719,084**	**$1,793,037**	**$1,880,915**	**$1,982,159**	**$2,091,644**

Type text h

FHIR Subscription fee includes:

- Provider Directory
- Patient Access

Section 9 – Service Delivery Model

CNSI will leverage an ITIL-based Managed Services delivery model for CHAMPS operations to include a Core Operations team augmented and supported by services teams. This section describes the teams that will support CHAMPS operations along with the organization structure.

9.1 Service Teams

The service teams supporting CHAMPS operations are listed in Table 36.

Table 36. Service Teams

Team	Role
Core Operations	Manages all operations activities
Operations Support Center (OSC)	Performs monitoring and Tier 1 support services
Advanced Support and Maintenance (ASM)	Performs Tier 2 and Tier 3 support Leads all maintenance activities
Business Operations	Performs all business operations activities
Infrastructure Services	Performs all infrastructure-related services
Business Services	Provides business expertise for support, defects, and enhancements
Development	Performs all development for defects and enhancements
Software Quality Assurance (SQA)	Performs testing for defects and enhancements
Quality Assurance and Tech Writing (QA/TW)	Performs quality assurance and technical writing for deliverables
Architecture	Reviews enhancements for architectural alignment to State and CNSI standards
COTS Managed Services Teams	Performs Tier 2 and Tier 3 Support

Table 37 is a RASIC Matrix for the Services Teams depicting the roles of each team across Service Categories. A RASIC Legend is provided at Table 38.

Table 37. RASIC Matrix

Service Category	Core Operations	OSC	ASM	Bus Ops	Inf f	Bus Services	Dev	SQA	QA/TW	Arch	COTS
Monitor System Operations	A	R	S		S	S					S
Provide Client Support	A	R	R		S	R					R
Perform Incident Management	A	R	R		R	R					R
Perform Problem Management	A	R	R		R	R					R
Perform System Maintenance	A	I	R		R	R	R	R	R	C	R
Business Operations	A			R		S					

Table 38. RASIC Legend

Role	Description
R	Responsible
A	Accountable
S	Supports
I	Informed
C	Consulted

9.2 Module Grouping

All modules and add-ons are grouped as shown in Table 39 for streamlined communication and service delivery:

Table 39. Module Groupings

Group	Modules
Provider Management	Provider Enrollment
	PCS
	SiteVisitPro
	eMIPP
	myCareVisit
Member Services	Eligibility and Enrollment
	Managed Care
	Customer Relationship Management
	myHealthButton/myHealthPortal
Payment Services	Reference
	Claims & Encounters
	Prior Authorization
	Financial Services
	ClaimsSure
Facility Settlement	Facility Settlement

Group	Modules
General Services	Common Components
	Web Services
	Access and Security
	Correspondence
	DMP
Reporting Services	BI/Reports
	ODS
	Data Warehouse
Interfaces and EDI	Interfaces
	DW Extracts
	EDI / HIPAA
FHIR Interoperability	Interfaces
	Web Services

9.3 Core Operations Team

Table 40 lists the roles for the Core Operations Team supporting CHAMPS operations.

Table 40. Core Operations Staff

Position	Role
Operations Manager	Manages all aspects of operations
Application Service Manager	Oversees all application support and maintenance activities
Application Services Architect	Provides business and solution expertise for support and maintenance
Provider Management Lead	Leads support and maintenance for Provider Management modules and add-ons
Provider Management Analyst	Performs support and maintenance activities for Provider Management modules and add-ons
Member Services Lead	Leads support and maintenance for Member Services modules and add-ons

Position	Role
Member Services Analyst	Performs support and maintenance activities for Member Services modules and add-ons
Payment Services Lead	Leads support and maintenance for Payment Services modules and add-ons
Payment Services Analyst	Performs support and maintenance activities for Payment Services modules and add-ons
General Services Lead	Leads support and maintenance for General Services modules and add-ons
General Services Analyst	Performs support and maintenance activities for General Services modules and add-ons
Facility Settlement Lead	Leads support and maintenance for Facility Settlement modules and add-ons
Interfaces Lead	Leads support and maintenance for Interfaces modules and add-ons
EDI Lead	Leads support and maintenance for EDI modules and add-ons
Configuration Management Lead	Leads Configuration Management activities including administration and release deployment
Infrastructure Lead	Leads all infrastructure activities
Software Quality Assurance Lead	Leads all SQA activities
Business Analyst Lead	Leads all business analysis activities for support and maintenance
Business Operations Manager	Manages ClaimsSure review activities

Figure 1 shows the high-level team structure for CHAMPS operations which combines the Core Operations Team and Service Teams.

CNSI will notify DHHS when changes in Core Staffing assignments are made. The notification will be done prior to departure of current staff and the name of the replacement staff member will be provided within 5 business days.

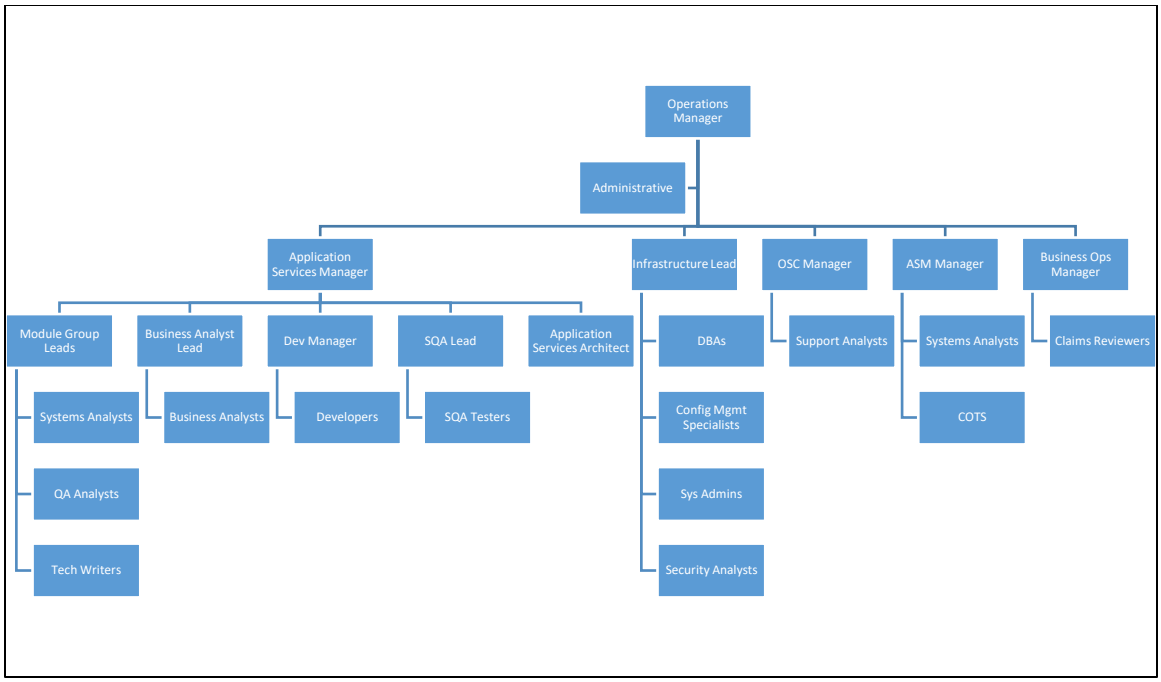


Figure 1. Team Structure

Section 10 – Assumptions and Constraints

Table 41 lists the assumptions and constraints for this amendment.

Table 41. Assumptions and Constraints

No.	Service Category	Description
1	All	CNSI may leverage global resources for all work in this amendment with the exception of development of security controls and handling of protected health information (PHI) and personally identifiable information (PII) data.
2	All	CNSI will ensure that all staff have the requisite training and knowledge before performing work. CNSI maintains an extensive knowledge base as well as training and onboarding processes. All operations resources must complete privacy and security training on an annual basis.
3	Perform System Maintenance	CHAMPS is standardized on JIRA as the tool for Incident Management and Change Management, which aligns to both State and CNSI standards.
4	Perform System Maintenance	Maintenance releases will follow the mutually agreed upon release calendar.
5	Perform System Maintenance	COTS product upgrades will be performed in order to remain at supported software versions according to DTMB Enterprise Architecture standards.
6	Monitor System Operations	CNSI is not responsible for managing or monitoring data center/infrastructure components, including but not limited to hardware, storage, networks, and telecommunication.

Section 11 – Pricing

Table 42 provides pricing for the amendment for CHAMPS Operations. Upgrades (also known as Enhancements) pricing is based on the number of hours and an hourly rate and is provided by fiscal year. Software licensing pricing is also provided by fiscal year.

Table 42. Pricing

Description	FY22	FY23	FY24	FY25	FY26	Extension Total
Operations	$20,800,000	$20,800,000	$20,800,000	$20,800,000	$20,800,000	$ 104,000,000
Licensing	$ 1,719,084	$ 1,793,037	$ 1,880,915	$ 1,982,159	$ 2,091,644	$ 9,466,839
Enhancements	$ 6,287,578	$ 6,287,578	$ 6,543,978	$ 6,543,978	$ 6,725,578	$ 32,388,690
FWA	$ 1,200,000	$ 1,200,000	$ 1,200,000	$ 1,200,000	$ 1,200,000	$ 6,000,000
FHIR Interoperability	$ 386,999	$ 386,999	$ 386,999	$ 386,999	$ 386,999	$ 1,934,995
evoBrix X Upgrades	$ 725,000	$ 725,000	$ 725,000	$ 725,000	$ 725,000	$ 3,625,000
Total:	$31,118,661	$31,192,614	$31,536,892	$31,638,136	$31,929,221	$ 157,415,524
Hourly Enhancement Rates	$145.00	$145.00	$151.41	$151.41	$155.95	

11.1 Payment Schedule

Table 43 contains the Payment Schedule for Operations and Licensing.

Month	Operations Support	Licensing	FHIR	FHIR Licensing	Platform Upgrades	Total
10/31/2021	$ 1,733,333	$ 1,367,184.00	$ 32,249.92			$ 3,132,767.27
11/30/2021	$ 1,733,333		$ 32,249.92			$ 1,765,583.27
12/31/2021	$ 1,733,333		$ 32,249.92		$ 181,250.00	$ 1,946,833.27
1/31/2022	$ 1,733,333		$ 32,249.92			$ 1,765,583.27
2/28/2022	$ 1,733,333		$ 32,249.92			$ 1,765,583.27
3/31/2022	$ 1,733,333		$ 32,249.92		$ 181,250.00	$ 1,946,833.27
4/30/2022	$ 1,733,333		$ 32,249.92			$ 1,765,583.27
5/31/2022	$ 1,733,333		$ 32,249.92	$ 351,900.00		$ 2,117,483.27
6/30/2022	$ 1,733,333		$ 32,249.92		$ 181,250.00	$ 1,946,833.27
7/31/2022	$ 1,733,333		$ 32,249.92			$ 1,765,583.27
8/31/2022	$ 1,733,333		$ 32,249.92			$ 1,765,583.27
9/30/2022	$ 1,733,333		$ 32,249.92		$ 181,250.00	$ 1,946,833.27
10/31/2022	$ 1,733,333	$ 1,436,771.99	$ 32,249.92			$ 3,202,355.23
11/30/2022	$ 1,733,333		$ 32,249.92			$ 1,765,583.24
12/31/2022	$ 1,733,333		$ 32,249.92		$ 181,250.00	$ 1,946,833.24
1/31/2023	$ 1,733,333		$ 32,249.92			$ 1,765,583.24
2/28/2023	$ 1,733,333		$ 32,249.92			$ 1,765,583.24
3/31/2023	$ 1,733,333		$ 32,249.92		$ 181,250.00	$ 1,946,833.24
4/30/2023	$ 1,733,333		$ 32,249.92			$ 1,765,583.24
5/31/2023	$ 1,733,333		$ 32,249.92	$ 356,265.01		$ 2,121,848.25
6/30/2023	$ 1,733,333		$ 32,249.92		$ 181,250.00	$ 1,946,833.24
7/31/2023	$ 1,733,333		$ 32,249.92			$ 1,765,583.24
8/31/2023	$ 1,733,333		$ 32,249.92			$ 1,765,583.24
9/30/2023	$ 1,733,333		$ 32,249.92		$ 181,250.00	$ 1,946,833.24
10/31/2023	$ 1,733,333	$ 1,518,494.17	$ 32,249.92			$ 3,284,077.39
11/30/2023	$ 1,733,333		$ 32,249.92			$ 1,765,583.22
12/31/2023	$ 1,733,333		$ 32,249.92		$ 181,250.00	$ 1,946,833.22
1/31/2024	$ 1,733,333		$ 32,249.92			$ 1,765,583.22
2/29/2024	$ 1,733,333		$ 32,249.92			$ 1,765,583.22
3/31/2024	$ 1,733,333		$ 32,249.92		$ 181,250.00	$ 1,946,833.22
4/30/2024	$ 1,733,333		$ 32,249.92			$ 1,765,583.22
5/31/2024	$ 1,733,333		$ 32,249.92	$ 362,420.83		$ 2,128,004.05
6/30/2024	$ 1,733,333		$ 32,249.91		$ 181,250.00	$ 1,946,833.22
7/31/2024	$ 1,733,333		$ 32,249.92			$ 1,765,583.22
8/31/2024	$ 1,733,333		$ 32,249.92			$ 1,765,583.22
9/30/2024	$ 1,733,333		$ 32,249.92		$ 181,250.00	$ 1,946,833.22
10/31/2024	$ 1,733,333	$ 1,612,130.00	$ 32,249.92			$ 3,377,713.24
11/30/2024	$ 1,733,333		$ 32,249.92			$ 1,765,583.24
12/31/2024	$ 1,733,333		$ 32,249.92		$ 181,250.00	$ 1,946,833.24
1/31/2025	$ 1,733,333		$ 32,249.92			$ 1,765,583.24
2/28/2025	$ 1,733,333		$ 32,249.92			$ 1,765,583.24
3/31/2025	$ 1,733,333		$ 32,249.92		$ 181,250.00	$ 1,946,833.24
4/30/2025	$ 1,733,333		$ 32,249.92			$ 1,765,583.24
5/31/2025	$ 1,733,333		$ 32,249.92	$ 370,029.00		$ 2,135,612.24
6/30/2025	$ 1,733,333		$ 32,249.92		$ 181,250.00	$ 1,946,833.24
7/31/2025	$ 1,733,333		$ 32,249.92			$ 1,765,583.24
8/31/2025	$ 1,733,333		$ 32,249.92			$ 1,765,583.24
9/30/2025	$ 1,733,333		$ 32,249.92		$ 181,250.00	$ 1,946,833.24
10/31/2025	$ 1,733,333	$ 1,713,700.51	$ 32,249.92			$ 3,479,283.76
11/30/2025	$ 1,733,333		$ 32,249.92			$ 1,765,583.25
12/31/2025	$ 1,733,333		$ 32,249.92		$ 181,250.00	$ 1,946,833.25
1/31/2026	$ 1,733,333		$ 32,249.92			$ 1,765,583.25
2/28/2026	$ 1,733,333		$ 32,249.92			$ 1,765,583.25
3/31/2026	$ 1,733,333		$ 32,249.92		$ 181,250.00	$ 1,946,833.25
4/30/2026	$ 1,733,333		$ 32,249.92			$ 1,765,583.25
5/31/2026	$ 1,733,333		$ 32,249.92	$ 377,943.49		$ 2,143,526.74
6/30/2026	$ 1,733,333		$ 32,249.92		$ 181,250.00	$ 1,946,833.25
7/31/2026	$ 1,733,333		$ 32,249.92			$ 1,765,583.25
8/31/2026	$ 1,733,333		$ 32,249.92			$ 1,765,583.25
9/30/2026	$ 1,733,333		$ 32,249.92		$ 181,250.00	$ 1,946,833.25
	$ 104,000,000	$ 7,648,281	$ 1,934,995	$ 1,818,558	$ 3,625,000	$ 119,026,834

Table 43. Pricing

STATE OF MICHIGAN
CENTRAL PROCUREMENT SERVICES
Department of Technology, Management, and Budget
525 W. ALLEGAN ST., LANSING, MICHIGAN 48913
P.O. BOX 30026 LANSING, MICHIGAN 48909

CONTRACT CHANGE NOTICE

Change Notice Number **43**

to

Contract Number **071B6200168**

CONTRACTOR	
	CLIENT NETWORK SERVICES, INC.
	1600 Tyson Blvd
	McLean, VA 22120
	Linda Mras
	(240) 243 2804
	linda.mras@cns-inc.com
	CV0059061

STATE			
	Program Manager	Crystal Kline	MDHHS
		517-284-1184	
		KlineC1@michigan.gov	
	Contract Administrator	Jennifer May	DTMB
		(517) 242-6664	
		mayj7@michigan.gov	

CONTRACT SUMMARY

MEDICAID PROCESSING SYSTEM (CHAMPS)

INITIAL EFFECTIVE DATE	INITIAL EXPIRATION DATE	INITIAL AVAILABLE OPTIONS	EXPIRATION DATE BEFORE
March 14, 2006	September 30, 2011	20 - 1 Year	September 30,2026

PAYMENT TERMS	DELIVERY TIMEFRAME

ALTERNATE PAYMENT OPTIONS	EXTENDED PURCHASING
☐ P-Card ☐ PRC ☐ Other	☐Yes ☒No

MINIMUM DELIVERY REQUIREMENTS

DESCRIPTION OF CHANGE NOTICE

OPTION	LENGTH OF OPTION	EXTENSION	LENGTH OF EXTENSION	REVISED EXP. DATE
☐		☐		September 30, 2026

CURRENT VALUE	VALUE OF CHANGE NOTICE	ESTIMATED AGGREGATE CONTRACT VALUE
$1,009,795,209.00	($47,850.00)	$1,009,747,359.00

DESCRIPTION

Effective 12/9/2021, the following amendment is hereby incorporated into this contract. This amendment represents a $47,850.00 reduction in contract value.

- De-Scope HealthBeat and Add Out-of-County Payment Support

All other terms, conditions, specifications, and pricing remain the same. Per contractor and agency agreement, and DTMB Central Procurement Services approval.

Change Request Number:	CHG-P-CCBHC-0001
Change Request Title:	De-Scope HealthBeat and Add Out-of-County Payment Support
Response Date	10/21/2021

CNSI Response to Customer Issues Change Request

Change Request Description:

The purpose of this change request is to de-scope the planned CCBHC HealthBeat dashboard from the project and add support for out-of-county payments.

Reason for Change Request:

- De-Scope HealthBeat Dashboard:
  - BHDDA determined existing reporting services can be used in lieu of the planned CCBHC dashboard.
- Support for Out-of-County Payments (MIPRO-1689)
  - While the initial enrollment will be limited to beneficiaries in CCBHC counties, after the program begins, beneficiaries who do not reside in CCBHC counties may travel to, and receive services from, a CCBHC. There is a need to develop a mechanism to match the beneficiary to the county in which the CCBHC is located so the beneficiary can be enrolled with the PIHP responsible for reimbursing the CCBHC. Then, a way to pay the PIHP for that beneficiary is also required. Key elements in the enhancement include:
    1. Optum will send the county of the PIHP in which the beneficiary should be enrolled. There will be no changes to the interface layout, but CHAMPS needs to accept the county information for CCBHC program.
    2. CHAMPS EE must enroll the beneficiary with the PIHP associated with the county included in the 1015.05 file. The enrollment can be prospective and or retroactive.
    3. The 5093 CCBHC 834 must report the county in which the beneficiary is enrolled for CCBHC and not the county of residence of the beneficiary from the EE subsystem
    4. Payment for CCBHC beneficiaries must be based on the county in the 834 not the county of residence of the beneficiary in the EE subsystem.

CNSI Response:

- CNSI will remove the planned CCBHC HealthBeat dashboard from the project.
- CNSI will add the following changes to support out-of-county payments:
  - **Interface**
    - Accept the county information in the 1015.05 for CCBHC.
  - **EE**
    - Accept and store the county information from the 1015.05 for CCBHC.
    - Accept and process changes made only to the county information, even if there are no changes to the eligibility segment. The older record will need to be inactivated/end dated based on the new record's dates.
    - 'HSW County' field – Replace with 'Waiver County' in the screen level. [pgCombinedEligibilityList(Member)]
  - **834**
    - CCBHC 834 process will be modified to report the County information receive in 1015.05 file instead of member County of Residence (COR) from EE Subsystem.
      - Report where the system currently reports COR (No changes in REF 2300).
  - **Payment**
    - CCBHC Payment process will be modified to derive the member's rate based on the County information reported in 834 (which is based on the 1015.05 data).
    - CCBHC Automatic Capitation Payment process will be modified to pend the payment for members who do not have the rates set up based on the county information that was reported in the 834s (based on the 1015.05 data) with Edit# 08819- "Member with out of service area county."

- Edit# 08819- “Member with out of service area county” of Auto recycle/ manual - resolve pended payment functionality will be enhanced to include CCBHC program.
- Recoup/Repay process will trigger with Reason code “Z2-Rate affecting dmgrphc change” for all CCBHC Beneficiaries when the system receives retroactive County changes in 1015.05 file or reported in CCBHC 834.
- Manual and Mass Manual Payment process will be enhanced to use CCBHC County received in 1015.05 instead of COR.

- **Reports**
  - By County Report (may have impact).
- **Encounter**
  - No change

Schedule

This change to support Out-of-County payments is planned for inclusion in the CHAMPS R10c-1.17 March 2022 release schedule as show below:

Milestone	Start	End
Design	11/8/2021	12/22/2021
Development	12/20/2021	1/28/2022
System Testing	1/31/2022	2/24/2022
User Acceptance Testing	2/25/2022	3/24/2022
Go-Live	3/25/2022	

Cost

A comparison of the approved project costs from the original SOW and the revised project costs from this Change Request is provided below.

Approved Project Costs from Original SOW	Cost
Phase 1 September Release	$278,278
Phase 2 December Release – Managed Care Reports	$18,348
Phase 2 December Release – Health Beat Dashboard	$201,550
Original Total Project Total:	**$498,176**

Change Request Adjustments	Cost
De-Scope Phase 2 December Release – Health Beat Dashboard	-$201,550
CR CHG-P-CCBHC-0001 - Support for Out-of-County Payments (MIPRO-1689)	$153,700
Net Adjustments:	**-$47,850**
Revised Total Project Cost:	**$450,326**

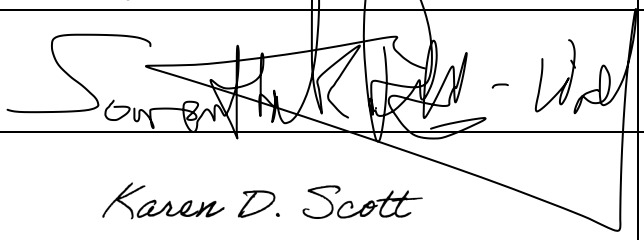
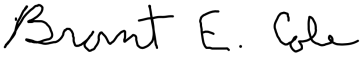
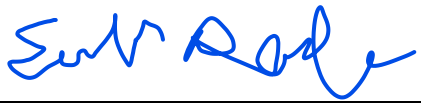
Payment Schedule

The Payment Schedule below reflects the revised overall cost for this change.

Item	Amount	Invoice Date
Phase 1 Design (Already invoiced)	$139,139	6/30/2021
Phase 1 Deployment to Production (Already invoiced)	$139,139	9/30/2021
Phase 2 - Managed Care Reports Deployment to Production	$18,348	12/30/2021
Design for Out-of-County Payments	$76,850	12/30/2021
Deployment to Production for Out-of-County Payments	$76,850	3/31/2022

Assumptions (Assumptions take precedence over the Change Request Requirements):

1. Other vendor partners can accommodate the proposed schedule.

Approvals:		
Jon Villasurda **BHDDA Business Owner**		Date: 11/18/2021
Samantha Rutledge-Wolf **MDHHS Business Owner**		Date:
Karen Scott **MDHHS MMIS Director**		Date: 11/18/2021
Brant Cole **MDHHS Director of Medicaid Systems Operations**		Date: 11/18/2021
Soopriya Razdan **DTMB Business Relationship Manager**		Date: 11/18/2021
Jim Schloss **CNSI Michigan Program Director**		Date: 11/18/2021

STATE OF MICHIGAN
CENTRAL PROCUREMENT SERVICES
Department of Technology, Management, and Budget

525 W. ALLEGAN ST., LANSING, MICHIGAN 48913
P.O. BOX 30026 LANSING, MICHIGAN 48909

CONTRACT CHANGE NOTICE

Change Notice Number **42**

to

Contract Number **071B6200168**

CONTRACTOR	
	CLIENT NETWORK SERVICES, INC.
	1600 Tyson Blvd
	McLean, VA 22120
	Linda Mras
	(240) 243 2804
	linda.mras@cns-inc.com
	CV0059061

Program Manager	Crystal Kline	MDHHS
	517-284-1184	
	KlineC1@michigan.gov	
Contract Administrator	Jennifer May	DTMB
	517-242-6664	
	mayj7@michigan.gov	

MEDICAID PROCESSING SYSTEM (CHAMPS)

INITIAL EFFECTIVE DATE	INITIAL EXPIRATION DATE	INITIAL AVAILABLE OPTIONS	EXPIRATION DATE BEFORE
March 14, 2006	September 30, 2011	20 - 1 Year	September 30, 2026

PAYMENT TERMS	DELIVERY TIMEFRAME

ALTERNATE PAYMENT OPTIONS			EXTENDED PURCHASING	
☐ P-Card	☐ PRC	☐ Other	☐ Yes	☒ No

MINIMUM DELIVERY REQUIREMENTS

DESCRIPTION OF CHANGE NOTICE

OPTION	LENGTH OF OPTION	EXTENSION	LENGTH OF EXTENSION	REVISED EXP. DATE
☐		☐		September 30, 2026

CURRENT VALUE	VALUE OF CHANGE NOTICE	ESTIMATED AGGREGATE CONTRACT VALUE
$1,009,795,209.00	$0.00	$1,009,795,209.00

DESCRIPTION

Effective 12/2/2021, the following amendment is hereby incorporated into this contract. Additional cost for this amendment is $398,750.00. Existing funds from CNSI Master Agreement 071B6200168 will be utilized.

- Enhancements for CHAMPS Home Help Savings project - Release 1 and Release 2.

All other terms, conditions, specifications, and pricing remain the same. Per contractor and agency agreement, and DTMB Central Procurement Services approval.

CHAMPS Home Help Savings Project
Statement of Work

Prepared For:
State of Michigan
Department of Health & Human Services
400 South Pine Street
Lansing, Michigan 48909

Prepared By:

CNSI
6465 Millennium Drive, Suite 150
Lansing, MI 48917

October 15, 2021

This document contains proprietary information intended to be provided to key management staff of the State of Michigan. It should not be released to third parties or used for other purposes without the express written consent of CNSI.

CHAMPS Home Help Savings Project
Statement of Work

October 15, 2021

Approved By:

Michelle Martin	
Michelle Martin **MDHHS Home Help Manager**	**Date** 10/18/21

Karen D. Scott	
Karen Scott **MDHHS MMIS Director**	**Date** 10/18/21

Brant E. Cole	
Brant Cole **MDHHS Director of Medicaid Systems Operations**	**Date** 10/18/2021

John A. Moore	
John Moore **DTMB Business Relationship Manager**	**Date** 10/18/2021

Jim Schloss	
Jim Schloss **CNSI Michigan Program Manager**	**Date** 10/18/2021

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Section 1: Introduction

MDHHS established a goal to achieve Home Help program savings for FY22 and resolve a recent audit finding in the quickest and most cost-effective means. To accomplish this, a match must occur between the Time and Task records in MiAIMS and the Community Health Automated Medicaid Processing System (CHAMPS) ESV Electronic Service Verification (ESV) module and myCareVisit app. Changes are also needed in the CHAMPS Paper Service Verification (PSV) module to accommodate a 28 day/4 week pay cycle. The initial focus for this goal is to work with ESV changes in the first release, followed by changes to PSVs and agency invoice changes in the second release. The following Scope and Schedule section reflects the results of multiple solutioning meetings held between MDHHS, HTC and CNSI. This Statement of Work (SOW) reflects the scope of work to be performed by CNSI to implement the changed required in the CHAMPS ESV and PSV modules.

Section 2: Scope and Schedule

This section summarizes the scope of work and schedule for the CHAMPS Home Help Savings project.

2.1 Scope of Work

The following list contains the specific enhancements that will be implemented in March 2022 for the first release and March 2023 for the second release.

Release 1 – March 2022 Requirements

1. **Support the ability to edit an ESV after it is submitted.**

   CHAMPS ESV Change: ESV and the MyCareVisit app will append the newly submitted data to the previous ESV record and re-transmit the entire record.

2. **Provide support for retroactive payments.**

   a. Update authorizations in MiAIMS and have the change reflected in ESV to record completion of additional tasks for payment.

   b. Some of these changes may occur after payment has already been issued for the month.

   CHAMPS ESV and the MyCareVisit app Change: A previously submitted ESV record will be transferred to a new ESV record and updated with the new changes. The new record will be transmitted for payment.

3. **Accommodate mid-month changes.**

   a. Worker stops one authorization and then adds a new authorization for the rest of the month.

   b. ESV will need to reflect that approved tasks and frequencies may vary during the month.

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CHAMPS ESV Change: This functionality is already supported in the existing CHAMPS ESV module. No changes are required.

4. **Support updates to existing ESV records.**

    a. If an updated ESV is needed, additional tasks or frequencies need to be added to existing ESV and not delete the existing one and then create a new one as provider may have already recorded completed tasks.

    CHAMPS ESV and the MyCareVisit app Change:

    a. MIAIMS/ASAP will need to send Authorizations and Revisions with a From-Date and To-Date based on the modified date.

        Example:
        - ESV previously received an auth A1 with Revision R1 of dates 01/01/2021 to 01/31/2021.
        - Updated Revisions are submitted to ESV on 01/11/2021 where:
            - The dates for R1 are changed to 01/01/2021 to 01/10/2021.
            - An R2 record is submitted with dates 01/11/2021 to 01/31/2021.

    b. Add an ESV business rule to restrict providers to entering ESV based on the modified frequency for the week.

    c. When a new ESV is created, any check marks already added for the time period will be carried over so the provider can see what was already submitted.

    d. Note: Complexity of validation within ESV will increase based on number of the modifications done on authorization within a week.

5. **Support the ability for providers to correct an ESV (decrease tasks) due to provider error.**

    CHAMPS ESV Change: This is already covered in the solution for requirement number 1 above. No additional changes are required.

6. **Support ESV changes mid-month, resulting in a decrease in a task.**

    CHAMPS ESV Change: This functionality is already supported by a combination of the existing CHAMPS ESV module and the solution for requirement number 1. No additional changes are required.

7. **Add travel time for shopping and laundry on the ESV.**

    CHAMPS ESV and the MyCareVisit app Change: CHAMPS ESV can be modified to receive tasks with travel time for shopping and/or laundry. The provider will select the specific travel time tasks to be added to the ESV record.

Release 2 – March 2023 Requirements

1. **Update PSV functionality to accommodate a 28 day/4 week pay cycle.**

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CHAMPS PSV Changes: CHAMPS PSV and displays (where applicable) will be modified to accommodate the 28 day pay cycle. CHAMPS will be modified to display both PSV and ESV tasks (if applicable) as well as updates to the PSV indexes.

2. **Migrate the Release 2 PSV code/changes from legacy NGDI lower testing environment to new HCI infrastructure testing environments.**

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2.2 High Level Timeline

Table 1 provides the project milestones for Releases 1 and 2 of the CHAMPS Home Help Savings project.

Table 1. High-Level Timeline

Release 1

Task Description	Start	Finish
Requirements	10/18/21	10/29/21
Design	11/8/21	12/22/21
Construction	12/20/21	1/28/22
System Test	1/31/2022	2/24/22
User Acceptance Test	2/25/22	3/24/22
Implementation	3/25/22	

Release 2

Activity	Start	Finish
CNSI Requirements	11/29/21	1/11/22
CNSI Design	1/12/22	3/29/22
CNSI Development	6/1/22	7/7/22
CNSI System Test	7/8/22	8/25/22
Final SIT	1/18/23	2/14/13
Final UAT	3/1/23	3/23/23
Production Deployment	3/24/23	

Note: The Release 2 dates are aligned with the ASAP and MiAIMS Release 2 dates, except for the Production Deployment date of 3/24/23, which falls on the Friday preceding the currently forecasted ASAP and MiAMS Production Deployment date of 3/29/23. CNSI will coordinate with ASAP, MiAMS, DTMB and MDHHS to finalize the Production Deployment date as part of the overall implementation planning.

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Section 3: General Assumptions

CNSI has identified and provided the following general assumptions regarding the project:

1. MDHHS/DTMB will make any required changes in FileNet and/or Right Fax to accommodate the PSV pay cycle update planned for Release 2.
2. A separate CHAMPS initiative environment is needed to support the extended duration of Release 2. Due to the schedule for migrating the CHAMPS infrastructure from the existing NGDI hardware to a new HCI platform, an HCI initiative environment will not be available until possibly July 2022. CNSI assumes the current NGDI UAT environment will be used until an HCI environment is available.
    a. This will require a migration of the Release 2 PSV changes from the NGDI environment to the HCI environment and will require DTMB to retain the NGDI UAT environment until migration is complete.
3. CNSI can start work on this project upon receipt of an approved this Statement of Work.

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Section 4: Proposed Project Cost

Table 2 provides the cost for the CHAMPS Home Help Savings project.

Table 2. Proposed Project Cost

Release	Cost
Phase 1 Release	$261,000
Phase 2 Release	$137,750
Project Total	**$398,750**

Table 3 provides the payment schedule for the CHAMPS Home Help Savings project.

Table 3. Project Payment Schedule

Item	Amount	Invoice Date
Release 1 Design	$130,500	12/30/2021
Release 1 Deployment to Production	$130,500	3/31/2022
Release 2 Design	$68,875	3/31/2022
Release 2 Deployment to Production	$68,875	3/31/2023

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STATE OF MICHIGAN
CENTRAL PROCUREMENT SERVICES
Department of Technology, Management, and Budget

525 W. ALLEGAN ST., LANSING, MICHIGAN 48913
P.O. BOX 30026 LANSING, MICHIGAN 48909

CONTRACT CHANGE NOTICE

Change Notice Number **41**

to

Contract Number **071B6200168**

CONTRACTOR	
	CLIENT NETWORK SERVICES, INC.
	1600 Tyson Blvd
	McLean, VA 22120
	Linda Mras
	(240) 243 2804
	linda.mras@cns-inc.com
	CV0059061

Program Manager	Crystal Kline	MDHHS
	517-284-1184	
	KlineC1@michigan.gov	
Contract Administrator	Jennifer May	DTMB
	517-242-6664	
	mayj7@michigan.gov	

MEDICAID PROCESSING SYSTEM (CHAMPS)

INITIAL EFFECTIVE DATE	INITIAL EXPIRATION DATE	INITIAL AVAILABLE OPTIONS	EXPIRATION DATE BEFORE
March 14, 2006	September 30, 2011	20 - 1 Year	September 30, 2026

PAYMENT TERMS	DELIVERY TIMEFRAME

ALTERNATE PAYMENT OPTIONS			EXTENDED PURCHASING	
☐ P-Card	☐ PRC	☐ Other	☐ Yes	☒ No

MINIMUM DELIVERY REQUIREMENTS

DESCRIPTION OF CHANGE NOTICE

OPTION	LENGTH OF OPTION	EXTENSION	LENGTH OF EXTENSION	REVISED EXP. DATE
☐		☐		September 30, 2026

CURRENT VALUE	VALUE OF CHANGE NOTICE	ESTIMATED AGGREGATE CONTRACT VALUE
$1,009,795,209.00	$0.00	$1,009,795,209.00

DESCRIPTION

Effective 11/29/2021, the following amendment is hereby incorporated into this contract. Additional cost for this amendment is $1,866,129.20. Existing funds from CNSI Master Agreement 071B6200168 will be utilized.

- Extending the CLIENT NETWORK SERVICES, INC. (CNSI) Statement of Work (SoW) Contract Change Notice 30, for One (1) additional month, December 1 - December 31, 2021.

  Pricing is located in Contract Change Notice 30, Table 41 - Pricing.
  Operations = $1,402,795.87
  Enhancements = $463,333.33
  Total for this extension = $1,866,129.20

The costs from Contract Change Notice 39 ($1,402,795.87 Operations for October 2021), Contract Change Notice 40 ($3,575,821.53) and this Contract Change Notice ($1,866,129.20) will be reduced from the total FY 2022 respective Operations, Licensing, and Enhancements amounts when a new Statement of Work is executed between State of Michigan and CNSI.

All other terms, conditions, specifications, and pricing remain the same. Per contractor and agency agreement, and DTMB Central Procurement Services approval.

STATE OF MICHIGAN
CENTRAL PROCUREMENT SERVICES
Department of Technology, Management, and Budget

525 W. ALLEGAN ST., LANSING, MICHIGAN 48913
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CONTRACT CHANGE NOTICE

Change Notice Number **40**

to

Contract Number **071B6200168**

CONTRACTOR	
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	mayj7@michigan.gov	

MEDICAID PROCESSING SYSTEM (CHAMPS)

INITIAL EFFECTIVE DATE	INITIAL EXPIRATION DATE	INITIAL AVAILABLE OPTIONS	EXPIRATION DATE BEFORE
March 14, 2006	September 30, 2011	20 - 1 Year	September 30, 2026

PAYMENT TERMS	DELIVERY TIMEFRAME

ALTERNATE PAYMENT OPTIONS			EXTENDED PURCHASING	
☐ P-Card	☐ PRC	☐ Other	☐ Yes	☒ No

MINIMUM DELIVERY REQUIREMENTS

DESCRIPTION OF CHANGE NOTICE

OPTION	LENGTH OF OPTION	EXTENSION	LENGTH OF EXTENSION	REVISED EXP. DATE
☐		☐		September 30, 2026

CURRENT VALUE	VALUE OF CHANGE NOTICE	ESTIMATED AGGREGATE CONTRACT VALUE
$1,009,795,209.00	$0.00	$1,009,795,209.00

DESCRIPTION

Effective 10/28/2021, the following amendment is hereby incorporated into this contract. Additional cost for this amendment is $3,575,821.53. Existing funds from CNSI Master Agreement 071B6200168 will be utilized.

- Extending the CLIENT NETWORK SERVICES, INC. (CNSI) Statement of Work (SoW) Contract Change Notice 30, for One (1) additional month, November 1 - November 30, 2021.

  Pricing is located in Contract Change Notice 30, Table 41 - Pricing.
  Operations = $1,402,795.87
  Licensing = $1,246,359.00
  Enhancements = $926,666.66

The costs from Contract Change Notice 39 ($1,402,795.87 Operations for October 2021) and this Contract Change Notice ($3,575,821.53) will be reduced from the total FY 2022 respective Operations, Licensing, and Enhancements amounts when a new Statement of Work is executed between State of Michigan and CNSI

All other terms, conditions, specifications, and pricing remain the same. Per contractor and agency agreement, and DTMB Central Procurement Services approval.

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CENTRAL PROCUREMENT SERVICES
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CONTRACT CHANGE NOTICE

Change Notice Number **39**

to

Contract Number **071B6200168**

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CONTRACT SUMMARY

MEDICAID PROCESSING SYSTEM (CHAMPS)

INITIAL EFFECTIVE DATE	INITIAL EXPIRATION DATE	INITIAL AVAILABLE OPTIONS	EXPIRATION DATE BEFORE
March 14, 2006	September 30, 2011	20 - 1 Year	September 30, 2026

PAYMENT TERMS	DELIVERY TIMEFRAME

ALTERNATE PAYMENT OPTIONS			EXTENDED PURCHASING	
☐ P-Card	☐ PRC	☐ Other	☐ Yes	☒ No

MINIMUM DELIVERY REQUIREMENTS

DESCRIPTION OF CHANGE NOTICE

OPTION	LENGTH OF OPTION	EXTENSION	LENGTH OF EXTENSION	REVISED EXP. DATE
☐		☐		September 30, 2026

CURRENT VALUE	VALUE OF CHANGE NOTICE	ESTIMATED AGGREGATE CONTRACT VALUE
$1,009,795,209.00	$0.00	$1,009,795,209.00

DESCRIPTION

Effective 9/30/2021, the following amendment is hereby incorporated into this contract per the attached Change Request. Additional cost for this amendment is $1,402,795.87. Existing funds from CNSI Master Agreement 071B6200168 will be utilized.

- Extending the CLIENT NETWORK SERVICES, INC. (CNSI) Statement of Work (SoW) Contract Change Notice 30, for One (1) month of Operations, October 1 - October 31, 2021.
  Pricing is located in Contract Change Notice 30, Table 41 - Pricing.
  FY21 Operations $16,833,550.38/12 = $1,402795.87.

All other terms, conditions, specifications, and pricing remain the same. Per contractor and agency agreement, and DTMB Central Procurement Services approval.

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Department of Technology, Management, and Budget
525 W. ALLEGAN ST., LANSING, MICHIGAN 48913
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CONTRACT CHANGE NOTICE

Change Notice Number **38**

to

Contract Number **071B6200168**

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Contract Administrator	Jennifer May	DTMB
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CONTRACT SUMMARY

MEDICAID PROCESSING SYSTEM (CHAMPS)

INITIAL EFFECTIVE DATE	INITIAL EXPIRATION DATE	INITIAL AVAILABLE OPTIONS	EXPIRATION DATE BEFORE
March 14, 2006	September 30, 2011	20 - 1 Year	September 30, 2026

PAYMENT TERMS	DELIVERY TIMEFRAME

ALTERNATE PAYMENT OPTIONS			EXTENDED PURCHASING	
☐ P-Card	☐ PRC	☐ Other	☐ Yes	☒ No

MINIMUM DELIVERY REQUIREMENTS

DESCRIPTION OF CHANGE NOTICE

OPTION	LENGTH OF OPTION	EXTENSION	LENGTH OF EXTENSION	REVISED EXP. DATE
☐		☐		September 30, 2026

CURRENT VALUE	VALUE OF CHANGE NOTICE	ESTIMATED AGGREGATE CONTRACT VALUE
$1,009,795,209.00	$0.00	$1,009,795,209.00

DESCRIPTION

Effective 9/17/2021, the following amendment is hereby incorporated into this contract per the attached Change Request. Additional cost for this amendment is $427,393.99. Existing funds from CNSI Master Agreement 071B6200168 will be utilized.

- Adding functionality to the CHAMPS NEMT project to support integration with Bridges as well as transportation reimbursement requests. This is a modification in scope and funding to Contract Change Notice 33

All other terms, conditions, specifications, and pricing remain the same. Per contractor and agency agreement, and DTMB Central Procurement Services approval.

Change Request Number:	CHG-P-NEMT-0001 V2
Change Request Title:	Bridges Integration
Response Date	04/28/2021

CNSI Response to Customer Issues Change Request

Change Request Description:

The purpose of this change request is to add functionality to the CHAMPS NEMT project to support integration with Bridges as well as transportation reimbursement requests.

Reason for Change Request:

Many county office workers use Bridges when assisting beneficiaries. They do not use CHAMPS. Therefore, functionality to create and view transportation service requests must be made available in Bridges and CHAMPS must integrate with Bridges to synchronize the request records. MDHHS has also determined CHAMPS does not need to provide screens for State staff to view, create or update transportation requests. Instead, Bridges will be the system of record for transportation requests. Medicaid beneficiaries will be able to submit and view transportation requests via myHealthPortal (mHP) and myHealthButton (mHB), which will integrate directly with Bridges via real-time interfaces.

The need to support travel reimbursement requests was identified during the NEMT design sessions.

Due to the need for tight integration with Bridges, no mHP, mHB or CHAMPS NEMT changes will be deployed in the June 2021 CHAMPS release as previously planned. Instead, most of the functionality will be deployed in the September 2021 CHAMPS release and the remainder will be deployed in the December 2021 CHAMPS release.

CNSI Response:

The following requirements have been added, revised or removed under this change request. CNSI will incorporate the design, development and testing changes into the project in a phased approach as defined in the embedded file titled "NEMT Change Request - Functions per Phase.xls".

New CHAMPS and mHP/mHB Requirements

- mHP/mHB must allow members to submit reimbursement requests as part of a travel request into Bridges.
- mHP/mHB must check if there are existing travel or reimbursement requests already present for the member for the specific Appointment Date.
- CHAMPS must send the final (approved or denied) status of travel request PAs to Bridges via a daily batch interface.
- CHAMPS must receive the real-time PA request from Bridges and create a PA.
- CHAMPS must send information about who is responsible for providing NEMT per county per service type real-time to Bridges upon receipt of a request from Bridges.
- Documents uploaded by either Bridges or mHB/mHP must be accessible to both systems.
- mHP/mHB must be able to edit and view requests initiated or updated in Bridges based on the appropriate statuses.
- mHP/mHB must integrate with Bridges using real-time web services via the Health Services Enterprise Service Bus (ESB).

Revised CHAMPS and mHP/mHB Requirements

- Build new online NEMT Grid for CHAMPS and mHP/mHB.
- Create new NEMT GRID profiles for CHAMPS.
- mHP/mHB must transmit all captured transportation request data to Bridges in real-time.

Removed CHAMPS and mHP/mHB Requirements

- Add CHAMPS profiles to enable local office staff to initiate new requests, view other existing requests and view Provider Enrollment information. (The resulting profile will contain some functions of a State worker profile and some functions of a Provider profile).

- Support the ability for local office staff to initiate a new transportation request on behalf of a beneficiary.
- CHAMPS must store information from mHP/mHB about the reimbursement requests.
- CHAMPS must allow county state users review, approve, or deny the reimbursement requests.
- Support the ability for local office staff to flag a request as needing prior authorization and refer the request to the Prior Authorization team (via CHAMPS)
- Enable Prior Authorization staff access to view the transportation request in CHAMPS that is related to the Prior Authorization request.
- Support the ability for transportation requests initiated by local office staff to be flagged for Prior Authorization
- CHAMPS must receive and process the travel and reimbursement information sent from Bridges.
- CHAMPS must allow users to set assignment rules for the System to assign the travel request/reimbursement to specific staff.
- Send an alert/email to the County office.

Impact:

1. **Proposed Schedule**
   CNSI recommends the following phased approach for deploying the NEMT functionality:
   - **Phase 1** – CHAMPS September release:
     - All functionality except the following items that are planned for Phase 2:
       - Build Administration module for authorized users to allow GRID changes - View/Add/Modify NEMT vendor Contact Details
       - Create a Complaint/appeal for denied Requests
       - Documents uploaded by either Bridges or mHB/mHP must be accessible to both systems.
   - **Phase 2** – CHAMPS December release:
     - Build Administration module for authorized users to allow GRID changes -View/Add/Modify NEMT vendor Contact Details
     - Create a Complaint/appeal for denied Requests
     - Documents uploaded by either Bridges or mHB/mHP must be accessible to both systems.

2. **Cost Considerations**
   Cost details, including a breakdown of costs per phase – per requirement are available in the embedded file titled "NEMT Change Request - Functions per Phase.xls"

   - **Phase Work:**

Phase 1 (September 2021 Release)	$1,173,394
Phase 2 (December 2021 Release)	$165,133
Total:	**$1,338,527**

Payment Schedule

Phase	Deliverable	Amount	Invoice Date
Phase 1	Design for CHAMPS	$248,667	4/23/2021
	Development for CHAMPS	$132,050	5/7/2021
	Design for Bridges Integration	$264,226	6/30/2021
	System Test	$264,226	8/31/2021
	Deployment to Production	$264,226	9/30/2021
Phase 2	Design	$55,044	9/30/2021
	System Test	$55,044	11/30/2021
	Deployment to Production	$55,044	12/30/2021

Detailed Content List per Release

The embedded document below provides the requirements per release.

NEMT Change Request - Functions

Assumptions (Assumptions take precedence over the Change Request Requirements):
1. MDHHS will provide any required user training to State and County staff. 2. MDHHS and DTMB will coordinate and manage all required integration changes with Bridges and the Enterprise Service Bus (Hub).

Approvals:		
Jason Werner **MDHHS Business Owner**	Jason Werner	Date: 5/7/2021
Karen Scott **MDHHS MMIS Director**	Karen P Scott	Date: 5/7/2021
Brant Cole **MDHHS Director of Medicaid Systems Operations**	Brant E. Cole	Date: 05/10/2021
John Moore **DTMB Business Relationship Manager**	John A. Moore	Date: 05/10/21
Jim Schloss **CNSI Michigan Program Manager**	Jim Schloss	Date: 05/10/2021
John Harding **CNSI Senior Vice President, Managed Services**	John Harding	Date: 5/11/2021

STATE OF MICHIGAN
CENTRAL PROCUREMENT SERVICES
Department of Technology, Management, and Budget

525 W. ALLEGAN ST., LANSING, MICHIGAN 48913
P.O. BOX 30026 LANSING, MICHIGAN 48909

CONTRACT CHANGE NOTICE

Change Notice Number **37**

to

Contract Number **071B6200168**

CONTRACTOR	
	CLIENT NETWORK SERVICES, INC.
	1600 Tyson Blvd
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	KlineC1@michigan.gov	
Contract Administrator	Jennifer May	DTMB
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CONTRACT SUMMARY

MEDICAID PROCESSING SYSTEM (CHAMPS)

INITIAL EFFECTIVE DATE	INITIAL EXPIRATION DATE	INITIAL AVAILABLE OPTIONS	EXPIRATION DATE BEFORE
March 14, 2006	September 30, 2011	20 - 1 Year	September 30, 2026

PAYMENT TERMS	DELIVERY TIMEFRAME

ALTERNATE PAYMENT OPTIONS			EXTENDED PURCHASING	
☐ P-Card	☐ PRC	☐ Other	☐ Yes	☒ No

MINIMUM DELIVERY REQUIREMENTS

DESCRIPTION OF CHANGE NOTICE

OPTION	LENGTH OF OPTION	EXTENSION	LENGTH OF EXTENSION	REVISED EXP. DATE
☐		☐		September 30, 2026

CURRENT VALUE	VALUE OF CHANGE NOTICE	ESTIMATED AGGREGATE CONTRACT VALUE
$1,009,795,209.00	$0.00	$1,009,795,209.00

DESCRIPTION

Effective 8/16/2021, the following amendment is hereby incorporated into this contract per the attached Statement of Work. The total cost for this amendment is $1,489,802.00. Existing funds from CNSI Master Agreement 071B6200168 will be utilized.

- Facility Settlement Tribal Health AIR project.

All other terms, conditions, specifications, and pricing remain the same. Per contractor and agency agreement, and DTMB Central Procurement Services approval.

Facilities Settlement Tribal Health AIR
Statement of Work

Prepared For:
State of Michigan
Department of Health & Human Services
400 South Pine Street
Lansing, Michigan 48909

Prepared By:

CNSI
6465 Millennium Drive, Suite 150
Lansing, MI 48917

March 31, 2021

This document contains proprietary information intended to be provided to key management staff of the State of Michigan. It should not be released to third parties or used for other purposes without the express written consent of CNSI.

Facility Settlement Tribal Health AIR Statement of Work

March 31, 2021

Approved By:

April 1, 2021	
Steve Ireland **MDHHS CHAMPS Business Owner**	**Date**

Karen D. Scott	
Karen Scott **MDHHS MMIS Director**	**Date** 4/1/21

Brant E. Cole	
Brant Cole **MDHHS Director of Medicaid Systems Operations**	**Date** 04/01/2021

John A. Moore	
John Moore **DTMB Business Relationship Manager**	**Date** 04/01/21

John Harding	
John Harding **CNSI Senior Vice President, Managed Services**	**Date** 4/1/2021

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Tables

Table 1. High-Level Timeline 2

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Section 1: Introduction

United Tribes of Michigan requested to be reimbursed at the All-Inclusive Rate (AIR) established by CMS for prescriptions dispensed by Tribal pharmacies.

Tribal Health Centers are paid on the claims in CHAMPS Fee-for-Service (FFS) under the institutional billing methodology. Health Plan encounters are paid under the same methodology but using a rate which approximates what would have been paid under the physician fee schedules used prior to institutional billing (health plans were held budget neutral in implementation). The reconciliation of FFS claims to interim payments and the settlement of health plan services to pay the full AIR occurs in the Facility Settlement (FS) subsystem of CHAMPS. The proposed additional services and reimbursement would also be settled within the FS subsystem.

Changes are required within the CHAMPS Facilities Settlement module to accommodate this request. This statement of work defines the proposed scope, schedule and cost to define, design, develop, test and implement the required changes.

Section 2: Scope and Schedule

This section summarizes the scope of work and schedule for the Facility Settlement Tribal Health AIR project.

2.1 Scope of Work

The following list contains the specific enhancements that will be implemented in the September and December 2021 CHAMPS releases.

Phase 1 - September Release

- Facility Settlement ODS Pharmacy Mart
- Historical data load process for Pharmacy Mart
- New claim and encounter process for Tribal Pharmacy summary/detail process, (similar to LPHD)
- Changes to existing wrapper to add new process for Tribal Health
- New interface for pushing the Tribal Health summary to Facility Settlement
- Rules-Based Access Control (RBAC) changes
- Settlement process BPMN and DB configuration changes for Settlement activities
- Settlement process business logic
- Prepare Pharmacy Settlement activities - Initial & Final
- Review Pharmacy Settlement activities - Initial & Final
- Settlement Payments
- Fund Source Mapping for Settlement payments
- Claims Summary screens (Fee-for-Service and Encounters)

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Phase 2 - December Release

- New summary/detail report views, (weekly/annual/settlement) (ad-hoc and scheduled)
- Facility Settlement ad-hoc mart enhancement to support Tribal Pharmacy
- RBAC Changes
- Settlement Process BPMN and DB configuration changes for Revision activities
- Interim Payments
- Fund Source Mapping for Interims
- Correspondence
- Email notifications
- Inbox alerts
- Accrual report
- Track Pharmacy claims status such as paid or voided within the Facility Settlement ODS Mart
- Support secondary race codes for assigning the proper FMAP

2.2 High Level Timeline

Table 1 provides the project milestones for the Facility Settlement Tribal Health AIR project.

Phase	Milestone	Start	End
Planning	Statement of Work	3/15/2021	4/16/2021
Phase 1	Requirements	4/19/2021	5/7/2021
	Design Sessions	5/10/2021	5/28/2021
	Finalize Design Documents	5/31/2021	6/11/2021
	Design Approval	6/14/2021	6/18/2021
	Development	6/21/2021	7/23/2021
	System Testing	7/26/2021	8/20/2021
	User Acceptance Testing	8/23/2021	9/16/2021
	Go-Live	9/17/2021	
	Optimization & Stabilization	9/20/2021	11/30/2021
Phase 2	Requirements	7/12/2021	7/30/2021
	Design Sessions	8/2/2021	8/20/2021
	Finalize Design Documents	8/23/2021	9/3/2021
	Design Approval	9/6/2021	9/10/2021
	Development	9/13/2021	10/15/2021
	System Testing	10/18/2021	11/12/2021
	User Acceptance Testing	11/15/2021	12/9/2021
	Go-Live	12/10/2021	
	Optimization & Stabilization	12/13/2021	2/28/2021

Table 1. High-Level Timeline

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Section 3: General Assumptions

CNSI has identified and provided the following general assumptions regarding the project:

1. CNSI, MDHHS and DTMB will provide access to, and time commitment from, subject matter experts who understand their programs and systems.
2. MDHHS will plan and execute user acceptance testing pursuant to the approved schedule.
3. No additional hardware or licensed software is required.
4. An architecture review is not required because the changes are within the existing CHAMPS architecture.
5. Any changes to the project scope or schedule will be managed through the project's change management process for assessment of impact to the project schedule and/or cost.

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Section 4: Proposed Project Cost

The table below provides the cost for the Facility Settlement Tribal Health AIR project.

Phase	Cost
Phase 1 September Release	$ 833,846
Phase 2 December Release	$ 655,956
Total	**$ 1,489,802**

The table below provides the payment schedule for the Facility Settlement Tribal Health AIR project.

Item	Invoice Date	Amount
Phase 1 Requirements Document	5/31/2021	$ 166,769
Phase 1 Design Document	6/30/2021	$ 250,154
Phase 2 Requirements Document	8/31/2021	$ 131,191
Phase 1 Production Deployment	9/30/2021	$ 416,923
Phase 2 Design Document	9/30/2021	$ 196,787
Phase 2 Production Deployment	12/30/2021	$ 327,978
	Total Payments:	**$ 1,489,802**

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CONTRACT CHANGE NOTICE

Change Notice Number **36**

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CONTRACT SUMMARY

MEDICAID PROCESSING SYSTEM (CHAMPS)

INITIAL EFFECTIVE DATE	INITIAL EXPIRATION DATE	INITIAL AVAILABLE OPTIONS	EXPIRATION DATE BEFORE
March 14, 2006	September 30, 2011	20 - 1 Year	September 30, 2026

PAYMENT TERMS	DELIVERY TIMEFRAME

ALTERNATE PAYMENT OPTIONS	EXTENDED PURCHASING
☐ P-Card ☐ PRC ☐ Other	☐ Yes ☒ No

MINIMUM DELIVERY REQUIREMENTS

DESCRIPTION OF CHANGE NOTICE

OPTION	LENGTH OF OPTION	EXTENSION	LENGTH OF EXTENSION	REVISED EXP. DATE
☐		☐		September 30, 2026

CURRENT VALUE	VALUE OF CHANGE NOTICE	ESTIMATED AGGREGATE CONTRACT VALUE
$1,009,795,209.00	$0.00	$1,009,795,209.00

DESCRIPTION

Effective 8/5/2021, the following amendment is hereby incorporated into this contract per the attached Statement of Work. The total cost for this amendment is $1,456,255.00. Existing funds from CNSI Master Agreement 071B6200168 will be utilized.

- Implementation of Interoperability Solution

All other terms, conditions, specifications, and pricing remain the same. Per contractor and agency agreement, and DTMB Central Procurement Services approval.

CHAMPS Interoperability Solution
Statement of Work V2.1

Prepared For:
State of Michigan
Department of Health & Human Services
400 South Pine Street
Lansing, Michigan 48909

Prepared By:

CNSI
6465 Millennium Drive, Suite 150
Lansing, MI 48917

April 30, 2021

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CHAMPS Interoperability Solution
Statement of Work V2.1

April 30, 2021

Approved By:

Jason Werner 5-4-21	
Jason Werner **MDHHS CHAMPS Business Owner**	**Date**

Karen D. Scott	
Karen Scott **MDHHS MMIS Director**	**Date** 5/4/2021

Brant E. Cole	
Brant Cole **MDHHS Director of Medicaid Systems Operations**	**Date** 05/05/2021

John A. Moore	
John Moore **DTMB Business Relationship Manager**	**Date** 05/05/2021

Jim Schloss	
Jim Schloss **CNSI Michigan Program Manager**	**Date** 05/05/2021

John Harding	
John Harding **CNSI Senior Vice President, Managed Services**	**Date** 5/5/2021

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Section 1: Introduction

On March 9, 2020, the Centers for Medicare & Medicaid Services (CMS) released the Interoperability and Patient Access final rule (CMS-9115-F) which requires CMS-regulated payers to make health information more easily available to patients by implementing and maintaining secure, standards-based Patient Access via Application Programming Interfaces (APIs) and Health Level 7® (HL7) Fast Healthcare Interoperability Resources® (FHIR) 4.0.1 technology to enable patient access to claims, payment, encounter, clinical, and formulary information through third party applications. These payers are also required to make provider directory information publicly available via a FHIR-based Provider Directory API.

CNSI offers an Interoperability Solution to the Michigan Department of Health and Human Services (MDHHS) and Department of Technology Management and Budget (DTMB) which meets all mandated Interoperability requirements and leverages the features and benefits of MDHHS' Community Health Automated Medicaid Processing System (CHAMPS).

The Interoperability and Patient Access final rule delivers on the Administration's promise to put patients first, giving them access to their health information when they need it most and in a way they can best use it. The myHealthPortal and myHealthButton platforms provide Michigan Medicaid members secure access personalized information, including demographics, healthcare providers, benefits and eligibility and health insurance. As part of the interoperability rule, both Provider Directory API and Patient Access API will be integrated with my myHealthPortal and myHealthButton for CHAMPS using FHIR standards.

One provision of the rule is to make provider directory information publicly available via a standards-based Application Programming Interface (API). To implement this requirement, the CHAMPS Provider module needs configuration changes so that servicing providers are associated to a billing provider at the individual servicing location level instead of the current base location level. Provider search features will also be enhanced to support the ability to search for providers based on specialty.

MDHHS has partnered with Michigan Health Information Network (MiHIN) to provide overall interoperability integration with payers, third-party applications and clinical data sources. CNSI will deploy our Interoperability Solution to integrate with MiHIN's IO Station, enabling user authentication and access to CHAMPS payer data. CNSI will also enable myHealthButton and myHealthPortal as third-party apps for Interoperability integration with CHAMPS.

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Section 2: Solution Overview

This section summarizes CNSI's proposed project, including functional and technical overviews, the proposed project timeline, and the project stages for meeting the objectives of the project.

2.1 Solution Overview

The Solution is engineered to support all the business and technical requirements defined in the CMS mandate and will leverage the CARIN Blue Button (BB) Explanation of Benefit (EOB) Profiles and Implementation guide along with the CARIN Common Payer Consumer Dataset (CPCDS) as anchors in conjunction with data exchange standards, such as HL7 FHIR, USCDI, HIPAA EDI, SMART on FHIR, and standards-based application programming interface (API) to facilitate the movement of data from payer systems (Producers) to the patients (Consumers) accessible via Consumer Apps. The patient data will be made available via EOBs. CNSI's Interoperability Solution is extensible and scalable to support long-term needs and use cases.

Figure 1 provides a schematic of the overall Solution with the following distinct components and associated product and non-product boundaries -

(a) A ***Product boundary*** encompassing the following:
   1) Data Mapping Template
   2) FHIR-Ready Payer Data Repository (FPDR)
   3) HL7 FHIR API (Adapter and Server)
   4) Secured integration with Smart Apps

(b) An ***Implementation boundary*** encompassing the following:
   1) Product Configuration
   2) API Documentation
   3) Product Access Approval Workflow

(c) An ***Operational boundary*** encompassing the following:
   1) Provisioning the Payer Data

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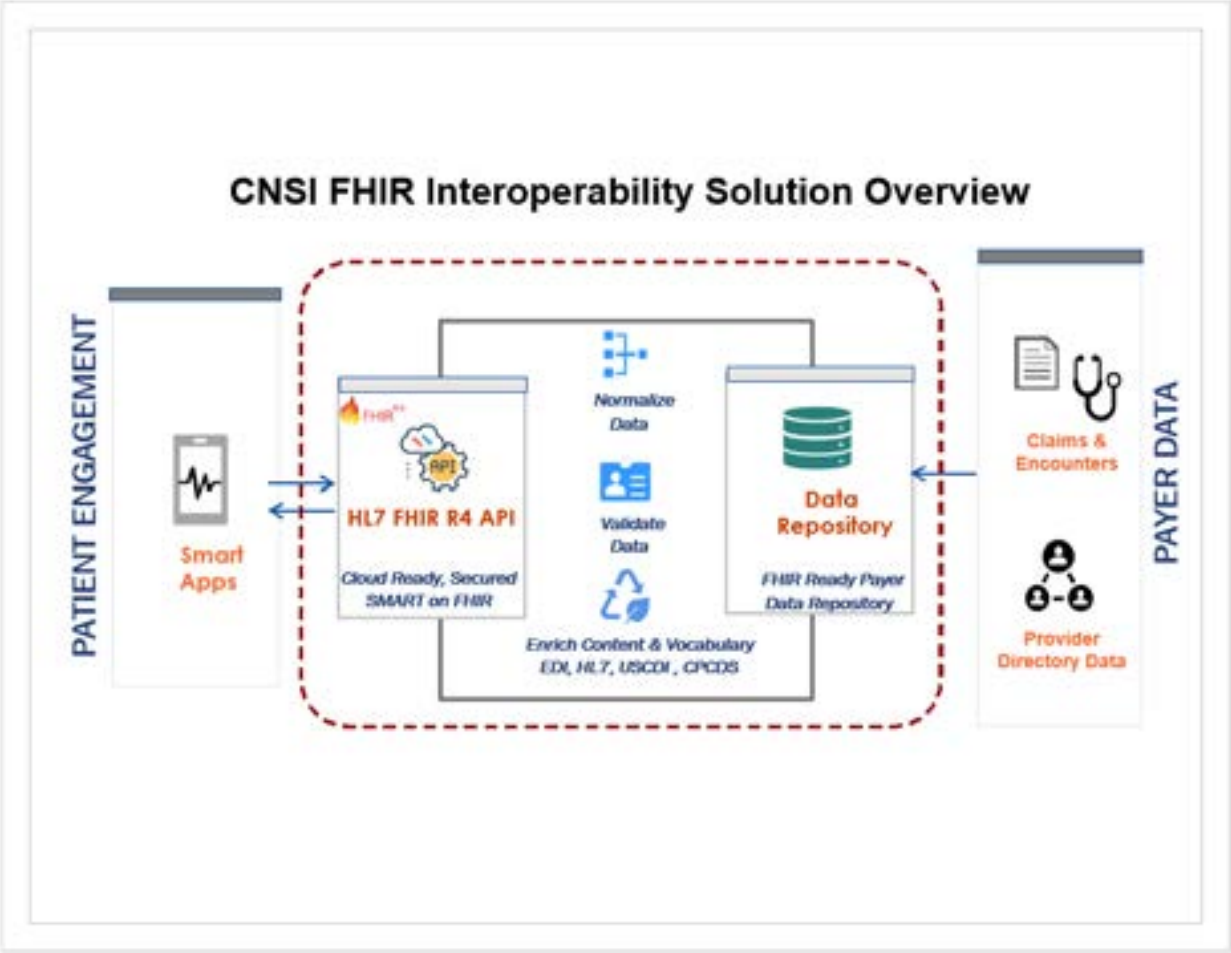

Figure 1. Promoting Interoperability Leveraging FHIR Standards

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As depicted in Figure 2 and Figure 3, CNSI's Interoperability Solution will interact with MiHIN's IO Station as a third-party application for the Patient Access and Provider Directory APIs.

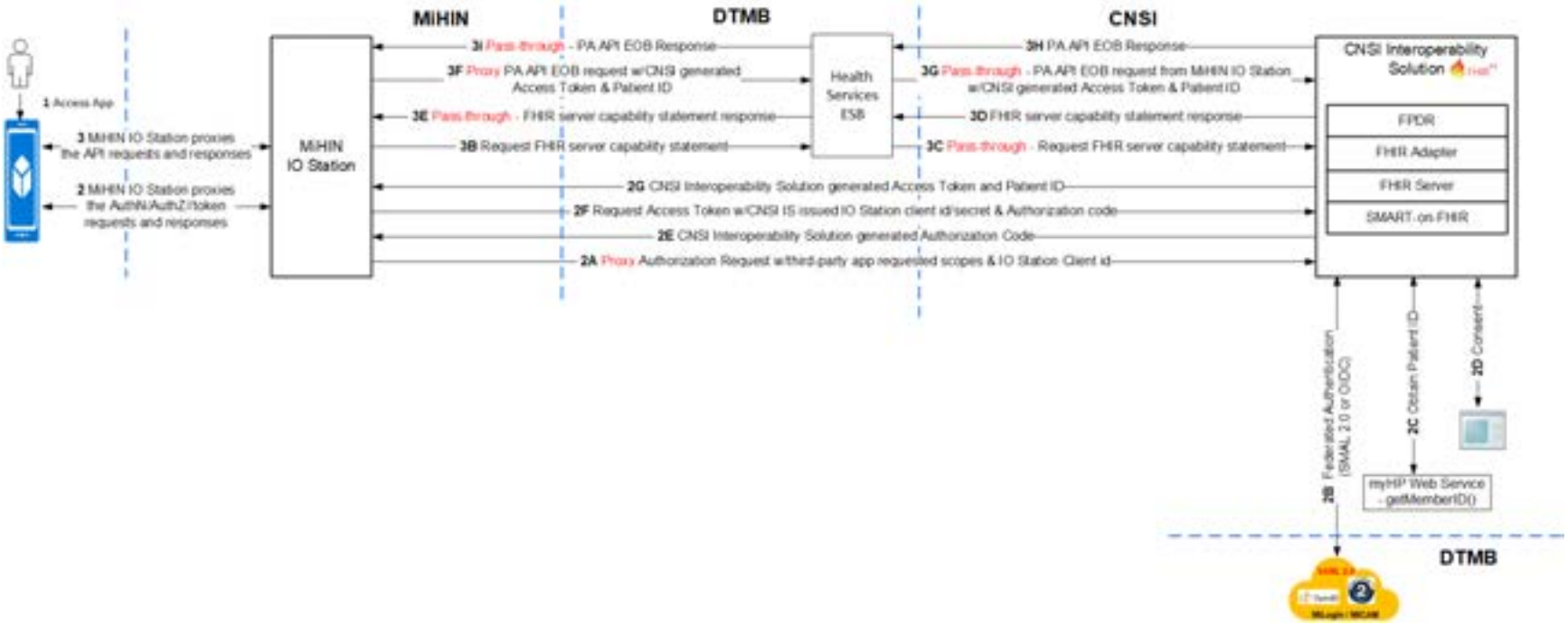

Figure 2. Patient Access API Integration with IO Station

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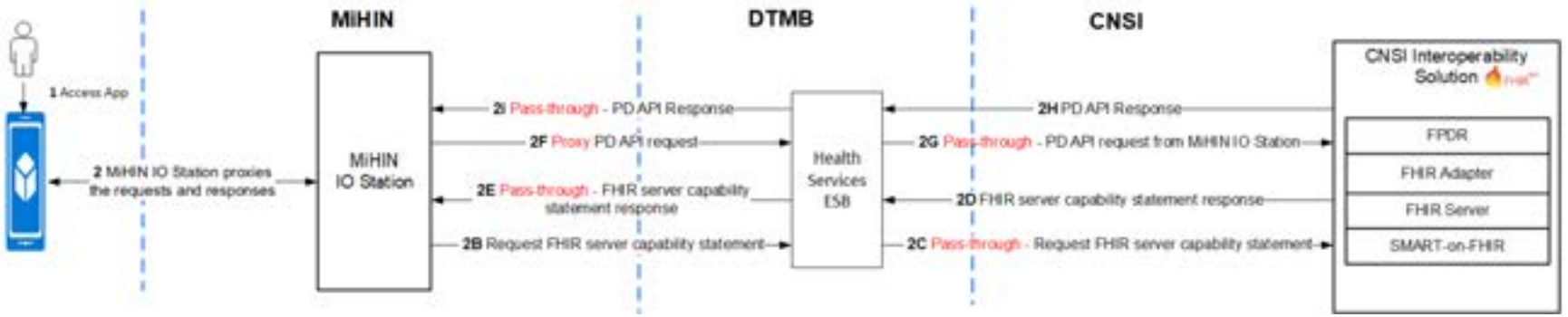

Figure 3. Provider Directory API Integration with IO Station

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2.2 Solution Components

The Solution includes the components described in Table 1.

Table 1. Interoperability Solution Components.

Component	Component Features
Mapper	Pre-built data intake template to enable translation of Payer data to a *Common Payer Interface (CPI)* based on CARIN CPCDS with full business data elements lineage across the CARIN BB Profiles, HL7 FHIR, USCDI, HIPAA EDI and other data standards.
Data Repository	FHIR Ready Payer Data Repository (data mart) with integration with the Common Payer Interface, with inter-related models for storing and retrieving data via logical views for EOBs. Data Models and Dictionaries for staging, master, reference, transactional, and framework data, in conjunction with the data lineage configuration data and logical views.
Adapter API	Facilitate the retrieval of data from FPDR.
FHIR Server	Enable CARIN Blue Button Profiles with Smart on FHIR integration for authentication and authorization.
Additional Services	API Documentation Portal and Developer Documentation.

2.3 Deployment Model

The Solution will be packaged and offered in the Cloud-Hosted deployment model described in Table 2.

Table 2. Cloud-Hosted Deployment Model

Deployment Model	Components
Cloud Hosted	Solution is hosted on AWS with the following components: 1. API Gateway 2. AWS Cognito 3. FHIR Server 4. API Adapter 5. Data Repository (FPDR)

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2.4 Scope of Work

The CNSI Interoperability Solution includes the following scope of work organized by release:

- **September 2021 Release:**
    - Patient Access API for EOBs
    - Fee-for-Service Medical and Pharmacy Claims and Encounters with a service date on or after January 1, 2016
    - Provider Directory API (DaVinci PDEX Plan-Net 0.3.0)
    - FHIR Server
    - API Documentation Portal
    - Developer Documentation
    - Member Consent Revocation
    - Configure myHealthButton and myHealthPortal as 3rd-party applications to display CHAMPS EOBs and Provider Information
- **March 2022 Release:**
    - CHAMPS Provider Module changes to enrich the Provider Directory API response

2.5 Implementation

MDHHS' Operations team will collaborate with the CNSI implementation team to understand the various solution components, leverage the pre-built templates and documentation, and provide Payer subject matter experts and technical and business operations staff to help with the mapping of the Payer's claims, members, and related datasets to the Solution's Common Payer Interface (CPI) specifications and support the initial (one-time) data load for the historical patient's claims data. In addition, the following are some of the high-level implementation tasks that need to be performed to complete the overall product rollout of the Full Interoperability Solution option:

- Product Configuration
- Integration
    - Identity & Access Management
    - MMIS Solution
    - Payers and Health Plans
- Testing
- Product API Documentation
- Revised DSDD for myHealthPortal
- Revised User Guide for myHealthButton
- Finalize Production Access Approval Workflow

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2.6 High Level Timeline

The schedules in Figure 4 provide a breakdown of the implementation milestones leading up to the deployment of the CNSI CHAMPS Interoperability Solution in the September 2021 release and the CHAMPS Provider Module Changes in the March 2022 release.

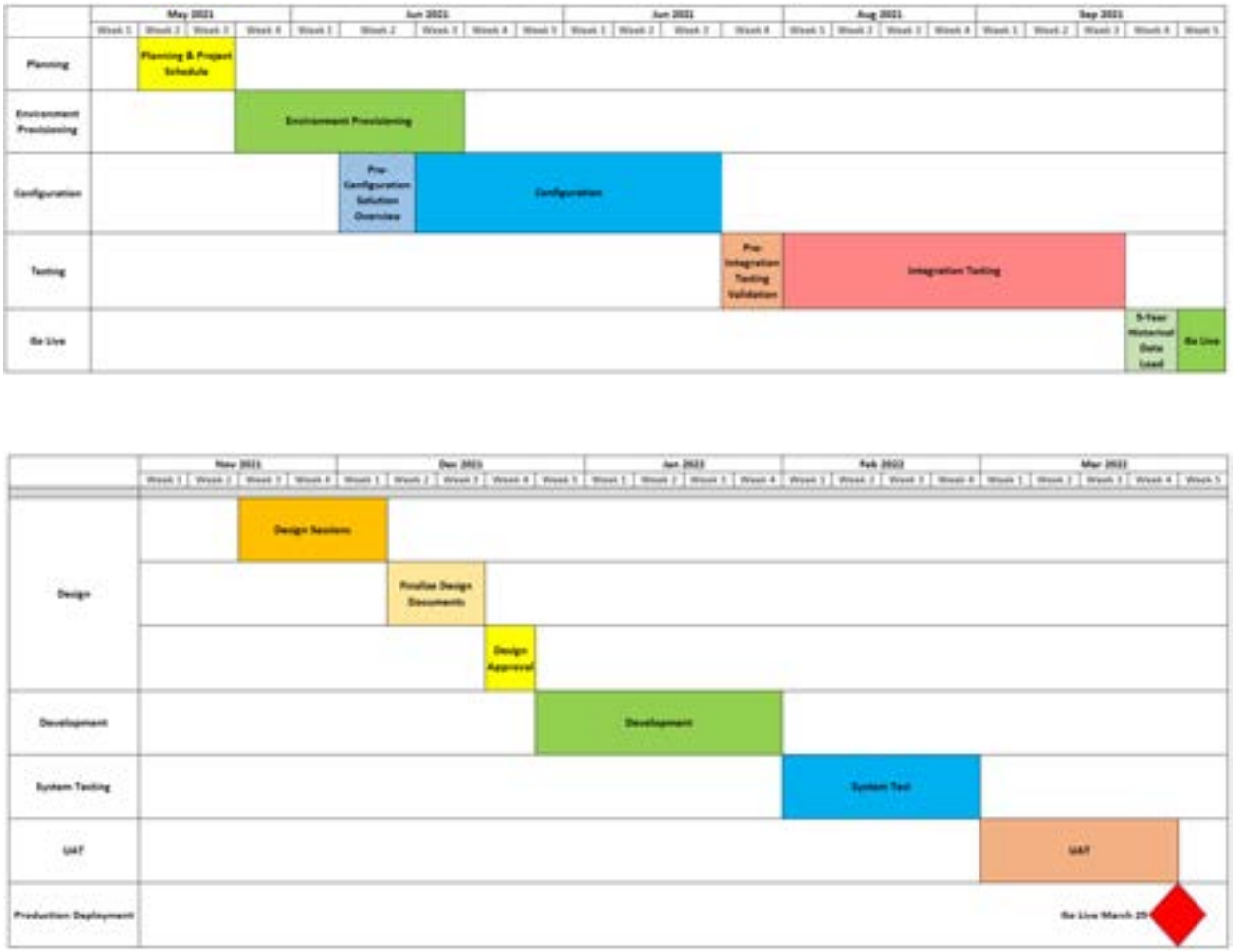

Figure 4. Implementation High-Level Timelines

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Section 3: General Assumptions and Constraints

CNSI has identified and provided the following general assumptions regarding the project:

1. All users will be on-boarded via mHB/mHP before they can connect to CHAMPS via third-party apps through IO Station.
2. IO Station interfaces with the CNSI Interoperability Solution like a third-party app and will connect with the CNSI FHIR server.
3. The CNSI Interoperability Solution will only interface with IO Station, myHealthButton and myHealthPortal as third-party apps. All other third-party apps will interface with IO station, not directly with the CNSI Interoperability Solution.
4. IO Station will handle third-party app registration and provide client-id/secret to the third-party apps. Third-party apps do not register with CNSI Interoperability Solution.
5. The CNSI Interoperability Solution will register IO Station as a SMART app and issue client-Id/secret to IO Station. IO station will provide secure callback URL to CNSI to receive Authorization Code after successful federated login.
6. The CNSI Interoperability Solution will federate user authentication with MILogin using SAML2.0 or OIDC/OAuth2.
7. The CNSI Interoperability Solution will enable SMART on FHIR standalone launch sequence and OAuth2 consent flow.
8. The CNSI Interoperability Solution will generate the Access Token based on the consented scopes and selected Patient ID.
9. IO Station will generate Access token encapsulating CNSI Interoperability Solution’s generated Access Token.
10. IO Station will proxy all HTTP re-directs between the CNSI Interoperability Solution and the third-party mobile app.
11. IO station will re-write the URLs bi-directionally while proxying requests/responses between CNSI Interoperability Solution and the third-party mobile app.
12. The Health Services Enterprise Service Bus (ESB) is a pass-through interface. It will not alter the requests and responses between IO Station and the CNSI Interoperability Solution. The Health Services Enterprise Service Bus (ESB) does not require any changes to the CNSI Interoperability Solution.
13. Interfaces with the Health Services ESB require mutual client certificate authentication.
14. Authentication/Authorization and consent flow is not required for the user while accessing the Provider Directory API.
15. While accessing the Provider Directory API, authentication/authorization flow is not required between IO Station and the CNSI Interoperability Solution.

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16. Any expense related to MILogin services is outside the scope of this engagement.
17. Scope of work is limited to inclusion of claim and encounter data in the inquiry response. Other data, such as Buy-In, TPL Dual-eligible beneficiaries, Managed Care, Prior Authorizations and Immunizations is out of scope and will be taken up as change requests if needed.
18. The Interoperability Solution product leverages the **CARIN IG for Blue Button® (C4BB) V1.0.0 (STU1)** implementation guide for Patient Access API (EOB). The product subscription fee covers CMS-mandated changes to the CARIN IG for Blue Button® under the CMS Final Rule 9115-F. Any State-specific changes required for payer data interfaces will be taken up as project-level Operations change requests.
19. Dental and Vision claims are excluded from the Patient Access API per the STU-1 release of the C4BB IG.
20. The Interoperability Solution product supports the **Da Vinci PDEX Plan Net V1.0.0 (STU1)** implementation guide for Provider Directory API. The product subscription fee covers CMS-mandated changes to the Da Vinci PDEX Plan Net IG under the CMS Final Rule 9115-F. Any State-specific changes required for payer data interfaces will be taken up as project-level Operations change requests.
21. The CNSI Interoperability Solution will be deployed in Amazon Web Services (AWS) cloud and will interface with CHAMPS over Secure File Transfer to exchange data extract files.
22. Data retention policies: **Indefinite**
23. Number of years of historical data to be supported: **Indefinite starting with dates-of-service on or after January 1, 2016**
24. Periodic database maintenance frequency: **Monthly**
25. CNSI maintains a forward-looking RoadMap for planned updates to the CNSI Interoperability product. Deployment of the updates per the RoadMap schedule for the Patient Access API and Provider Directory API as defined in the CMS Final Rule 9115-F are included within the annual subscription fee.
26. CNSI will provide the following supporting documentation:
    - API Documentation Portal: A public website for third-party app developers to find information about the Patient Access API and Provider Directory API and Third-party App Registration process
    - API Guide - Developer Documentation: Provides all the details required for the third-party app developers to connect and consume the Patient Access API and Provider Directory API
    - Mapping Document: Documents the data elements mapping between the payer system and the pre-defined intake templates (CPI layouts)
    - Business Rules: Documents eligible claim types, EOB suppression rules etc.
    - Interaction Diagrams: Documents the touchpoints between third-party app, MiHIN, DTMB and CNSI

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27. MDHHS and DTMB will provide access to, and time commitment from, subject matter experts who understand their programs and systems.
28. MDHHS/MiHIN will provide on-going support for third-party application vendors regarding registration and integration.
29. As primary vendor selected by MDHHS for this project, MiHIN has the lead responsibility for overall project planning, scheduling and implementation coordination.
30. The CHAMPS operations contract will be amended to add the annual operations support costs for this project.
31. MiHIN will lead the planning and coordination of Integration Testing with collaboration and participation from CNSI, MDHHS and DTMB pursuant to the approved master schedule. Any delays will be evaluated through the project's change management process.

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Section 4: Proposed Project Cost

This section provides the cost and payment schedule for the CNSI Interoperability Solution, which includes additional services to configure myHealthButton (mHB) and myHealthPortal (mHP) as third-party apps for CHAMPS and configure changes in the CHAMPS Provider module to enrich responses to Provider Directory inquiries.

Base Implementation	Cost
Interoperability Solution	$964,460

Additional Services Implementation	Cost
Configure mHB and mHP as 3rd-Party Apps	$293,467
CHAMPS Provider Module Changes	$198,328
Total Implementation Cost:	**$1,456,255**

FY 2021 Implementation Payment Schedule (Base + mHB / mHP Changes)		
Item / Milestone	**Amount**	**Invoice Date**
Project Schedule	$456,464	5/31/2021
Software License Fee	$345,000	5/31/2021
Go-Live	$456,464	8/31/2021

FY 2022 Implementation Payment Schedule (CHAMPS Provider Module Changes)		
Item / Milestone	**Amount**	**Invoice Date**
Design	$66,109	12/30/2021
System Test	$66,109	2/28/2022
Go-Live	$66,109	3/31/2022

The following table contains the proposed annual Operations costs to be incorporated into the CHAMPS Operations statement of work.

Proposed Annual Operations Cost			
Year	**Subscription Fee**	**Labor**	**Total**
SFY 2021		$18,534	$18,534
SFY 2022	$345,000	$390,192	$735,192
SFY 2023	$345,000	$394,856	$739,856
SFY 2024	$345,000	$407,359	$752,359
SFY 2025	$345,000	$424,476	$769,476
SFY 2026	$345,000	$442,399	$787,399

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STATE OF MICHIGAN
CENTRAL PROCUREMENT SERVICES
Department of Technology, Management, and Budget

525 W. ALLEGAN ST., LANSING, MICHIGAN 48913
P.O. BOX 30026 LANSING, MICHIGAN 48909

CONTRACT CHANGE NOTICE

Change Notice Number **35**

to

Contract Number **071B6200168**

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	KlineC1@michigan.gov	
Contract Administrator	Jennifer May	DTMB
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	mayj7@michigan.gov	

CONTRACT SUMMARY

MEDICAID PROCESSING SYSTEM (CHAMPS)

INITIAL EFFECTIVE DATE	INITIAL EXPIRATION DATE	INITIAL AVAILABLE OPTIONS	EXPIRATION DATE BEFORE
March 14, 2006	September 30, 2011	20 - 1 Year	September 30, 2026

PAYMENT TERMS	DELIVERY TIMEFRAME

ALTERNATE PAYMENT OPTIONS			EXTENDED PURCHASING	
☐ P-Card	☐ PRC	☐ Other	☐ Yes	☒ No

MINIMUM DELIVERY REQUIREMENTS

DESCRIPTION OF CHANGE NOTICE

OPTION	LENGTH OF OPTION	EXTENSION	LENGTH OF EXTENSION	REVISED EXP. DATE
☐		☐		September 30, 2026

CURRENT VALUE	VALUE OF CHANGE NOTICE	ESTIMATED AGGREGATE CONTRACT VALUE
$1,009,795,209.00	$0.00	$1,009,795,209.00

DESCRIPTION

Effective 6/24/2021, the following amendment is hereby incorporated into this contract per the attached Statement of Work. The total cost for this amendment is $498,176.00. Existing funds from CNSI Master Agreement 071B6200168 will be utilized.

- Implementation of enhancements in the September and December CHAMP releases in support of the CCBHC project.

All other terms, conditions, specifications, and pricing remain the same. Per contractor and agency agreement, and DTMB Central Procurement Services approval.

Certified Community Behavioral Health Clinic (CCBHC)
Statement of Work

Prepared For:
State of Michigan
Department of Health & Human Services
400 South Pine Street
Lansing, Michigan 48909

Prepared By:

CNSI
6465 Millennium Drive, Suite 150
Lansing, MI 48917

April 29, 2021

This document contains proprietary information intended to be provided to key management staff of the State of Michigan. It should not be released to third parties or used for other purposes without the express written consent of CNSI.

Certified Community Behavioral Health Clinic (CCBHC)
Statement of Work

April 29, 2021

Approved By:

Jamy Hengesbach **MDHHS CHAMPS Business Owner**	**Date**

Karen Scott **MDHHS MMIS Director**	**Date**

Brant Cole **MDHHS Director of Medicaid Systems Operations**	**Date**

John Moore **DTMB Business Relationship Manager**	**Date**

Jim Schloss **CNSI Michigan Program Manager**	**Date**

John Harding **CNSI Senior Vice President, Managed Services**	**Date**

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Section 1: Introduction

In 2016, MDHHS applied to CMS to become a Certified Community Behavioral Health Clinic (CCBHC) Demonstration state under Section 223 of the federal Protecting Access to Medicare Act of 2014 (PAMA). That request was approved on August 5, 2020, when the federal CARES Act of 2020 authorized two additional states—Michigan and Kentucky—to join the demonstration. As a result, MDHHS was approved for a two-year demonstration with an anticipated implementation start date of October 1, 2021.

MDHHS will utilize administrative claim/encounter data to auto-enroll Medicaid beneficiaries into the CCBHC benefit plan based on having a current mental health and/or Substance Use Disorder (SUD) diagnosis. Queries will search historically for a diagnosis as far back as data allows. The relevant PIHP will identify and assign these beneficiaries to the pertinent CCBHC site within the Waiver Support Application (WSA) system. This includes verifying beneficiary consent to share information (particularly regarding beneficiaries with an SUD only diagnosis). Once enrolled in the WSA, the WSA will send the information to the Community Health Automated Medicaid Processing System (CHAMPS) in the 1015.05 (Receive 1115 Waiver File from Optum) interface file for Medicaid CCBHC benefit plan assignment, which affords CCBHC services and commensurate reimbursement.

For prospective non-Medicaid CCBHC enrollees, both the PIHP and CCBHC will recommend individuals for enrollment via the WSA. Unlike the Medicaid beneficiaries enrolling in the CCBHC, these individuals will not be assigned a benefit plan in CHAMPS (since they are not Medicaid beneficiaries). Rather, the WSA will be leveraged to track the volume of non-Medicaid enrollees. The CCBHCs must still submit the pertinent encounter codes for these enrollees to the PIHPs and the PIHPs must submit these “look-alike encounters” to MDHHS via CHAMPS per the existing process for submitting claim/encounter information for non-Medicaid persons.

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Section 2: Scope and Schedule

This section summarizes the scope of work and schedule for the CCBHC project.

2.1 Scope of Work

The following list contains the specific enhancements that will be implemented in the September and December 2021 CHAMPS releases.

Phase 1 - September Release

- Change the 1015.05 (Receive 1115 Waiver File from Optum) interface to support the receipt of CCBHC enrollment records.
- Configure a new CCBHC benefit plan.
- Configure new Managed Care program and contract.
- Develop benefit plan and managed care enrollment assignment rules.
- Create new HIPAA 270/271 rules for the new CCBHC benefit plan.
- Create a new HIPAA 834 audit file.
- Develop new CCBHC rate cell calculations.
- Update payment logic as required for CCBHC payments.
- Update HIPAA Encounter processing logic as required for CCBHC encounters

Phase 2 - December Release

- Create new CHAMPS Managed Care reports.
- Create a CCBHC dashboard in CHAMPS Health Beat.

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2.2 High Level Timeline

Table 1 provides the project milestones for the CCBHC project.

Table 1. High-Level Timeline

Phase	Milestone	Start	End
Planning	Statement of Work	4/21/2021	5/7/2021
Phase 1	Design Sessions	5/10/2021	5/28/2021
	Finalize Design Documents	5/31/2021	6/11/2021
	Design Approval	6/14/2021	6/18/2021
	Development	6/21/2021	7/23/2021
	System Testing	7/26/2021	8/20/2021
	User Acceptance Testing	8/23/2021	9/16/2021
	Go-Live	9/17/2021	
Phase 2	Design Sessions	8/2/2021	8/20/2021
	Finalize Design Documents	8/23/2021	9/3/2021
	Design Approval	9/6/2021	9/10/2021
	Development	9/13/2021	10/15/2021
	System Testing	10/18/2021	11/12/2021
	User Acceptance Testing	11/15/2021	12/9/2021
	Go-Live	12/10/2021	

Section 3: General Assumptions

CNSI has identified and provided the following general assumptions regarding the project:

1. The layout of the 1015.05 (Receive 1115 Waiver File from Optum) interface will not change. Only new data values will be added.
2. There are no new non-Medicaid identifiers required in the HIPAA encounters.

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Section 4: Proposed Project Cost

Table 2 provides the cost for the CCBHC project. (Phase 2 is broken-out to show the Health Beat Dashboard separately for funding considerations).

Table 2. Proposed Project Cost

Phase	Cost
Phase 1 September Release	$278,278
Phase 2 December Release – Managed Care Reports	$18,348
Phase 2 December Release – Health Beat Dashboard	$201,550
Phase 2 Total	***$219,898***
Project Total	**$498,176**

Table 3 provides the payment schedule for the CCBHC project.

Table 3. Project Payment Schedule

Item	Amount	Invoice Date
Phase 1 Design	$139,139	6/30/2021
Phase 1 Deployment to Production	$139,139	9/30/2021
Phase 2 Design	$109,949	9/30/2021
Phase 2 Deployment to Production	$109,949	12/30/2021

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STATE OF MICHIGAN
CENTRAL PROCUREMENT SERVICES
Department of Technology, Management, and Budget

525 W. ALLEGAN ST., LANSING, MICHIGAN 48913
P.O. BOX 30026 LANSING, MICHIGAN 48909

CONTRACT CHANGE NOTICE

Change Notice Number **34**

to

Contract Number **071B6200168**

CONTRACTOR	
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Contract Administrator	Jennifer May	DTMB
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CONTRACT SUMMARY

MEDICAID PROCESSING SYSTEM (CHAMPS)

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$1,009,795,209.00	$0.00	$1,009,795,209.00

DESCRIPTION

Effective 5/3/2021, the following amendment is hereby incorporated into this contract per the attached Statement of Work. The total cost for this amendment is $1,199,848.00. Existing funds from CNSI Master Agreement 071B6200168 will be utilized.

- Implementation of ClaimsSure enhancements to help increase overall efficiency and effectiveness, with a focus on improving Provider success rates and additional claims cost avoidance.

All other terms, conditions, specifications, and pricing remain the same. Per contractor and agency agreement, and DTMB Central Procurement Services approval.

ClaimsSure Enhancements
Statement of Work

Prepared For:
State of Michigan
Department of Health & Human Services
400 South Pine Street
Lansing, Michigan 48909

Prepared By:

CNSI
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March 15, 2021

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ClaimsSure Enhancements
Statement of Work

March 15, 2021

Approved By:

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Karen Scott **MDHHS MMIS Director**	**Date** 3/15/21

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Brant Cole **MDHHS Director of Medicaid Systems Operations**	**Date** 03/17/21

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John Moore **DTMB Business Relationship Manager**	**Date** 03/16/21

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Section 1: Introduction

Michigan's Department of Health and Human Services (MDHHS) secured fiscal year 2021 funding to implement ClaimsSure enhancements to help increase overall efficiency and effectiveness, with a focus on improving Provider success rates and additional claims cost avoidance. MDHHS and CNSI collaboratively identified a specific list of enhancements that will be implemented with the CHAMPS June and September 2021 releases. Those enhancements are listed in section 2.1 – Scope of Work.

Section 2: Scope and Schedule

This section summarizes the scope of work and schedule for the ClaimsSure Enhancements project.

2.1 Scope of Work

The following list contains the specific enhancements that will be implemented in the June and September 2021 CHAMPS releases. In addition to these enhancements, up to 265 hours are available to cover other changes that are identified during design and testing.

June Release

Item	Description
MIPRO-408: Update to ClaimSure Logic - Provider Success Rate	This enhancement supports bypasses for certain NPI-scenario combinations when the provider has demonstrated a success rate with their ClaimSure activity and documentation submission. The NPIs will be stored in a Claim Editing group for bypassing each scenario identified in CHAMPS Reference subsystem to be added/updated by State Staff when necessary. When the 1010 scenario is bypassed for a given NPI, no other scenario will be applied to cause the claim to suspend for ClaimSure review for that NPI. The list of provider NPI's for which the respective scenarios are bypassed will be provided by the state based on the success rate.
MIPRO-414: Weekly 9001 Report	To help ensure there are no improper denials for documentation not received, this weekly scheduled report will show all TCNs with Edit 9001 where documentation is uploaded to DMP.
MIPRO-204: Blank Improper Billing Screen	This will change ClaimsSure result logic to always modify based on existing record, instead of over-write.

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September Release

Item	Description
MIPRO-921: Edits in Numerical Order	Put ClaimsSure edits in numerical order in CHAMPS screen.
MIPRO-919: 1020 Scenario Update Regarding Modifiers	Eliminate unnecessary flagging of claims for Predictive Modeling review: Modify the scenario where ambulance claims suspend for Predictive Modeling to look at the modifiers on the claim and if they do not match and if the date of service is the same, do not set the 1020 scenario. Example: 311921810311832000 2/23/2019 J, N 311907310225666000 2/23/2019 N, J
MIPRO-915: 1020 Scenario update regarding procedure codes to eliminate unnecessary flagging of claims for Predictive Modeling review	For claims suspending for Predictive Modeling, check the procedure codes on the claims. If they do not match for the same date of service, do not set the 1020 scenario.
As-Is Exclusions through ClaimsSure Screens	The ClaimsSure UI currently has the feature to configure exclusions. This will be standardized for all criteria and parameters. Note: The screen will be accessible by MDHHS staff.
Scenario Refinement - DME Scenario (September code deployment and go-live in December)	The original scenario was developed around 2016. Refinements to existing variables are needed to accommodate recent policy changes and improve accuracy. These variables will be created and run in production to analyze the trend and patterns. These variables will later be included in the scenario based on the observation in production. The switch to the new variables can be performed in 2022.

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Statistical Parameter Validation	**Availability of previous week's coefficient values** if there is no statistical model change: -Ensure that the statistical coefficients which are the main attributes leading to flagging of claims are available in the tables for flagging when no coefficient values change. -Ensures manual intervention is not required to verify and upload the same values. **Validation of the uploaded coefficients** prior to reflecting the scenario for flagging: - Provision will be made in the UI to view and verify the values present and ensure that the uploaded values are validated before moving to the production tables. Note: The screen will be accessible by MDHHS staff.
Additional Enhancement Hours	There are up to 265 additional enhancement hours available within the total cost of this SOW beyond the scope listed above for additional changes identified during design and testing.

2.2 High Level Timeline

Figure 1 provides a breakdown of the project milestones for the ClaimsSure Enhancements project.

Figure 1. High-Level Timeline

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Section 3: General Assumptions

CNSI has identified and provided the following general assumptions regarding the project:

1. Up to 265 additional enhancement hours can be supported without increasing the overall project cost.
2. MDHHS and DTMB will provide access to, and time commitment from, subject matter experts who understand their programs and systems.
3. MDHHS will plan and execute user acceptance testing pursuant to the approved schedule. Any delays will be evaluated through the project's change management process.

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Section 4: Proposed Project Cost

The table below provides the cost for the ClaimsSure Enhancements project.

	Hours	Cost
June 2021 Release	1270	$ 176,530
September 2021 Release	7362	$ 1,023,318
Total	**8632**	**$ 1,199,848**

The table below provides the payment schedule for the ClaimsSure Enhancements project.

Item	Amount	Invoice Date
Design for June Release	$ 88,265	4/30/2021
June Production Deployment	$ 88,265	6/30/2021
Design for September Release	$ 511,659	6/30/2021
September Production Deployment	$ 511,659	9/30/2021

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STATE OF MICHIGAN
CENTRAL PROCUREMENT SERVICES
Department of Technology, Management, and Budget

525 W. ALLEGAN ST., LANSING, MICHIGAN 48913
P.O. BOX 30026 LANSING, MICHIGAN 48909

CONTRACT CHANGE NOTICE

Change Notice Number **33**

to

Contract Number **071B6200168**

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Contract Administrator	Jennifer May	DTMB
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CONTRACT SUMMARY

MEDICAID PROCESSING SYSTEM (CHAMPS)

INITIAL EFFECTIVE DATE	INITIAL EXPIRATION DATE	INITIAL AVAILABLE OPTIONS	EXPIRATION DATE BEFORE
March 14, 2006	September 30, 2011	20 - 1 Year	September 30, 2026

PAYMENT TERMS	DELIVERY TIMEFRAME

ALTERNATE PAYMENT OPTIONS			EXTENDED PURCHASING	
☐ P-Card	☐ PRC	☐ Other	☐ Yes	☒ No

MINIMUM DELIVERY REQUIREMENTS

DESCRIPTION OF CHANGE NOTICE

OPTION	LENGTH OF OPTION	EXTENSION	LENGTH OF EXTENSION	REVISED EXP. DATE
☐		☐		September 30, 2026

CURRENT VALUE	VALUE OF CHANGE NOTICE	ESTIMATED AGGREGATE CONTRACT VALUE
$1,009,795,209.00	$0.00	$1,009,795,209.00

DESCRIPTION

Effective 2/3/2021, the following amendment is hereby incorporated into this contract per the Statement of Work. The total cost for this amendment is $746,000.01. Existing funds from CNSI Master Agreement 071B6200168 will be utilized.

- Phase 1 system enhancements to myHealthPortal, myHealthButton, and CHAMPS to build the Non-Emergency Transportation (NEMT) Module.

Phase 2 system enhancements to myHealthPortal, myHealthButton, and CHAMPS to build the Non-Emergency Transportation (NEMT) Module are out of scope at this time, however, may be added at a later date with a new contract change notice.

All other terms, conditions, specifications, and pricing remain the same. Per contractor and agency agreement, and DTMB Central Procurement Services approval.

CHAMPS NEMT
Statement of Work

Prepared For:
State of Michigan
Department of Health & Human Services
400 South Pine Street
Lansing, Michigan 48909

Prepared By:

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January 12, 2021

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Section 1: Introduction

Michigan Medicaid beneficiaries have trouble obtaining non-emergency medical transportation (NEMT) services. The process is manual and time-intensive, often requiring multiple phone calls to various entities to find the correct transportation provider. The Michigan Department of Health and Human Services (MDHHS) secured Federal grant funding to improve the process via automation.

Over 73,000 Michigan Medicaid beneficiaries use the MyHealthPortal via desktop computers and the MyHealthButton application on tablets and smart phones to access their Medicaid information. The myHealthPortal and myHealthButton platforms provide Medicaid beneficiaries secure access to personalized information including demographics, healthcare providers, benefits and health care coverage. Both platforms provide the beneficiaries with detailed online, real-time functionality such as the ability to make authorized changes, see provider claims filed for services rendered and view or request a replacement mihealth card.

The goal of the NEMT project is to streamline the NEMT request process. MDHHS will use the myHealthPortal and myHealthButton platforms to automate beneficiary NEMT requests to:

- Enable beneficiaries to request transportation services from the correct provider based on their demographics and Medicaid coverage.
- Support the ability for State workers to generate transportation requests on behalf of a beneficiary.
- Integrate myHealthButton and myHealthPortal with the CHAMPS Prior Authorization module.
- Provide workflow functionality for the Prior Authorization unit to process a request and report the results of the review to the State worker and beneficiary.
- Support beneficiary complaints and appeals.

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Section 2: Solution Overview

This section summarizes CNSI's proposed NEMT project, the proposed project timeline, and the project stages for meeting the objectives of the NEMT project.

2.1 Solution Overview

Beneficiaries will access myHealthButton or myHealthPortal to submit NEMT service requests. The process starts with a series of questions to identify the appropriate transportation provider for the beneficiary's needs. After the system validates the beneficiary's responses against the data already on file in CHAMPS, the beneficiary submits their transportation service request. The request is then routed to MDHHS county staff who determine if prior authorization is needed. If no prior authorization is needed, the county worker either approves or denies the transportation request and the results are made available for the beneficiary to view in myHealthButton and myHealthPortal. If prior authorization is needed, the service request is forwarded to the MDHHS Prior Authorization unit to approve or deny the request. The results are then made available for the beneficiary to view in myHealthButton and myHealthPortal. Figure 1 summarizes the flow of the service request.

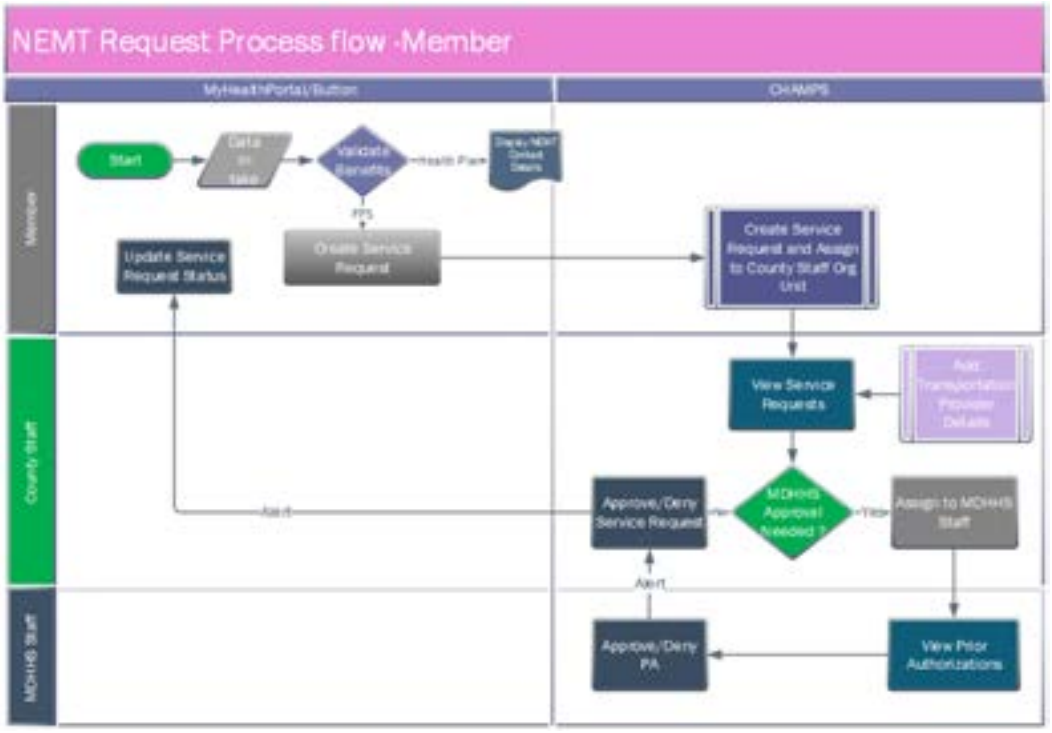

Figure 1. Member submission of a transportation request

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Figure 2 summarizes the flow of a service request when submitted by a County staff worker on behalf of the beneficiary.

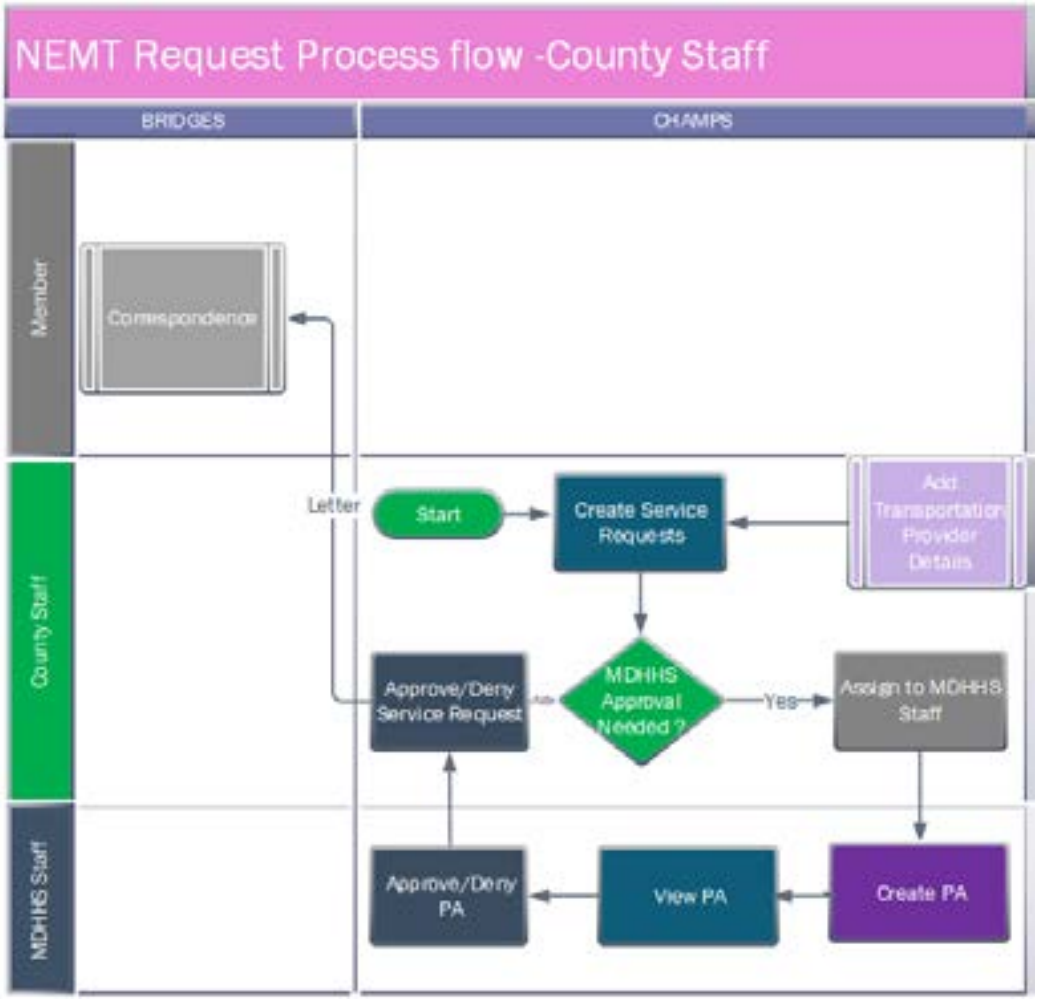

Figure 2. County staff submission of a transportation request

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2.2 Functional Requirements

The functional requirements were defined during scoping conversations between MDHHS and CNSI. The requirements are listed in Table 1 by phase.

Table 1. Function Requirements

Requirement Description	Phase
Build new online NEMT Grid	Phase1
Create new NEMT GRID profiles	Phase1
Build a new section and Tile for the new module	Phase1
Build new Q&A screen to allow the beneficiary to access right NEMT service	Phase1
Build a service to validate the member eligible services based on BP, Member demographics	Phase1
Build a service to capture additional services required (additional Riders and Special needs.)	Phase1
Validate user inputs against the CHAMPS Benefits data and display the Vendor details.	Phase1
Store the transportation request data created in the system in CHAMPS	Phase1
Add CHAMPS profiles to enable local office staff to initiate new requests, view other existing requests and view Provider Enrollment information. (The resulting profile will contain some functions of a State worker profile and some functions of a Provider profile).	Phase1
Support the ability for local office staff to flag a request as needing prior authorization and refer the request to the Prior Authorization team (via CHAMPS)	Phase1
Enable Prior Authorization staff access to view the transportation request in CHAMPS that is related to the Prior Authorization request.	Phase1
Support the ability for local office staff to initiate a new transportation request on behalf of a beneficiary.	Phase1
Support the ability for transportation requests initiated by local office staff to be flagged for Prior Authorization	Phase1
Build Administration module for authorized users to allow GRID changes -View/Add/Modify NEMT vendor Contact Details	Phase2
Send an alert/email to the County office	Phase2
Create a Complaint/appeal for denied Requests	Phase2

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2.3 High Level Timeline

Figure 3 provides a high-level implementation timeline for the project.

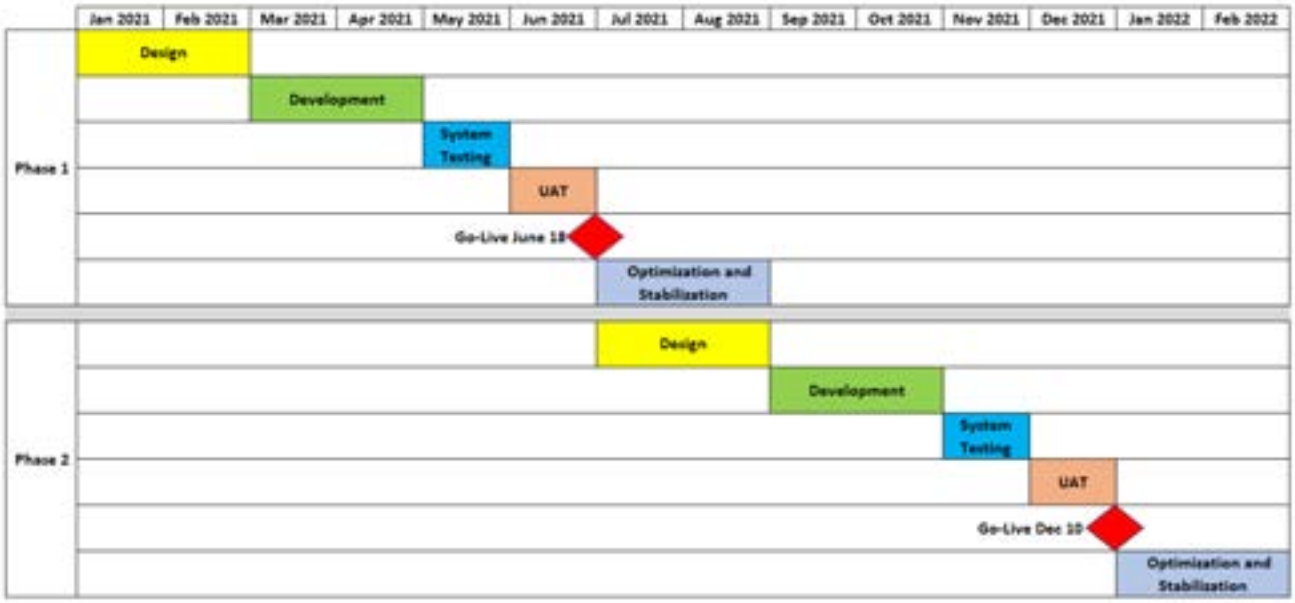

Figure 3. Implementation High-Level Timeline

Section 3: General Assumptions

CNSI has identified and provided the following general assumptions regarding the project:

1. MDHHS and DTMB will approve the project by 1/22/2021 so that design can start on 1/29/2021.
2. The project will follow CNSI's standard iVision360 SDLC methodology.
3. The functional requirements are defined and listed in section 2.2 of this SOW. Changes or additions to the requirements will be taken up under the project change management process.
4. MDHHS and DTMB will provide access to, and time commitment from, subject matter experts who understand their programs and systems.
5. Funding will be obtained for Phase 2 of the project.

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Section 4: Proposed Project Cost

This section of our proposal presents our fixed-price, overall labor cost for completing the NEMT project.

The total fixed-price labor cost for the NEMT project is **$993,700.00**. This cost is split into two phases:

- Phase 1 - $746,000.00
- Phase 2 - $247,700.00

Table 2 provides a schedule of proposed payments based on deliverables.

Table 2. Proposed Payment Schedule

Phase	Deliverable	Amount	Invoice Month
Phase 1	Design	$248,666.67	Mar-21
	System Test	$248,666.67	May-21
	Deployment to Production	$248,666.67	Jun-21
Phase 2	Design	$82,566.67	Aug-21
	System Test	$82,566.67	Nov-21
	Deployment to Production	$82,566.67	Dec-21

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CONTRACT CHANGE NOTICE

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to

Contract Number **071B6200168**

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Contract Administrator	Jennifer May	DTMB
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ALTERNATE PAYMENT OPTIONS			EXTENDED PURCHASING	
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MINIMUM DELIVERY REQUIREMENTS

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☐		☐		September 30, 2026

CURRENT VALUE	VALUE OF CHANGE NOTICE	ESTIMATED AGGREGATE CONTRACT VALUE
$1,009,795,209.00	$0.00	$1,009,795,209.00

DESCRIPTION

Effective 2/1/2020, per the attached Statement of Work, the IMPACT IGA is hereby extended for nine additional months to 9/30/2021. Total cost for this extension is $352,030.00. This work will be completed utilizing existing funds from CNSI Master Agreement 071B6200168.

All other terms, conditions, specifications, and pricing remain the same. Per contractor and agency agreement, and DTMB Central Procurement Services approval.

IMPACT MMIS Implementation
Project Change Request Summary

A. General Information

Change Name:	IMPACT Closeout SOW Extension		
Project ID/Acronym:	IMPACT	**Control Number (from Control Log):**	CHG-P-IL MMIS-0464
Date:	11/18/2020	**Prepared by:**	PCO

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Change Control

Revision Date	Author	Section(s)	Summary
9/24/2020	PCO	All	Initial draft document
11/12/2020	MDHHS	All	Updated CR to include impact analysis information
11/13/2020	PCO	Assumptions and Payment Schedule	Revised from 11/13/2020 meeting
11/18/2020	PCO	Approvals	Included all Approvers

B. Requestor Information

Continuation of IGA to complete Closeout and Transfer Activities

Because of the unanticipated length of time to receive approval to proceed with a sole source procurement, Illinois requires an amendment to extend the IMPACT IGA for nine (9) more months to 9/30/2021. The nine-month extension will give Illinois time to complete the execution of its sole source contract and transfer of source code and data to its new environment.

During the extension, Illinois will require continued maintenance and operation of PE and e-MIPP through code base Release 10c-1.14. In anticipation of annual audits, cooperation from Michigan to support Illinois' audit requirement requests for PE and e-MIPP will need to continue. Due to the challenges of acquiring an escrow agent, Illinois will also require the continued storage of source code and data for Core IMPACT.

Proposed Change Description and References

An extension of the IL MMIS Final Closeout Plan Statement of Work (SOW) is being proposed for the following activities:

1) Activity 1: eMIPP/PE M&O and Closeout Activities:
    a. Illinois' need for continued operation and support from Michigan of the Provider Enrollment (PE) and electronic Medicaid Incentive Payment Program (eMIPP) systems beyond 12/31/2020.
    b. Michigan to transition data and source code directly to IL per updated Closeout Work Plan.
2) Activity 2: Core Final Closeout Activities:
    a. Removal of the escrow agent activities.
    b. Michigan to maintain the data repository of Core materials for Illinois beyond 12/31/2020 and transition directly to IL per updated Closeout Work Plan.

Upon approval from both states, this Change Request, in conjunction with an extended Intergovernmental Agreement, will serve as an Amendment and Extension of the SOW in writing as required by Sections 2 and 3 of the current SOW, as approved on 8/25/2020.

Activity 1 Updates:

Proposed High-level activities and dates for Activity 1 beyond 12/31/2020 are listed below.

ID	Task Name	Duration	Start	Finish
256	**Continuing Activities - PE & eMIPP**	**245 days**	**6/22/2020**	**6/18/2021**
257	**PE and Emipp 1.11, 1.12, 1.13, and 1.14 Activities**	**245 days**	**6/22/2020**	**6/18/2021**
271	**1.13 Activities**	**104 days**	**10/19/2020**	**3/26/2021**
279	**1.14 Activities**	**106 days**	**1/19/2021**	**6/18/2021**
287	**Closeout Execution - PE & eMIPP**	**297 days**	**7/1/2020**	**9/13/2021**
288	**New IL PE/eMIPP Contract Agreement Complete**	**0 days**	**2/26/2021**	**2/26/2021**
289	**New IL Infrastructure Milestones**	**83 days**	**4/30/2021**	**8/27/2021**
298	**Transition DSDDs - PE & eMIPP**	**222 days**	**10/5/2020**	**8/30/2021**
309	**Transition Production Data - PE & eMIPP**	**34 days**	**6/28/2021**	**8/13/2021**
313	**Transition Production Code Base - PE & eMIPP**	**31 days**	**6/10/2021**	**7/23/2021**
317	**Transition Hardware/Servers - PE & eMIPP**	**297 days**	**7/1/2020**	**9/13/2021**
332	Remove IL from SoM Software Licenses (PE/eMIPP)	1 day	8/27/2021	8/27/2021
333	**Transition User Security - PE & eMIPP**	**25 days**	**6/21/2021**	**7/26/2021**
338	**Transition MILogin**	**186 days**	**12/7/2020**	**9/3/2021**
350	**Closeout Finalization - PE & eMIPP**	**64 days**	**6/21/2021**	**9/20/2021**
351	**Transition/Archive SOW Deliverables and Documents**	**41 days**	**6/21/2021**	**8/17/2021**
364	**Perform Legal Review for Closeout activities**	**20 days**	**8/16/2021**	**9/13/2021**
367	**Perform Project Management Closeout Activities**	**20 days**	**8/16/2021**	**9/13/2021**
373	**Complete Financial Process**	**20 days**	**8/16/2021**	**9/13/2021**
376	**Create the Project Closeout Summary**	**4 days**	**9/14/2021**	**9/17/2021**
386	**Provide formal notification to all stakeholders that the PE & eMIPP project is closed**	1 day	9/20/2021	9/20/2021

Activity 2 Updates:

Proposed High-level activities and dates for Activity 2 beyond 12/31/2020 are listed below.

ID	Task Name	Duration	Start	Finish
108	**Closeout Execution - Core and TED**	**214 days**	**7/1/2020**	**5/14/2021**
~~130~~	~~**Establish a Data & Source Code Escrow location**~~	~~80 days~~	~~8/5/2020~~	~~12/2/2020~~
136	**Transition Core Data to IL**	**178 days**	**8/21/2020**	**5/14/2021**
155	**Transition Core Source Code to IL**	**150 days**	**9/21/2020**	**5/4/2021**
232	**Closeout Finalization - Core**	**20 days**	**5/17/2021**	**6/14/2021**
233	**Perform Legal Review for Closeout activities**	**20 days**	**5/17/2021**	**6/14/2021**
236	**Perform Project Management Closeout Activities**	**20 days**	**5/17/2021**	**6/14/2021**
242	**Complete Financial Process**	**20 days**	**5/17/2021**	**6/14/2021**
245	**Create the Project Closeout Summary**	**10 days**	**5/26/2021**	**6/9/2021**
255	**Provide formal notification to all stakeholders that the Core project is closed**	1 day	6/14/2021	6/14/2021

Infrastructure Notification Requirements

Illinois must provide authorization in writing at least 45-days prior to the requested date for termination of MILogin services. This notification is necessary for Michigan DTMB to initiate the appropriate contract termination for closeout activities.

Assumptions

1. This CR is an amendment to the Closeout SOW and this SOW supersedes all other open SOW's for eMIPP/PE and Core.
2. All TED activities completed as of 12/31/2020 and are not part of any future IMPACT agreements.
3. Maintenance activities for eMIPP and PE will not be available for Illinois after the June R10c.1.14 release.
4. Illinois must have a location for transfer of all data and source code necessary for Activities 1 and 2 by the work plan dates, or sooner, else significant cost increases will occur to Illinois due to changes in the Michigan infrastructure.
5. IMPACT Project Support will continue in a minimal capacity to complete remaining identified activities.
6. All Core continued activities previously identified in the Closeout SOW are completed as of 12/31/2020.

Impact of Not Implementing Proposed Change

If the proposed change is not implemented, then the Illinois PE and eMIPP systems will cease operations at 12/31/2020 and Illinois will be without this critical functionality to support their Medicaid program.

C. Impact Analysis and Results

Impact on Cost

Organization	Service	Project	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Total
MDHHS	***Closeout and Transition Activities*** [1] • *Closeout Workplan Updates/Reviews* • *Closeout Change Requests* • *Final Multi-Tenant DSDD & Decoupled DSDD Reviews* • *User Account Transitions/Terminations* • *Infrastructure Decommission Monitoring* • *Perform Final Regresssion Testing of CHAMPS* • *Invoicing Activities* • *Business Knowledge Transfer Activities* • *Legal Reviews of Closeout Activities* • *CMS Correspondence & Engagement Activities*	***Closeout***	$200,000	$200,000	$200,000	$200,000	$200,000	$200,000	$200,000	$200,000	$200,000	$1,800,000
DTMB	***Project Control Office*** [2] *(CAI Contract KL&A Resource)*	***Closeout***	$25,000	$25,000	$25,000	$25,000	$25,000	$25,000	$25,000	$25,000	$25,000	$225,000
	DTMB Resources [2]	***Closeout***	$10,000	$10,000	$10,000	$10,000	$10,000	$10,000	$10,000	$10,000	$10,000	$90,000
	Infrastructure Costs [2] ***-*** *Hosting & Data for eMIPP, PE, FTS Filenet, MiLogin*	***eMIPP/PE Operations***	$176,074	$177,562	$179,066	$180,584	$182,118	$183,666	$185,231	$186,811	$188,406	$1,639,518
	Annual License Costs [2] ***-*** *Oracle SW*	***eMIPP/PE Operations***	$0	$0	$0	$0	$1,396,036	$0	$0	$0	$0	$1,396,036
	MILogin Decommission Costs [2,3]	***Closeout***	$0	$0	$0	$0	$0	$0	$0	$0	$153,000	$153,000
CNSI	***Close Out Support*** [2] *- 1 FTE to support activities for extended Close Out* *- Monitor/Control, Technical Requests, Reviews, Reporting, etc.*	***Closeout***	$22,240	$22,240	$22,240	$22,240	$22,240	$22,240	$22,240	$22,240	$22,240	$200,160
	PE/eMIPP Decommissioning/Closeout [1,3] ***-*** *IL Fortify Scan and report, code clean up and testing* *- Server decommissioning support* *- MI Fortify Scan, code cleanup, and regression testing* *- PE DSDD Addendum Merge*	***Closeout***	$0	$0	$0	$0	$0	$0	$101,470	$0	$0	$101,470
	Code/Data Transfer [1,3] *- Core Code and Data Transfer from MI NGDI to IL NAS*	***Closeout***	$0	$0	$0	$0	$0	$0	$25,200	$0	$0	$25,200
	Code/Data Transfer [1,3] *- PE/eMIPP Code and Data Transfer from MI NGDI to IL NAS*	***Closeout***	$0	$0	$0	$0	$0	$0	$25,200	$0	$0	$25,200
	eMIPP/PE Ongoing Operational Costs *- eMIPP Ops (Fixed, Monthly)* [1] *- PE Ops (Fixed, Monthly)* [1] *- LexisNexis (Fixed, Monthly)* [1] *- eMIPP Enhancements (Estimate, Monthly) (thru MI Ops 1.14)* [2] *- PE Enhancements through (Estimate, Monthly) (thru MI Ops 1.14)* [2]	***eMIPP/PE Operations***	$302,395	$302,395	$302,395	$302,395	$302,395	$302,395	$227,395	$227,395	$227,395	$2,496,555
	Totals:		**$735,709**	**$737,197**	**$738,701**	**$740,219**	**$2,137,789**	**$743,301**	**$821,736**	**$671,446**	**$826,041**	**$8,152,139**
	[1]Fixed Cost											
	[2]Actual Cost Incurred, Estimated Monthly Totals											
	[3]Timing Could Vary, Will Be Based Upon Closeout Workplan											

Impact on Schedule

See section above on "Activities Beyond 12/31/2020." The detail tasks with the forecasted dates are listed in the current version of the Finalized IMPACT Closeout Work Plan that is in As-One under the work product of IL MMIS Closeout Work Plan (schedule).

Impact on Resources

Resource impact is present due to the extended duration of the IMPACT project closeout. Both states acknowledge that additional human and system resources are required to support the extension. Both states, and their vendor-partners have committed to providing these resources. The costs of these resources are captured in the Cost section of this document above.

Final Recommendation

The Project Team recommendation is to approve this Change Request to continue operation and support of the Illinois PE and eMIPP systems beyond 12/31/2020 with a termination date of 9/30/2021, and to eliminate Escrow Agent activities as described above.

D. Approval Information

Governance Body: Includes all accountable key project stakeholders. Approval may be obtained via email.

Program Leadership Approval:

Org	Role	Name	Approval Signature or Email Acceptance Date/Time	Date
MDHHS	Business Owner	Karen Scott	Email on 11/19/2020, 9:45am with signed .pdf attachment	11/19/20
MDHHS	Business Owner	Keelie Honsowitz	Email on 11/18/2020, 6:51pm with signed .pdf attachment	11/18/20
MDTMB	Technical Owner	John Moore	Email on 11/19/2020, 9:43am with signed .pdf attachment	11/19/20
IL HFS	Project Director	Rachelle Caldwell	Email on 11/19/2020, 9:35am with signed .pdf attachment	11/19/20
IL HFS	Deputy Project Director	Anita Corey	Email on 11/18/2020, 5:11pm with signed .pdf attachment	11/18/20
CNSI	Program Director	Bret Baker	Email on 11/19/2020, 9:50am with signed .pdf attachment	11/19/20
KL&A	Project Manager	Jonathan Szynkowski	Email on 11/18/2020, 5:21pm with signed .pdf attachment	11/18/20
PCO	PCO Manager	Bob Marquis	Email on 11/19/2020, 10:22am with signed .pdf attachment	11/19/20

Sponsor Approval:

Org	Role	Name	Approval Signature or Email Acceptance Date/Time	Date
MDHHS	Sponsor	Brian Keisling	Email on 11/19/2020, 10:46am. Signed .pdf sent 11/19/20, 4:10pm	11/19/20
IL HFS	Sponsor	Teresa Flesch	Email on 12/2/2020, 11:59am with signed .pdf attachment	12/2/20
IL HFS	Technical Lead	Graham Osmonson	Email on 12/2/2020, 11:59am with signed .pdf attachment	12/2/20
IL HFS	Sponsor	Kelly Cunningham	Email on 12/2/2020, 11:59am with signed .pdf attachment	12/2/20

STATE OF MICHIGAN
CENTRAL PROCUREMENT SERVICES
Department of Technology, Management, and Budget
525 W. ALLEGAN ST., LANSING, MICHIGAN 48913
P.O. BOX 30026 LANSING, MICHIGAN 48909

CONTRACT CHANGE NOTICE

Change Notice Number **31**

to

Contract Number **071B6200168**

CONTRACTOR	
	CLIENT NETWORK SERVICES, INC.
	1600 Tyson Blvd
	McLean, VA 22120
	Linda Mras
	(240) 243 2804
	linda.mras@cns-inc.com
	CV0059061

Program Manager	Crystal Kline	MDHHS
	517-284-1184	
	KlineC1@michigan.gov	
Contract Administrator	Jennifer May	DTMB
	517-242-6664	
	mayj7@michigan.gov	

CONTRACT SUMMARY

MEDICAID PROCESSING SYSTEM (CHAMPS)

INITIAL EFFECTIVE DATE	INITIAL EXPIRATION DATE	INITIAL AVAILABLE OPTIONS	EXPIRATION DATE BEFORE
March 14, 2006	September 30, 2011	20 - 1 Year	September 30, 2026

PAYMENT TERMS	DELIVERY TIMEFRAME

ALTERNATE PAYMENT OPTIONS			EXTENDED PURCHASING	
☐ P-Card	☐ PRC	☐ Other	☐ Yes	☒ No

MINIMUM DELIVERY REQUIREMENTS

DESCRIPTION OF CHANGE NOTICE

OPTION	LENGTH OF OPTION	EXTENSION	LENGTH OF EXTENSION	REVISED EXP. DATE
☐		☐		September 30, 2026

CURRENT VALUE	VALUE OF CHANGE NOTICE	ESTIMATED AGGREGATE CONTRACT VALUE
$1,009,795,209.00	$0.00	$1,009,795,209.00

DESCRIPTION

Effective 8/19/2020, the following amendments are hereby incorporated into this contract per the Statement of Work and Intergovernmental agreement:

This Change Notice incorporates reference(s) to the Fifth Amendment to the Intergovernmental Agreement between The Illinois Department of Healthcare and Family Services and The Michigan Department of Health and Human Services to form the Illinois-Michigan Program Alliance for Core Technology (IMPACT) 2015-62-001-6.

Page Three (3) of the Intergovernmental Agreement (IGA) Section 1, C, iii, provides the direction that The Illinois Department of Healthcare and Family Services (IDHFS) and The Michigan Department of Health and Human Services (MDHHS) shall agree on a Closeout Work Plan.

As a result of the Intergovernmental Agreement for IMPACT, a Closeout Plan Statement of Work (SoW) was created between The Illinois Department of Healthcare and Family Services and The Michigan Department of Health and Human Services.

In the IMPACT Closeout Plan SoW, page Seven (7), Section 9. PAYMENT SCHEDULE - IMPACT Closeout Project,

Table 4. Payment Schedule, CNSI will invoice $3,000,000 for the Months of October, November, and December 2020 which will be invoiced directly to IL. These costs are identified in the CNSI row, first row Closeout/Transition Activities.

This work will be completed utilizing existing funds from the CNSI Master Agreement 071B6200168

All other terms, conditions, specifications, and pricing remain the same. Per contractor and agency agreement, and DTMB Central Procurement Services approval.

Fifth Amendment to the

Intergovernmental Agreement

between

The Illinois Department of Healthcare and Family Services

and

The Michigan Department of Health and Human Services

to form the

Illinois – Michigan Program Alliance for Core Technology (***IMPACT***) 2015-62-001-6

Amendment #5

The State of Illinois, acting through the Illinois Department of Healthcare and Family Services, (IDHFS), subject to the provisions of the Illinois Intergovernmental Cooperation Act (5 ILCS 220/1 et seq.), and the Illinois Public Aid Code (305 ILCS 5/12-4.7 and -10.2), and the State of Michigan, acting through the Michigan Department of Health and Human Services (MDHHS), pursuant to Section 5 of Article 3 of the Constitution of Michigan of 1963 and Section 2226 of the Michigan Public Health Code, MCL 333.2226, entered into an Intergovernmental Agreement (Agreement) to initiate an Intergovernmental Alliance to share and improve the Michigan Medicaid Management Information System and its supporting infrastructure. The Parties have entered into an Intergovernmental Agreement effective July 1, 2015 and amended the agreement effective October 1, 2019, January 1, 2020, April 1, 2020, and May 16, 2020.

IDHFS and MDHHS hereby enter into this Fifth Amendment to that Agreement. IDHFS and MDHHS are collectively referred to herein as “Parties” or individually as a “Party”.

Now therefore, in consideration of the mutual promises and stipulations set forth herein the Parties agree the Agreement shall be amended as follows.

1. Article II, Section 2.01 is amended to
    a. Extend the term of the Agreement until December 31, 2020 (the “Extended Term”); and

    b. During the Extended Term of the agreement all IMPACT Core project tasks in the IMPACT Core Statement of Work (SOW) dated August 7, 2015 (Titled ‘Illinois MMIS Implementation Project’) and in the ‘IL MMIS Implementation’ project schedule will be terminated, except:
        i. the Parties will continue:
            - data conversion and validation activities (SOW Section 8.2.8) and end by September 30, 2020
            - IDHFS data warehouse development activities for IMPACT Core and end by September 30, 2020
            - TED development and testing activities for IMPACT Core including related data warehouse development (SOW Section 5.1) and end by September 30, 2020
        ii. the Parties will complete:
            - IMPACT Core Release 9 development (SOW Section 8.2.3) no later than September 30, 2020
            - System Integration Testing using operational Release 1.10 code base and complete System Test Results Report deliverable (SOW Section 8.2.6, Section 9) no later than September 30, 2020
        iii. MDHHS will provide business resources to IDHFS on an as-needed basis until December 31, 2020

iv. Activities that were suspended through June 30, 2020 via the Fourth Amendment to the IGA will be terminated after July 1, 2020 and addressed in the Initial and Final Closeout Plans.

c. During the Extended Term of the agreement the parties will complete Article VIII, Section 8.02 (G) Close Out Activities as follows:

i. MDHHS shall submit an Initial Closeout Plan that meets the requirements of Section 8.02(G)(1) within 14 days of this Fifth Amendment.

ii. Appropriate members of each Party's team will meet at least once weekly to complete the Final Closeout Work Plan.

iii. IDHFS and MDHHS shall agree on a Final Closeout Work Plan within 90 days of this Fifth Amendment.

iv. It is the intention of the parties

- to decommission IMPACT and complete all required Final Closeout Plan's activities no later than December 31, 2020.
- to continue IDHFS' PE/eMIPP until IDHFS is able to stand up this function with its chosen vendor for its MMIS design, development and implementation project. However, it is parties' intention to make all efforts for transition of the PE/eMIPP functions a priority and complete transition no later than December 31, 2020 .
- Complete migration of IMPACT (including PE/e-MIPP/Core and IDHFS data) to IDHFS' new infrastructure environment by December 31, 2020

v. Until closeout is final MDHHS and IDHFS will work cooperatively to ensure the contractual obligations of the MDHHS Vendors to report to, invoice and involve MDHHS in IMPACT related activities are met, especially for any activities identified in the Closeout Plan to be continued or completed by CNSI, or other third party subcontractor or vendor.

2. Article VII, Section 7.04(A) is amended to increase funding by $25,000,000. The total amount payable to MDHHS under this agreement, related SOWs and any closeout costs under Section 8.02(G) shall not exceed $110,000,000.

In witness whereof, the parties have here unto cause this agreement to be executed by their duly authorized representatives.

ACCEPTED BY:

MICHIGAN DEPARTMENT OF HEALTH AND HUMAN SERVICES	ILLINOIS DEPARTMENT OF HEALTHCARE AND FAMILY SERVICES
By: Robert Gordon	By:
Robert Gordon, MDHHS Director	Theresa Eagleson, Director
June 30, 2020	
Date	Date

Illinois Michigan Program Alliance for Core Technology (IMPACT)

Final Closeout Plan Statement of Work

Between

The Illinois Department of Healthcare and Family Services

and

The Michigan Department of Health and Human Services

August 19, 2020

The Illinois Department of Healthcare and Family Services (IDHFS) and the Michigan Department of Health and Human Services (MDHHS) (the "Parties") entered into an Intergovernmental Agreement effective July 1, 2015. On June 30, 2020, the Fifth Amendment to the Intergovernmental Agreement was executed and the Parties agreed that it was their intention to terminate the current IMPACT CORE Statement of Work and Provider Enrollment/eMIPP ("PE/eMIPP") Operations Statement of Work Amendment #3 to complete required closeout planning and closeout activities for termination by December 31, 2020.

Pursuant to the initial IMPACT Intergovernmental Agreement and all its amendments, the Parties agree they are responsible for the orderly transition of work and accuracy of data as IMPACT CORE and PE/eMIPP closeout activities occur ensuring coordination with IDHFS and its chosen vendors for an efficient transition for its continued MMIS system development. The purpose of this Statement of Work is to identify each Parties' responsibilities and deliverables under Section 8.02(G) and the IMPACT Final Closeout Plan to allow for the orderly closeout contemplated by the IMPACT IGA.

1. Term

This signed IMPACT Final Closeout Plan Statement of Work ("SOW" or "this SOW") becomes effective on the date of execution through December 31, 2020.

2. Amendments

This SOW may only be amended by consent of each Party, amendments must be in writing and signed by authorized representatives of both Parties.

3. Extension

This SOW may only be extended by the consent of each Party, and extension must be in writing, signed by authorized representatives by both Parties, and only if supported by a new or extended Intergovernmental Agreement between IDHFS and MDHHS.

4. Initial Closeout Plan and Final Closeout Plan Activities

Initial Closeout Plan and Final Closeout Plan. The Initial Closeout Plan ("Plan") was finalized on July 15, 2020. The final closeout plan, which continues to be drafted by the Parties, can be found in the As One project repository (https://client.as-one.com/MaaS/AsOneES/workProduct.action?M=R&ID=1595255646444) and will include all activities to be completed by the Parties for an orderly closeout of all IMPACT functions. The activities in the closeout plans and the Payment Schedule listed in this SOW's Table 4 will be completed and subject to the requirements of Section 7.04 of the IMPACT IGA.

a. Other necessary services and activities required to be completed for orderly closeout under Section 8.02(G) of the IMPACT IGA. The Parties agree that some activities required to terminate the IMPACT CORE and PE/eMIPP projects began

and continue, or potentially have been completed prior to the finalization by the Parties of the Final Closeout Plan. These services and activities, directly related to required actions identified in the Initial and Final closeout plans, are considered to be closeout activities by the Parties and as such are subject to invoicing by Michigan and payment by Illinois consistent with Section 7.03 and 7.04.

b. Escrow Agent. The Parties will mutually select an independent nationally recognized escrow agent (the "Escrow Agent') to foster the transfer of IDHFS data from Michigan to Illinois and to deposit the proprietary IMPACT source code together with the Escrow Material as defined in the IGA. MDHHS will enter into an escrow agreement (the "Escrow Agreement") with the Escrow Agent and IDHFS will be identified as a beneficiary of the Escrow Agreement. IDHFS will pay all fees and costs of the Escrow Agreement relating to IDHFS data stored and source code and Escrow Material deposited with the Escrow Agent.

c. Transfer, destruction and purge of IDHFS data. The transfer, destruction and purge of IDHFS information from Michigan's infrastructure will occur as agreed to in the Initial and Final Closeout Plans. The Parties will assure transfer, destruction and purge activities in the closeout plans will meet the expectations of Section 8.02(G)(1) of the IMPACT IGA. IDHFS is responsible to fund the transfer, destruction and purge of its data, which includes any storage or retention of data by MDHHS while IDHFS confirms data transferred to the Escrow Agent.

d. Source Code Escrow. The Parties agree that strict compliance with Section 8.02(G)(4) is waived and agree to the following procedures for the transfer of the IMPACT source code to IDHFS:
    i. As required by the initial and final closeout plans, but no later than December 31, 2020, MDHHS will deposit and maintain with the Escrow Agent a complete copy of the most recent version of IMPACT together with the Escrow Material.
    ii. MDHHS will grant IDHFS a royalty-free, non-exclusive and irrevocable license to use the Escrow Materials. Such license is conditioned on IDHFS's explicit written agreement to keep the Escrow Materials confidential.

5. Project Governance

The States of Michigan and Illinois have an established project governance structure that will be used for the Closeout SOW and related Closeout Work Plan Activities.

a. Michigan Team. The State of Michigan team is comprised of several state agencies and vendors, as described in Table 1. On the Michigan side, the project is led by the Michigan Department of Health and Human Services (MDHHS). When

Team Name	Team Information
Michigan Department of Health and Human Services (MDHHS)	MDHHS staff will provide their expertise in the overall project closeout and oversight of closeout activities. MDHHS is the lead organization for the State of Michigan's functional policy, procedural and requirements activities related to MMIS.
Department of Technology Management and Budget (DTMB)	MDHHS's technical partner, the Department of Technology Management and Budget (DTMB), is responsible for providing oversight to the technology and integration vendors, managing statewide technology infrastructure, identity and access management solution as well as managing Software licenses. DTMB is the lead organization for the State of Michigan's technology policy and hosting infrastructure.
CNSI	MDHHS will engage CNSI, the system integration vendor who is responsible for the initial development of IMPACT MMIS solution. They will also provide maintenance and operational support for current IMPACT PE and eMIPP modules. CNSI will be responsible for closeout activities related to IMPACT CORE MMIS project and PE/eMIPP operational transition.
Kunz, Leigh & Associates, Inc. (KLA)	MDHHS will engage KL&A, the system integration vendor who is responsible for the initial development of the TED [Third Party Liability (TPL) Electronic Database] system. KL&A will be responsible for closeout activities related to TED IMPACT project work completion.

referring to the State of Michigan throughout the documentation, this could be referring to MDHHS or any of its state agency partners or vendors.

Table 1. Michigan Team Members

b. Illinois Team. The Illinois Team will be comprised of members from the State of Illinois Department of Healthcare and Family Services (IDHFS), as identified in Table 2. When referring to the State of Illinois throughout the documentation, this could be referring to any of its state agency partners or vendors.

Team Name	Team Information
Division of Medical Programs (DMP)	DMP staff will provide their expertise in the overall project closeout and oversight of closeout activities. DMP is the lead organization for the State of Illinois business functions and is the lead for the State of Illinois' functional policy, procedural and MMIS activities.
Department of Innovation and Technology (DoIT)	DoIT staff will provide their expertise in the overall project closeout and oversight of closeout activities. DoIT is the lead organization responsible for defining the technical component, including security and technology policies for the State of Illinois.

Table 2. Illinois Team Members

c. Project Control Office. The Project Control Office (PCO) is responsible for supporting the project management as identified in Table 3. Members of the

team are located and will be managed in the MMIS Resource Management Plan as defined by the Project Team.

Team Name	Team Information
Project Control Office (PCO)	The PCO will facilitate and support the Program Leadership team of both States to execute the governance model and develop the overall Project Closeout Work Plan to support the program strategy, alignment, planning, decision making, issue resolution, change management and risk mitigation related to all closeout activities. The PCO represents the best interest of all the project stakeholders. The PCO will provide CMS Regional office staff with updates on the status of closeout plan activities as requested.

Table 3. PCO Team Members

d. Out of Scope Areas. The following services/items will not be provided by the State of Michigan:

- Illinois/IMPACT Desktop Support
- Illinois/IMPACT Provider Support and Provider Outreach
- Illinois/IMPACT Level 1 MICAM Support
- Illinois/IMPACT Staff training
- Conversion of any State of Illinois legacy image data (i.e., paper claims and provider enrollment documentation).
- No MI Ops release code base or DSDDs beyond R10c-1.10 June 2020 Quarterly release - other than for PE/eMIPP which will include MI Ops release through R10c-1.12 December 2020.
- TED/TPL - No Development or Documentation after the 8.4.0 release.
- Responses to Illinois auditors for any time period or activities after the completion of Closeout Activities. This provision does not relieve the State of Michigan of obligations set out in Section 9.02 of the IMPACT IGA for audit periods and activities that have occurred up until the project closeout is complete.

6. **PROJECT MANAGEMENT**

The IMPACT Closeout project will follow the project management processes defined in the IMPACT Program Management Plan to govern the closeout activities. The project will be managed by a dedicated project manager acting as the Project Control Office (PCO). The PCO will support closeout initiation through closeout execution/termination including the development of the Initial and Final Closeout Work Plan. The approved Closeout Work Plan will document how the closeout will be planned, executed, and finalized.

a. **Project Management Tools -** The Closeout project will utilize the tools defined in the IMPACT Program Management Plan. The PCO and the project teams will continue to use the As-One project repository to manage the Closeout project deliverables and related documents.

b. **Change Control Process -** The Closeout project will follow the Change Control process and criteria defined in the IMPACT Program Management Plan.

7. **PROJECT TIMELINE**

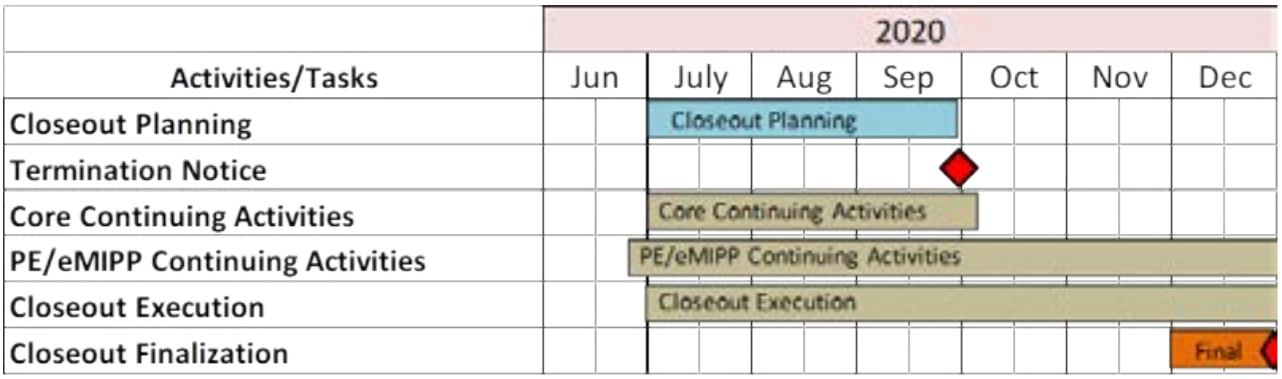

Figure 1. Closeout Timeline

The project timeline above is a high-level plan based off the Initial Closeout Work Plan schedule as defined by the Parties. The Closeout Work Plan schedule is the formal document that will be updated and tracked throughout the lifecycle of the Closeout project. The schedule will be reviewed and, if needed, re-baselined into the Final Closeout Work Plan within 90 days of the submission of the Initial Closeout Work Plan.

8. PROJECT PHASES AND ACTIVITIES

Two phases are identified in the Initial and Final Project Closeout Work Plans:

- Project Wind Down & Closeout Planning – this phase includes completion of a limited set of current development & testing activities to solidify code base & data for transition to IL; Finalize Closeout Work Plan; revise MI software licensing agreements to remove IL.
- Closeout Execution – decommissioning of IL servers; transition/migration of data to IL; removal/destruction of IL data on MI side; complete remainder of closeout activities for final project closeout and termination.

9. PAYMENT SCHEDULE - IMPACT Closeout Project

Organization	Service	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Total
MDHHS	***Closeout and Migration Activities*** [1] • *Initial & Final Closeout Workplans* • *Closeout Statement of Work* • *Final Multi-Tenant 1.10 DSDD & Decoupled DSDD Reviews* • *User Account Transitions/Terminations* • *Infrastructure Decommission Monitoring* • *Perform Complete Regresssion Testing of CHAMPS & TED* • *Invoicing Activities* • *Business Knowledge Transfer Activities* • *Legal Reviews of Closeout Activities*	$300,000	$300,000	$300,000	$300,000	$300,000	$300,000	$1,800,000
KL&A	***Continuation Activities*** [1] • *CR-338, 448, 451, 454, 455, 457, 462, 463* • *System Test Reporting & Remediation* • *EDW Validation Test Results and Remediations* • *Payer Development Tasks and Supporting* • *CR UAT Facilitation* • *Development Updates for Transition Preparation* • *Operational Support*	$600,000	$400,000	$400,000	$400,000	$400,000	$400,000	$2,600,000
	Closeout and Migration [1] • *Server Migration Plan* • *Migrated JIRA Suite of Documentation* • *TED MI Closeout Package (DB Server Config, Configuration Data Scripts, Letter Layouts, Report Layouts, Conversion Scripts, TED Source Code)* • *Deliver TED MI Closeout Package to escrow* • *TED & JIRA Training Sessions* • *Architecture Diagram*	$370,000	$320,000	$160,000	$22,400	$22,400	$22,400	$917,200
DTMB	***Project Control Office*** [2] *(CAI Contract KL&A Resource)*	$25,000	$25,000	$25,000	$25,000	$25,000	$25,000	$150,000
	DTMB Resources [2]	$4,696	$4,696	$4,696	$4,696	$4,696	$4,696	$28,173
	Infrastructure Costs [2] *- Hosting & Data for CORE, eMIPP, PE, FTS Filenet, MiLogin*	$381,351	$358,704	$312,161	$314,017	$319,095	$316,248	$2,001,577
	Annual License Costs [2] *- Oracle SW, IBM, Pitney Bowes*	$0	$0	$0	$3,461,177	$0	$0	$3,461,177
	MILogin Decommission Costs [2]	$12,500	$12,500	$12,500	$312,500	$12,500	$612,500	$975,000
CNSI	***Closeout/Transition Activities*** [1] • *Ramp Down (MI) - Close Out Workplan* • *Design Workstream* *-DSDD Merge to MI Ops 1.10; DSDD Decoupling* *-Resolve Open R9 Design Questions* • *Development Workstream* *-SIT Defect Fixes through 9/30/2020* *-Complete Core R9 Development* *-MI Ops Code Retrofits thru 1.10* *-EDW Extract Development* *-Data Conversion & Validation (CVE)* • *System Integration Testing & Report (R1-9)*	$1,000,000	$1,000,000	$1,000,000	$1,000,000	$1,000,000	$1,000,000	$6,000,000
	eMIPP/PE Ongoing Operational Costs [1] ***& eMIPP & PE R10c 1.11 & 1.12 Enhancements*** [2] ***(Estimate)***	$277,342	$277,342	$277,342	$287,727	$287,727	$287,727	$1,695,207
Escrow Agent	***Closeout/Transition Activities*** [2] ***- IMPACT source code and data***	$0	$0	$0	$10,000	$0	$0	$10,000
	Totals:	**$2,970,889**	**$2,698,242**	**$2,491,698**	**$6,137,517**	**$2,371,418**	**$2,968,570**	**$19,638,334**
	[1]Fixed Cost							
	[2]Actual Cost Incurred, Estimated Monthly Totals							

Table 4. Payment Schedule

10. GENERAL ASSUMPTIONS

The State of Michigan has identified and provided the following general assumptions with regards to the Illinois IMPACT Closeout Project:

1. The Illinois IMPACT Closeout project will be completed in accordance with the agreed upon Closeout Work plan schedule. Any delay will require formal change control.
2. Both states will provide access to, and time commitment from, subject matter experts who understand their programs and systems and are able to articulate how they operate.
3. The State of Illinois will provide business documentation, background information and technical artifacts needed on a timely basis. Due dates are collaboratively agreed upon for any such requests.
4. The State of Illinois is responsible for all external outreach and training activities.
5. The State of Illinois will be responsible for development and publication of provider manuals.
6. The State of Illinois is responsible for state staff training.
7. The State of Illinois is responsible for business process reengineering and related process documentation.

MICHIGAN DEPARTMENT OF HEALTH AND HUMAN SERVICES	ILLINOIS DEPARTMENT OF HEALTHCARE AND FAMILY SERVICES
By: Robert Gordon	By:
Robert Gordon, MDHHS Director	Theresa Eagleson, Director
8/24/2020	
Date	Date

STATE OF MICHIGAN PROCUREMENT

Department of Technology, Management, and Budget
525 W. ALLEGAN ST., LANSING, MICHIGAN 48913
P.O. BOX 30026, LANSING, MICHIGAN 48909

CONTRACT CHANGE NOTICE

Change Notice Number **30**
to
Contract Number **071B6200168C**

CONTRACTOR	
	Client Network Services, LLC
	2277 Research Boulevard
	Rockville, MD 20850
	Linda Mras
	240-243-2804
	linda.mras@cns-inc.com
	CV0059061

STATE		
	Crystal Kline	MDHHS
	517-284-1184	
	Klinec1@michigan.gov	
	Jarrod Barron	DTMB
	517-249-0406	
	BarronJ1@michigan.gov	

CONTRACT SUMMARY			
DESCRIPTION: Medicaid Processing System (CHAMPS)			
INITIAL EFFECTIVE DATE	INITIAL EXPIRATION DATE	INITIAL AVAILABLE OPTIONS	EXPIRATION DATE BEFORE CHANGE(S) NOTED BELOW
March 14, 2006	September 30, 2011	20, 1 year	September 30, 2026
PAYMENT TERMS		DELIVERY TIMEFRAME	
ALTERNATE PAYMENT OPTIONS		EXTENDED PURCHASING	
☐ P-card ☐ Payment Request (PRC) ☐ Other		☐ Yes	☒ No
MINIMUM DELIVERY REQUIREMENTS			
N/A			

DESCRIPTION OF CHANGE NOTICE				
OPTION	LENGTH OF OPTION	EXTENSION	LENGTH OF EXTENSION	REVISED EXP. DATE
☐		☐		September 30, 2026
CURRENT VALUE	VALUE OF CHANGE NOTICE	ESTIMATED AGGREGATE CONTRACT VALUE		
1,009,795,209.00	$0.00	$1,009,795,209.00		

DESCRIPTION: Effective upon MDHHS signature, the following amendment is hereby incorporated into this contract per the attached Statement of Work:

2020 Operations Services Addendum

Please note the Contractor contact is changed to Linda Mras. All other terms, conditions, specifications, and pricing remain the same.

2020 Operations Services Addendum

Section 1 – Introduction

This amendment modifies the previously executed operations agreement titled "Ops Amendment 2019" between the State of Michigan (hereafter, "the State") and CNSI for Fiscal Year 2019. This amendment represents the implementation of CNSI's Information Technology Infrastructure Library (ITIL) -based Managed Services model for the Michigan Community Health Automated Medicaid Processing System (CHAMPS) and the Illinois Medicaid Program Advanced Cloud Technology (IMPACT) Provider Enrollment (PE) and Electronic Health Record Medicaid Incentive Payment Program (eMIPP) operations. This model enables the State and CNSI to achieve a more streamlined and efficient model for operations, and to support the business and program goals of the State.

The amendment contains the sections detailed in Table 1.

Table 1. Sections

Section	Description
1 – Introduction	Introduction of the amendment and period of performance
2 – Service Categories	Description of service categories within the scope of the amendment
3 – Services	Description of the services to be performed within the amendment
4 – Performance Standards	Performance standards for services performed in the amendment including associated Service-Level Agreements (SLA)
5 – Upgrades	Description of upgrades performed within the scope of the amendment
6 – Software Licensing	List of software licensing included in the amendment
7 – Service Delivery Model	Description of the service delivery model
8 – Assumptions and Constraints	Assumptions and constraints for the performance of services in the amendment
9 – Pricing	Pricing for services performed in the amendment

The period of performance for this amendment is October 1, 2019, to September 30, 2021

Section 2 – Service Categories

CNSI has worked with the Michigan Department of Health and Human Services (MDHHS) to map the services performed for CHAMPS Operations into industry-standard Service Categories developed through a long history of performing operations services on multiple contracts. Table 2 contains brief descriptions of the Service Categories as defined for the CHAMPS Operations amendment and the scope that they apply to.

Table 2. Service Categories

Category	Description	Scope
Monitor System Operations	Compare and evaluate actual system performance to system specifications in the areas of response times, outputs, application data, and other performance characteristics, and to initiate resolution of any anomalies. Includes proactive Availability and Capacity Management disciplines to achieve SLA objectives.	CHAMPS Applications • evoBrix modules o Provider Enrollment o Claims and Encounters o Prior Authorization (PA) o Eligibility and Enrollment o Third-Party Liability (TPL) o Managed Care o Benefits Administration (BA) • CHAMPS evoBrix Add-Ons o Provider Credentialing Service (PCS) o Site Visit Pro (SVP) o myCareVisit o myHealthPortal o myHealthButton o Operational Data Store (ODS) o eMIPP o ClaimsSure o HealthBeat IMPACT Applications • evoBrix modules o Provider Enrollment • IMPACT evoBrix Add-Ons
Provide Client Support	Interact with the client in a timely manner to perform support activities that do not affect the application software baseline or production data. Includes handling on-demand requests for problem investigation, providing answers to questions, and performing parameter and schedule changes.	
Perform Incident Management	Detect and resolve incidents (an "incident" is defined as an event that is not part of the normal operation of a service and that causes or may cause interruption to or reduction in the quality of that service).	
Perform Problem Management	Detect and remove problems (a "problem" is defined as a significant incident or multiple incidents with common symptoms that indicate a single root cause) from the information technology (IT) infrastructure (including applications) by performing root cause analysis to minimize the occurrence of incidents and maximize efficiency.	
Perform System Maintenance	Make modifications to an existing application to correct faults, to improve performance or maintainability, to adapt the application to a modified environment, and to meet new client requests (enhancements).	

Category	Description	Scope
		o PCS CHAMPS commercial off-the-shelf (COTS) modules • Siebel • Doc1 Correspondence • Pitney Bowes Universal Address Module (UAM) • Oracle Financials • Cognos Reporting • Grouper Software • Edifecs • Compumax State-Specific Modules (CHAMPS) • Document Management Portal (DMP) • Facility Settlement CHAMPS and IMPACT Interfaces and Data Warehouse (DW) Extracts CHAMPS and IMPACT Application Server and Web Server Software CHAMPS and IMPACT Databases and Database Software
Business Operations	Perform operations for business processes aligned to established Operating-Level Agreements (OLA) and in accordance with defined policies and procedures. Examples include the following: • Claims resolution	ClaimsSure claims review

These Service Categories reflect industry best practices aligned to the services performed by CNSI for CHAMPS operations.

Illinois IMPACT operations scope is limited to the following modules and add-ons for this agreement:

- PE
- PCS
- eMIPP

- General Services (GS): common components for security, roles, access, and profiles

Section 3 – Services

This section describes the services that CNSI will provide to the State under this amendment, grouped by Service Category. The activities performed within each Service ID definition are described in detail, including any exclusions from CNSI's scope and expectations from the State.

3.1 Monitor System Operations

This category focuses on comparing and evaluating actual system performance to system specifications and SLAs in the areas of response times, outputs, application data, and other performance characteristics. This includes initiating resolution of any anomalies.

Table 3. Monitor System Operations

Service ID	Activity	Description	Details
MSO 01	System Monitoring	Verify that the CHAMPS applications perform correctly and that other requirements are met. Any critical jobs, tasks, or transactions that must be completed within a particular timeframe are monitored and verified for successful completion within the specified time. The processes listed in the "Details" cell of this table are monitored, tracked, and escalated with corrective action in the event of an incident	CNSI Operations Support team monitors and supports 24 hours per day, 7 days per week, 365 days per year Daily system health check for production servers (for example, disk space, central processing unit (CPU) loads, memory usage, killed sessions) HealthBeat monitors system performance and activities to produce real-time support Batch/transaction and real-time service management: • Planning and coordination with stakeholders • Daily batch and real-time transaction monitoring, reporting, review, and analysis Capacity planning for infrastructure (for example, data storage, server disk space, network bandwidth usage, system and infrastructure log review) • Constantly examine the operation and execution of individual applications and the overall environment • Monitor and identify performance-tuning opportunities crucial to maintaining the needs of the business and to extend the

Service ID	Activity	Description	Details
			hardware investment; recommend action when necessary • Review database query performance and make recommendations for improvement • Identify performance trends and tuning opportunities for existing batch queries Monitor backup solutions and recovery to support business continuity, data loss, and audit regulations
MSO-02	Track Service Level Agreements	Compare system performance with SLAs and report any exceptions or anomalies.	Services are tracked and reported via HealthBeat reporting dashboard Generate Monitoring and SLA report
MSO-03	Database Monitoring	Monitor automatically scheduled maintenance jobs across all databases in all environments to keep the database in a healthy status.	CNSI Operations Support team monitors and supports 24 hours per day, 7 days per week, 365 days per year The database monitoring repository includes the following features: • Hourly stats jobs for core real-time tables • Daily or weekly transactional and optimizer table maintenance jobs • Monthly purge and archive jobs during a specified downtime • Frequent data usage reports, which help to analyze system data usage and plan future usage • Alert mechanism to trigger alerts to respective teams during any issues Continually monitors system data including, but not limited to, the following database monitoring tools: • **Oracle Enterprise Manager (OEM):** Monitors database space management, database performance, and database availability. OEM sends an alert when thresholds are met or during critical events, such as space exhausted or high resource usage

Service ID	Activity	Description	Details
			• **Cloud Tool Repository (CTR):** Connects to all databases remotely and performs all monitoring and maintenance activities • **Server-Level Tools:** Reside on all database servers and send alerts during an incident, such as services are down or network failures • **Oracle Connection Manager (OCM):** Sends alerts related to user activity, such as downloading data or trying to connect with multiple sessions • **Custom Reports:** Continuously monitor the database size and report the relevant group if there is any unexpected growth in the data

3.2 Provide Client Support

Interact with the client and systems in a timely manner to perform operations and support activities across modules.

Table 4. Provide Client Support

Service ID	Activity	Description	Details
PCS-01	Initiate Request Processing	Document each State request or any incident or problem that requires a production change with sufficient information to categorize the request, identify the requestor, and fully define the request. Whenever possible, provide an immediate response to the client. If the client's request can be completely satisfied, then update the request documentation with the response and mark the request as complete. If the request cannot be	Requests are logged and tracked via the Open Source Ticket Request System (OTRS) OTRS is the first step for logging and reporting a request or issue. OTRS is used for managing incoming operation requests and issues OTRS will be replaced by JIRA during this operations amendment based on the mutually agreed-upon schedule Every ticket generated by the system has persistence (or "history") showing what happened to the ticket within its life cycle The Operations Application Services team triages the ticket to determine a course of action, reviews the ticket with the State

Service ID	Activity	Description	Details
		completely addressed at this point, then acknowledge the request, update the request documentation, and forward the request to an appropriate subject matter expert (SME). Update the organization's incident and problem tracking mechanism to reflect the status of any incidents or problems.	team if necessary, and responds accordingly Tickets requiring more information are reviewed by the Tier 1 Change Control Board (CCB)
PCS-02	Perform Necessary Support (General Operations and Support)	Interact with the client to understand the request, problem, or incident; and provide any information about the request that is readily available. Assemble any documentation needed to accurately and efficiently address the request. Based on a review of the available information, determine the best approach to satisfying the request. Document the steps taken. Determine whether the request is an incident or a problem. Update OTRS to reflect the status of any incidents or problems. Use when additional information is needed to process the client request.	Ongoing support for the CHAMPS/IMPACT subsystems and processes: ▪ Reference table management support o Perform creation and maintenance of application reference tables in Production and lower environments ▪ Support from CNSI staff o Provide support for operations team and end users o Reference table changes required to support functionality o Release implementation support ▪ Support development to finalization of production implementation plan ▪ Provide technical support for business validation during Go-Live o Batch support ▪ Implement environment requests for multiple environments ▪ Schedule and execute batch, database (DB), and real-time jobs using the Service Oriented Architecture (SOA) framework

Service ID	Activity	Description	Details
			○ Emergency release support ▪ Create and manage emergency release plan ▪ Monitor testing status and take necessary steps to successfully meet implementation timeline ○ Security support and setup ○ Functionality changes: Impact to CHAMPS/IMPACT ▪ Perform impact analysis on existing CHAMPS/IMPACT application functionality ○ Configuration Management support ▪ Plan, schedule, and coordinate builds in Production and lower environments ○ Functionality changes: Impact to Interfaces ▪ Perform impact analysis on interfaces impacted to CHAMPS/IMPACT • Subsystem Application Team support: Provide user support, including the following: ○ Answering questions regarding the functionality of the System ○ UAT support, including assisting the State with questions related to mock test file creation, running files as needed, data set up, and other topics as needed ○ Participate, provide input and discuss issues and concerns in weekly Tier 1 meetings between State and CHAMPS/IMPACT subsystem team ○ Provide impact analysis and recommend prioritization for any anomalies that are

Service ID	Activity	Description	Details
			identified during the monitoring process • CHAMPS HealthBeat Kiosk Support o Daily monitoring activities of the application and the underlying database tables o Application support, impact analysis and research for any issues related to the hardware and software reported by MDHHS or the Department of Technology, Management & Budget (DTMB) ▪ For any hardware issues reported, liaison with State staff to fix the issue o Support for applications (such as HealthBeat) that currently function on the kiosks o Support to the CHAMPS/IMPACT team for access rights and privileges to systems and tools, and password resets o Provide support when needed for operating system, antivirus, and network upgrades • System Monitoring Support for CHAMPS/IMPACT o Assist MILogin with support for user access control ▪ Manually granting/revoking roles to CNSI users in the lower environments. o Monitor ongoing batch processes frequently and exceptions on a regular basis ▪ Correct exceptions identified through the monitoring activities ▪ Monitor email inboxes to ensure that all email-related functionality is working

Service ID	Activity	Description	Details
			○ Monitor application performance for critical software parameters ▪ Track server performance ▪ Check availability of environments and servers ○ Log Remedy Tickets for each system release ○ Draft, review, and post banner messages as needed for system maintenance and release windows ○ Provide impact analysis and research on CHAMPS/IMPACT issues and tickets • Application Support ○ Daily monitoring activities of the application and the underlying database tables ▪ Includes monitoring related to interfaces with trading partners such as Bridges, Maximus, and First Health ○ Provide support for COTS products • Configuration and administration of COTS components within CHAMPS/IMPACT scope ○ Provide impact analysis and research on COTS issues and tickets ▪ Evaluate and assign tickets to Application Services team if necessary ▪ Support to team for impact analysis and research activities ○ Release support, including planning, coordination, and delivery • Support business workgroups and conferences

Service ID	Activity	Description	Details
			○ Provide subject matter expertise to support MDHHS and user group ○ Present or support business presentations at conferences or to internal or external stakeholders
PCS-03	Perform Operations and Support (Interfaces and Data Warehouse)	Interact with the client to understand the request, problem, or incident; and provide any information about the request that is readily available. Assemble any documentation needed to accurately and efficiently address the request. Based on a review of the available information, determine the best approach to satisfying the request. Document the steps taken. Determine whether the request is an incident or a problem. Update OTRS to reflect the status of any incidents or problems. Use when additional information is needed to process the client request.	Ongoing support for the CHAMPS/IMPACT Interface and DW extracts and processes: ▪ Support Interfaces ○ Provide daily Interface and Oracle Service Bus (OSB) monitoring in Production ○ Triage interface OTRS and email specific to interfaces ○ Support all lower environments ○ Provide release support, including release planning, coordination, and delivery ○ Attend Tier 1 CCB for interface facilitation ○ 24x7 on-call support ▪ Support DW extracts ○ Monitor Daily Extracts sent to DW ○ Monitor DW Procedure statuses in CHAMPS/IMPACT production ○ Support DW OTRS ticket triaging ○ Support requests and questions from State users and DW staff regarding data flows from CHAMPS/IMPACT to DW, including modules EE, TPL, Claims and Encounters, Managed Care, Provider Enrollment, PA, FIN, BA, and eMIPP ○ Assist and coordinate with certain modules (EE, TPL, Claims, Encounters, Managed Care, Provider, PA, FIN, BA) on OTRS tickets that have DW

Service ID	Activity	Description	Details
			impact, including manual validations of extracts ○ Attend subsystem Tier1 meetings on required basis (for DW impacts only) ○ Work on special extracts on request ○ Work with cross-functional teams on extract failures for any data or code fixes ○ Monitor Recon Extracts sent to DWH ○ Coordinate with Operations Support team for manual processing of inbounds received from Health Services Data Warehouse on demand
PCS-04	Perform Operations and Support (Claims Processing, Payment and Remittance Advice (RA))	Interact with the client to understand the request, problem, or incident; and provide any information about the request that is readily available. Assemble any documentation needed to accurately and efficiently address the request. Based on a review of the available information, determine the best approach to satisfying the request. Document the steps taken. Determine whether the request is an incident or a problem. Update OTRS to reflect the status of any incidents or problems. Use when additional information is needed to process the client request.	Ongoing support for the CHAMPS Payment and Remittance Advice (RA): • Support Claims Adjudication and Loading ○ Daily monitoring of Fee for Services (FFS) and Encounter volume ○ Monitor weekly pay cycle cut-off claims adjudication, and switch from FFS to ENC based on priority and volume ○ Prioritize mass adjustment claims and gross adjustment processing for ad hoc requests • Support FFS and MC payment processing ○ Monitor and initiate processes associated with the Weekly RA and 835 and 820 electronic RA processes ○ Support ad hoc requests and analyze issues • Monitor weekly loading cut-off Maintain pay cycle calendar Support integration with SIGMA for payment processing

Service ID	Activity	Description	Details
PCS-05	Perform Operations and Support (Electronic Data Interchange (EDI))	Interact with the client to understand the request, problem, or incident; and provide any information about the request that is readily available. Assemble any documentation needed to accurately and efficiently address the request. Based on a review of the available information, determine the best approach to satisfying the request. Document the steps taken. Determine whether the request is an incident or a problem. Update OTRS to reflect the status of any incidents or problems. Use when additional information is needed to process the client request.	Ongoing support for the CHAMPS EDI transaction and processing: • Support EDI processing o Daily 270/271 batch, and daily 834 and 820 monitoring o Daily CORE Real Time 270/271 and 276/277 monitoring, and CORE providers support for Production and business-to-business (B2B) environments o Monthly 834 Audit and First of Month (FOM) and End of Month (EOM) support o EDI files FileNet Archival monitoring o Ad hoc requests for CORE 270/271, 276/277, and 834 transactions o Edifecs inbound and outbound batch validation, and translation monitoring for all EDI transactions o Edifecs CORE real-time profiles monitoring for Production and B2B environments o National Council for Prescription Drug Programs (NCPDP) support
PCS-06	Perform Operations and Support (Provider Credentialing (PCS))	Interact with the client to understand the request, problem, or incident; and provide any information about the request that is readily available. Assemble any documentation needed to accurately and efficiently address the request. Based on a review of the available information, determine the best approach to satisfying the request. Document the steps taken. Determine whether the request is	Ongoing support for provider credentialing: • PCS o Daily monitoring of the applications o Work with LexisNexis on data issues o Work with LexisNexis on change requests (CR) o Research and respond to OTRS requests for PCS o Monitor monthly batch screenings with interface team o Collaborate on monthly files with MDHHS and DTMB teams

Service ID	Activity	Description	Details
		an incident or a problem. Update QTRS to reflect the status of any incidents or problems. Use when additional information is needed to process the client request.	○ Create reports for monthly batch monitoring files ○ Contract renewals with different vendors, including follow-up and coordination ○ Weekly meeting with business users, including the State and other State clients ○ Weekly meetings with multiple vendors
PCS-07	Perform Operations and Support (Security/Audits)	Interact with the client to understand the request, problem, or incident; and provide any information about the request that is readily available. Assemble any documentation needed to accurately and efficiently address the request. Based on a review of the available information, determine the best approach to satisfying the request. Document the steps taken. Determine whether the request is an incident or a problem. Update QTRS to reflect the status of any incidents or problems. Use when additional information is needed to process the client request.	Ongoing support for the Security and Audits • Provide information, expertise, and artifacts in support of audits (including but not limited to OIG, OAG, CMS, IRS) ○ Help support user access management in CHAMPS/IMPACT Production, Development, System Test, UAT, and Production environments ○ Work closely with business security team to add and maintain business functions and roles ○ Support planning and research activities for audits such as Centers for Medicare and Medicaid Services (CMS) audit ○ Corrective Action Plan (CAP) management for CHAMPS/IMPACT and other supporting systems ▪ OAG single audits for CHAMPS/IMPACT ▪ OAG performance audits for CHAMPS/IMPACT and other eligibility systems ▪ Post-release reconciliation ▪ Database user review Recommend changes to policies and procedures

Service ID	Activity	Description	Details
PCS-08	Perform Operations and Support (Consumer Engagement)	Interact with the client to understand the request, problem, or incident; and provide any information about the request that is readily available. Assemble any documentation needed to accurately and efficiently address the request. Based on a review of the available information, determine the best approach to satisfying the request. Document the steps taken. Determine whether the request is an incident or a problem. Update OTRS to reflect the status of any incidents or problems. Use when additional information is needed to process the client request	Ongoing support for the myHealthButton and myHealthPortal: ▪ Production support on State reported issues ▪ Operations releases support ▪ Production OTRS tickets
PCS-09	Perform Operations and Support (Facility Settlement)	Interact with the client to understand the request, problem, or incident, and provide any information about the request that is readily available. Assemble any documentation needed to accurately and efficiently address the request. Based on a review of the available information, determine the best approach to satisfying the request. Document the steps taken. Determine whether the request is an incident or a problem. Update OTRS to reflect the status of any incidents or problems. Use when additional information is	Ongoing support for the Facility Settlement: ▪ Daily database-to-database (DB2DB) jobs monitoring ▪ Daily external interfaces monitoring ▪ Monthly payments monitoring for interim payments ▪ Daily OTRS ticket triaging ▪ Provide support to testing team in test data setup and understanding the functionality ▪ Support analyze the issues reported by State and provide the response ▪ Interact with the development team to explain the design scope of defect and enhancement tickets ▪ Work with all support groups and operations management

Service ID	Activity	Description	Details
		needed to process the client request.	• Develop Request For Change (RFC) scripts associated with OTRS tickets
PCS-10	Perform Operations and Support (Document Management Portal)	Interact with the client to understand the request, problem, or incident; and provide any information about the request that is readily available. Assemble any documentation needed to accurately and efficiently address the request. Based on a review of the available information, determine the best approach to satisfying the request Document the steps taken. Determine whether the request is an incident or a problem. Update OTRS to reflect the status of any incidents or problems. Use when additional information is needed to process the client request.	Ongoing support for DMP: • Production OTRS tickets • Operations release support • State weekly Tier 1 meetings
PCS-11	Perform Operations and Support (Report Services - ODS/Cognos)	Interact with the client to understand the request, problem, or incident; and provide any information about the request that is readily available. Assemble any documentation needed to accurately and efficiently address the request. Based on a review of the available information, determine the best approach to satisfying the request. Document the steps taken. Determine whether the request is an incident or a problem. Update OTRS to reflect the status of	Ongoing support for ODS/Cognos: • Production OTRS tickets • Operations release support • Participation in State Tier 1 meetings (across subsystems) and other State meetings / discussions • Coordination with business and technical leads in Operations • Meetings for coordinating with the operations team for identifying the downstream impacts for model and reference data changes as part of defect fixes and enhancements for Operations and follow up with subsystems

Service ID	Activity	Description	Details
		any incidents or problems. Use when additional information is needed to process the client request.	• Documenting ODS Mapping, ad-hoc, and COGNOS, including scope defect document, change logs, CQ updates, and follow up • Performance tuning • Support for the following: o Monthly data refreshes o ODS o evaBnx daily reconciliations o Quarterly data refreshes in ODS o RFCs o Ad hoc requests for data analysis • Sanity checks and follow-ups for the following: o DB monthly maintenance o All major and interim releases o Production release o Issues related to server, DB, or network restart • CHAMPS Annual Data Purge support (OLTP, ODS, DW impacts) • CHAMPS year-end activities (OLTP, ODS, DW impacts)
PCS-12	Perform Operations and Support (eMIPP)	Interact with the client to understand the request, problem, or incident; and provide any information about the request that is readily available. Assemble any documentation needed to accurately and efficiently address the request. Based on a review of the available information, determine the best approach to satisfying the request. Document the steps taken. Determine	Provide support for eMIPP: • Production OTRS tickets • Operations releases support • State weekly Tier 1 meetings

Service ID	Activity	Description	Details
		whether the request is an incident or a problem. Update OTRS to reflect the status of any incidents or problems. Use when additional information is needed to process the client request.	
PCS-13	Provide Requested Services (Ad Hoc Support Needs)	Perform the requested service according to the established procedures for the client or application. If the request is for a small application change that does not affect the application software baseline (such as a change to an application parameter or a change to a production schedule), then provide the service as defined in the application support documentation. Consolidate the information and review it with or report it to the client	Provide existing ad hoc reports • OTRS Ticket Reports • ClearQuest Reports CNSI will replace OTRS and ClearQuest with JIRA based on a mutually agreed-upon schedule
PCS-14	Monitor and Track Requests	Review open client requests on a regular basis to ensure that they are being addressed in a timely manner. If necessary, initiate follow-up actions on requests that have been forwarded, but not recorded as complete. Ensure that all required measurement data is being accurately recorded and collected in accordance with organizational and client standards.	Review daily OTRS ticket request Review ClearQuest open tickets daily report Release content tracking sheet Track content targeted for a release
PCS-15	Technical Communication	Provide users with information related to	Maintain user system documentation, including but not limited to the following:

Service ID	Activity	Description	Details
		system updates, system outages, and issues. Maintain user system documentation.	• Detailed System Design Documents (DSDD) • On Line Help • User Guides • Frequently Asked Questions (FAQ) Maintain technical documentation related to the system to be shared as required by the State of Michigan (SoM)

3.3 Perform Incident Management

Incident management is the formal process of addressing and tracking the progress of an identified issue. CNSI uses OTRS as the primary tracking tool when the system encounters an incident that results in impact to functionality or processing of data. CNSI will replace OTRS with JIRA based on a mutually agreed-upon schedule

Table 5. Perform Incident Management

Service ID	Activity	Description	Details
INC-01	Detection and Recording	MDHHS business owners are responsible for the creation of OTRS ticket to report an incident CNSI Tier 1 Support team monitors and triages each support ticket by assigning it to the appropriate queue as it is logged.	OTRS is used for managing incidents logged by MDHHS and the Operations Support Center. The OTRS system is a web-based portal and requires a named user account to access • The CNSI Operations Support Center performs an initial analysis of the ticket and notifies the Application Services and Infrastructure teams for additional support, if needed. • The Operations Support team reviews the ticket and provides any necessary notes directly in the OTRS ticket details, discusses in Tier 1 CCB if needed, and performs next steps, based on requirements, until the incident is resolved and can be closed by Tier 2 CCB. If an interface issue occurs outside normal business hours, then CNSI

Service ID	Activity	Description	Details
			communicates to the Tier 1 business owner and proceeds with any necessary actions
INC-02	Tier 2 Support Ticket Analysis	Analyze each escalated ticket details; validate that the Ticket Type, queue, and level are accurate; and assign the ticket to the appropriate support team.	Each OTRS ticket is assigned to the appropriate queue and application owner, who then performs the following tasks: • Conduct analysis of the issue • Define an action plan to resolve the issue depending upon the severity level of the issue • If a change is needed, open a ClearQuest RFC ticket (via Application Services), which follows the RFC process • Implement the resolution (via Application Services) • Move OTRS ticket to Tier 2 CCB status for Tier 2 CCB review and closure
INC-03	Tier 3 Support Ticket Analysis	Analyze each escalated ticket details; validate that the Ticket Type, queue, and level are accurate; and assign the ticket to the appropriate support team.	Each OTRS ticket is assigned to the appropriate queue and application owner, who then performs the following tasks: • Conduct analysis of the issue • Define an action plan to resolve the issue depending upon the severity level of the issue • If a change is needed, open a ClearQuest RFC ticket (via Application Services), which follows the RFC process • Implement the resolution (via Application Services) Move OTRS ticket to Tier 2 CCB status for Tier 2 CCB review and closure

3.4 Perform Problem Management

Detect and remove errors from the IT infrastructure, including applications, by performing root cause analysis to minimize the occurrence of incidents and maximize efficiency. A problem is a significant incident or multiple incidents that have common symptoms that indicate a single root cause. Use when tasked with identifying, resolving, and tracking application problems. OTRS and ClearQuest are used for tracking incidents and changes respectively. CNSI will replace OTRS and ClearQuest with JIRA based on a mutually agreed-upon schedule

Table 6. Perform Problem Management

Service ID	Activity	Description	Details
PMT-01	Proactive Problem Analysis	Perform proactive analysis to determine whether problems or errors exist and whether they can be subjected to permanent fixes. Research previous incidents and problems to identify trends, volumes, and types to determine whether preventive action is needed. Create application change requests to correct the underlying cause of problems as needed.	Monitor connections and traffic between various servers such as web, application, FileNet, and database CNSI's HealthBeat application, email alerts, 24/7 support staff are the tools used for monitoring Perform and document root cause analysis to determine any preventative steps or permanent fixes Perform environment validations after a planned or unplanned outage Analyze repeat issues, patterns, and problems for related fixes to be permanent and preventative in nature
PMT-02	Acknowledge and Prioritize Problems	Prioritize problem resolution based on impact and urgency. Use documented procedures to identify, minimize, or avoid the impact of problems. Determine schedule of resolving problems based on priority, skills available, competing requirements for resources, effort and cost to provide the method of resolution.	Known defects are prioritized to be included in the next production release Production releases occur quarterly

Service ID	Activity	Description	Details
		and elapsed time to provide a method of resolution.	Defects are tracked using the ClearQuest application. Non-code changes are reviewed and approved on a daily basis using a set review process Production environment issues are tracked using the OTRS ticketing system
PMT-03	Investigate Problems	Investigate the underlying cause of the problem If problem management identifies root causes of incidents and a method of resolving the incident, then classify the problem as a known error. Record known errors against the current and potentially affected services in addition to the configuration item suspected of being at fault. Ensure that up-to-date information on known errors and corrected problems is available to incident management. Submit application change requests where the resolution will result in a permanent change to the baseline application	Investigate problems that arise due to network, infrastructure, or COTS products
PMT-04	Perform Temporary Fix	Determine causes and provide temporary resolutions such as temporary firewall, security patch, upgrade patch, and other non-code changes	Coordinate and support code releases to multiple environments Maintain application environments and version control Proactive certificate management Database administration activities related to infrastructure and application management File runs, application of scripts to resolve non-data issues, data need requests, testing support in lower environments

Service ID	Activity	Description	Details
PMT-05	Management Problem Resolution	Monitor the progress of all open problems until completion and determine whether service levels are being met. Escalate if service levels are not being met, if management approvals or authorizations are required, or if management intervention or awareness is required; inform the requestor or client of the situation as well. Close the problem or known error once the corrective change has been successfully applied, or when the error is no longer applicable. Maintain information on problem resolutions and temporary fixes, including applicability and effectiveness.	Review system anomalies and system upgrade requirements identified via the monitoring activities, and escalate for prioritization Upgrades and resolutions to anomalies follow the established change management process

3.5 Perform System Maintenance

Maintenance is the process of supporting a system after implementation to maintain operational status, correct faults, improve performance or other attributes, adapt to a changed environment, and meet new client requests. Major enhancements to system functionality are implemented as separate initiatives outside of Operations, with their own timeline, cost, and resource allocation. Major enhancements fall outside the scope of the maintenance activities discussed below.

Table 7. Perform System Maintenance

Service ID	Activity	Description	Details
MNT-01	Corrective Maintenance (Defect Fixes)	**Unscheduled**: Emergency Maintenance (break/fix) • Production issues that stop business operations and must be corrected as soon as possible. • Urgent issues that do not stop business operations but have a significant impact **Scheduled**: Identify and remove non-break/fix defects; correct actual errors. These issues are identified and processed according to the Change Management and Release Management processes in place. They are grouped into planned, scheduled maintenance releases by priority status. Inclusion in the release is determined first by the priority set by the business, and then by CNSI analysis of resource requirements and dependencies	Defect fixes scoped through quarterly major releases and emergency releases as needed

Service ID	Activity	Description	Details
MNT-02	Perfective Maintenance	Improve the system without changing its functionality, improves performance, dependability, and maintainability, safety, reliability, efficiency, or cost-effectiveness of operation	The following environments are supported: • Operations Development • Operations System Test • Operations UAT • Performance • Regression • Disaster Recovery (DR) • Production Server patching and validation Middleware patching, maintenance, tuning, and validation Database patching, maintenance, tuning, and validation Application performance tuning Application scanning and remediation Upgrades to system components and COTS applications Data retention (purge and archive) Year-end maintenance activities
MNT-03	Adaptive Maintenance	Modify the system to keep it up to date with its environment; adapt to a new or upgraded environment by providing new functionality to address requirements that crop up due to changes in the environment (hardware, interfaces, operating system, middleware) or new regulations that impact business operations.	
MNT-04	Preventive Maintenance	Identify and detect latent faults. Includes changes to the existing system to reduce the risk of failure while operating.	
MNT-05	Minor Enhancements	Changes to the system that alter the functionality but are within the hours threshold set for the system; can be accomplished in one major release cycle (waterfall systems); or do not significantly impact integration partners. The threshold for minor enhancements is set at 2,000 hours. Any enhancement that exceeds the	Enhancements (CRs) scoped through quarterly major releases

Service ID	Activity	Description	Details
		threshold will be implemented as a project outside the scope of this operations and maintenance amendment	
MNT-06	IT Service Continuity Management	Maintenance and testing of the DR Plan Data replication (periodic backup)	Annual DR Test Periodic backup
MNT-07	Release and Deployment Management	The process of managing, planning, scheduling, and controlling a software build through different stages and environments • Plan, configure, and execute builds through all environments to support timely and accurate application deployments • Develop scripts, utilities, and accompanying documentation for refreshing non-production environments System Testing, UAT, Production Deployment • Sanity Testing	Build management Release deployment Post-release database refresh
MNT-08	Change Management/ Release Management	Release preplanning Requirements and prioritization Content review and freeze, design, and development System Testing, UAT, Production Deployment Sanity Testing	Tier 1 and Tier 2 CCBs Estimation process Change Logs, DSDD packets, and Defect Scope Documents QA review, including internal peer review of code changes Development, System Testing, UAT (collaborate with the UAT Support team for UAT, emergency and initiative release planning, advise on test script preparations, data setups and interface runs), and Production Deployment Sanity Testing – Post Deployment Sanity checklist completed for each subsystem. This includes

Service ID	Activity	Description	Details
			connectivity smoke testing and screen checks.

3.6 Business Operations

Certified Professional Coders, along with a Registered Nurse, perform the task of medical review functions related to the FFS claims for prepayment editing, monitoring, auditing, and predictive modeling. Operational tasks including adjusting thresholds for Predictive Modeling, scenario fine-tuning, and predictive modeling data support and analysis.

Table 8. Business Operations

Service ID	Activity	Description	Details
BOP-1	ClaimsSure Module Maintenance and Enhancements	Provide improvement in quality of the ClaimsSure module with regular maintenance.	Module releases based on State approval
BOP-2	Technical Support to State Predictive Modeling Team on Ad-Hoc Basis	Supporting the State predictive modeling team for a specific claim or scenario.	Upon specific request, provide assistance with technical support
BOP-3	Preliminary Claim Review	Review claims determined by the predictive modeling solution as possibly improperly billed claims.	Conduct prescreening of claims using scenarios with the predictive modeling solution Modify claim edits to support review decision
BOP-4	ClaimsSure Medical Review	The process of identifying the claim against medical documentation and supporting it through different stages of determination.	Daily, a team of medical reviewers review both the medical claim and documentation submitted by the provider or facility requesting payment • If documentation supports, then

Service ID	Activity	Description	Details
			payment is approved • If documentation is lacking information, then additional information is requested • If documentation fails to be produced within a specific timeframe, then claim is denied payment
BOP-5	Verifying Documentation Prior to Script Deny	The process of documentation review with the appropriate edit appended to identify possible errors.	Weekly process that provides a list of claims to be denied for exceeding a 45- or 10-day limit for submitted documentation
BOP-6	Second Review of Denied Claims	A review process designed to revisit the claim and documentation, at the request of provider or client.	Furnish detailed rationale for the original determination and uphold the denial or to upend the original determination while informing the client that documentation supports new determination
BOP-7	Claims Appeals	The process to improve communication and possible provider performance.	Supply assistance and information, subject matter expertise, and rationale for claim denial reasoning
BOP-8	Technical Support	Improve the system, communication, correspondence, messaging, and reporting.	Maintain support and solutions with regards to the creation and generation of reporting functions

Service ID	Activity	Description	Details
BOP-9	Reviews of Performance and Quality Assurance	Review of both performance and quality assurance of the team to verify that policies and procedures of State Medicaid are being followed and met.	Routine monitoring and performance review, while providing and meeting quality standards of policies and procedures
BOP-10	Reporting	Submitting required account details and statements of various data, including suspected fraud, waste, or abuse	Monthly requested reports that provide detailed information with regards to deliverables and activities that impact daily performance
BOP-11	Analytics	Deliver analytical guidance for claim monitoring, trending or reporting beyond the scope of the everyday workload	Supply analysis with statistics obtained while observing progress or quality over a specific time period
BOP-12	Module Updates and System Configuration Changes	Improving the structure, principles, or procedures with changes that work co lectively with the system adjustments or arrangement of elements that would affect flagged and suspended claims for review.	Provide upgrades, data purges, and enhancements that assist with gathering of correct data and sound support

Section 4 – Performance Standards

This section describes the performance standards that CNSI will adhere to for CHAMPS/IMPACT operations. CNSI's staffing and pricing model are designed to provide services that meet or exceed the standards below. The CNSI Operations Manager and MDHHS representative will schedule a monthly meeting to review performance against the standards using the reports specified in Appendix A – List of Performance Reports.

The parties agree that any delay or failure by CNSI to timely perform the services described in Section 3 or its obligations in accordance with the Performance Standards set forth in this Section 4 will interfere with the proper and timely operation of the system and services. The parties agree that, as a result of any delay or failure by CNSI to timely perform its duties, the State will incur costs to maintain the functions that would have otherwise been performed by CNSI and that the State will incur damages that will be difficult to measure. The parties understand and agree that the provisions in this Section 4 - Performance Standards – describe the liquidated damages CNSI will owe to the State as a result of any delay or failure of CNSI to perform its duties under this agreement; that the liquidated damages are enforceable compensatory damages and not in the nature of a penalty; and that CNSI will not claim at any time that the liquidated damages are unenforceable. The parties also agree that the liquidated damages described here are in addition to the liquidated damages described in section 2.073 of the contract between them.

The parties acknowledge and agree that CNSI will owe the State liquidated damages for any one failure to timely perform its obligations under this agreement. Any liquidated damages assessed are in addition to and not in limitation of any other rights or remedies of the State. The assessment of liquidated damages does not constitute a waiver or release of any other remedy the State may have under the agreement, but such damages will be reduced by the amount of liquidated damages assessed for the same events causing the actual damages.

During the first five months after this agreement is executed, the State will not assess liquidated damages. The State and CNSI will meet on a monthly basis and the State will identify any deficiencies in CNSI failing to meet performance standards that may result in liquidated damages. But any failure by the State to raise any such deficiencies at these meetings will not waive the State's right to assess liquidated damages.

Undisputed amounts of liquidated damages assessed by the State may be deducted by the State from any money payable to CNSI under this agreement or the State may bill CNSI and CNSI will promptly pay those bills.

Exclusions

CNSI shall not be responsible for liquidated damages for unplanned outages and operations events related to infrastructure, including but not limited to data center, hardware, network, storage, or telecommunications.

CNSI shall not be responsible for liquidated damages for unplanned outages and operations events related to DTMB enterprise applications, including but not limited to MILogin, FileNet, and SIGMA.

Definitions

For the purposes of this SOW the following terms are defined:

"Unplanned Outage" means occurrences that adversely affect the system and cause a condition where the system is completely unusable for its purposes in the daily operations of the system.

"Operations Event". Occurrences that adversely affect the system but do not cause an Unplanned Outage, e.g., System performance problems.

"Deficiency" means an incident or problem resulting from a flaw in a deliverable or service that causes the deliverable or service to fail to perform in accordance with its applicable specifications or a failure of a deliverable to conform to reasonable commercial or industry standards for appearance, quality, functionality, or format.

4.1 Key Staff

Related services.

- All

Table 9. Key Staff

Performance Requirement	Liquidated Damages
CNSI must notify the MDHHS within 2 business days after CNSI learns about the departure of Key Staff. CNSI must replace Key Staff as defined in the contract with individuals who are acceptable to MDHHS within 30 calendar days of departure unless a longer period is approved in writing by MDHHS. CNSI must appoint an interim replacement Key Staff within 5 business days of departure of the Key Staff.	If the Key Staff is not replaced within 30 calendar days of Key Staff departure, or a longer period if approved in writing by MDHHS, then MDHHS shall assess $500 per business day for each day beyond 60 days until an acceptable replacement has been made.

4.2 System Enhancement As-Built Deliverables

Related Services:

- MNT-08 – Change Management / Release Management

Table 10. System Enhancement As-Built Deliverables

Performance Requirement	Liquidated Damages
CNSI and MDHHS will agree upon the due date for a System Enhancement As-Built Deliverable and the Production release date for its implementation in a Change Order. CNSI must incorporate and accept the tracked changes from the approved As-Built Deliverable to the appropriate parts of the system documentation (DSDD)	MDHHS shall assess $2,000 for each business day after the due date that an acceptable as-built deliverable is not received by MDHHS. If the as-built deliverable is received on time but the information is inaccurate or incomplete, then MDHHS shall assess $2,000 per business

Performance Requirement	Liquidated Damages
within 30 business days of the date the as-built deliverable is released into production	day until an acceptable as-built deliverable is received by MDHHS. MDHHS shall assess $2,000 for each calendar day after the agreed-upon Production release date until the system enhancement deliverable is released into Production.

4.3 Change Request Response

Related Services:

- MNT-08 -- Change Management / Release Management

Table 11. Change Request Response

Performance Requirement	Liquidated Damages
CNSI must deliver a CR response within 30 business days of receipt of an MDHHS Approved CR, unless otherwise agreed upon.	MDHHS shall assess $100 for each business day after the due date that a complete CR response is not received.

4.4 Unplanned Outage or Operations Event Response Time

Related Services:

- MSO-01 – System Monitoring
- MSO-02 - Track Service Level Agreements
- MSO-03 – Database Monitoring

Table 12. Unplanned Outage or Operations Event Response Time

Performance Requirement	Liquidated Damages
Response time requirements for Unplanned Outages or Operation Events are as noted in Table 13. CNSI will provide all responses via telephone call or email using the agreed-upon MDHHS Distribution List.	When notice, response, recommended resolution, or update is not received by MDHHS within the identified timeframe, MDHHS shall assess $350 per missed response time

Table 13. Response Time Requirements

Event	Response Time
Call or email to CNSI Operations Support team from MDHHS or DTMB regarding an Unplanned Outage	30 minutes
CNSI discovery of an Unplanned Outage	30 minutes
Call or email to CNSI Operations Support team from MDHHS or DTMB regarding an Operations Event (during business hours)	30 minutes
CNSI discovery of an Operations Event (during business hours)	30 minutes
Call or email to CNSI Operations Support team from MDHHS or DTMB regarding an Operations Event (non-business hours)	Prior to 8am on the next business day
CNSI discovery of an Operations Event (non-business hours)	Prior to 8 am on the next business day
CNSI provides status update for an Unplanned Outage or Operations Event, including next steps and (when available) the recommended resolution and estimated fix date and time for all system components	2 hours Once per hour thereafter (unless another timeframe agreed upon in writing via email)

4.5 Unplanned Outage or Operations Event Reports

Related Services:

- INC-03 – Ticket Analysis and Reporting

Table 14. Unplanned Outage or Operations Event Reports

Performance Requirement	Liquidated Damages
CNSI must provide MDHHS and DTMB with CNSI's completed analysis of the causes for any Unplanned Outage or Operations Event in the Production environment, excluding tickets owned by MDHHS or DTMB, within 5 business days of the resolution of the issue. The analysis will be documented in the CNSI Incident Report format and must include the following: • Title • Date and time of event • Summary of event • Root cause • Solution • Follow up actions needed (if any)	MDHHS shall assess $200 for each business day after the due date the report is not received. If the report is received on time but the information is inaccurate or incomplete, then MDHHS will provide a written outline of the deficiencies, and CNSI will provide a corrected report within 5 business days, during which time liquidated damages will not be assessed until the sixth business day

4.6 System Maintenance

Related Services:

- MNT-01 – Corrective Maintenance
- MNT-02 – Perfective Maintenance
- MNT-03 – Adaptive Maintenance
- MNT-04 – Preventive Maintenance
- MNT-05 – Minor Enhancements
- MNT-06 – IT Service Continuity Management
- MNT-07 – Release and Deployment Management
- MNT-08 – Change Management/Release Management

Table 15. System Maintenance

General Requirements
CNSI must provide production maintenance support and correct system Deficiencies, Unplanned Outages, and Operations Events for any and all CNSI system components installed and operated within CNSI and State of Michigan sites. System deficiencies (also referred to as "Deficiencies") are categorized from Severity Level 1 to Severity Level 4, as set forth in Section 4.7 through 4.10, according to their impact on operations. Unplanned Outages and Operations Events are categorized as either Severity Level 1 or Severity Level 2. MDHHS and CNSI, in consultation, will determine the severity level assigned to a Deficiency, Unplanned Outage, or Operations Event. Each Deficiency, Unplanned Outage or Operation Event must be fixed within the required timeframes for the severity level and business criticality, as stated below. If a timeline is not met, then liquidated damages shall be assessed in accordance with Section 4 Performance Standards. Performance tracking will be via CNSI's *OTRS Reporting*.

General Requirements
Available Release Explanation
Available Release Definitions apply to CHAMPS/IMPACT software. For COTS or third-party software, CNSI may provide a workaround to the Deficiency taking into consideration available release schedules. The schedule for the long-term fix for the COTS or third-party software Deficiency will be planned by the Tier 2 CCB and assigned to a scheduled release. Available Release Definitions are based on the System Release Schedule established by the Tier 2 CCB and are relative to the date of discovery of a deficiency • If a Deficiency is discovered when there are 10 or more business days left in the development cycle of the release, then the Next Available Release is the one currently in development. • If a Deficiency is discovered when there are 9 or fewer business days left in the development cycle of the release, then the Next Available Release will be the release following the one that is currently in development. • If a Deficiency is discovered during the period of the cycle in which there is no development underway (the planning period), then the Next Available Release will be the release that starts its development cycle immediately following the planning period. The Second Available Release is the release following the Next Available Release. The Third Available Release is the release following the Second Available Release. Note that MDHHS may request release deferral based on State resource constraints.

4.7 Severity Level 1 – Urgent

A Severity Level 1 event is one that causes the complete loss of one or more critical functions of the system, including the following:

- Provider Enrollment Screens
- Prior Authorization Screens
- Call Center Screens
- Claims Adjudication and processing
- Payment processing
- Eligibility Inquiry
- EDI processing
- Web Services processing
- Interface processing

HIPAA security breaches are also considered Severity 1 incidents.

Table 16 describes the requirements to repair or correct Severity Level 1 Deficiencies, Operation Events and Unplanned outages and the liquidated damages assessed by MDHHS for failure to comply with said requirements.

Table 16. Severity Level 1 Requirements and Damages

Severity Level 1 Performance Requirement		Liquidated Damages
24 hours	CNSI must have corrected Deficiency, Unplanned Outage, or Operations Event	For CNSI's failure to repair or correct a Severity Level 1 Deficiency, Unplanned Outage, or Operations Event within 24 hours, MDHHS shall assess liquidated damages in the following amounts:
Exceptions for Infrastructure CNSI is not responsible for downtime related to infrastructure, including but not limited to data center, hardware, network, storage, and telecommunications. CNSI is not responsible for downtime related to DTMB enterprise applications, including but not limited to MILogin, Filenet, and SIGMA. **Exceptions for Maintenance and Deployment** One weekend per month, the System may be unavailable to MDHHS between the hours of 6:00 PM Eastern Time Saturday to 9:00 AM Eastern Time Sunday as a result of the System maintenance process. Additional planned downtime may be scheduled as agreed between CNSI and MDHHS.		**$5,000** — For each calendar day or any part of a calendar day, up to 10 calendar days **$10,000** — For each calendar day between 11 and 20 calendar days **$20,000** — For each calendar day or any part of a day thereafter, until the deficiency unplanned outage, or operations event is corrected

4.8 Severity Level 2 – High

A Seventy Level 2 event is one that causes the complete loss without availability of workarounds of one or more functions of the system that are not considered Severity 1 Critical functions.

- Table 17 describes the requirements to repair or correct Severity Level 2 Deficiencies Operation Events and Unplanned Outages and the liquidated damages assessed by MDHHS for failure to comply with said requirements.

Table 17. Severity Level 2 Requirements and Damages

Severity Level 2 Performance Requirement		Liquidated Damages
Unplanned Outage or Operations Event		For CNSI's failure to repair or correct a Severity Level 2 Unplanned Outage or Operations Event within 48 hours, MDHHS shall assess liquidated damages in the following amounts:
48 hours	CNSI must have corrected Severity Level 2 Unplanned Outage or Operation Event.	**$2,500** — For each calendar day or any part of a calendar day, up to 15 calendar days
Exceptions for Infrastructure CNSI is not responsible for downtime related to infrastructure, including but not limited to data		

Severity Level 2 Performance Requirement	Liquidated Damages
center, hardware, network, storage, and telecommunications. CNSI is not responsible for downtime related to DTMB enterprise applications, including but not limited to MILogin, Fitenet, and SIGMA. **Exceptions for Maintenance and Deployment** One weekend per month, the System may be unavailable to MDHHS between the hours of 6:00 PM Eastern Time Saturday to 9:00 AM Eastern Time Sunday as a result of the System maintenance process. Additional planned downtime may be scheduled as agreed between CNSI and MDHHS.	**$5,000** — For each calendar day or any part of a day thereafter, until the Unplanned Outage or Operations Event is corrected
Deficiency **Next Available Release (Scheduled or Emergency Release)** — CNSI must have corrected Severity Level 2 Deficiency	For CNSI's failure to repair or correct a Severity Level 2 Deficiency within the timeframe agreed upon, MDHHS shall assess liquidated damages in the following amount: **$2,500** — For each calendar day or any part of a calendar day thereafter, until the Deficiency is corrected

4.9 Severity Level 3 – Medium

A Severity Level 3 event is one that causes a business function or system component to not work as required, but where a workaround that is acceptable to MDHHS is available.

Severity Level 3 events will be evaluated as high vs. low impact and priority by MDHHS staff, in consultation with CNSI, based on the level of impact the Deficiency has on the provider, client, or State users; or on the business impact to the State.

- Table 18 describes the requirements to repair or correct Severity Level 3 Deficiencies and the liquidated damages assessed by MDHHS for failure to comply with said requirements.

Table 18. Severity Level 3 Requirements and Damages

Severity Level 3 Performance Requirement	Liquidated Damages
High Impact or Priority Deficiency **Next Available Release** — CNSI must have corrected Deficiency	For CNSI's failure to repair or correct a high impact or priority Severity Level 3 Deficiency within the timeframe identified, MDHHS shall assess liquidated damages in the following amount: **$5,000** — For each calendar day or any part of a day thereafter, until the Deficiency is corrected

Severity Level 3 Performance Requirement		Liquidated Damages	
Low Impact or Priority Deficiency		For CNSI's failure to repair or correct a low impact or priority Severity Level 3 Deficiency within the timeframe identified, MDHHS shall assess liquidated damages in the following amount:	
Second Available Release	CNSI must have corrected Deficiency	**$2,500**	For each calendar day or any part of a day thereafter, until the Deficiency is corrected

4.10 Severity Level – Low

A Severity Level 4 event is one that causes a non-critical or cosmetic Deficiency that has a negative effect on one or more business functions or system components, and that does not qualify as any other Deficiency.

- Table 19 describes the requirements to repair or correct Severity Level 4 Deficiencies and the liquidated damages assessed by MDHHS for failure to comply with said requirements.

Table 19. Severity Level 4 Requirements and Damages

Severity Level 4 Performance Requirement		Liquidated Damages	
Non-Critical or Cosmetic Deficiency		For CNSI's failure to repair or correct a Severity Level 4 Deficiency within the timeframe identified, MDHHS shall assess liquidated damages in the following amount:	
Third Available Release	CNSI must have corrected Deficiency	**$2,500**	For each calendar day or any part of a day thereafter, until the Deficiency is corrected

4.11 System Uptime

Related Services

- MSO-01 – System Monitoring
- MSO-02 – Track Service Level Agreements
- MSO-03 – Database Monitoring
- INC-01 – Detection and Recording
- INC-02 – Tier 2 Support Ticket Analysis
- INC-03 – Tier 3 Support Ticket Analysis
- PMT-01 – Proactive Problem Analysis

- PMT-02 – Acknowledge and Prioritize Problems
- PMT-03 – Investigate Problems
- PMT-04 – Perform Temporary Fix
- PMT-05 – Management Problem Resolution

Table 20. System Uptime

System Uptime - Performance Requirement	**Liquidated Damages**
The required uptime for **Production** CHAMPS/IMPACT and the System components is 99.5% of the time, 24 hours per day, 7 days per week, on a monthly basis, excluding planned downtime. **Exceptions for Infrastructure** CNSI is not responsible for downtime related to infrastructure, including but not limited to data center, hardware, network, storage, and telecommunications. CNSI is not responsible for downtime related to DTMB enterprise applications, including but not limited to MILogin, Filenet, and SIGMA. **Exceptions for Maintenance and Deployment** One weekend per month, the System may be unavailable to MDHHS between the hours of 6:00 PM Eastern Time Saturday to 9:00 AM Eastern Time Sunday as a result of the System maintenance process. Additional planned downtime may be scheduled as agreed between CNSI and MDHHS	MDHHS shall assess liquidated damages as specified below for each hour or portion thereof in the month that the System fails to meet these uptime performance standards. **$1,000 per hour** – Up to 24 hours **$2,000 per hour** – From 24-48 hours **$3,000 per hour** – More than 48 hours **Continuous** If an unplanned outage starts in one calendar month and continues into the following calendar month, then all of the continuous hours of that unplanned outage will count in the calculation of the liquidated damages without starting over for the hours in the new calendar month and without impacting the hours for calculating the uptime requirement for either month.
System Uptime –Performance Reporting	**Liquidated Damages**
CNSI will provide system uptime reports as follows: *Monthly Uptime Report* – Monthly, by the first business day on or after the 10th *CHAMPS/IMPACT Monitoring and SLA Report* – Monthly, by the first business day on or after the 10th	MDHHS shall assess $200 per calendar day for each day after the due date that an acceptable system uptime report is not received. If the system uptime report is received on time but the information is inaccurate or incomplete, then MDHHS shall assess $50 per calendar day until an acceptable system uptime report is received.

4.12 Data Warehouse

Related Services:

- PCS-03 – Perform Operations and Support (Interfaces and Data Warehouse)

Table 21. Data Warehouse

Performance Requirement	Liquidated Damages
CNSI must generate 100% of daily data warehouse extracts within 24 hours of the defined extract schedule within the approved DSDD. This excludes delays due to planned outages and releases.	MDHHS shall assess $500 per calendar day for each day the data warehouse extracts are not completed.

4.13 Data Maintenance

Related Services:

- PCS-02 – Perform Necessary Support

Table 22. Data Maintenance

Performance Requirement	Liquidated Damages
CNSI must obtain MDHHS approval through the change request or ticketing process before making any changes to database tables, structures and rules including edits, audits and business data contained therein	MDHHS shall assess up to $10,000 per occurrence for failure to obtain MDHHS approval through the change request or ticketing process before making any changes to database tables, structures and rules including edits, audits and data contained therein

4.14 UAT Availability

Related Services:

- MSO-01 – System Monitoring
- MSO-03 – Database Monitoring
- INC-01 – Detection and Recording
- INC-02 – Tier 2 Support Ticket Analysis
- INC-03 – Tier 3 Support Ticket Analysis
- PMT-01 – Proactive Problem Analysis
- PMT-02 – Acknowledge and Prioritize Problems
- PMT-03 – Investigate Problems
- PMT-04 – Perform Temporary Fix
- PMT-05 – Management Problem Resolution

Table 23. UAT Availability

Performance Requirement	Liquidated Damages
During the scheduled Operations UAT Testing and Emergency release period, CNSI must make User Acceptance Testing (UAT) environments or Regression Test environments available at least 95% of the time during normal business hours (6:00 AM to 7:00 PM, Monday through Friday Eastern Time.	MDHHS shall assess $250 per hour for each full hour during normal business hours that the UAT or Regression environments do not meet this uptime percentage of the hourly specifications.

4.15 System Security

Related Services:

- PCS-07 – Perform Operations and Support (Security/Audits)

Table 24. System Security

Performance Requirement	Liquidated Damages
CNSI must participate in and cooperate with MDHHS and DTMB in any required security design reviews of any part of the system	MDHHS shall assess $100 per full calendar day for each day CNSI does not participate in a security design review.
CNSI must maintain and document security features for all CNSI-supported automation systems to ensure that the system is protected against unauthorized access in alignment with the DTMB Security Office.	MDHHS shall assess $100 per full calendar day for each day CNSI does not meet this requirement, unless CNSI is meeting the agreed-upon schedule in completing any follow-up action plan to bring the System into compliance with DTMB security standards. MDHHS shall assess $100 per full calendar day for each day after the due date that a milestone in any follow-up action plan to bring the system into compliance with the DTMB security standards is not met, until that milestone is completed
System Security – Performance Reporting	**Liquidated Damages**
CNSI must share security reports (for example, app scan reports) periodically as required by DTMB.	MDHHS shall assess $100 per full calendar day for each day after the due date that requested security reports are not received.

4.16 Disaster Recovery

Related Services:

- MNT-06 -- IT Service Continuity Management

Table 25. Disaster Recovery

Performance Requirement	Liquidated Damages
CNSI must prepare and submit to MDHHS and DTMB an updated and comprehensive Disaster Recovery (DR) Plan annually on the first business day of July	MDHHS shall assess $500 per full calendar day for each day after the due date that an acceptable DR Plan is not received. If the DR Plan is received on time but the information is inaccurate or incomplete, MDHHS shall continue to assess $50 per full calendar day until an acceptable DR Plan is received.
The CNSI must coordinate and test DR capabilities and demonstrate disaster recovery capabilities annually in coordination with MDHHS and DTMB	MDHHS shall assess up to $500 per full calendar day for each day after the due date that the scheduled DR testing is not conducted.
CNSI will provide MDHHS and DTMB with the DR testing results within 30 days of the completed DR test	MDHHS shall assess up to $500 per full calendar day for each day after the due date that the DR testing results are not received. If the DR testing results are received on time but the information is inaccurate or incomplete, then MDHHS shall continue to assess $50 per full calendar day until acceptable DR testing results are received

4.17 Claims Processing

Related Services.

- PCS-04 – Perform Operations and Support (Payment and Remittance Advice (RA))

Table 26. Claims Processing

Performance Requirement	Liquidated Damages
Claims will be adjudicated in real time through direct data entry. For batch claims, CNSI must perform a claims adjudication cycle at least once daily, excluding planned downtimes.	MDHHS shall assess $100 per full calendar day for each day that a claim adjudication cycle is late.

4.18 Payment Processing

Related Services:

- PCS-04 – Perform Operations and Support (Payment and Remittance Advice (RA))

Table 27. Payment Processing

Performance Requirement	Liquidated Damages
CNSI must perform payment cycles in CHAMPS and produce and send the financial transaction details to the appropriate State financial system based on agreed upon schedules documented in the CHAMPS *Interfaces Detailed System Design Document (DSDD)*, unless the schedule for one or more specific payment cycles is changed by mutual agreement.	MDHHS shall assess $5,000 per full calendar day for each day a payment cycle for CHAMPS is late.

4.19 UAT Readiness

Related Services:

- MNT-01 – Corrective Maintenance (Defect Fixes)
- MNT-02 – Perfective Maintenance
- MNT-03 – Adaptive Maintenance
- MNT-04 – Preventive Maintenance
- MNT-05 – Minor Enhancements
- MNT-07 – Release and Deployment Management
- MNT-08 – Change Management/Release Management

Table 28. UAT Availability

Performance Requirement	Liquidated Damages
During the scheduled Operations UAT Testing Period, CNSI will deploy a minimum of 90% of approved release content into UAT by the start of the first day of UAT as per the approved release schedule. Exceptions: • Content approved after the initial content freeze will be excluded • Change Logs that have not been approved by the end of the design period defined in the approved release schedule.	MDHHS shall assess $500 per calendar day for each day the minimum content is not available for UAT testing.

4.20 UAT Environment and Deployment

Related Services:

- MNT-01 – Corrective Maintenance (Defect Fixes)

- MNT-02 – Perfective Maintenance
- MNT-03 – Adaptive Maintenance
- MNT-04 – Preventive Maintenance
- MNT-05 – Minor Enhancements
- MNT-07 – Release and Deployment Management
- MNT-08 – Change Management/Release Management

Table 29. UAT Environment and Deployment

Performance Requirement	Liquidated Damages
CNSI will resolve UAT environment and deployment issues within 72 hours of notification of the issue by MDHHS. **Exceptions for Infrastructure** CNSI is not responsible for downtime related to infrastructure, including but not limited to data center, hardware, network, storage, and telecommunications. CNSI is not responsible for downtime related to DTMB enterprise applications, including but not limited to MILogin, FileNet, and SIGMA.	MDHHS shall assess liquidated damages of $25 per hour over the 72-hour period.

4.21 Eligibility Files (CIMS and Monthly 834)

Related Services:

- PCS-03 – Perform Operations and Support (Interfaces and Data Warehouse)

Table 30. Eligibility Files (CIMS)

Performance Requirement	Liquidated Damages
CNSI must complete processing of the daily Eligibility (CIMS) file received from Bridges and corresponding outbound files within 16 hours of receipt. CNSI must send the monthly 834 files according to the approved schedule	MDHHS shall assess $250 for each day the Eligibility file is processed late or the monthly 834 files are sent late.

Appendix A – List of Performance Reports

All CNSI reports are posted on the CNSI SharePoint web site.

Table 31. Performance Reports

Performance Standard	Performance Tracking Description or Name of Report	How Often and When Due (Except State Holidays)
4.2 System Enhancements As-Built Deliverables	DHHS spreadsheet based on due date and Production release date from Change Order CNSI's *CR Summary for Minor Release* Report for Production release date	Every two weeks, on Monday
4.3 Change Request Response	CNSI's *CR Tracking Report*	Weekly, on Monday
4.5 Unplanned Outage or Operational Event Reports	The analysis will be in either the CNSI Incident Report or the Operations Event Report (whichever is applicable) and will be attached to the ticket	Within 4 business days of resolution of the issue
4.6 System Maintenance	CNSI's *Biweekly OTRS Reporting*	Every two weeks, on Monday
4.7 Severity Level 1 - Urgent	CNSI's *Biweekly OTRS Reporting*	Every two weeks, on Monday
4.8 Severity Level 2 - High	CNSI's *Biweekly OTRS Reporting*	Every two weeks, on Monday
4.9 Severity Level - Medium	CNSI's *Biweekly OTRS Reporting*	Every two weeks, on Monday
4.10 Severity Level - Low	CNSI's *Biweekly OTRS Reporting*	Every two weeks, on Monday
4.11 System Uptime	CNSI's *Monthly Uptime Report*	Monthly, by the first business day on or after the 10th
4.11 System Performance	CNSI's *Monitoring and SLA Report*	Monthly, by the first business day on or after the 10th
4.12 Data Warehouse	CNSI's *Completeness Report*	Weekly, on Monday

Performance Standard	Performance Tracking Description or Name of Report	How Often and When Due (Except State Holidays)
4.13 Reference Data Maintenance	N/A	Ad hoc basis as required
4.14 UAT Availability	CNSI's *Monthly Uptime Report*	Monthly, by the first business day on or after the 10th
4.15 System Security	*Periodic Security Report*	Based on State and CNSI agreed-upon schedule
4.16 Disaster Recovery	CNSI's *Disaster Recovery Plan*	Once per calendar year
	CNSI's *DR Testing Results*	Within 30 business days of the DR testing
4.17 Claims Processing 4.18 Payment Processing	CNSI's *Claims Adjudication Report*	Daily
4.19 UAT Readiness	CNSI's *UAT Readiness Report*	At the start of the UAT phase
4.20 UAT Environment and Deployment	The analysis will be in the CNSI Incident Report	Within 4 business days of resolution of the issue
4.21 Eligibility Files (CIMS)	Daily Interface Acknowledgement Email	Daily

Section 5 – Upgrades

Continuous upgrades are required for CHAMPS to maintain a high level of service to stakeholders including citizens, providers, health plans, auditors, and other SoM integration partners/systems and to maintain compliance with State and Federal regulations and standards.

CHAMPS upgrades (also known as Enhancements) are categorized in Table 32. An individual upgrade will be classified into one or more categories. All upgrades are approved by MDHHS before any work is performed.

Table 32. Upgrade Categories

Upgrade Categories
Access to Care
Audit Compliance
Cost Savings and Avoidance
Impact to Provider Payments
Technology Upgrades
State/Federal Policy Compliance
Visibility/Sensitivity Risk

Upgrades are budgeted on an annual basis and are performed based on MDHHS approval of the detailed scope and hours associated with each upgrade.

The annual budget includes 40,000 hours for Michigan CHAMPS and 5,000 hours for Illinois IMPACT at a rate of $139 per hour. Defect classification remains unchanged in this amendment and any associated effort and cost are not part of the upgrade hours.

The following staff perform upgrades and are included as part of the hourly rate:

- Operations Manager
- Application Service Manager
- Application Services Architect
- Business Analyst Lead
- Infrastructure Lead
- Project Managers
- Subject Matter Experts
- Business Analysts
- Systems Analysts

- Software Engineers
- Solutions Architects
- Enterprise Architects
- Software Quality Assurance Engineers
- Database Administrators
- Configuration Management Engineers
- System Administrators
- Security Analysts
- Quality Assurance Engineers
- Technical Writers

5.1 Planned Technology Upgrades for FY2020/2021

The Operations and Maintenance agreement includes the following known upgrades. Additional technology upgrades will be planned based on mutual agreement between DHHS and CNSI.

Upgrade	Current Version	New Version	Targeted Release	Targeted Date	Comment
Siebel Patch Set	19.4	19.x or 10.x based on the demand	TBD	TBD	Siebel Patch set will be applied based on demand and security compliance
Infrastructure Upgrades	Solaris	Linux	TBD	TBD	Infrastructure upgrades required due to removal of DTMB support for the Solaris operating system

5.2 Upgrade Billing

Upgrades are billed based on milestones achieved for each release as below:

- 1/3 upon Change Log Approval
- 1/3 upon deployment to System Testing
- 1/3 upon completion of UAT

Section 6 – Software Licensing

The Operations and Maintenance agreement includes the following software licenses:

- MI LexisNexis - $44,000 per month
- IL LexisNexis - $49,000 per month
- MI RuleIT - $201,266 per year
- evoBrix Subscription - $500,000 per year
  - evoBrix Platform
  - ClaimsSure
  - HealthBeat
- CompuMax - $17,093 per year

Table 33, Annual Software License Costs

Licensing	Michigan	Illinois
RuleIT	$201,266	$0
LexisNexis	$528,000	$588,000
CompuMax	$17,093	$0
evoBrix Subscription. • evoBrix Platform • ClaimsSure • HealthBeat	$500,000	$0
Total	$1,246,359	$588,000

Section 7 – Service Delivery Model

CNSI will leverage an ITIL-based Managed Services delivery model for CHAMPS/IMPACT operations to include a Core Operations team augmented and supported by services teams. This section describes the teams that will support CHAMPS/IMPACT operations along with the organization structure.

7.1 Service Teams

The service teams supporting CHAMPS/IMPACT operations are listed in Table 34.

Table 34. Service Teams

Team	Role
Core Operations	Manages all operations activities
Operations Support Center (OSC)	Performs monitoring and Tier 1 support services
Advanced Support and Maintenance (ASM)	Performs Tier 2 and Tier 3 support Leads all maintenance activities
Business Operations	Performs all business operations activities
Infrastructure Services	Performs all infrastructure-related services
Business Services	Provides business expertise for support, defects, and enhancements
Development	Performs all development for defects and enhancements
Software Quality Assurance (SQA)	Performs testing for defects and enhancements
Quality Assurance and Tech Writing (QA/TW)	Performs quality assurance and technical writing for deliverables
Architecture	Reviews enhancements for architectural alignment to State and CNSI standards

Table 35 is a RASIC Matrix for the Services Teams depicting the roles of each team across Service Categories. A RASIC Legend is provided at Table 36.

Table 35. RASIC Matrix

Service Category	Core Operations	OSC	ASM	Bus Ops	Infr	Bus Srvcs	Dev	SQA	QA/TW	Arch
Monitor System Operations	A	R	S		S	S				
Provide Client Support	A	R	R		S	R				
Perform Incident Management	A	R	R		R	R				
Perform Problem Management	A	R	R		R	R				
Perform System Maintenance	A	I	R		R	R	R	R	R	C
Business Operations	A			R		S				

Table 36. RASIC Legend

Role	Description
R	Responsible
A	Accountable
S	Supports
I	Informed
C	Consulted

7.2 Module Grouping

All modules and add-ons are grouped as shown in Table 37 for streamlined communication and service delivery.

Table 37. Module Groupings

Group	Modules
Provider Management	Provider Enrollment
	PCS
	SiteVisitPro
	eMIPP
Member Services	Eligibility and Enrollment
	Managed Care
	Customer Relationship Management
	myHealthButton/myHealthPortal
Payment Services	Reference
	Claims & Encounters
	Prior Authorization
	Financial Services
	ClaimsSure
Facility Settlement	Facility Settlement
General Services	Common Components

Section 9 – Pricing

Table 41 provides pricing for the amendment for CHAMPS/IMPACT Operations. Operations pricing is provided by quarter to reflect efficiencies built into the transition to the managed services model. Upgrades (also known as Enhancements) pricing is based on the number of hours and an hourly rate and is provided by fiscal year. Software licensing pricing is also provided by fiscal year.

Table 41. Pricing

	SFY 2020			SFY 2021			Grand Total		
Description	Michigan	Illinois	Total	Michigan	Illinois	Total	Michigan	Illinois	Grand Total
Operations	$ 18,257,137.19	$ 2,142,740.00	$ 20,397,877.19	$ 16,833,598.38	$ 2,140,200.00	$ 18,974,798.38	$ 35,090,697.57	$ 4,281,440.00	$ 39,372,167.57
Licensing	$ 1,246,359.00	$ 591,990.00	$ 1,838,349.00	$ 1,246,359.00	$ 592,000.00	$ 1,838,359.00	$ 2,492,718.00	$ 1,183,990.00	$ 3,676,708.00
Enhancements	$ 5,466,000.00	$ 895,260.00	$ 6,361,260.00	$ 5,543,100.00	$ 895,000.00	$ 6,438,100.00	$ 11,009,100.00	$ 1,790,260.00	$ 12,799,360.00
Total	$ 24,969,496.19	$ 3,629,990.00	$ 28,597,486.19	$ 23,623,057.38	$ 3,627,200.00	$ 27,250,257.38	$ 48,592,553.57	$ 7,257,190.00	$ 55,849,743.57

9.1 FY 2020 Price Breakdown by SIA Category

Below is a breakdown of the FY2020 pricing by SIA Category for reference purposes:

Table 42. Price Breakdown by SIA Category

CNSI Software	Monitor System Operations	Provide Client Support	Perform Incident Management	Perform Problem Management	Minor Maintenance	Business Operations	Total
$1,246,359	$2,314,165	$5,359,320	$3,897,541	$2,679,560	$6,704,294	$2,862,257	$25,063,496

9.2 Payment Schedule

Table 43 contains the Payment Schedule for Operations and Licensing.

Table 43. Payment Schedule

Month	CHAMPS Operations			IMPACT Operations			Grand Total
	Operations Support	Licensing	Total	Operations Sup	Licensing	Total	
10/31/2019	1,734,075.52	762,359.00	2,496,434.52	178,395.00	49,000.00	227,395.00	2,723,829.52
11/30/2019	1,734,075.52	44,000.00	1,778,075.52	178,395.00	49,000.00	227,395.00	2,005,470.52
12/31/2019	1,734,075.52	44,000.00	1,778,075.52	178,395.00	49,000.00	227,395.00	2,005,470.52
1/31/2020	1,557,886.04	44,000.00	1,601,886.04	178,395.00	49,000.00	227,395.00	1,829,281.04
2/29/2020	1,557,886.04	44,000.00	1,601,886.04	178,395.00	49,000.00	227,395.00	1,829,281.04
3/31/2020	1,557,886.04	44,000.00	1,601,886.04	178,395.00	49,000.00	227,395.00	1,829,281.04
4/30/2020	1,408,356.80	44,000.00	1,452,356.80	178,395.00	49,000.00	227,395.00	1,679,751.80
5/31/2020	1,408,356.80	44,000.00	1,452,356.80	178,395.00	49,000.00	227,395.00	1,679,751.80
6/30/2020	1,408,356.80	44,000.00	1,452,356.80	178,395.00	49,000.00	227,395.00	1,679,751.80
7/31/2020	1,404,879.38	44,000.00	1,448,879.38	178,395.00	49,000.00	227,395.00	1,676,274.38
8/31/2020	1,404,879.38	44,000.00	1,448,879.38	178,395.00	49,000.00	227,395.00	1,676,274.38
9/30/2020	1,404,879.38	44,000.00	1,448,879.38	178,395.00	49,000.00	227,395.00	1,676,274.38
10/31/2020	1,397,924.53	762,359.00	2,160,283.53	178,395.00	49,000.00	227,395.00	2,387,678.53
11/30/2020	1,397,924.53	44,000.00	1,441,924.53	178,395.00	49,000.00	227,395.00	1,669,319.53
12/31/2020	1,397,924.53	44,000.00	1,441,924.53	178,395.00	49,000.00	227,395.00	1,669,319.53
1/31/2021	1,397,924.53	44,000.00	1,441,924.53	178,395.00	49,000.00	227,395.00	1,669,319.53
2/28/2021	1,397,924.53	44,000.00	1,441,924.53	178,395.00	49,000.00	227,395.00	1,669,319.53
3/31/2021	1,397,924.53	44,000.00	1,441,924.53	178,395.00	49,000.00	227,395.00	1,669,319.53
4/30/2021	1,397,924.53	44,000.00	1,441,924.53	178,395.00	49,000.00	227,395.00	1,669,319.53
5/31/2021	1,397,924.53	44,000.00	1,441,924.53	178,395.00	49,000.00	227,395.00	1,669,319.53
6/30/2021	1,397,924.53	44,000.00	1,441,924.53	178,395.00	49,000.00	227,395.00	1,669,319.53
7/31/2021	1,397,924.53	44,000.00	1,441,924.53	178,395.00	49,000.00	227,395.00	1,669,319.53
8/31/2021	1,397,924.53	44,000.00	1,441,924.53	178,395.00	49,000.00	227,395.00	1,669,319.53
9/30/2021	1,397,924.53	44,000.00	1,441,924.53	178,395.00	49,000.00	227,395.00	1,669,319.53
Grand Total	35,090,687.57	2,492,718.00	37,583,405.57	4,281,480.00	1,176,000.00	5,457,480.00	43,040,885.57

STATE OF MICHIGAN
CENTRAL PROCUREMENT SERVICES
Department of Technology, Management, and Budget

525 W. ALLEGAN ST., LANSING, MICHIGAN 48913
P.O. BOX 30026 LANSING, MICHIGAN 48909

CONTRACT CHANGE NOTICE

Change Notice Number **29**

to

Contract Number **071B6200168**

CONTRACTOR	
	CLIENT NETWORK SERVICES, LLC
	2277 Research Boulevard
	Rockville, MD 20850
	Tom Sofo
	(301) 634-4672
	tom.sofo@cns-inc.com
	CV0059061

STATE			
	Program Manager	Crystal Kline	MDHHS
		517-284-1184	
		KlineC1@michigan.gov	
	Contract Administrator	Jarrod Barron	DTMB
		(517) 249-0406	
		barronj1@michigan.gov	

CONTRACT SUMMARY

MEDICAID PROCESSING SYSTEM (CHAMPS)

INITIAL EFFECTIVE DATE	INITIAL EXPIRATION DATE	INITIAL AVAILABLE OPTIONS	EXPIRATION DATE BEFORE
March 14, 2006	September 30, 2011	20 - 1 Year	September 30, 2026

PAYMENT TERMS	DELIVERY TIMEFRAME

ALTERNATE PAYMENT OPTIONS			EXTENDED PURCHASING	
☐ P-Card	☐ PRC	☐ Other	☐ Yes	☒ No

MINIMUM DELIVERY REQUIREMENTS

DESCRIPTION OF CHANGE NOTICE

OPTION	LENGTH OF OPTION	EXTENSION	LENGTH OF EXTENSION	REVISED EXP. DATE
☐		☐		September 30, 2026

CURRENT VALUE	VALUE OF CHANGE NOTICE	ESTIMATED AGGREGATE CONTRACT VALUE
$1,013,886,284.00	($4,091,075.00)	$1,009,795,209.00

DESCRIPTION

Effective 5/1/2019, the parties hereby reduce the contract by $4,091,075.00, comprised of (1) reducing Additional Operational Services by $1,725,185 and (2) reducing labor rates by 7.5% retroactive to 10/1/2018 (cost reduction of $2,365,890). Further, the September 2019 enhancements will be performed in October 2019. See attached Operations Services Addendum for further details. All other terms, conditions, specifications, and pricing remain the same. Per Contractor, agency and DTMB Procurement approval.

May 2019 – Operations Services Addendum

1.0 Amendment Background

This amendment modifies the previously executed Operations agreement between the State of Michigan and CNSI for Fiscal Year 2019. Section 2.0 describes the elimination of services that are required of CNSI from May 2019 through September 2019 based on decisions made by MDHHS. CNSI expects relief from SLAs associated with scope of work changes.

In addition, CNSI has implemented a 7.5% retroactive rate reduction for all Operations Services for FY 2019 which is detailed in Section 3.1

Finally, MDHHS has requested that the September 2019 enhancement release be deferred to October 2019.

2.0 Service Modifications

The following sections detail the service and scope contractual requirements that are included in this amendment, as well the corresponding adjustments required for SLAs. There will be resulting impacts to MDHHS business areas from the service and scope changes contained within this amendment.

2.1 eMIPP Support

MDHHS has decided that this service currently provided by CNSI be reduced. This has the following Service and SLA Impacts:

- Support limited to defects or Severity 1 production tickets
- CNSI will need SLA relief for tickets of Severity levels below 1

2.2 Predictive Modeling

MDHHS has decided that this service currently provided by CNSI be reduced. This has the following Service and SLA Impacts:

- CNSI's claims review volume will decrease to a new threshold based on reduced staffing levels

2.3 Operational Data Store Support

MDHHS has decided that this service currently provided by CNSI be reduced. This has the following Service and SLA Impacts:

- CNSI will not be able to support ad hoc requests for assistance on ODS
- Support activities will be confined to supporting defects or production outages only

2.4 Facility Settlement Support

MDHHS has decided that this service currently provided by CNSI be reduced. This has the following Service and SLA Impacts:

- Increased timeline for responding to ad hoc requests from 1 business day to 5 business days

2.5 Mobile Platform Support

MDHHS has decided that this service currently provided by CNSI be eliminated. This has the following Service and SLA Impacts:

- No Production Support capability except to resolve Mobile Platform defects and Severity 1 production tickets
- SLAs will no longer apply for issues with Severity levels below 1

2.6 Consumer Engagement Support

MDHHS has decided that this service currently provided by CNSI be eliminated. This has the following Service and SLA Impacts:

- No Production Support capability except to resolve Consumer Engagement defects and Severity 1 production tickets
- SLAs will no longer apply for issues with Severity levels below 1
- No demo app support (for example - trade shows and discussions with MPHI)
- No support for MILogin issues
- No support for Training Needs

2.7 Audit Compliance Support

MDHHS has decided that this service currently provided by CNSI be eliminated. This has the following Service and SLA Impacts:

- Turnaround time for audit requests will need to be adjusted from 24 hours to a minmum of 5 days except for emergency requests.

2.8 PCS & Core Compliance Support

MDHHS has decided that this service currently provided by CNSI be eliminated. This has the following Service and SLA Impacts:

- CNSI will not be able to directly support PCS provider credentialing data issues
- State staff will need to work directly with LexisNexis on provider credentialing data issues

2.9 Enhancements

MDHHS has decided that the September enhancement release and billing be postponed to October 2019. Table 3 below outlines the resulting reduction in enhancement hours for FY 2019.

3.0 Resources and Costs

The below sections describe the resource allocations and associated costs for the modified services that CNSI will provide from May 1, 2019 through September 30, 2019.

3.1 Operations Services Rate Reduction

CNSI has retroactively reduced the cost of CHAMPS Operations Services through a 7.5% reduction in all rates for FY 2019. The contracted services amount for FY 2019 of **$31,501,475** has been reduced by **$2,365,890**.

3.2 Resource Allocation and Cost Per Service Area

The below table depicts the revised resource allocations based upon the requested reductions in services. The resource allocations are broken down by Service Layer and include subtotals and overall totals.

Table 2. Revised 2019 Amendment Staffing

Service Layer	October 2018 – April 2019	May 2019 – September 2019	Reduction
Core Operations	41	41	0
Issue Resolution	6	6	0
Management	6	6	0
SME	6	6	0
Subtotal Operations	**59**	**59**	**0**
Data Warehouse/Data Dictionary Support	1	1	0
eMIPP Support	1	.5	.5
DMP Support	1	1	0
Subtotal Supplemental Services	**3**	**2.5**	**.5**
Predictive Modeling	16	8	8
Operational Data Store	2	1	1
Facility Settlement	9	7	2
Mobile Platform Support	1	0	1
Consumer Engagement	1	0	1
Audit Compliance	1	0	1
PCS & Core Compliance	1	0	1

Subtotal Additional Services	31	16	15.5
Total	**93**	**77.5**	**15.5**

Table 3. FY 2019 Enhancement Reductions

Service Layer	Prior to Amendment	After Amendment	Reduction
Enhancement Hours Remaining for FY 2019	19,500	11,500*	8,000*

*** Approximate based on State approved enhancement hours**

Table 4. Revised FY 2019 Annual Costs Reflecting Changes

Service Layer	Prior to Amendment	After Amendment	Reduction
Core Operations	$10,839,088	$10,839,088	-
Issue Resolution	$1,586,208	$1,586,208	-
Management	$1,934,400	$1,934,400	-
SME	$1,934,400	$1,934,400	-
Subtotal Operations	**$16,294,096**	**$16,294,096**	**-**
Enhancements	$6,243,078	$5,003,078	$1,240,000
Data Warehouse/Data Dictionary Support	$264,368	$264,368	-
eMIPP Support	$264,368	$209,334	$55,034
DMP Support	$322,400	$322,400	-
Subtotal Supplemental Services	**$7,094,214**	**$5,799,180**	**$1,295,034**
Predictive Modeling	$3,857,485	$3,054,460	$803,025
Operational Data Store	$644,800	$510,570	$134,230
Facility Settlement	$2,379,312	$2,159,175	$220,137
Mobile Platform Support	$322,400	$188,170	$134,230
Consumer Engagement	$264,368	$154,299	$110,069
Audit Compliance	$322,400	$188,170	$134,230

PCS & Core Compliance	$322,400	$188,170	$134,230
Subtotal Additional Services	**$8,113,165**	**$6,443,014**	**$1,670,151**
SubTotal Services	**$31,501,475**	**$28,536,290**	**$2,965,185**
After 7.5% Rate Reduction		**$26,170,401**	**$2,365,890**
Licensing	**$1,133,066**	**$1,133,066**	**$0**
Total	**$32,634,541**	**$27,303,467**	**$5,331,075**

STATE OF MICHIGAN
ENTERPRISE PROCUREMENT
Department of Health and Human Services
235 South Grand Avenue, Lansing, MI 48913
P.O. Box 30037, Lansing, MI 48909

CONTRACT CHANGE NOTICE

Change Notice Number 28
to
Contract Number 071B6200168C

CONTRACTOR	
	Client Network Services, Inc
	2277 Research Blvd
	Rockville, MD 20850
	Tom Sofo
	(301) 634-4672
	Tom.sofo@cns-inc.com
	CV0059061

STATE		
	Crystal Kline	MDHHS
	(517) 284-1184	
	KlineC1@michigan.gov	
	Jarrod Barron	DTMB
	(517) 249-0406	
	BarronJ1@michigan.gov	

CONTRACT SUMMARY			
DESCRIPTION: Medicaid Services Administration			
INITIAL EFFECTIVE DATE	INITIAL EXPIRATION DATE	INITIAL AVAILABLE OPTIONS	EXPIRATION DATE BEFORE CHANGE(S) NOTED BELOW
March 14, 2006	September 30, 2011	Two, one-year	September 30, 2026
PAYMENT TERMS		DELIVERY TIMEFRAME	
Net 30		Per fiscal year project payment schedule	
ALTERNATE PAYMENT OPTIONS		EXTENDED PURCHASING	
☐ P-card ☐ Direct Voucher (DV) ☐ Other		☐ Yes ☒ No	
MINIMUM DELIVERY REQUIREMENTS			
CNS must meet the project delivery requirements agreed upon by MDHHS in project Statements of Work			

DESCRIPTION OF CHANGE NOTICE				
OPTION	LENGTH OF OPTION	EXTENSION	LENGTH OF EXTENSION	REVISED EXP. DATE
☐		☐		
CURRENT VALUE	VALUE OF CHANGE NOTICE	ESTIMATED AGGREGATE CONTRACT VALUE		
$1,013,886,284.00	$0.00	$1,013,886,284.00		

DESCRIPTION: Effective upon MDHHS signature, the following attachments are hereby incorporated into this contract:
a. CHAMPS Healthy Michigan Plan Waiver 3
b. CHAMPS Behavioral Health Integration
c. CHAMPS Workforce Engagement
d. CHAMPS Level of Care Determination Process
e. 2019 Operations Services Addendum

Additionally, the Program Manager changed from Kristi Brossel to Crystal Kline and the Contract Administrator changed from Simon Baldwin to Jarrod Barron.

All other terms, conditions, pricing and specifications remain unchanged.

By signing this Contract, the Contractor certifies and assures to the state that they will comply with the Anti-Trust Lobbying Act 31 USC 1352, as revised by the Lobbying Disclosure Act of 1995, 2 USC 1601 et seq, Federal Acquisition Regulations 52.203.11 and 52.203.12, and Section 503 of the Department of Labor, Health & Human Services and Education, and Related Agencies section of the current fiscal year Omnibus Consolidated Appropriations Act.

FOR THE CONTRACTOR:

Client Network Services, ~~Inc.~~ LLC
Contractor

Tom Sofo
Signature of Director or Authorized Designee

Tom Sofo
Print Name

3/26/19
Date

FOR THE STATE:

Christine H. Sanches
Signature

Christine H. Sanches, Director
Name & Title

Michigan Department of Health and Human Services, Bureau of Grants and Purchasing
Agency

4·17·19
Date

CHAMPS Healthy Michigan Plan Waiver 3
Statement of Work

Prepared For:
State of Michigan
Department of Health & Human Services
400 South Pine Street
Lansing, Michigan 48909

Prepared By:

CNSI
6465 Millennium Drive, Suite 150
Lansing, MI 48917

CNSI
WWW.CNS-INC.COM

September 13, 2018

This document contains proprietary information intended to be provided to key management staff of the State of Michigan. It should not be released to third parties or used for other purposes without the express written consent of CNSI.

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Section 1: Introduction

On September 10, 2018, the Michigan Department of Health and Human Services (MDHHS) submitted an application for extension of the Section 1115 Healthy Michigan Plan (HMP) demonstration waiver.

HMP is predicated on the establishment of the Healthy Behaviors Incentives Program and the MI Health Account (MIHA) which support beneficiary participation in healthy behaviors and awareness of personal health care utilization costs. The Healthy Behaviors Incentives Program encourages beneficiaries to achieve and maintain healthy behaviors in collaboration with their primary care providers, primarily through completion of a standardized Health Risk Assessment (HRA) and attesting to a healthy behavior. All HMP beneficiaries enrolled in Medicaid Health Plans (MHPs) have the opportunity to earn program incentives which are applied consistently across the participating plans.

HMP also implements innovative approaches to beneficiary cost-sharing and financial responsibility for health care expenses. For the subset of HMP beneficiaries with an income above 100% of the federal poverty level (FPL), there is a requirement to pay monthly contributions toward the cost of their health care. The MIHA is a vehicle to collect cost sharing and also serves to increase beneficiary awareness of health care costs and promote engagement in their health service utilization.

On December 17, 2015, the Centers for Medicare & Medicaid Services (CMS) approved an amendment to the HMP demonstration waiver which was referred to as the "Marketplace Option." Beneficiaries who were scheduled to be impacted by that amendment were those:

- With income above 100% of the FPL,
- Enrolled in an MHP for twelve (12) consecutive months or more,
- Who did not complete a healthy behavior,
- Who were not medically frail in accordance with 42 CFR 440.315, and
- Who were not exempt from premiums and cost-sharing pursuant to 42 CFR 447.56

Through the demonstration extension application process, MDHHS requested to amend certain elements of the HMP to comply with Public Act 208 of 2018. Specifically, MDHHS requested approval to amend the HMP waiver eligibility coverage and cost-sharing requirements applicable to individuals between 100% and 133% of the FPL who have had 48 months of cumulative eligibility coverage through HMP. MDHHS also requested provisions to address exemptions related to cost-sharing, medically frail individuals, and beneficiary hardship. Finally, MDHHS plans to end the Marketplace Option benefit.

In furtherance of Medicaid program objectives, Michigan seeks to promote work and community engagement and provide incentives to beneficiaries to increase their sense of purpose, build a healthy lifestyle, and further the positive physical and mental health benefits associated with work. Approval of this demonstration extension application request would allow the State of Michigan to continue to provide comprehensive health care coverage while incorporating new innovative approaches and structural incentives to increase beneficiary engagement in healthy behaviors and to promote personal responsibility in maintaining health care coverage.

This Statement of Work defines the scope of CHAMPS changes required to support the HMP Waiver 3 requirements and provides the high-level schedule to implement the changes.

Section 2: Solution Overview

This section summarizes CNSI's proposed CHAMPS HMP Waiver 3 functionality, including a functional overview, the proposed project timeline, and the project stages for meeting the objectives of the project. Full business and technical requirements will be elicited and documented as a part of the first phase of the project.

2.1 Functional Overview

The following CHAMPS HMP Waiver 3 scope is based on high-level specifications provided to CNSI by MDHHS.

- CHAMPS will receive, and process increases in cost share premiums from 2% to 5% for beneficiaries enrolled for 48 cumulative months, based on change records received from the MIHA system.
- Notify HMP-enrolled beneficiaries of the need to complete their annual healthy behavior assessment.
- Support the ability for HMP-enrolled beneficiaries to submit their annual healthy behavior assessment.
- For HMP enrolled beneficiaries who are not compliant with both Healthy Behavior and Cost Share requirements, CHAMPS will notify Bridges, who will end the beneficiary's eligibility.
- Support the ability to capture and track exemptions for Healthy Behavior compliance.
- Support the ability to capture and track exemptions for Cost Share exemptions.

2.2 Technical Overview

CNSI has identified the following high-level CHAMPS changes. Detailed changes will be identified during the requirement and design phases.

- Create a new interface to Bridges to report non-compliance.
- Use the existing HSDW Healthy Behavior 1040.02 interface file with possible modifications.
- Modify the 1040.03 Healthy Behavior interface from HSDW as required.
- Modify the 1038.10 and 1038.11 interface files between MAX-OFA and CHAMPS as required.
- Modify the 1041.03 (Send Health Risk Assessment Data to MCOs) and subsequent processing EE rules.
- Modify the 1039.01 (Send Title 19 Eligibility to MAXeb).
- Revise the CHAMPS cost-share logic.
- Revise cost-share integration with MAX-OFA.
- Change CHAMPS Member subsystem screens as needed.
- Generate beneficiary correspondence related to non-compliance.
- Revise ODS and Cognos functions as needed.
- Update the CHAMPS data model.
- Update the CHAMPS EE Data Warehouse extract.
- Modify the Health Risk Assessment questions in myHealthPortal and myHealthButton as required.
- Modify re-enrollment logic as needed, including Long Term Care admissions/enrollments.
- Permanently remove any previous Marketplace Option design and code that will not be used.

2.3 Solution Delivery Plan

In this section, CNSI presents the proposed timeline, technical approach, and staged delivery approach for the **Healthy Michigan Plan Waiver 3** project.

A detailed description of the activities and deliverables within each stage is presented in *Section 2.3.3 Staged Delivery Summary*.

CNSI structured this work plan to address the overall relationship and sequence of the work required to complete the project. It effectively uses the professional resources required to successfully complete the work and produce high-quality products in a cost-conscious manner.

The following subsections further describe how CNSI intends to accomplish the goals of the work plan by employing its Midwest iVision360 framework in the proposed approach for the **Healthy Michigan Plan Waiver 3** project.

2.3.1 High-Level Timeline

CNSI has created a summary timeline and work plan for the HMP Waiver 3 project. The timeline is shown in Figure 1. The timeline shows the approximate duration of each stage and phase of the work for the project. This timeline was developed based on the estimated effort of the work necessary to accomplish the proposed technical and functional solutions.

The proposed timeline was developed with the goal of optimizing the effective use of the professional resources required to accomplish this scope of work and produce high-quality products in a cost-conscious manner.

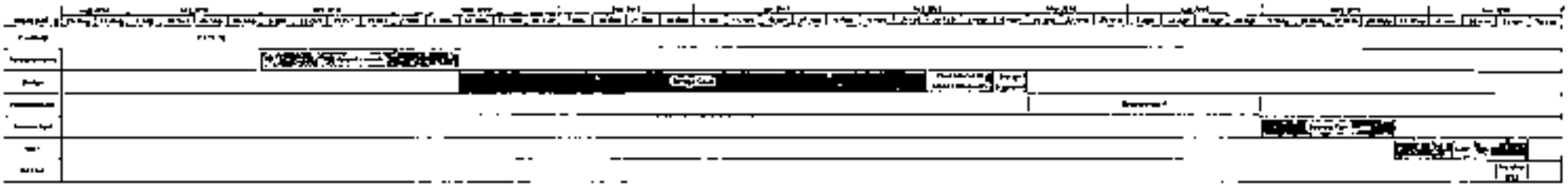

Figure 1. Initial HMP Waiver 3 Project Timeline

2.3.2 Midwest iVision360 Delivery Processes

In this section, CNSI provides an outline of its Capability Maturity Model Integration (CMMI) Maturity Level 3-appraised Midwest iVision360 Framework, which includes a full system development lifecycle (SDLC) model supporting the delivery of the technical solution. CNSI's SDLC processes have been adapted to address the specific needs of the HMP Waiver 3 project. CNSI will produce deliverables for each phase of the project.

CNSI will engage in requirements analysis and design with the customer in order to begin iterative development. CNSI will provide an opportunity for the customer to review design documents prior to the start of system development activity.

Iterative, agile development under the Midwest iVision360 delivery framework is visible in Stage II for the HMP Waiver 3 project. During this stage, technical design specifications for new or impacted functions and user stories are constructed in parallel by the software engineers and Subject Matter Experts (SMEs). As the impacted function's design is completed, the team lead plans the iterations required to complete development.

Development work is planned based on a two-week iteration schedule. Software engineers build internal design documentation prior to, and during, the two-week iterations. The first day of each iteration is reserved for startup activities, including finalizing the iteration's internal design documentation. The software engineer meets with the Data Modeling Team on the first day of the iteration and conducts a walkthrough of any required data model changes. The Data Modeling Team makes the required changes to the database schema and approves the physical model for coding.

Development begins once the internal design and pre-development work is completed for the iteration. The software engineer writes internal iteration test scripts in parallel to actual working code and updates screens and other system functions to fit the physical mode. The software engineer executes the iteration test scripts as they complete sections of code. The software engineer builds the code, tests incrementally, and coordinates and communicates with the team through daily stand-up meetings regarding any issues holding up the development work.

Software engineers then test the code against the internal auto-unit code and manual internal iteration test scripts. As they reach the end of the iteration, they run the code against the functional scripts developed by the Test Team. Discrepancies are identified and corrected. The software engineer retests to ensure all discrepancies are corrected and closed before the iteration ends. The software engineer then conducts a peer review of the code of a given function on the last day of the iteration. The software engineer then updates the code based on the review. When software engineer iteration testing and software code reviews are successfully completed for the iteration, the code is then promoted to the integration test stream. The code is released to the Test Team for system testing when the coding and software engineer iteration testing is completed for all user stories for a given function.

During initial development iterations, the Test Team develops system test cases based on the current system solution specifications. During system testing, the Test Team executes system test cases to validate system results against the current production functionality.

For the HMP Waiver 3 project, CNSI plans to engage the Test and Development Teams early on to build the regression test suite for the critical functions. This will speed up testing and improve the overall quality of implementation. CNSI understands the importance and sensitivity of the HMP Waiver 3 project and the need to ensure it aligns with the environment that is already in production. During system testing, regression tests will be performed to demonstrate that the solution continues to function as expected.

As soon as regression testing is completed for a function, CNSI will deliver the code to the User Acceptance Testing (UAT) environment. CNSI plans to engage the customer as early as possible and well before the beginning of the planned UAT phase. This ensures that enough time is allowed for thorough UAT, which will also reduce the risk of schedule slippage for UAT completion. CNSI will deploy system- and regression-tested functions to the UAT environment as they are completed.

Figure 2 presents a graphical overview of the Midwest iVision360 delivery framework processes applicable to the HMP Waiver 3 project.

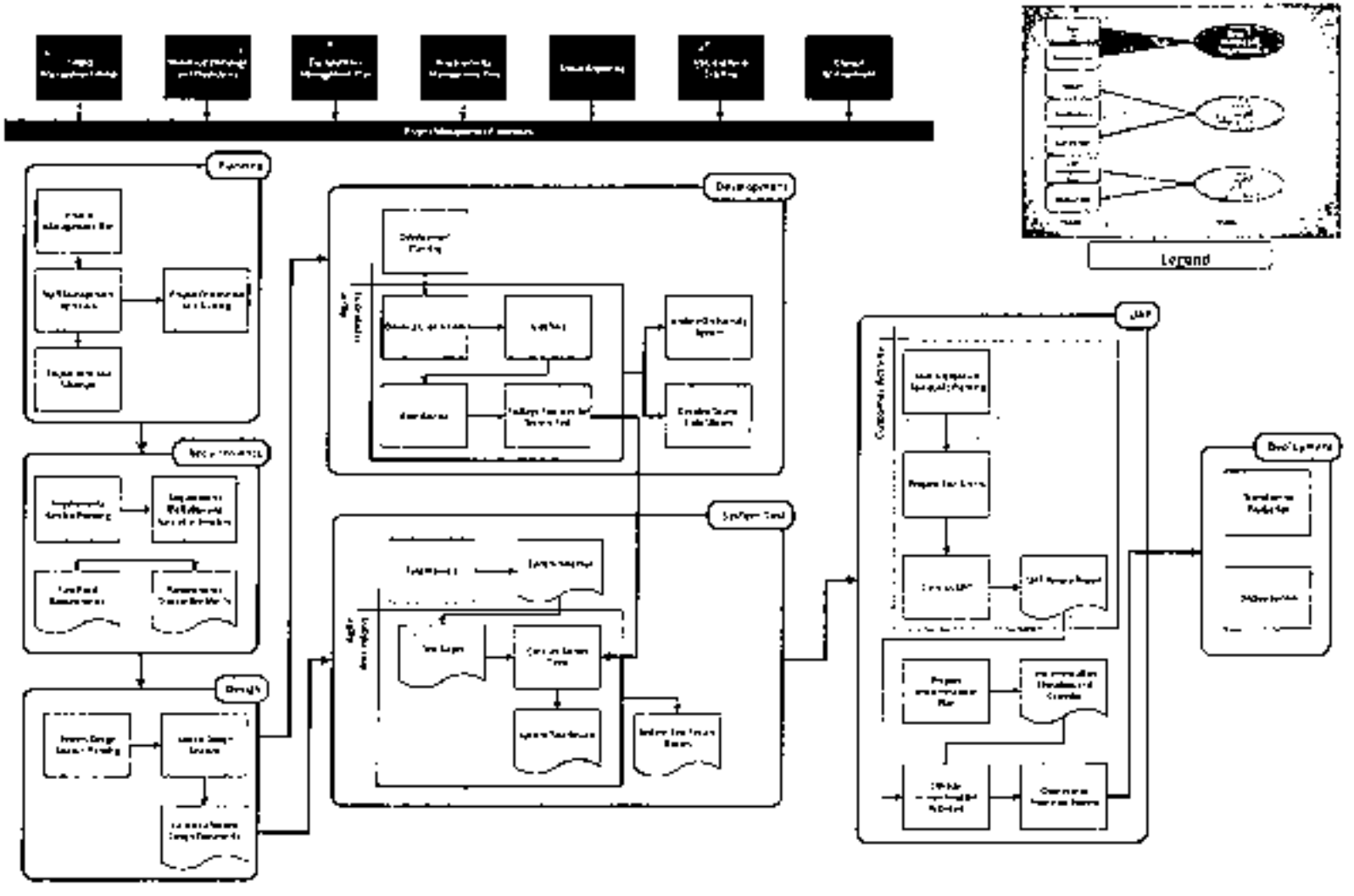

Figure 2. Midwest iVision360 Process Diagram

2.3.3 Staged Delivery Summary

CNSI proposes a staged delivery of HMP Waiver 3 which incorporates the seven phases of CNSI's CMMI Maturity Level 3-appraised Midwest iVision360 delivery framework. This top-down approach provides an easily understandable grouping of activities with similar resource requirements and related groupings of deliverables along with three major milestones following each stage to facilitate monitor and control of the initiative.

Figure 3 below summarizes the staged delivery using the seven phases of the Midwest iVision360 delivery framework.

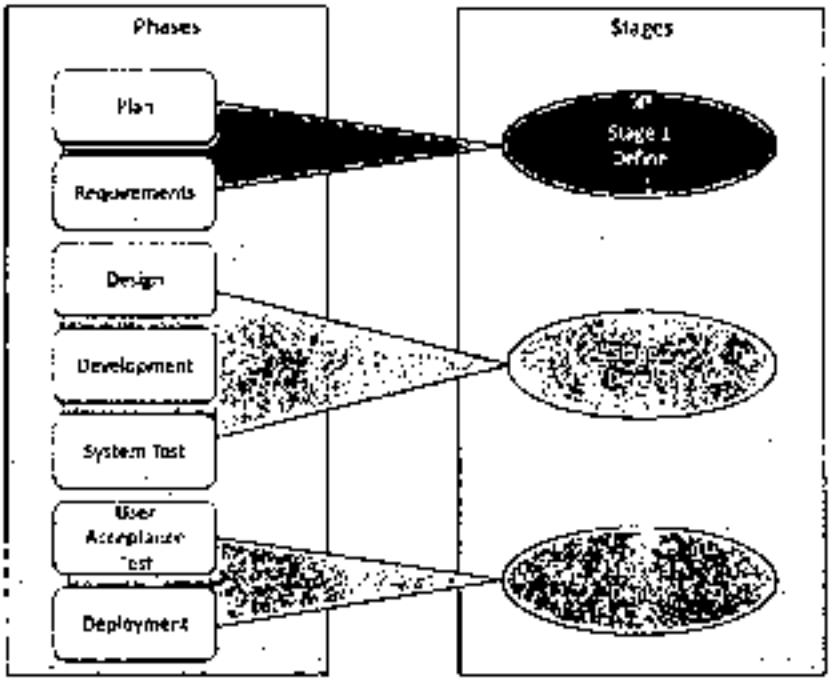

Figure 3. Midwest iVision360 Framework Phases and Stages

Figure 3 provides a high-level overview of the project stages with major activities and anticipated deliverables. Note that the overall timeline for the project presented in shows a 10-month total duration. The stages shown in Figure 4 are aggregated across project phases and, in some instances, will overlap to accomplish the total work needed in the 10-month duration.

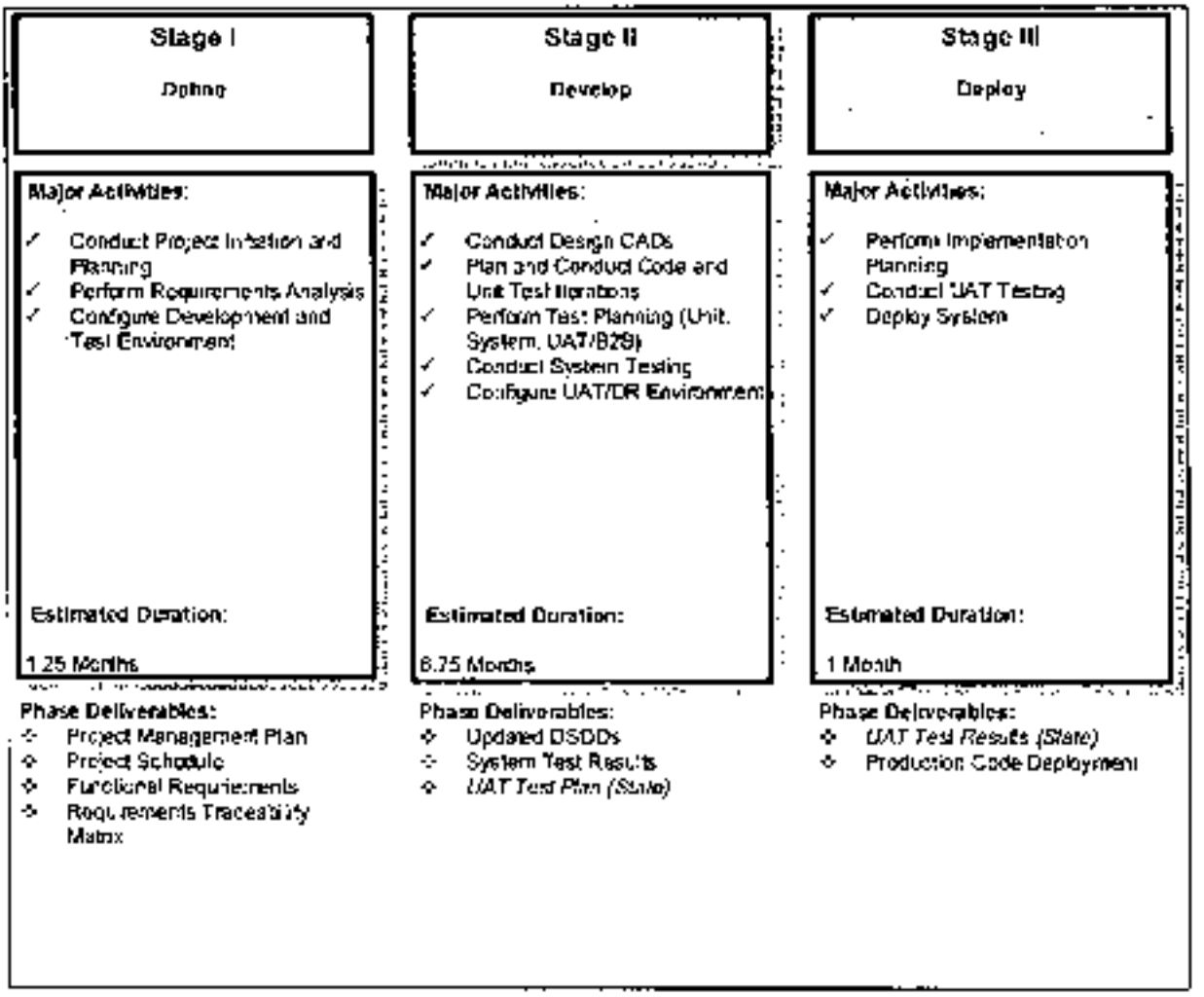

Figure 4. High-Level Project Stages and Activities

With every project, there are critical milestones to be met and work products and deliverables that must be developed and produced in order to provide the inputs necessary to perform the next activity. **Table 1** elaborates on the activities of the proposed project timeline, along with the expected deliverables.

In **Table 1**, **bold** text in the deliverables sections indicate formal deliverables; *italicized* text indicates State acceptance tasks and deliverables.

Table 1. High-Level Activities and Milestones by Stage

Major Activity	Description	Stage
Project Initiation	Establish the project team structure, key stakeholders, and operating guidelines for team activity throughout the course of the project.	Stage I
Project Planning	Develop PMP, schedule, and metrics.	Stage I

Major Activity	Description	Stage
Requirements Analysis	Conduct collaborative application development (CAD) sessions to elicit and validate requirements for the **Healthy Michigan Plan Waiver 3** project.	Stage I
Stage I Deliverables • **Project Management Plan** • **Project Work Plan** • **Requirements Specification Document** • Initial Requirements Traceability		
Design Analysis	Conduct CAD sessions to document detailed system design changes for the **Healthy Michigan Plan Waiver 3** project.	Stage II
Test Planning	Conduct detailed test planning for each phase of testing.	Stage II
Software Development	Develop and unit test software required to support the detailed functional design including: • Screens • Functionality (driven by use cases) • Data Models • Reports • Interfaces	Stage II
System Testing	Internal CNSI testing of developed functionality at the component, subsystem, and system level.	Stage II
Stage II Deliverables • **As-Built DSDD** • Test Plan • **System Test Results** • Updated Online Help • *User Acceptance Test Plan*		

Major Activity	Description	Stage
Implementation Planning	Coordinate production installation of the system changes.	Stage III
UAT Support	MDHHS testing of all system changes using formal UAT test scripts.	Stage III
Production Deployment	CNSI and the State of Michigan deploy the modifications in the MDHHS production CHAMPS environment.	Stage III
Stage III Deliverables • *UAT results* • Operational Support Forecast Report • Finalized Online Help • **Code Deployment to Production**		

2.3.3.1 Stage 1 – Initiation and Requirements

Activity 1 – Project Initiation

During this activity, CNSI will collaborate with the State of Michigan to identify the key business and technical team members who will participate in the **Healthy Michigan Plan Waiver 3** project. CNSI will conduct the formal project kickoff and deliver orientation for the project effort.

The major milestones associated with this activity are:

- Participating team members from the State of Michigan are identified.
- Project kickoff meeting is conducted and project kickoff is completed.

Activity 2 – Project Planning

During this activity, CNSI will develop the PMP. The PMP outlines the standards and procedures for risk, issue, and action item management; project governance plan to coordinate activities between the CNSI project team and the State of Michigan; communications plan; deliverable management plan; project work breakdown structure (WBS); and the baseline schedule.

Milestones associated with this activity are:

- PMP is delivered.
- Project work plan is delivered.

Activity 3 – Requirements Analysis

The goals of the **Healthy Michigan Plan Waiver 3** project have been defined at a high level within this statement of work. During this activity, CNSI will host CAD sessions to elicit and validate detailed functional and technical requirements. The CAD sessions will include the State of Michigan and CNSI functional and technical SMEs. CNSI will compare the validated requirements with current CHAMPS functionality and technical architecture to determine the impact of the new requirements across all CHAMPS subsystems, including system aspects such as:

- New and modified screens.
- Functionality (use cases).
- Data models.
- Reports.
- Interfaces.

This will result in a requirements specification document which provides a clear, concise, and final definition of each requirement. The approved requirements will be used during the design and development activities in Stage II.

The major milestones associated with this activity are:

- Functional requirements specification document is delivered.
- Approved requirements have been loaded into the requirements repository.

2.3.3.2 Stage II – Design, Coding, and System Testing

Activity 1 – Design Analysis

During this activity, CNSI will host CAD sessions to produce detailed design artifacts. Sessions will be organized and scheduled per requirements for the affected CHAMPS subsystem and the solution's technical architecture. CAD sessions will include State of Michigan and CNSI functional and technical SMEs. Using the existing CHAMPS design and the requirements specification document as a starting point, session participants will identify and document required design changes including system aspects such as:

- Screens.
- Functionality (use cases).
- Data models.
- Reports.
- Interfaces.

This will result in final, revised design artifacts, including use cases and data models, which will be the basis for the development of changes to system functions. CNSI will submit the completed design artifacts to the appropriate State of Michigan decision-maker shortly after the completion of a CAD

session. The State of Michigan decision-maker will formally approve the design artifacts via signature on an approval form, similar to the existing CHAMPS enhancement approval process. This approval indicates that design is final and development can begin.

The major milestone associated with this activity is:

- Delivery of the as-built DSDD.

Activity 2 – Test Planning

During this activity, CNSI collaborates with the State of Michigan to determine the required set of tests to be executed. CNSI prepares test scenarios and scripts for each phase of internal testing, including system testing and regression testing. The system test scenarios and scripts are prepared by the CNSI Test Lead. The State of Michigan prepares the UAT test plan and related test scenarios and script during this activity time frame.

Milestones associated with this activity include:

- System test plan is completed.
- System test scenarios and scripts are completed.
- *UAT preparation is completed (State).*

Activity 3 – Software Development

At the beginning of this activity, the development iteration plan is prepared. During this activity, CNSI codes the software changes required to support the updated detailed functional and technical design. Development is performed through a series of bi-weekly development iterations as previously described. Development includes the coding changes as defined in the as-built DSDDs for CHAMPS, including system aspects, such as:

- Screens.
- Functionality (use cases).
- Data models.
- Reports.
- Interfaces.

At the conclusion of each development iteration, the developed code is delivered to the CNSI Test Team. The major milestone associated with this activity is the completion of all development iterations.

Activity 4 – System Testing

During this activity, CNSI tests the developed functionality at the component, subsystem, and system levels in accordance with the test plan. Test results are compiled and at the conclusion of system testing, CNSI performs end-to-end (E2E) regression testing. At the conclusion of this activity, the test manager conducts a test readiness review meeting to ensure all entry criteria for the UAT phase are met.

Milestones associated with this activity include:

System test results report is delivered.

Code is deployed to UAT environment.

UAT begins.

2.3.3.3 Stage III – UAT and Production Deployment

Activity 1 – Implementation Planning

During this activity, CNSI collaborates with the State to coordinate the timing of the production installation of the system changes. The **Healthy Michigan Plan Waiver 3** project will be incorporated into the regular CHAMPS operational release implementation schedule. Implementation planning activities will focus on targeting the operational release that will include this initiative and integrating the new features into the release. During this activity, CNSI will review operational support projections for post-deployment support and prepare an operational support forecast report documenting any changes expected post-deployment.

Milestones associated with this activity include:

- Identification of the operational releases where the software will be deployed.
- Define implementation strategy.
- Preparation of the operational support forecast report.

Activity 2 – UAT Support

During this activity, CNSI provides support to MDHHS staff who will conduct UAT using formal, State-developed test scripts. UAT testing will be aligned with the selected operational releases where the code will be deployed. Defects identified are monitored and corrected throughout UAT.

The major milestones associated with this activity include:

- *UAT test results report (State deliverable).*
- Final defect correction report.
- State approval to deploy the software.

Activity 3 – Production Deployment

During this activity, CNSI and the State of Michigan collaborate to execute the implementation strategy. The finalized code will be merged into the selected regular operational release. CNSI deploys the release to the production environment where it is available for use by MDHHS staff.

The major milestones associated with this activity include:

Code is deployed to production.

Production support begins.

Section 3: General Assumptions and Constraints

CNSI has identified and provided the following general assumptions in regard to the HMP Waiver 3 project:

1. The proposed cost and schedule is based on the scope-of-work information provided to CNSI by MDHHS as listed in section 2.1 - Functional Overview. Increases to scope-of-work identified during the requirement and/or design phases will be assessed for impact to the project cost and schedule.
2. MDHHS and DTMB will provide access to, and time commitment from, subject matter experts who understand their programs and systems.
3. All other State systems, such as Bridges, MIHA, MAX-OFA and the Health Services Data Warehouse will meet all required project milestones pursuant to the approved Project Work Plan.
4. No conversion or migration of external data sources is required.
5. The State will plan and execute UAT pursuant to the approved Project Work Plan.

CNSI has identified the following constraints in regard to the **Healthy Michigan Plan Waiver 3** project:

1. The State requested to implement the HMP Waiver 3 functionality by June 2019.

Section 4: Proposed Project Cost

This section of our proposal presents our fixed-price, overall labor cost and hardware estimates for completing the Healthy Michigan Plan Waiver 3 project. The cost was derived based on the expected effort required as presented in our initial work plan, composed of the three stages depicted in Figure 4

The total fixed-price labor cost for the Healthy Michigan Plan Waiver project is $1,550,000.

Error! Reference source not found.below provides a schedule of proposed payments based on deliverables.

Table 2. Proposed Payment Schedule

Phase	Deliverable	Cost in $
Planning	Project Work Plan	$ 310,000
Requirements	Functional Requirements Specification	$ 310,000
Design	Design Artifacts	$ 310,000
System Test	System Test Results	$ 310,000
Production Release	Code Deployment	$ 310,000
	Total	**$ 1,550,000**

CHAMPS Behavioral Health Integration
Statement of Work

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September 28, 2018

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Section 1: Introduction

The Michigan Department of Health and Human Services (MDHHS) intends to conduct pilot projects and demonstration models is to test how the State may better integrate behavioral and physical health delivery systems in order to improve behavioral and physical health outcomes, maximize efficiencies, minimize unnecessary costs, and achieve material increases in behavioral health services without increases in overall Medicaid spending.

MDHHS will work with willing Community Mental Health Service Providers (CMHSP) and willing Medicaid health plans to pilot a full physical and behavioral health integrated service demonstration model.

Section 2: Solution Overview

This section summarizes CNSI's proposed CHAMPS Behavioral Health Integration functionality, including a functional overview, the proposed project timeline, and the project stages for meeting the objectives of the project. Full business and technical requirements will be elicited and documented as a part of the first phase of the project.

2.1 Functional Overview

The following CHAMPS Behavioral Health Integration scope is based on high-level specifications provided to CNSI by MDHHS.

- Establish CHAMPS benefit plans to support the Behavioral Health Integration pilot as depicted in Figure 5.

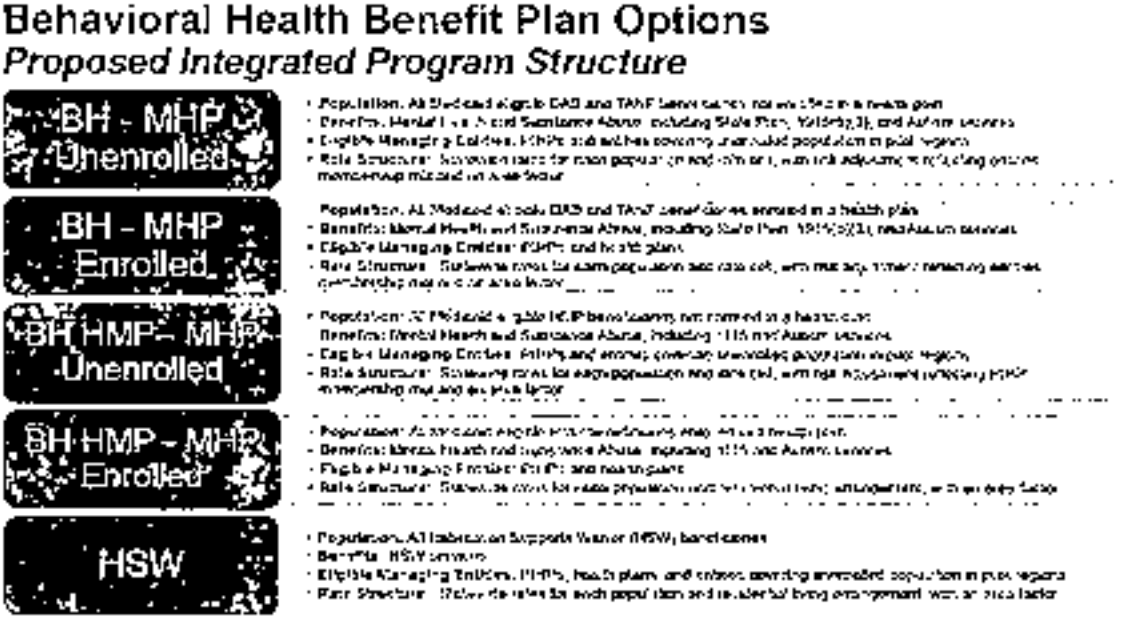

Figure 5. CHAMPS Benefit Plans to Support the BHI Project

- Process eligibility, enrollment and payments based on the structure depicted in Figure 6. This includes accommodating paying Mental Health rates to Medicaid Health Plans that are participating in the pilot.

Potential CHAMPS System Logic
Proposed Integrated Program Structure for DAB/TANF/HMP

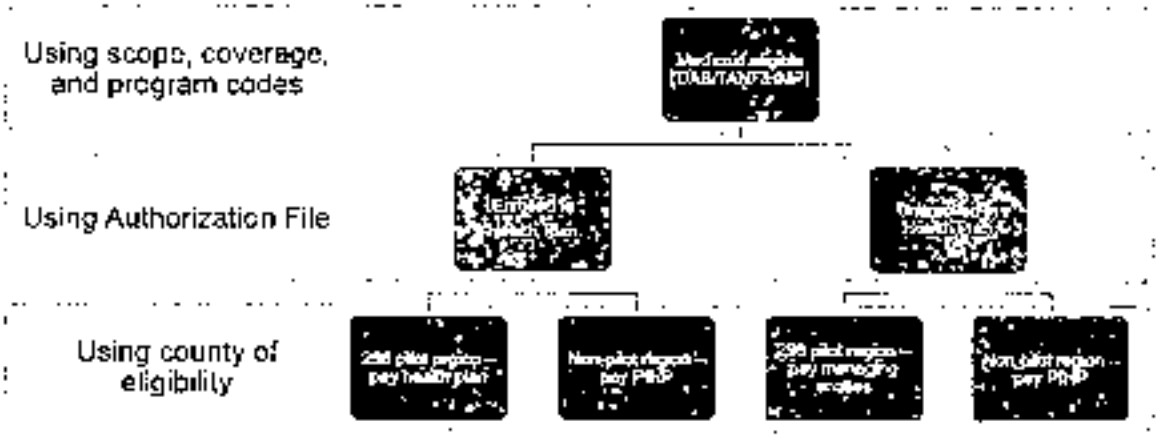

Figure 6. CHAMPS Eligibility, Enrollment and Payment Structure for the BHT Project

2.2 Technical Overview

CNSI has identified the following high-level CHAMPS changes. Detailed changes will be identified during the requirement and design phases.

Reference Sub-System:

- Create five new benefit plans
- Set up account codes

Member Subsystem Changes:

- Benefit plan assignment changes
- Retroactive enrollment changes
- Enrollment changes
- Screen changes
- Changes to integration with trading partners:
  - Enrollment Broker
  - Pharmacy Benefit Manager
  - Health Services Data Warehouse

Interface Changes:

- 1015.05 – Receive 1115 Waiver File From HSDW
- 1039.01 – Send Title 19 Eligibility To MAXeb
- 1032.01 – Send Eligibility And TPL Information To PBM
- 1038.02 – Receive Daily Enrollments And Disenrollments From MAXeb

- 1039.06 – Send Pre-edit Errors To MAXeb
- 1015.45 - Real-time CHAMPS View Service for MDHHS

HIPAA EDI Changes:

- 834 enrollment transaction
- 820 payment transaction
- 837 encounters
- 270/271 eligibility inquiry and response

Managed Care:

- New programs
- Rate structure changes
- Payment changes
- Recoupment changes

Claims:

- Claim edit changes

Facility Settlement:

- Settlement template changes

Consumer Engagement:

- Eligibility inquiry changes

ODS:

- Changes to data analytics

Cognos:

- Report changes or additions

2.3 Solution Delivery Plan

In this section, CNSI presents the proposed timeline, technical approach, and staged delivery approach for the **Healthy Michigan Plan Waiver 3** project.

A detailed description of the activities and deliverables within each stage is presented in *Section 2.3.3 Staged Delivery Summary*.

CNSI structured this work plan to address the overall relationship and sequence of the work required to complete the project. It effectively uses the professional resources required to successfully complete the work and produce high-quality products in a cost-conscious manner.

The following subsections further describe how CNSI intends to accomplish the goals of the work plan by employing its Midwest iVision360 framework in the proposed approach for the **Healthy Michigan Plan Waiver 3** project.

2.3.1 High-Level Timeline

CNSI has created a summary timeline and work plan for the Behavioral Health Integration project. The timeline is shown in Figure 1. The timeline shows the approximate duration of each stage and phase of the work for the project. This timeline was developed based on the estimated effort of the work necessary to accomplish the proposed technical and functional solutions.

The proposed timeline was developed with the goal of optimizing the effective use of the professional resources required to accomplish this scope of work and produce high-quality products in a cost-conscious manner.

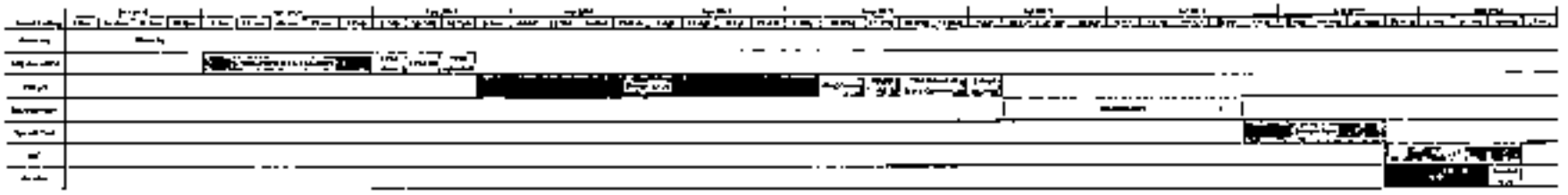

Figure 7. Initial Behavioral Integration Project Timeline

2.3.2 Midwest iVision360 Delivery Processes

In this section, CNSI provides an outline of its Capability Maturity Model Integration (CMMI) Maturity Level 3-appraised Midwest iVision360 Framework, which includes a full system development lifecycle (SDLC) model supporting the delivery of the technical solution. CNSI's SDLC processes have been adapted to address the specific needs of the Behavioral Health Integration project. CNSI will produce deliverables for each phase of the project.

CNSI will engage in requirements analysis and design with the customer in order to begin iterative development. CNSI will provide an opportunity for the customer to review design documents prior to the start of system development activity.

Iterative, agile development under the Midwest iVision360 delivery framework is visible in Stage II for the Behavioral Health Integration project. During this stage, technical design specifications for new or impacted functions and user stories are constructed in parallel by the software engineers and Subject Matter Experts (SMEs). As the impacted function's design is completed, the team lead plans the iterations required to complete development.

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As soon as regression testing is completed for a function, CNSI will deliver the code to the User Acceptance Testing (UAT) environment. CNSI plans to engage the customer as early as possible and well before the beginning of the planned UAT phase. This ensures that enough time is allowed for thorough UAT, which will also reduce the risk of schedule slippage for UAT completion. CNSI will deploy system- and regression-tested functions to the UAT environment as they are completed.

Figure 2 presents a graphical overview of the Midwest iVision360 delivery framework processes applicable to the Behavioral Health Integration project.

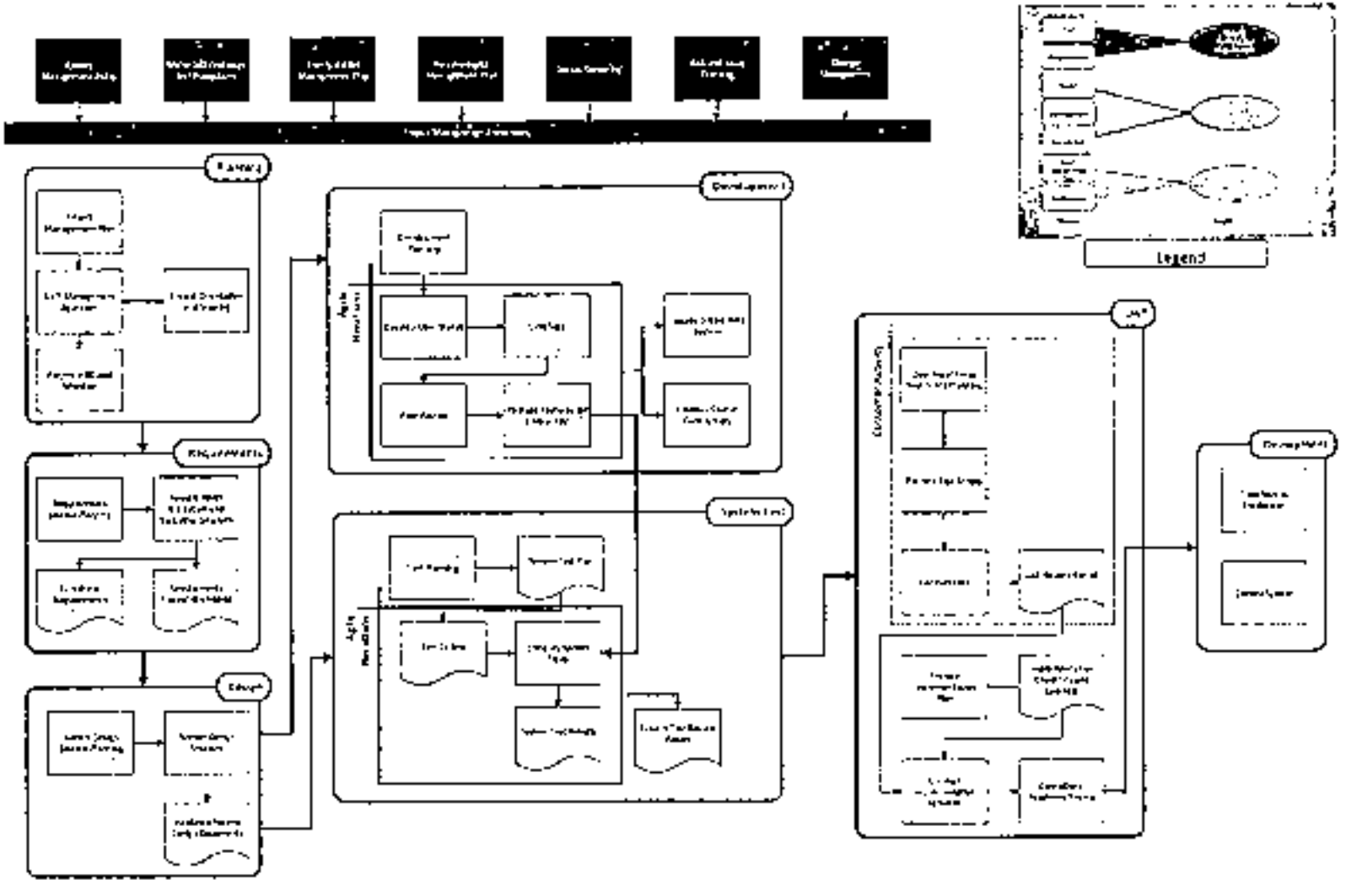

Figure 8. Midwest iVision360 Process Diagram

2.3.3 Staged Delivery Summary

CNSI proposes a staged delivery of Behavioral Health Integration which incorporates the seven phases of CNSI's CMMI Maturity Level 3-appraised Midwest iVision360 delivery framework. This top down approach provides an easily understandable grouping of activities with similar resource requirements and related groupings of deliverables along with three major milestones following each stage to facilitate monitor and control of the initiative.

Figure 3 below summarizes the staged delivery using the seven phases of the Midwest iVision360 delivery framework.

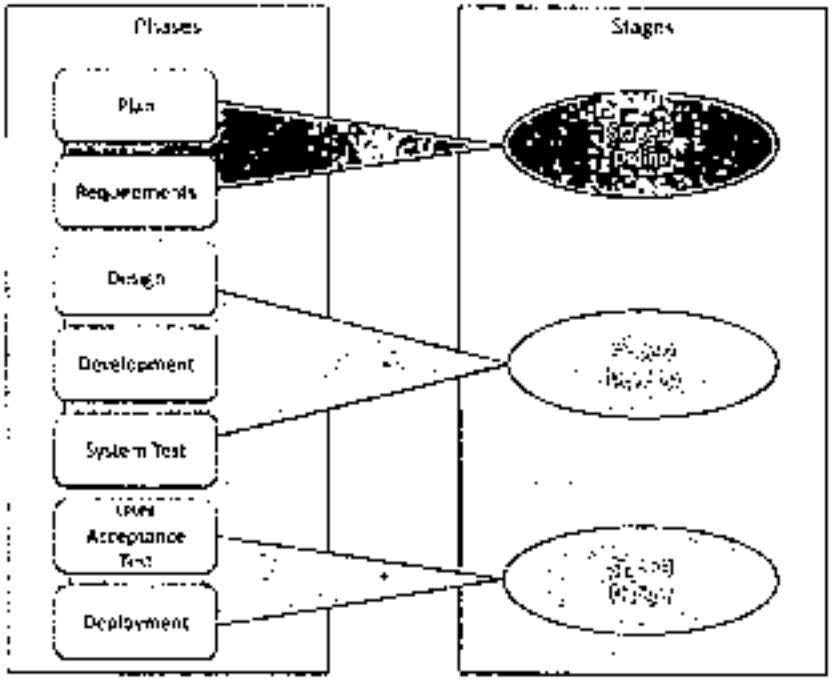

Figure 9. Midwest iVision360 Framework Phases and Stages

Figure 3 provides a high-level overview of the project stages with major activities and anticipated deliverables. Note that the overall timeline for the project presented in shows a 10-month total duration. The stages shown in Figure 4 are aggregated across project phases and, in some instances, will overlap to accomplish the total work needed in the 10-month duration.

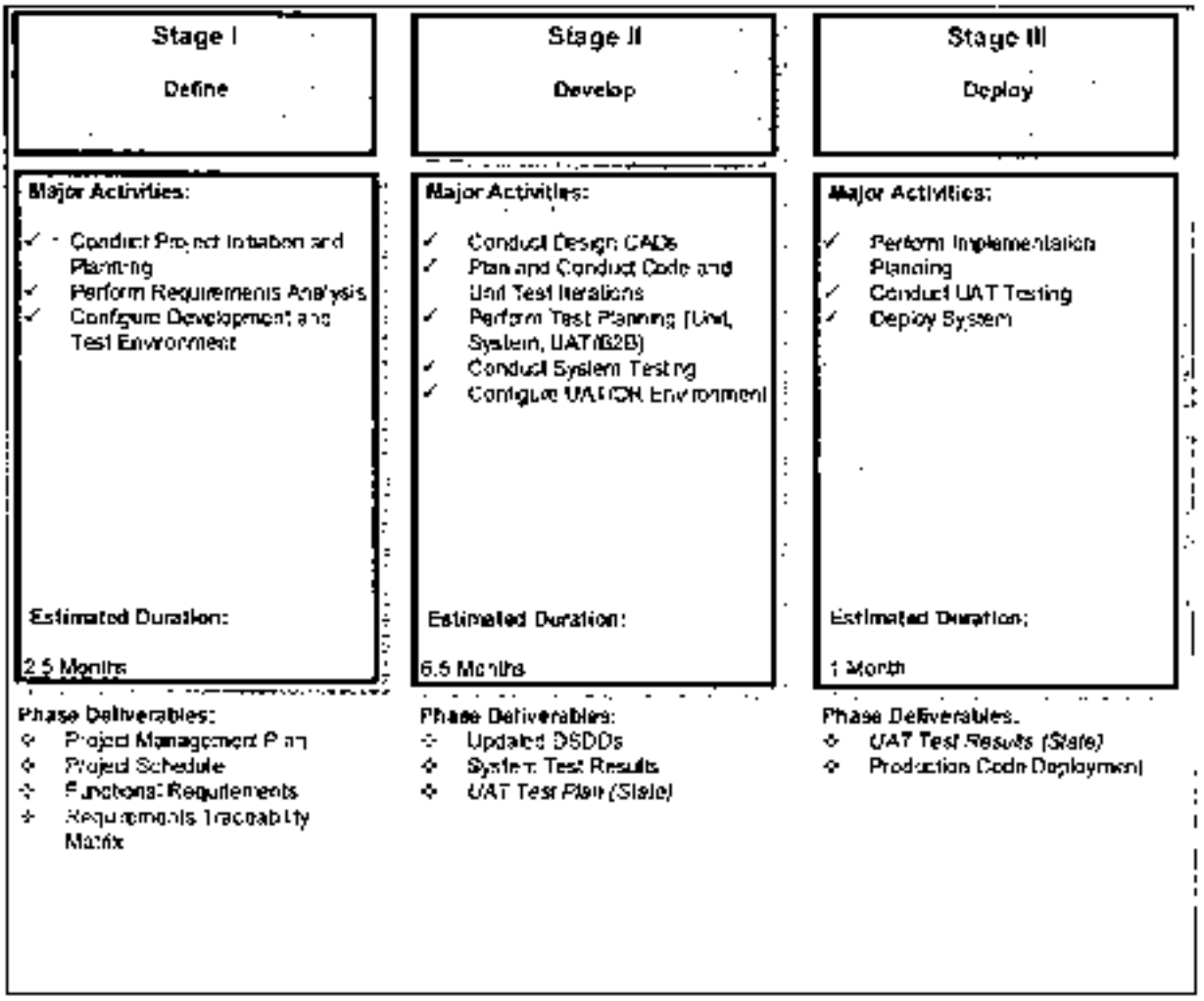

Figure 10. High-Level Project Stages and Activities

With every project, there are critical milestones to be met and work products and deliverables that must be developed and produced in order to provide the inputs necessary to perform the next activity. Table 1 elaborates on the activities of the proposed project timeline, along with the expected deliverables.

In Table 1, bold text in the deliverables sections indicate formal deliverables; *italicized* text indicates State acceptance tasks and deliverables.

Table 3. High-Level Activities and Milestones by Stage

High-Activity	Description	Stage
Project Initiation	Establish the project team structure, key stakeholders, and operating guidelines for team activity throughout the course of the project.	Stage I
Project Planning	Develop PMP, schedule, and metrics.	Stage I

Major Activity	Description	Stage
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Stage I Deliverables • **Project Management Plan** • **Project Work Plan** • **Requirements Specification Document** • Initial Requirements Traceability		
Design Analysis	Conduct CAD sessions to document detailed system design changes for the **Healthy Michigan Plan Waiver 3** project.	Stage II
Test Planning	Conduct detailed test planning for each phase of testing:	Stage II
Software Development	Develop and unit test software required to support the detailed functional design including: • Screens • Functionality (driven by use cases) • Data Models • Reports • Interfaces	Stage II
System Testing	Internal CNSI testing of developed functionality at the component, subsystem, and system level.	Stage II
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Major Activity	Description	Stage
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Stage III Deliverables

- *UAT results*
- Operational Support Forecast Report
- Finalized Online Help
- Code Deployment to Production

2.3.3.1 Stage 1 – Initiation and Requirements

Activity 1 – Project Initiation

During this activity, CNSI will collaborate with the State of Michigan to identify the key business and technical team members who will participate in the **Healthy Michigan Plan Waiver 3** project. CNSI will conduct the formal project kickoff and deliver orientation for the project effort.

The major milestones associated with this activity are:

- Participating team members from the State of Michigan are identified.
- Project kickoff meeting is conducted and project kickoff is completed.

Activity 2 – Project Planning

During this activity, CNSI will develop the PMP. The PMP outlines the standards and procedures for risk, issue, and action item management; project governance plan to coordinate activities between the CNSI project team and the State of Michigan; communications plan; deliverable management plan; project work breakdown structure (WBS); and the baseline schedule.

Milestones associated with this activity are:

- PMP is delivered.
- Project work plan is delivered.

Activity 3 – Requirements Analysis

The goals of the **Healthy Michigan Plan Waiver 3** project have been defined at a high-level within this statement of work. During this activity, CNSI will host CAD sessions to elicit and validate detailed functional and technical requirements. The CAD sessions will include the State of Michigan and CNSI functional and technical SMEs. CNSI will compare the validated requirements with current CHAMPS functionality and technical architecture to determine the impact of the new requirements across all CHAMPS subsystems, including system aspects such as:

- New and modified screens.
- Functionality (use cases).
- Data models.
- Reports.
- Interfaces.

This will result in a requirements specification document which provides a clear, concise, and final definition of each requirement. The approved requirements will be used during the design and development activities in Stage II.

The major milestones associated with this activity are:

- Functional requirements specification document is delivered.
- Approved requirements have been loaded into the requirements repository.

2.3.3.2 Stage II – Design, Coding, and System Testing

Activity 1 – Design Analysis

During this activity, CNSI will host CAD sessions to produce detailed design artifacts. Sessions will be organized and scheduled per requirements for the affected CHAMPS subsystem and the solution's technical architecture. CAD sessions will include State of Michigan and CNSI functional and technical SMEs. Using the existing CHAMPS design and the requirements specification document as a starting point, session participants will identify and document required design changes including system aspects such as:

- Screens.
- Functionality (use cases).
- Data models.
- Reports.
- Interfaces.

This will result in final, revised design artifacts, including use cases and data models, which will be the basis for the development of changes to system functions. CNSI will submit the completed design artifacts to the appropriate State of Michigan decision-maker shortly after the completion of a CAD

session. The State of Michigan decision-maker will formally approve the design artifacts via signature on an approval form, similar to the existing CHAMPS enhancement approval process. This approval indicates that design is final and development can begin.

The major milestone associated with this activity is:

- Delivery of the as-built DSDD.

Activity 2 – Test Planning

During this activity, CNSI collaborates with the State of Michigan to determine the required set of tests to be executed. CNSI prepares test scenarios and scripts for each phase of internal testing, including system testing and regression testing. The system test scenarios and scripts are prepared by the CNSI Test Lead. The State of Michigan prepares the UAT test plan and related test scenarios and script during this activity time frame.

Milestones associated with this activity include:

- System test plan is completed.
- System test scenarios and scripts are completed.
- *UAT preparation is completed (State).*

Activity 3 – Software Development

At the beginning of this activity, the development iteration plan is prepared. During this activity, CNSI codes the software changes required to support the updated detailed functional and technical design. Development is performed through a series of bi-weekly development iterations as previously described. Development includes the coding changes as defined in the as-built DSDDs for CHAMPS, including system aspects, such as:

- Screens.
- Functionality (use cases).
- Data models.
- Reports.
- Interfaces.

At the conclusion of each development iteration, the developed code is delivered to the CNSI Test Team. The major milestone associated with this activity is the completion of all development iterations.

Activity 4 – System Testing

During this activity, CNSI tests the developed functionality at the component, subsystem, and system levels in accordance with the test plan. Test results are compiled and at the conclusion of system testing, CNSI performs end-to-end (E2E) regression testing. At the conclusion of this activity, the test manager conducts a test readiness review meeting to ensure all entry criteria for the UAT phase are met.

Milestones associated with this activity include:

System test results report is delivered.

Code is deployed to UAT environment.

UAT begins.

2.3.3.3 Stage III – UAT and Production Deployment

Activity 1 – Implementation Planning

During this activity, CNSI collaborates with the State to coordinate the timing of the production installation of the system changes. The **Healthy Michigan Plan Waiver 3** project will be incorporated into the regular CHAMPS operational release implementation schedule. Implementation planning activities will focus on targeting the operational release that will include this initiative and integrating the new features into the release. During this activity, CNSI will review operational support projections for post-deployment support and prepare an operational support forecast report documenting any changes expected post-deployment.

Milestones associated with this activity include:

- Identification of the operational releases where the software will be deployed.
- Define implementation strategy.
- Preparation of the operational support forecast report.

Activity 2 – UAT Support

During this activity, CNSI provides support to MDHHS staff who will conduct UAT using formal, State-developed test scripts. UAT testing will be aligned with the selected operational releases where the code will be deployed. Defects identified are monitored and corrected throughout UAT.

The major milestones associated with this activity include:

- *UAT test results report (State deliverable).*
- Final defect correction report.
- State approval to deploy the software.

Activity 3 – Production Deployment

During this activity, CNSI and the State of Michigan collaborate to execute the implementation strategy. The finalized code will be merged into the selected regular operational release. CNSI deploys the release to the production environment where it is available for use by MDHHS staff.

The major milestones associated with this activity include:

Code is deployed to production.

Production support begins.

Section 3: General Assumptions and Constraints

CNSI has identified and provided the following general assumptions in regard to the Behavioral Health Integration project:

6. The proposed cost and schedule is based on the scope-of-work information provided to CNSI by MDHHS as listed in section 2.1 - Functional Overview. Increases to scope-of-work identified during the requirement and/or design phases will be assessed for impact to the project cost and schedule.
7. MDHHS and DTMB will provide access to, and time commitment from, subject matter experts who understand their programs and systems.
8. All other State systems, such as Bridges, MILTA, MAX-OFA and the Health Services Data Warehouse will meet all required project milestones pursuant to the approved Project Work Plan
9. No conversion or migration of external data sources is required.
10. The State will plan and execute UAT pursuant to the approved Project Work Plan.

CNSI has identified the following constraints in regard to the **Healthy Michigan Plan Waiver 3** project:

2. The State requested to implement the Behavioral Health Integration pilot functionality by October 1, 2019.

Section 4: Proposed Project Cost

This section of our proposal presents our fixed-price, overall labor cost for completing the Behavioral Health Integration project. The cost was derived based on the expected effort required as presented in our initial work plan, composed of the three stages depicted in Figure 4

The total fixed-price labor cost for the Behavioral Health Integration project is $1,846,205.

Below table provides a schedule of proposed payments based on deliverables.

Table 4. Proposed Payment Schedule

Phase	Deliverable	Cost in $
Planning	Project Work Plan	$369,241
Requirements	Functional Requirements Specification	$369,241
Design	Design Artifacts	$369,241
System Test	System Test Results	$369,241
Production Release	Code Deployment	$369,241
	Total	**$1,846,205**

CHAMPS Workforce Engagement
Statement of Work

Prepared For:
State of Michigan
Department of Health & Human Services
400 South Pine Street
Lansing, Michigan 48909

Prepared By:

CNSI
6465 Millennium Drive, Suite 150
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September 13, 2018

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Section 1: Introduction

On September 10, 2018, the Michigan Department of Health and Human Services (MDHHS) submitted an application for extension of the Section 1115 Healthy Michigan Plan (HMP) demonstration waiver. MDHHS seeks to add workforce engagement requirements as a condition of HMP eligibility for able-bodied adults ages 19 to 62. In furtherance of Medicaid program objectives, Michigan seeks to promote work and community engagement and provide incentives to beneficiaries to increase their sense of purpose, build a healthy lifestyle, and further the positive physical and mental health benefits associated with work. MDHHS workforce engagement requirements are designed to assist, encourage, and prepare an able-bodied adult for a life of self-sufficiency and independence from governmental interference. Studies provide evidence of the correlation between income and health: as income increases overall health status improves. Risk factors such as smoking, obesity and poor nutrition are disproportionately evident in lower income groups. Chronic disease, depression, addiction and premature death rise as incomes drop. Income is also a driving force behind health disparities. These new HMP requirements are expected to help beneficiaries realize the mental and physical health benefits associated with gainful employment by incentivizing engagement in the workforce and providing future opportunities to obtain health care coverage through their employer or the federal marketplace. In addition, studies indicate that employment and community engagement are beneficial for health, particularly depression, general mental health, life satisfaction, and wellbeing.

This Statement of Work defines the scope of CHAMPS changes required to support the Workforce Engagement requirements and provides the high-level schedule to implement the changes.

Section 2: Solution Overview

This section summarizes CNSI's proposed CHAMPS Workforce Engagement functionality, including a functional overview, the proposed project timeline, and the project stages for meeting the objectives of the project. Full business and technical requirements will be elicited and documented as a part of the first phase of the project.

2.1 Functional Overview

The following Workforce Engegement functionality is based on very high-level specifications provided to CNSI by MDHHS. This is an *overall* list of functions throughout the Medicaid enterprise. As such, some of these functions may be supported by systems other than CHAMPS.

Workforce engagement requirements include the following, which start on the first month of Healthy Michigan coverage:

- Participation in an average of 80 hours per month of qualifying activities or a combination of any qualifying activities
- Self-attestation of compliance with, or exemption from, workforce engagement requirements to MDHHS on a monthly basis
- MDHHS will conduct periodic sample auditing to confirm compliance.

- Qualifying Activities (all are self-attested):
    - Employment, self employment, or having income consistent with being employed or self-employed (makes at least minimum wage for an average of 80 hours per month)
    - Education directly related to employment (including, but not limited to, high school equivalency test preparation, postsecondary education)
    - Job training directly related to employment
    - Vocation training directly related to employment
    - Unpaid workforce engagement directly related to employment (including, but not limited to an internship)
    - Tribal employment programs
    - Participation in a substance use disorder treatment (court ordered, prescribed by a licensed medical professional, or a Medicaid-funded Substance Use Disorder (SUD) treatment
    - Community service completed with a non-profit 501(c)(3) or 501(c)(4) organization (can only be used as a qualifying activity for up to 3 months in a 12-month period)
    - Job search directly related to job training.
- A beneficiary is allowed three months of noncompliance within a 12-month reporting period. After three months of noncompliance, a beneficiary who remains noncompliant will not receive coverage for at least one month and will be required to come into compliance before coverage is reinstated. If a beneficiary is found to have misrepresented his or her compliance with the workforce engagement requirements as identified in PA 208 of 2018, he or she shall not be allowed to participate in the HMP for a one-year period.
- The beneficiary must be notified if they are not-compliant with the workforce engagement requirements.
- The following are Workforce Engagement exemptions:
    - A caretaker of a family member under 6 years of age (only one parent at a time can claim this exemption)
    - Beneficiaries currently receiving temporary or permanent long-term disability benefits from a private insurer or from the government
    - Full-time student who is not a dependent of a parent or guardian or whose parent or guardian qualifies for Medicaid
    - Pregnant women
    - A caretaker of a dependent with a disability who needs full-time care based on a licensed medical professional's order (this exemption is allowed one time per household)
    - A caretaker of an incapacitated individual even if the incapacitated individual is not a dependent of the caretaker

- Beneficiaries who have proven they meet a good cause temporary exemption (as defined in PA 208 of 2018)
- Beneficiaries designated as medically frail
- Beneficiaries with a medical condition that results in a work limitation according to a licensed medical professional order
- Beneficiaries who have been incarcerated within the last 6 months
- Beneficiaries currently receiving unemployment benefits from the State of Michigan
- Beneficiaries under 21 years of age who had previously been in foster care placement in this state.
- Beneficiaries in compliance with or exempt from the work requirements of the Supplemental Nutrition Assistance Program or Temporary Assistance for Needy Families Program.

- All exemptions for each HMP beneficiary must be captured and tracked for reporting purposes.

2.2 CHAMPS Scope

This section describes the CHAMPS-specific scope-of-work required to support the Workforce Engagement project:

- Support the ability to receive a workforce compliance indicator from Bridges.
- Support the ability to capture and track data related to medically frail beneficiaries.
- Transmit the following data to Bridges to augment the Workforce Engagement exceptions tracked in Bridges:
    - Third Party Liability (TPL) information for beneficiaries currently receiving temporary or permanent long-term disability benefits from a private insurer or from the government.
    - Beneficiaries designated as medically frail.
- Support the ability to recoup managed care capitation payments based on retroactive loss of beneficiary eligibility.

2.3 Solution Delivery Plan

In this section, CNSI presents the proposed timeline, technical approach, and staged delivery approach for the **Healthy Michigan Plan Waiver 3** project.

A detailed description of the activities and deliverables within each stage is presented in *Section 2.3.3 Staged Delivery Summary*.

CNSI structured this work plan to address the overall relationship and sequence of the work required to complete the project. It effectively uses the professional resources required to successfully complete the work and produce high-quality products in a cost-conscious manner.

The following subsections further describe how CNSI intends to accomplish the goals of the work plan by employing its Midwest iVision360 framework in the proposed approach for the **Healthy Michigan Plan Waiver 3** project.

2.3.1 High-Level Timeline

CNSI has created a summary timeline and work plan for the Workforce Engagement project. The timeline is shown in Figure 1. The timeline shows the approximate duration of each stage and phase of the work for the project. This timeline was developed based on the estimated effort of the work necessary to accomplish the proposed technical and functional solutions.

The proposed timeline was developed with the goal of optimizing the effective use of the professional resources required to accomplish this scope of work and produce high-quality products in a cost-conscious manner.

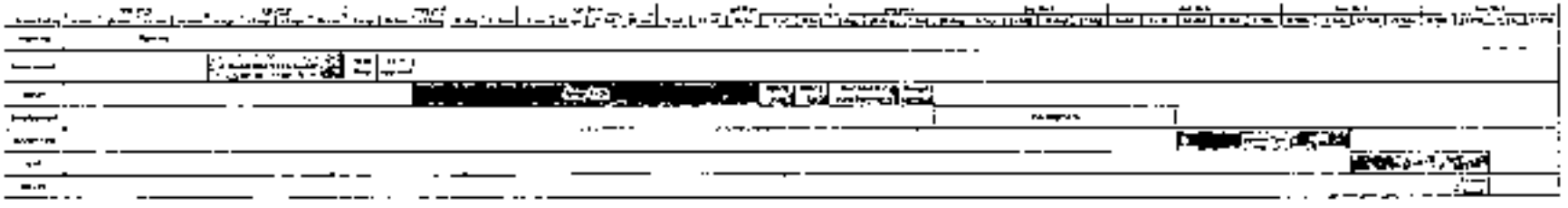

Figure 11. Initial Workforce Engagement Project Timeline

2.3.2 iVision360 Delivery Processes

In this section, CNSI provides an outline of its Capability Maturity Model Integration (CMMI) Maturity Level 3-appraised Midwest iVision360 Framework, which includes a full system development lifecycle (SDLC) model supporting the delivery of the technical solution. CNSI's SDLC processes have been adapted to address the specific needs of the Workforce Engagement project. CNSI will produce deliverables for each phase of the project.

CNSI will engage in requirements analysis and design with the customer in order to begin iterative development. CNSI will provide an opportunity for the customer to review design documents prior to the start of system development activity.

Iterative, agile development under the Midwest iVision360 delivery framework is visible in Stage II for the Workforce Engagement project. During this stage, technical design specifications for new or impacted functions and user stories are constructed in parallel by the software engineers and Subject Matter Experts (SMEs). As the impacted function's design is completed, the team lead plans the iterations required to complete development.

Development work is planned based on a two-week iteration schedule. Software engineers build internal design documentation prior to, and during, the two-week iterations. The first day of each iteration is reserved for startup activities, including finalizing the iteration's internal design documentation. The software engineer meets with the Data Modeling Team on the first day of the iteration and conducts a walkthrough of any required data model changes. The Data Modeling Team makes the required changes to the database schema and approves the physical model for coding.

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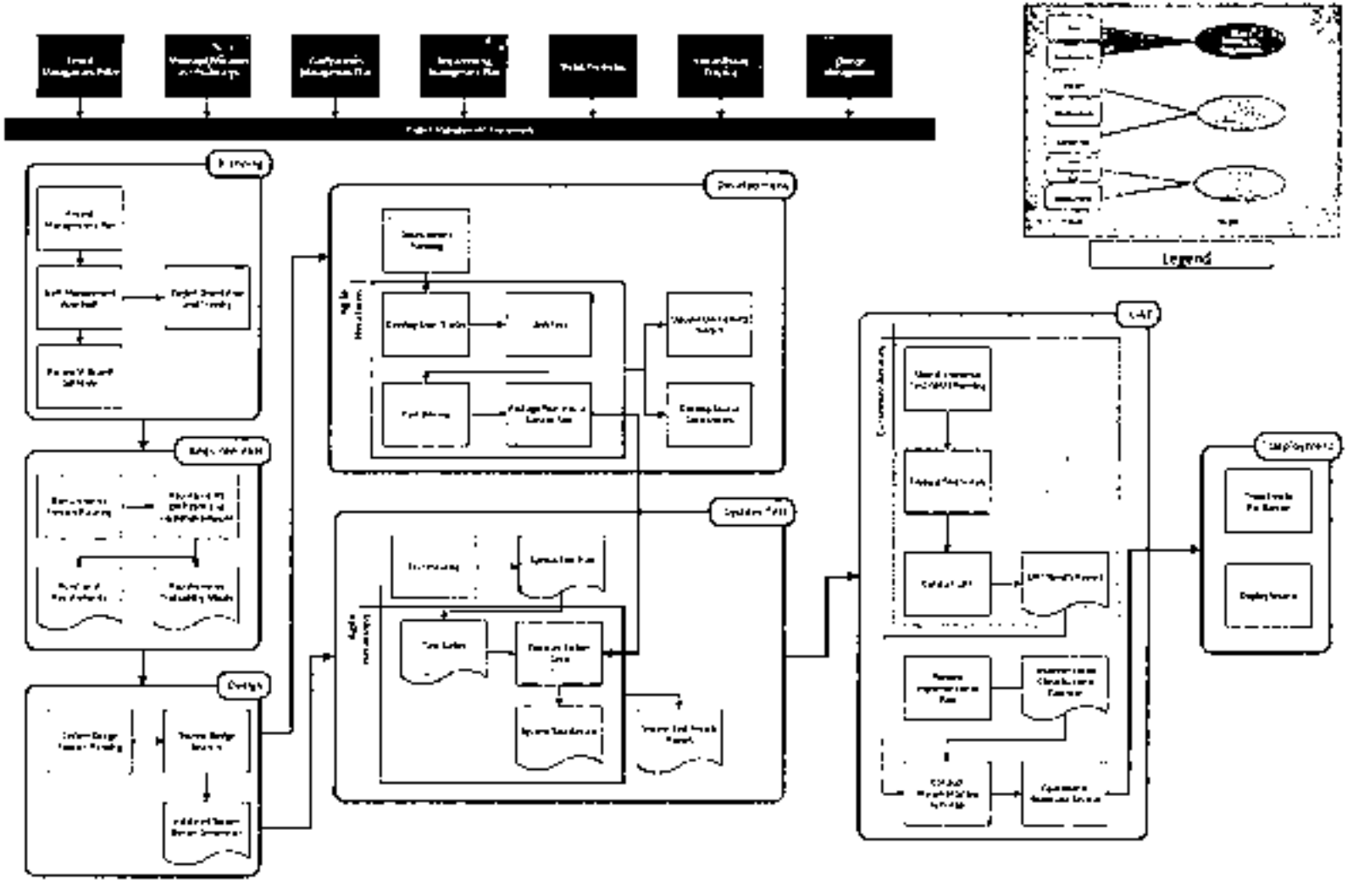

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CNSI proposes a staged delivery of Workforce Engagement which incorporates the seven phases of CNSI's CMMI Maturity Level 3-appraised Midwest iVision360 delivery framework. This top-down approach provides an easily understandable grouping of activities with similar resource requirements and related groupings of deliverables along with three major milestones following each stage to facilitate monitor and control of the initiative.

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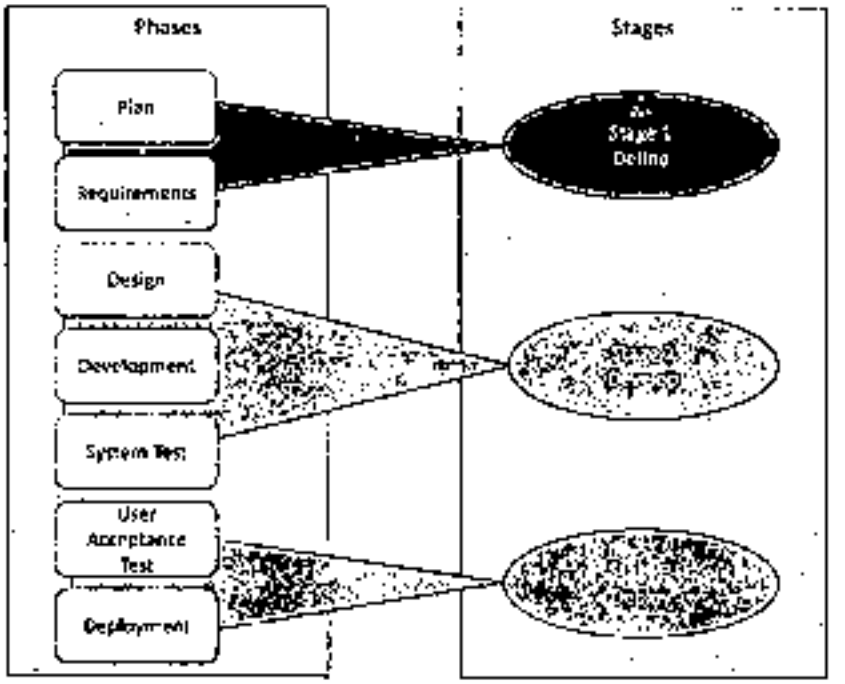

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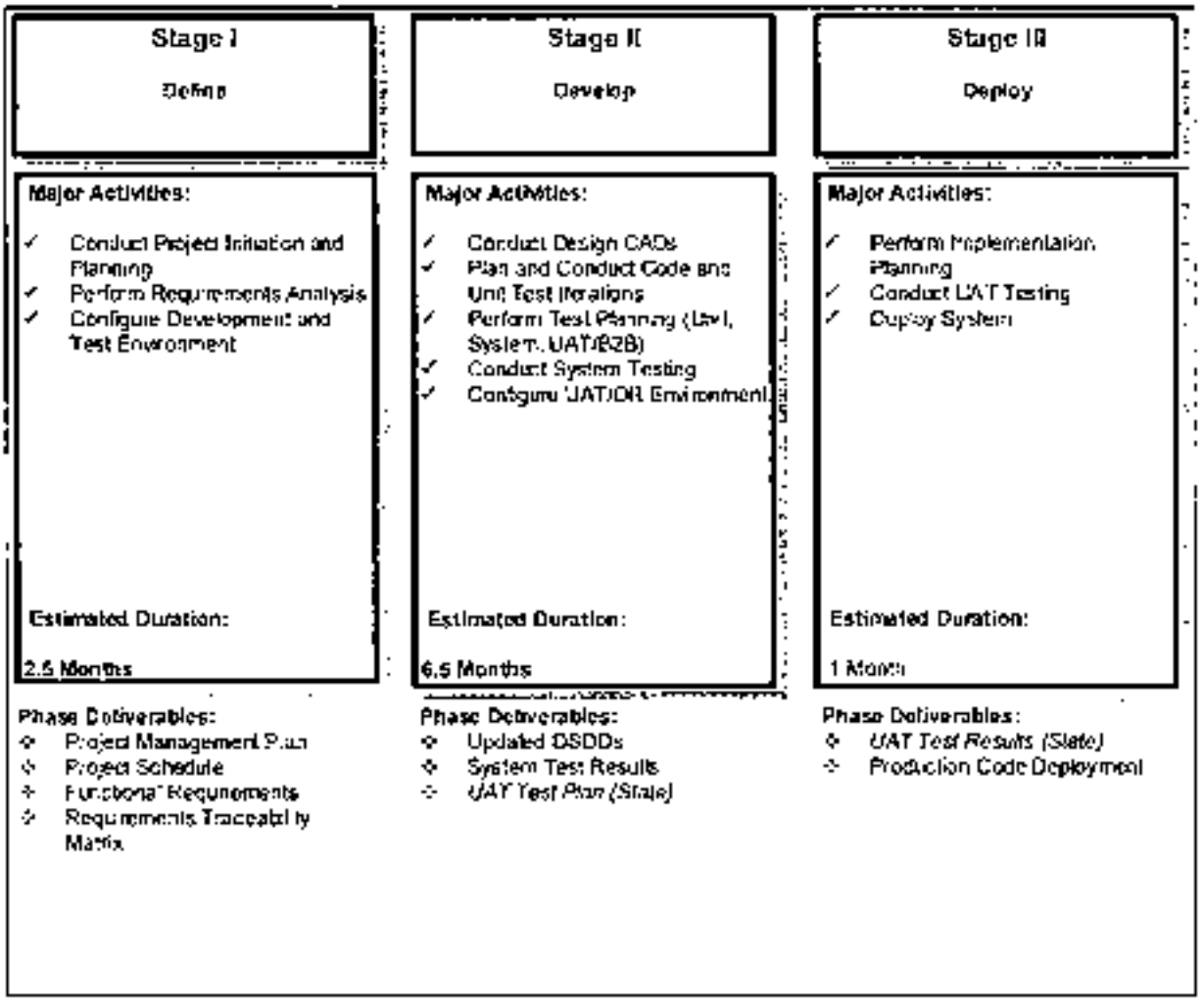

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Activity 1 – Project Initiation

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The major milestones associated with this activity are:

- Participating team members from the State of Michigan are identified.
- Project kickoff meeting is conducted and project kickoff is completed.

Activity 2 – Project Planning

During this activity, CNSI will develop the PMP. The PMP outlines the standards and procedures for risk, issue, and action item management; project governance plan to coordinate activities between the CNSI project team and the State of Michigan; communications plan; deliverable management plan; project work breakdown structure (WBS); and the baseline schedule.

Milestones associated with this activity are:

- PMP is delivered.
- Project work plan is delivered.

Activity 3 – Requirements Analysis

The goals of the **Healthy Michigan Plan Waiver 3** project have been defined at a high-level within this statement of work. During this activity, CNSI will host CAD sessions to elicit and validate detailed functional and technical requirements. The CAD sessions will include the State of Michigan and CNSI functional and technical SMEs. CNSI will compare the validated requirements with current CHAMPS functionality and technical architecture to determine the impact of the new requirements across all CHAMPS subsystems, including system aspects such as:

- New and modified screens.
- Functionality (use cases).
- Data models.
- Reports.
- Interfaces.

This will result in a requirements specification document which provides a clear, concise, and final definition of each requirement. The approved requirements will be used during the design and development activities in Stage II.

The major milestones associated with this activity are:

- Functional requirements specification document is delivered.
- Approved requirements have been loaded into the requirements repository.

2.3.3.2 Stage II -- Design, Coding, and System Testing

Activity 1 – Design Analysis

During this activity, CNSI will host CAD sessions to produce detailed design artifacts. Sessions will be organized and scheduled per requirements for the affected CHAMPS subsystem and the solution's technical architecture. CAD sessions will include State of Michigan and CNSI functional and technical SMEs. Using the existing CHAMPS design and the requirements specification document as a starting point, session participants will identify and document required design changes including system aspects such as:

- Screens.
- Functionality (use cases).
- Data models.
- Reports.
- Interfaces.

This will result in final, revised design artifacts, including use cases and data models, which will be the basis for the development of changes to system functions. CNSI will submit the completed design artifacts to the appropriate State of Michigan decision-maker shortly after the completion of a CAD

session. The State of Michigan decision-maker will formally approve the design artifacts via signature on an approval form, similar to the existing CHAMPS enhancement approval process. This approval indicates that design is final and development can begin.

The major milestone associated with this activity is:

- Delivery of the as-built DSDD.

Activity 2 – Test Planning

During this activity, CNSI collaborates with the State of Michigan to determine the required set of tests to be executed. CNSI prepares test scenarios and scripts for each phase of internal testing, including system testing and regression testing. The system test scenarios and scripts are prepared by the CNSI Test Lead. The State of Michigan prepares the UAT test plan and related test scenarios and script during this activity time frame.

Milestones associated with this activity include:

- System test plan is completed.
- System test scenarios and scripts are completed.
- *UAT preparation is completed (State).*

Activity 3 – Software Development

At the beginning of this activity, the development iteration plan is prepared. During this activity, CNSI codes the software changes required to support the updated detailed functional and technical design. Development is performed through a series of bi-weekly development iterations as previously described. Development includes the coding changes as defined in the as-built DSDDs for CHAMPS, including system aspects, such as:

- Screens.
- Functionality (use cases).
- Data models.
- Reports.
- Interfaces.

At the conclusion of each development iteration, the developed code is delivered to the CNSI Test Team. The major milestone associated with this activity is the completion of all development iterations.

Activity 4 – System Testing

During this activity, CNSI tests the developed functionality at the component, subsystem, and system levels in accordance with the test plan. Test results are compiled and at the conclusion of system testing, CNSI performs end-to-end (E2E) regression testing. At the conclusion of this activity, the test manager conducts a test readiness review meeting to ensure all entry criteria for the UAT phase are met.

Milestones associated with this activity include:

System test results report is delivered.

Code is deployed to UAT environment.

UAT begins.

2.3.3.3 Stage III – UAT and Production Deployment

Activity 1 – Implementation Planning

During this activity, CNSI collaborates with the State to coordinate the timing of the production installation of the system changes. The **Healthy Michigan Plan Waiver 3** project will be incorporated into the regular CHAMPS operational release implementation schedule. Implementation planning activities will focus on targeting the operational release that will include this initiative and integrating the new features into the release. During this activity, CNSI will review operational support projections for post deployment support and prepare an operational support forecast report documenting any changes expected post-deployment.

Milestones associated with this activity include:

- Identification of the operational releases where the software will be deployed.
- Define implementation strategy.
- Preparation of the operational support forecast report.

Activity 2 – UAT Support

During this activity, CNSI provides support to MDHHS staff who will conduct UAT using formal, State-developed test scripts. UAT testing will be aligned with the selected operational releases where the code will be deployed. Defects identified are monitored and corrected throughout UAT.

The major milestones associated with this activity include:

- *UAT test results report (State deliverable).*
- Final defect correction report.
- State approval to deploy the software.

Activity 3 – Production Deployment

During this activity, CNSI and the State of Michigan collaborate to execute the implementation strategy. The finalized code will be merged into the selected regular operational release. CNSI deploys the release to the production environment where it is available for use by MDHHS staff.

The major milestones associated with this activity include:

Code is deployed to production.

Production support begins.

Section 3: General Assumptions and Constraints

CNSI has identified and provided the following general assumptions in regard to the Workforce Engagement project:

11. The proposed cost and schedule is based on the scope-of-work information provided to CNSI by MDHHS as listed in section 2.2 – CHAMPS Scope. Increases to scope-of-work identified during the requirement and/or design phases will be assessed for impact to the project cost and schedule.
12. MDHHS and DTMB will provide access to, and time commitment from, subject matter experts who understand their programs and systems.
13. All other State systems, such as Bridges, MIHA, MAX-OFA and the Health Services Data Warehouse will meet all required project milestones pursuant to the approved Project Work Plan.
14. No conversion or migration of external data sources is required.
15. The State will plan and execute UAT pursuant to the approved Project Work Plan.

CNSI has identified the following constraints in regard to the **Healthy Michigan Plan Waiver 3** project:

3. The State requested to implement the Workforce Engagement functionality by December 2019.

Section 4: Proposed Project Cost

This section of our proposal presents our fixed-price, overall labor cost and hardware estimates for completing the Workforce Engagement project. The cost was derived based on the expected effort required as presented in our initial work plan, composed of the three stages depicted in Figure 4

The total fixed-price labor cost for the Workforce Engagement project is $699,050.

Error! Reference source not found.below provides a schedule of proposed payments based on deliverables.

Table 6. Proposed Payment Schedule

Phase	Deliverable	Cost in $
Planning	Project Work Plan	$ 139,810
Requirements	Functional Requirements Specification	$ 139,810
Design	Design Artifacts	$ 139,810
System Test	System Test Results	$ 139,810
Production Release	Code Deployment	$ 139,810
	Total	**$ 699,050**

CHAMPS LOCD Enhancements
Statement of Work

Prepared For:
State of Michigan
Department of Health & Human Services
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October 24, 2018

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Section 1: Introduction

The Michigan Department of Health and Human Services (MDHHS) has conducted a lean process improvement activity regarding the level of care determination process (LOCD) utilized for certifying that individuals meet a particular level of needed care in order for MDHHS to pay for long-term care services and supports. One of the key findings of the group was that MDHHS should be utilizing existing data from the Health Services Data Warehouse (HSDW) to conduct automatic LOCD redeterminations when data is available. Specifically, nursing facilities complete the Minimum Data Set (MDS) and MIChoice and other agencies complete the InterRAI Home Care (HC) assessment. All of this data is submitted to the HSDW. The general goal of this project is for the MMIS, CHAMPS, to receive the information from the HSDW and use it to make an LOCD determination without necessitating the facility or agency to complete a parallel assessment in CHAMPS. CHAMPS would then utilize the HC and MDS data from HSDW if the member still meets long term care and set new begin and end dates for the automatically generated record. If member is no longer LOCD eligible through the automatic process, CHAMPS will send an alert to the provider that submitted the assessment that the member was not able to be passively re-determined LOCD eligible and a manual LOCD must be conducted in CHAMPS.

In addition to support for automatic LOCD redeterminations, MDHHS also seeks to implement support for the following functions:

- **Review Functionality**: Support the ability to automatically select and track random LOCD records for review.
- **PACE LOCD Coverage**: Under the Centers for Medicare and Medicaid Services (CMS) federal regulations, the Michigan Department of Health and Human Services (MDHHS) may deem a participant who no longer meets the State Medicaid nursing facility level of care requirements to continue to be eligible for the PACE program if, in the absence of continued coverage under the program, MDHHS determines the participant reasonably would be expected to meet the nursing facility level of care requirement in the next six months.
- **Nursing Facility Trauma Transfer**: Develop the functionality to provide State Staff the ability to find a member still eligible for long term care level of care even though the normal LOCD rules have found the member ineligible.

Section 2: Solution Overview

This section summarizes CNSI's proposed CHAMPS LOCD Enhancements functionality, including a functional overview, the proposed project timeline, and the project stages for meeting the objectives of the project. Full business and technical requirements will be elicited and documented as a part of the first phase of the project.

2.1 Functional Overview

The following CHAMPS LOCD Enhancement scope is based on high-level specifications provided to CNSI by MDHHS.

- **Automatic (Passive) Redeterminations:**

- Supports the ability for the system to create another LOCD record for the beneficiary without Provider interaction.
- Using information received from the Health Services Data Warehouse (HSDW), CHAMPS will determine the start and end dates for automatically created records and manage any overlaps between multiple records.
- CHAMPS will seamlessly incorporate the automatically created records into all other LOCD processes.
- CHAMPS will incorporate the automatically created records into all payment processes for claims and managed care capitation payments.
- Do not include passive LOCD records in the review functionality.
- Enable MDHHS staff to set and modify the start and end dates for passive LOCD records.

- **Review Functionality:**
  - Using MDHHS-defined business rules, CHAMPS will automatically select random LOCD records for review.
  - CHAMPS will apply the following criteria to claim and managed care capitation payments while the LOCD record is in review: LOCD Application Status must equal "Completed", and Audit Status must equal "Not Selected and Accepted".
  - CHAMPS will support the ability for Providers to submit documents in support of review processes.
- **PACE LOCD Coverage:**
  - Support the ability for the MDHHS staff to determine a beneficiary is eligible for long term care level of care even if normal LOCD rules have found them ineligible.
  - Support a new "door" that the MDHHS staff can create to indicate that the beneficiary is still eligible for PACE even though they do not meet Doors 1 to 8 through normal LOCD rules.
  - Manage payment process so that payments for the new "door" are made only for the PACE Program.
  - Support special business rules for PACE LOCD coverage:
    - The LOCD cannot follow the member, (it cannot be adopted by any other program).
    - Do not conduct passive redetermination for PACE LOCD determinations.
    - Do not include PACE LOCD determinations in the review functionality.
    - Enable MDHHS staff to set and modify the start and end dates for PACE LOCD determination records.
- **Nursing Facility Trauma Transfer:**

- Support the ability for the MDHHS staff to determine a member is eligible for long term care level of care even if normal LOCD rules have found them ineligible.
- Support a new "door" that the MDHHS staff can create to indicate that the beneficiary is still eligible for nursing facility services even though they do not meet Doors 1 to 8 through normal LOCD rules.
- Manage payment process so that payments for the new "door" are made only to the nursing facility Provider with which the member is currently admitted.
- Support special business rules for nursing facility coverage:
    - The LOCD cannot follow the member, (it cannot be adopted by any other program).
    - Do not conduct passive redetermination for these LOCD determinations.
    - Do not include these LOCD determinations in the review functionality.
    - Enable MDHHS staff to set and modify the start and end dates for these LOCD determination records.

2.2 Solution Delivery Plan

In this section, CNSI presents the proposed timeline, technical approach, and staged delivery approach for the **Healthy Michigan Plan Waiver 3** project.

A detailed description of the activities and deliverables within each stage is presented in *Section 2.3.3 Staged Delivery Summary*.

CNSI structured this work plan to address the overall relationship and sequence of the work required to complete the project. It effectively uses the professional resources required to successfully complete the work and produce high-quality products in a cost-conscious manner.

The following subsections further describe how CNSI intends to accomplish the goals of the work plan by employing its Midwest iVision360 framework in the proposed approach for the **Healthy Michigan Plan Waiver 3** project.

2.2.1 High-Level Timeline

CNSI has created a summary timeline and work plan for the LOCD Enhancements project. The timeline is shown in Figure 1. The timeline shows the approximate duration of each stage and phase of the work for the project. This timeline was developed based on the estimated effort of the work necessary to accomplish the proposed technical and functional solutions.

The proposed timeline was developed with the goal of optimizing the effective use of the professional resources required to accomplish this scope of work and produce high-quality products in a cost-conscious manner.

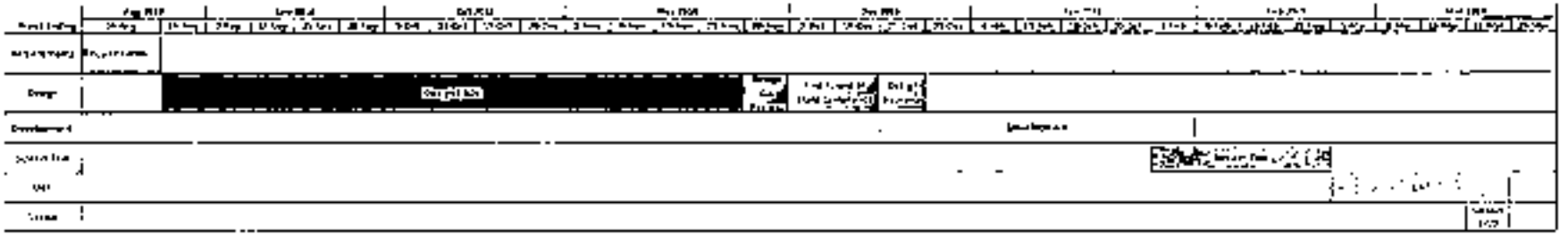

Figure 15. Initial LOCD Enhancements Project Timeline

2.2.2 Midwest iVision360 Delivery Processes

In this section, CNSI provides an outline of its Capability Maturity Model Integration (CMMI) Maturity Level 3-appraised Midwest iVision360 Framework, which includes a full system development lifecycle (SDLC) model supporting the delivery of the technical solution. CNSI's SDLC processes have been adapted to address the specific needs of the LOCD Enhancements project. CNSI will produce deliverables for each phase of the project.

CNSI will engage in requirements analysis and design with the customer in order to begin iterative development. CNSI will provide an opportunity for the customer to review design documents prior to the start of system development activity.

Iterative, agile development under the Midwest iVision360 delivery framework is visible in Stage II for the LOCD Enhancements project. During this stage, technical design specifications for new or impacted functions and user stories are constructed in parallel by the software engineers and Subject Matter Experts (SMEs). As the impacted function's design is completed, the team lead plans the iterations required to complete development.

Development work is planned based on a two-week iteration schedule. Software engineers build internal design documentation prior to, and during, the two-week iterations. The first day of each iteration is reserved for startup activities, including finalizing the iteration's internal design documentation. The software engineer meets with the Data Modeling Team on the first day of the iteration and conducts a walkthrough of any required data model changes. The Data Modeling Team makes the required changes to the database schema and approves the physical model for coding.

Development begins once the internal design and pre-development work is completed for the iteration. The software engineer writes internal iteration test scripts in parallel to actual working code and updates screens and other system functions to fit the physical mode. The software engineer executes the iteration test scripts as they complete sections of code. The software engineer builds the code, tests incrementally, and coordinates and communicates with the team through daily stand-up meetings regarding any issues holding up the development work.

Software engineers then test the code against the internal auto-unit code and manual internal iteration test scripts. As they reach the end of the iteration, they run the code against the functional scripts developed by the Test Team. Discrepancies are identified and corrected. The software engineer retests to ensure all discrepancies are corrected and closed before the iteration ends. The software engineer then conducts a peer review of the code of a given function on the last day of the iteration. The software engineer then updates the code based on the review. When software engineer iteration testing and software code reviews are successfully completed for the iteration, the code is then promoted to the integration test stream. The code is released to the Test Team for system testing when the coding and software engineer iteration testing is completed for all user stories for a given function.

During initial development iterations, the Test Team develops system test cases based on the current system solution specifications. During system testing, the Test Team executes system test cases to validate system results against the current production functionality.

For the LOCD Enhancements project, CNSI plans to engage the Test and Development Teams early on to build the regression test suite for the critical functions. This will speed up testing and improve the overall quality of implementation. CNSI understands the importance and sensitivity of the LOCD Enhancements project and the need to ensure it aligns with the environment that is already in production. During system testing, regression tests will be performed to demonstrate that the solution continues to function as expected.

As soon as regression testing is completed for a function, CNSI will deliver the code to the User Acceptance Testing (UAT) environment. CNSI plans to engage the customer as early as possible and well before the beginning of the planned UAT phase. This ensures that enough time is allowed for thorough UAT, which will also reduce the risk of schedule slippage for UAT completion. CNSI will deploy system- and regression-tested functions to the UAT environment as they are completed.

Figure 2 presents a graphical overview of the Midwest iVision360 delivery framework processes applicable to the LOCD Enhancements project.

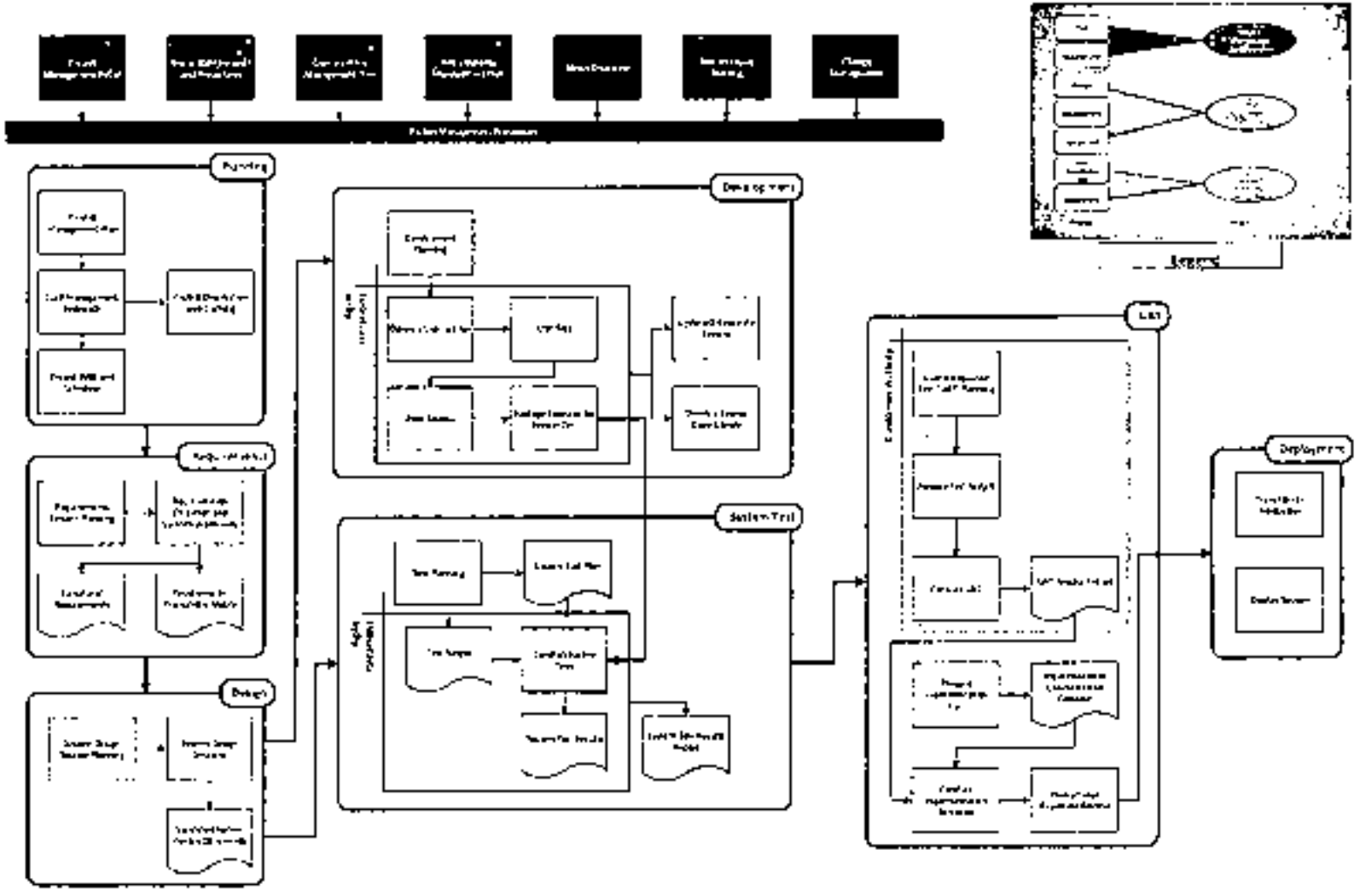

Figure 16. Midwest iVision360 Process Diagram

2.2.3 Staged Delivery Summary

CNSI proposes a staged delivery of LOCD Enhancements which incorporates the seven phases of CNSI's CMMI Maturity Level 3-appraised Midwest iVision360 delivery framework. This top-down approach provides an easily understandable grouping of activities with similar resource requirements and related groupings of deliverables along with three major milestones following each stage to facilitate monitor and control of the initiative.

Figure 3 below summarizes the staged delivery using the seven phases of the Midwest iVision360 delivery framework.

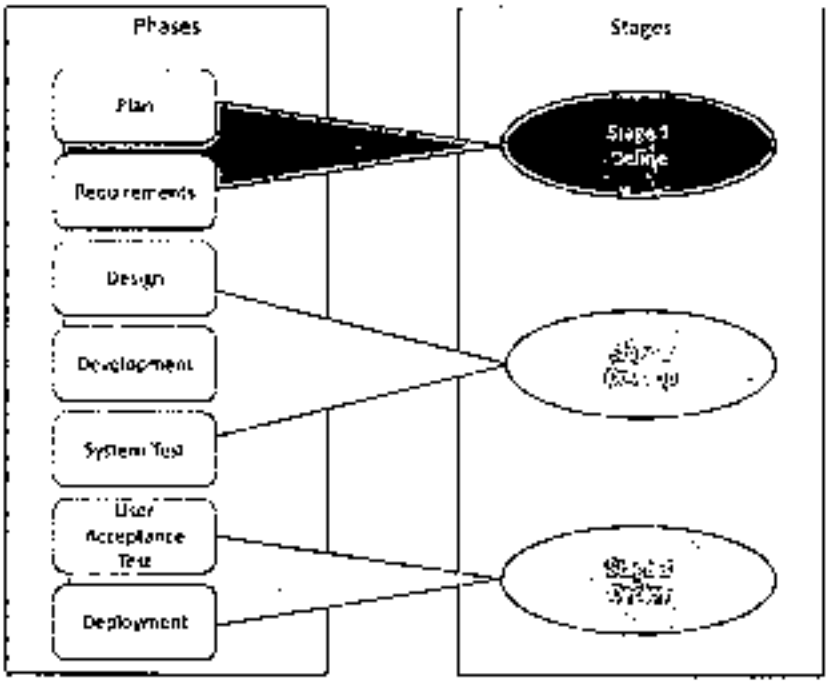

Figure 17. Midwest iVision360 Framework Phases and Stages

Figure 3 provides a high-level overview of the project stages with major activities and anticipated deliverables. Note that the overall timeline for the project presented in shows a 8-month total duration. The stages shown in Figure 4 are aggregated across project phases and, in some instances, will overlap to accomplish the total work needed in the 8-month duration.

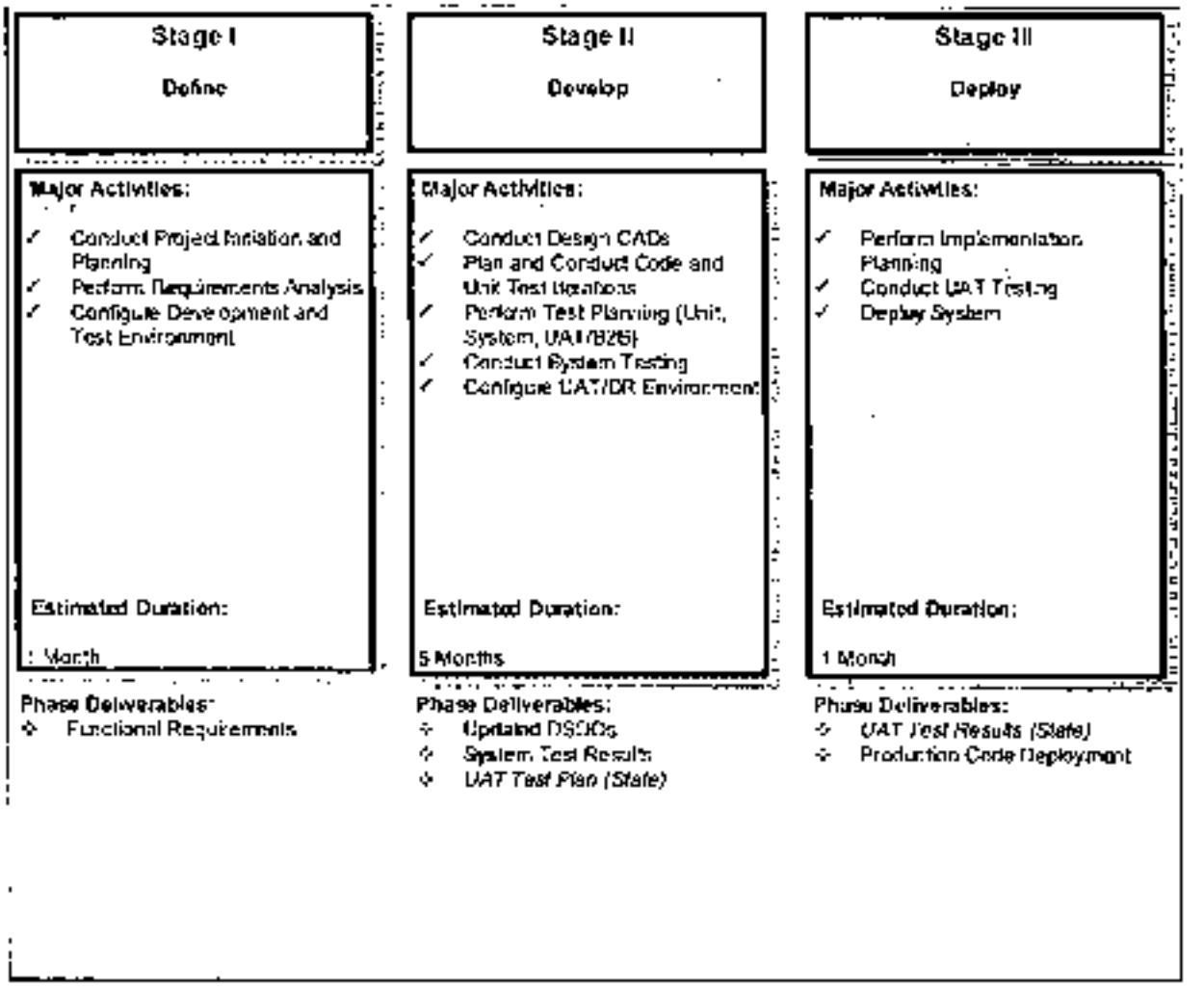

Figure 18. High-Level Project Stages and Activities

With every project, there are critical milestones to be met and work products and deliverables that must be developed and produced in order to provide the inputs necessary to perform the next activity. Table 1 elaborates on the activities of the proposed project timeline, along with the expected deliverables.

In Table 1, **bold** text in the deliverables sections indicate formal deliverables; *italicized* text indicates State acceptance tasks and deliverables.

Table 7. High-Level Activities and Milestones by Stage

Major Activity	Description	Stage
Project Initiation	Establish the project team structure, key stakeholders, and operating guidelines for team activity throughout the course of the project.	Stage I
Project Planning	Develop schedule, and metrics.	Stage I
Requirements Analysis	Conduct collaborative application development (CAD) sessions to elicit and validate requirements for the	Stage I

Major Activity	Description	Stage
	Healthy Michigan Plan Waiver 3 project.	
Stage I Deliverables • Table of Requirements		
Design Analysis	Conduct CAD sessions to document detailed system design changes for the **Healthy Michigan Plan Waiver 3** project.	Stage II
Test Planning	Conduct detailed test planning for each phase of testing:	Stage II
Software Development	Develop and unit test software required to support the detailed functional design including: • Screens • Functionality (driven by use cases) • Data Models • Reports • Interfaces	Stage II
System Testing	Internal CNSI testing of developed functionality at the component, subsystem, and system level.	Stage II
Stage II Deliverables • **As-Built DSDD** • **Test Plan** • **System Test Results** • *User Acceptance Test Plan*		
Implementation Planning	Coordinate production installation of the system changes.	Stage III
UAT Support	MDHHS testing of all system changes using formal UAT test scripts.	Stage III
Production Deployment	CNSI and the State of Michigan deploy the modifications in the MDHHS production CHAMPS environment	Stage III
Stage III Deliverables • *UAT results* • **Code Deployment to Production**		

2.2.3.1 Stage I – Initiation and Requirements

Activity 1 – Project Initiation

During this activity, CNSI will collaborate with the State of Michigan to identify the key business and technical team members who will participate in the **Healthy Michigan Plan Waiver 3** project. CNSI will conduct the formal project kickoff and deliver orientation for the project effort.

The major milestones associated with this activity are:

- Participating team members from the State of Michigan are identified.
- Project kickoff meeting is conducted and project kickoff is completed.

Activity 2 – Project Planning

During this activity, CNSI will develop a high level schedule.

Activity 3 – Requirements Analysis

The goals of the **Healthy Michigan Plan Waiver 3** project have been defined at a high-level within this statement of work. During this activity, CNSI will host CAD sessions to elicit and validate detailed functional and technical requirements. The CAD sessions will include the State of Michigan and CNSI functional and technical SMEs. CNSI will compare the validated requirements with current CHAMPS functionality and technical architecture to determine the impact of the new requirements across all CHAMPS subsystems, including system aspects such as:

- New and modified screens.
- Functionality (use cases).
- Data models.
- Reports.
- Interfaces.

This will result in a table of requirements which provides a clear, concise, and final definition of each requirement. The approved requirements will be used during the design and development activities in Stage II.

The major milestones associated with this activity are:

- Table of requirements is delivered.
- Approved requirements are loaded into the requirements repository.

2.2.3.2 Stage II – Design, Coding, and System Testing

Activity 1 – Design Analysis

During this activity, CNSI will host CAD sessions to produce detailed design artifacts. Sessions will be organized and scheduled per requirements for the affected CHAMPS subsystem and the solution's technical architecture. CAD sessions will include State of Michigan and CNSI functional and technical

SMEs. Using the existing CHAMPS design and the requirements table as a starting point, session participants will identify and document required design changes including system aspects such as:

- Screens.
- Functionality (use cases).
- Data models.
- Reports.
- Interfaces.

This will result in final, revised design artifacts, including use cases and data models, which will be the basis for the development of changes to system functions. CNSI will submit the completed design artifacts to the appropriate State of Michigan decision-maker shortly after the completion of a CAD session. The State of Michigan decision-maker will formally approve the design artifacts via signature on an approval form, similar to the existing CHAMPS enhancement approval process. This approval indicates that design is final and development can begin.

The major milestone associated with this activity is:

- Delivery of the as-built DSDD.

Activity 2 – Test Planning

During this activity, CNSI collaborates with the State of Michigan to determine the required set of tests to be executed. CNSI prepares test scenarios and scripts for each phase of internal testing, including system testing and regression testing. The system test scenarios and scripts are prepared by the CNSI Test Lead. The State of Michigan prepares the UAT test plan and related test scenarios and script during this activity time frame.

Milestones associated with this activity include:

- System test plan is completed.
- System test scenarios and scripts are completed.
- *UAT preparation is completed (State).*

Activity 3 – Software Development

At the beginning of this activity, the development iteration plan is prepared. During this activity, CNSI codes the software changes required to support the updated detailed functional and technical design. Development is performed through a series of bi-weekly development iterations as previously described. Development includes the coding changes as defined in the as-built DSDDs for CHAMPS, including system aspects, such as:

- Screens.
- Functionality (use cases).
- Data models.
- Reports.
- Interfaces.

At the conclusion of each development iteration, the developed code is delivered to the CNSI Test Team. The major milestone associated with this activity is the completion of all development iterations.

Activity 4 – System Testing

During this activity, CNSI tests the developed functionality at the component, subsystem, and system levels in accordance with the test plan. Test results are compiled and at the conclusion of system testing, CNSI performs end-to-end (E2E) regression testing. At the conclusion of this activity, the test manager conducts a test readiness review meeting to ensure all entry criteria for the UAT phase are met.

Milestones associated with this activity include:

System test results report is delivered.

Code is deployed to UAT environment.

UAT begins.

2.2.3.3 Stage III – UAT and Production Deployment

Activity 1 – Implementation Planning

During this activity, CNSI collaborates with the State to coordinate the timing of the production installation of the system changes. The **Healthy Michigan Plan Waiver 3** project will be incorporated into the regular CHAMPS operational release implementation schedule. Implementation planning activities will focus on targeting the operational release that will include this initiative and integrating the new features into the release. During this activity, CNSI will review operational support projections for post-deployment support and prepare an operational support forecast report documenting any changes expected post-deployment

Milestones associated with this activity include:

- Identification of the operational releases where the software will be deployed.
- Define implementation strategy.
- Preparation of the operational support forecast report.

Activity 2 – UAT Support

During this activity, CNSI provides support to MDHHS staff who will conduct UAT using formal, State-developed test scripts. UAT testing will be aligned with the selected operational releases where the code will be deployed. Defects identified are monitored and corrected throughout UAT.

The major milestones associated with this activity include:

- *UAT test results report (State deliverable).*
- Final defect correction report.
- State approval to deploy the software.

Activity 3 – Production Deployment

During this activity, CNSI and the State of Michigan collaborate to execute the implementation strategy. The finalized code will be merged into the selected regular operational release. CNSI deploys the release to the production environment where it is available for use by MDHHS staff.

The major milestones associated with this activity include:

Code is deployed to production.

Production support begins.

Section 3: General Assumptions and Constraints

CNSI has identified and provided the following general assumptions in regard to the LOCD Enhancements project:

16. The proposed cost and schedule is based on the scope-of-work information provided to CNSI by MDHHS as listed in section 2.1 - Functional Overview. Increases to scope-of-work identified during the requirement and/or design phases will be assessed for impact to the project cost and schedule.
17. MDHHS and DTMB will provide access to, and time commitment from, subject matter experts who understand their programs and systems.
18. All other State systems, such as the Health Services Data Warehouse will meet all required project milestones pursuant to the approved project schedule.
19. No conversion or migration of external data sources is required.
20. The State will plan and execute UAT pursuant to the approved project schedule.

CNSI has identified the following constraints in regard to the **Healthy Michigan Plan Waiver 3** project:

4. The State requested to implement the LOCD Enhancements functionality by April 1, 2019.

Section 4: Proposed Project Cost

This section of our proposal presents our fixed-price, overall labor cost estimates for completing the LOCD Enhancements project. The cost was derived based on the expected effort required as presented in our initial work plan, composed of the three stages depicted in Figure 4

The total fixed-price labor cost for the LOCD Enhancements project is $1,334,240.

Table 4 provides a schedule of proposed payments based on deliverables.

Table 8. Proposed Payment Schedule

Phase	Deliverable	Cost in $
Requirements	Functional Requirements Specification	$ 333,560
Design	Design Artifacts	$333,560
System Test	System Test Results	$333,560
Production Release	Code Deployment	$333,560
	Total	$1,334,240

2019 Operations Services Addendum

1.0 Amendment Background

This amendment modifies the previously executed Operations agreement between the State of Michigan and CNSI for Fiscal Years 2016 through 2018. Section 2.0 describes additional services that CNSI will be providing from October 2018 through September 2019. These services have resulted from new projects and initiatives implemented since the prior Operations amendment was approved in 2013 and modified in 2016.

2018 rates have been carried through to 2019 with the exception of a rate reduction for Business Operations services. The updated rates are listed in Table 2 and used to calculate the updated service costs that are listed in Table 5.

2.0 Additional Services

The following sections detail the additional services that will be provided as part of this amendment.

2.1 Operational Data Store Support

CNSI will provide ongoing support and maintenance for Operation Data Store applications and data marts:

- Claims and Encounters
- Managed Care Payments
- Eligibility and Enrollment

ODS data marts are updated to reflect changes in data models, additional functionality, and data values.

2.2 Consumer Engagement Support

CNSI will provide ongoing support and maintenance of the myHealthPortal application developed in the Consumer Engagement initiative. This includes maintenance of integration with the CHAMPS core modules and underlying components.

2.3 Audit Compliance Support

CNSI will provide ongoing support for security and compliance audits. This includes support of periodic audits including OIG, DTMB, and DHHS audits. These audits occur at varying frequencies and require technical, functional, and management resource support to meet audit criteria within prescribed timelines.

2.4 PCS & Core Compliance Support

CNSI will provide ongoing support for PCS credentialing and Core Compliant transactions. PCS support includes troubleshooting, analysis, and research in collaboration with LexisNexis. Core Compliance support includes EDI transaction monitoring, troubleshooting, and collaboration with trading partners.

2.5 Core Operations and SME

Due to the large number of initiatives and projects undertaken since 2016, CNSI has expanded its Core Operations team due to increased modules to be supported and monitored and associated infrastructure environments to be managed. The below areas have been impacted by the increase in operations scope:

Operations Support

Configuration Management

Database Management

Infrastructure Management

System Administration

Transition Management

Subject Matter Experts

During 2018, CNSI performed a detailed analysis of operations activities across all subsystems. This analysis was used to restructure the operations team to align to the activity types and levels observed since Cloud Enablement and other initiatives went live. This has resulted in small changes in the resource mix within some service areas to better service State needs. A key aspect was to increase the number of Subject Matter Experts to cover the larger set of functional areas now represented in the CHAMPS ecosystem.

2.7 Licensing

The Operations and Maintenance agreement now includes the following licenses:

MI LexisNexis - $35,000 per month

IL LexisNexis - $40,000 per month

MI RuleIT - $201,266 per year

evoBrix Subscription - $500,000 per year

evoBrix Platform

ClaimsSure

HealthBeat

CompuMax - $11,800 per year

Table 9. Total License Cost

Licensing:	Michigan	Illinois
RuleIT	$201,266	$0
LexisNexis	$420,000	$480,000
CompuMax	$11,800	$0
evoBrix Subscription: • evoBrix Platform • ClaimsSure • HealthBeat	$500,000	$0
Total	**$1,133,066**	**$480,000**

Table 1 provides the total annual licensing cost for the State of Michigan and State of Illinois respectively.

3.0 Resources and Costs

The below sections describe the resource allocations and associated costs for the additional services that CNSI will provide during Fiscal Years 2016 through 2018.

3.1 Cost By Service Type

FY 2019 rates have been added and reflect additional discounts:

Table 2. Discounted Blended Rate

Hourly Rates by Fiscal Year (FY)	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019
Core Operations Retail Rate	$146.76	$146.76	$146.76	$155.00	$155.00	$155.00
Core Operations Discount Rate	$120.34	$120.34	$120.34	$127.10	$127.10	$127.10
Services Discount Rate	$146.76	$146.76	$146.76	$155.00	$155.00	$155.00
Business Operations Services	$120.34	$120.34	$120.34	$127.10	$127.10	$115.91

Business Operations Services rates have been reduced due to the team being collocated onsite at the State of Michigan. These reductions are contingent on continued colocation of these resources.

3.2 Resource Allocation and Cost Per Service Area

The below table depicts the resource allocations from the amendment executed in 2016. The resource allocations are broken down by Service Layer and State and include subtotals and overall totals.

Table 10. Resource Allocations in 2016 Amendment

Year	FY 2016		FY 2017		FY 2018	
Service Layer	MI	IL	MI	IL	MI	IL
Core Operations	30	2	34	2	34	2
Issue Resolution	5	2	5	2	5	2
Management	7	0	8	0	8	0
SME	4	1	4	1	4	1
Subtotal Operations	46	5	51	5	51	5
CHAMPS Enhancements	8	2	8	2	8	2
Legislative Enhancements	6	0	6	0	6	0
MSA Other Enhancements	6	0	6	0	6	0
Data Warehouse/Data Dictionary Support	2	0	2	0	2	0
COGNOS Training	0	0	0	0	0	0
OFIN Support	0	0	0	0	0	0
eMIPP Support	1	1	1	1	1	1
DMF Support	2	0	2	0	2	0

Subtotal Supplemental Services	**25**	**3**	**25**	**3**	**25**	**3**
Predictive Modeling	14	0	16	0	16	0
IL PE Operations	0	1	0	1	0	1
CSHCS/eMEDS	0	0	3	0	3	0
Facility Settlement	0	0	0	0	7	0
Mobile Platform Support	1	0	1	0	1	0
Core Operations	1	0	3	0	2	0
Total	**87**	**9**	**99**	**9**	**105**	**9**

The below table depicts the resources required to support the FY 2019 scope of operations

Year	FY 2018		FY 2019	
Service Layer	**MI**	**IL**	**MI**	**IL**
Core Operations	34	2	41	3
Issue Resolution	5	2	6	1
Management	8	0	6	0
SME	4	1	6	1
Subtotal Operations	**51**	**5**	**59**	**5**
CHAMPS Enhancements	8	2	9	3
Legislative Enhancements	6	0	6	0
MSA Other Enhancements	6	0	4.5	0
Data Warehouse/Data Dictionary Support	2	0	1	0
eMPP Support	1	1	1	1
DMP Support	2	0	1	0
Subtotal Supplemental Services	**25**	**3**	**22.5**	**4**
Predictive Modeling	16	0	16	0
Operational Data Store	0	0	2	0

IL PE Operations	0	1	0	0
CSHCS/eMEDS	3	0	0	0
Facility Settlement	7	0	9	0
Mobile Platform Support	1	0	1	0
Consumer Engagement	0	0	1	0
Audit Compliance	0	0	1	0
PCS & Core Compliance	0	0	1	1
Core Operations	2	0	0	0
Subtotal Additional Services	**29**	**1**	**31**	**1**
Total	**105**	**9**	**112.5**	**10**

Table 11. 2019 Amendment Costs

Year	**FY 2019**	
Service Layer	**MI**	**IL**
Core Operations	$10,839,088	$967,200
Issue Resolution	$1,586,208	$322,400
Management	$1,934,400	$0
SME	$1,934,400	$264,368
Subtotal Operations	**$16,294,096**	**$1,553,968**
CHAMPS Enhancements	$2,901,600	$744,785
Legislative Enhancements	$1,934,400	$0
MSA Other Enhancements	$1,407,078	$0
Data Warehouse/Data Dictionary Support	$264,368	$0
eMPP Support	$264,368	$322,400
DMP Support	$322,400	0
Subtotal Supplemental Services	**$7,094,214**	**$1,067,185**

Predictive Modeling	$3,857,485	$0
Operational Data Store	$644,800	$0
IL PE Operations	$0	$0
CSHCS/eMEDS	$0	$0
Facility Settlement	$2,379,312	$0
Mobile Platform Support	$322,400	$0
Consumer Engagement	$264,368	$0
Audit Compliance	$322,400	$0
PCS & Core Compliance	$322,400	$264,368
Core Operations	$0	$0
Subtotal Additional Services	$8,113,165	$264,368
SubTotal Services Cost	$31,501,475	$2,885,521
Licensing	$1,133,066	$480,000
Total	$32,634,541	$3,365,521

3.3 Total Combined Costs by Fiscal Year for the States of Michigan and Illinois

Table 12 depicts the revised total combined cost for the States of Michigan and Illinois to undertake the services and tasks presented throughout the proposal. The table below presents the Services cost by Fiscal Year since 2016.

Table 12. Combined Costs by Fiscal Year

Combined Totals by Fiscal Year	FY 2016	FY 2017	FY 2018	FY 2019
Services Cost	$25,347,338	$31,313,968	$32,900,176	$36,000,062

STATE OF MICHIGAN
ENTERPRISE PROCUREMENT

Department of Health and Human Services
235 South Grand Avenue, Lansing, MI 48913
P.O. BOX 30037, Lansing, MI 48909

CONTRACT CHANGE NOTICE

Change Notice Number **27**
to
Master Agreement Number **071B6200168C**

CONTRACTOR	
	Client Network Services, Inc
	2277 Research Blvd
	Rockville, MD 20850
	Tom Sofo
	(301) 634-4672
	Tom.sofo@cns-inc.com
	CV0059061

STATE			
	Program Manager	Kristi Broessel	MDHHS
		(517) 284-4906	
		233 S. Grand Ave, Grand Tower Bldg.	
	Contract Administrator	Simon Baldwin	DTMB
		(517) 241-3215	
		baldwins@michigan.gov	

CONTRACT SUMMARY			
DESCRIPTION: Medicaid Services Administration.			
INITIAL EFFECTIVE DATE	**INITIAL EXPIRATION DATE**	**INITIAL AVAILABLE OPTIONS**	**EXPIRATION DATE BEFORE CHANGE(S) NOTED BELOW**
March 14, 2006	September 30, 2011	2 years	September 30, 2018
PAYMENT TERMS		**DELIVERY TIMEFRAME**	
Net 30 days		Per fiscal year project payment schedule	
ALTERNATE PAYMENT OPTIONS			**EXTENDED PURCHASING**
☐ P-card ☐ Direct Voucher (DV) ☐ Other			☐ Yes ☒ No
MINIMUM DELIVERY REQUIREMENTS			
CNSI must meet the project delivery requirements agreed upon by MDHHS in project Statements of Work.			

DESCRIPTION OF CHANGE NOTICE				
OPTION	**LENGTH OF OPTION**	**EXTENSION**	**LENGTH OF EXTENSION**	**REVISED EXP. DATE**
☐		☒	8 years	September 30, 2026
CURRENT VALUE	**VALUE OF CHANGE NOTICE**		**ESTIMATED AGGREGATE CONTRACT VALUE**	
$533.886,284.00	$480,000,000.00		$1,013,886,284.00	

DESCRIPTION: Effective immediately, this Contract is extended eight years, and is increased by $480,000,000.00 to provide funding for various Community Health Administrative Management Payment System (CHAMPS) project initiatives and maintenance and operations not to exceed $1,013,886,284.00 The revised contract expiration date is September 30, 2026. The Contract Number is changed from 071B6200168 to MA 071B6200168C. Contract Change Notices will be issued for the projects authorized by MDHHS. MDHHS will issue Delivery Orders for the amounts of the contract authorized to be expended.

Per Administrative Board Approval on March 13, 2018.

In addition, MDHHS is adding new contract requirements for CNSI for the initiation, planning and implementation activities associated with, but not limited to offering Medicaid as a Services (MaaS) to Other States under Attachment B, attached and included in this Change Notice.

All other terms, conditions, pricing, and specifications remain unchanged.

CHANGE NOTICE NO. **27** TO CONTRACT NO. 071B6200168C

Attachment B

Initiation, Planning and Implementation Activities

for

Medicaid as a Service (MaaS)

Contractual Requirements

The following additional contractual requirements identify the obligations of both Client Network Services, Inc. (CNSI) and State of Michigan, Michigan Department of Health and Human Services (SOM/MDHHS) during the initiation, planning, and implementation activities for offering Medicaid as a Service to another State. This agreement outlines obligations of both CNSI and SOM/MDHHS in the event a work product that is part of MaaS from this Contract (07186200168C) is leveraged or contemplated to be leveraged by another state.

1. **Requirements of CNSI:**

   In the event another state expresses interest in the use or leveraging any work product (systems, infrastructure, deliverables, materials, etc.) created under this Contract by CNSI, CNSI is required to do the following:

   a. CNSI shall notify the MDHHS Business Integration Center (BIC) Director in writing if another state expresses interest in the MaaS of this Contract.
   b. CNSI shall direct any inquiries from other states regarding the MaaS of this Contract to the MDHHS BIC Director.
   c. CNSI shall participate in any demonstrations of MaaS work products coordinated by MDHHS BIC and the appropriate MDHHS business area to ensure there is appropriate representation.
   d. CNSI will not be a party to the Intergovernmental Agreement for the MaaS.
   e. CNSI shall only invoice the MDHHS for any MaaS work product.
   f. CNSI may not directly receive payment from another state for under this Contract for MaaS.

2. **Requirements of the SOM/MDHHS:**

   In the event another state expresses interest in the use or leveraging of any MaaS work product created under this Contract by CNSI, the MDHHS is required to do the following:

   a. MDHHS BIC shall serve as the point of contact to the Centers for Medicare and Medicaid Services (CMS) regarding any MaaS activities under this Contract.
   b. MDHHS will be a party to the Intergovernmental Agreement for the MaaS.
   c. MDHHS will provide payment to CNSI based on the individual state agreement for MaaS and specific costs incurred.
   d. MDHHS BIC shall provide the leadership and project governance structure which shall be leveraged by other states for MaaS.
   e. MDHHS BIC shall coordinate all invoicing to any state for MaaS and shall directly receive reimbursement from any state leveraging MaaS through this Contract.
   f. MDHHS shall maintain ownership over any relationship with another state seeking to leverage this Contract and will notify and include CNSI, as needed.

AUTHORITY: Act 431 of 1984
COMPLETION: Required
PENALTY: Contract change will not be executed unless form is filed

STATE OF MICHIGAN
DEPARTMENT OF TECHNOLOGY, MANAGEMENT AND BUDGET
PROCUREMENT
P.O. BOX 30026, LANSING, MI 48909
OR
530 W. ALLEGAN, LANSING, MI 48933

CHANGE NOTICE NO. 26

to

CONTRACT NO. 071B6200168

between

THE STATE OF MICHIGAN

and

NAME & ADDRESS OF CONTRACTOR	PRIMARY CONTACT	EMAIL
Client Network Services, Inc. (CNSI) 2277 Research Boulevard Rockville, MD 20850	Tom Sofo	Tom.sofo@cns-inc.com
	TELEPHONE (301) 634-4600	CONTRACTOR #, MAIL CODE

STATE CONTACTS	AGENCY	NAME	PHONE	EMAIL
CONTRACT COMPLIANCE INSPECTOR:	DTMB	John Spitzley	(517) 335-6812	spitzleyj1@michigan.gov
BUYER:	DTMB	Simon Baldwin	(517) 241-3215	baldwins@michigan.gov

CONTRACT SUMMARY:

DESCRIPTION: **Medicaid Services Administration**

INITIAL EFFECTIVE DATE	INITIAL EXPIRATION DATE	INITIAL OPTIONS INCLUDED	CURRENT EXPIRATION DATE
March 14, 2006	September 30, 2011	Two One-Year	September 30, 2018
PAYMENT TERMS	F.O.B	SHIPPED	SHIPPED FROM
N/A	N/A	N/A	N/A

ALTERNATE PAYMENT OPTIONS	AVAILABLE TO MIDEAL PARTICIPANTS
☐ P-card ☐ Direct Voucher (DV) ☐ Other	☐ YES ☒ NO

MINIMUM DELIVERY REQUIREMENTS

N/A

DESCRIPTION OF CHANGE NOTICE:

OPTION EXERCISED	EFFECTIVE DATE OF CHANGE	EXPIRATION DATE
☒ NO ☐ YES		September 30, 2018

This change notice reflects the vendor's address change.

Effective immediately this contract is hereby INCREASED to provide funding for various Community Health Administrative Management Payment System (CHAMPS) project initiatives not to exceed $35,354,210.00 as listed in Attachment A.

All project initiatives funded by this change notice have been prior approved and authorized to proceed by the Michigan Department of Health and Human Services, Medical Services Administration and the Michigan Department of Technology, Management and Budget per the Statements of Works. Statements of Work for all of the projects listed in Attachment A are included in this Change Notice.

In addition, a technical adjustment of $6,000.00 for funding that was authorized in Change Notice #3 that was not included in the Change Notice #3 is being added in this Change Notice.

Total Value of Change Notice #26: $35,360,210.00

CHANGE NOTICE NO. 26 to CONTRACT NO. 071B6200168

Per Administrative Board Approval on November 15, 2016.

All other terms, conditions, pricing and specifications remain unchanged.

VALUE/COST OF CHANGE NOTICE	$ 35,360,210.00
ESTIMATED AGGREGATE CONTRACT VALUE:	$ 533,886,284.00

FOR THE CONTRACTOR:

Client Network Services, Inc. (CNSI)

Firm Name

Authorized Agent Signature

Arnold D. Morse

Authorized Agent (Print or Type)

11/02/16

Date

FOR THE STATE:

Signature

Kim Stephen, Bureau of Purchasing, Director

Name/Title

Michigan Department of Health and Human Services

Enter Name of Agency

Date

ATTACHMENT A

Projects	CN #26 Funding	SOW Funding in CN#26	Funding Previous Change Notices See Comments column	Total SOW Funding	Comments
	A	B	C	A+C	
1 [illegible]	$ 1,500,000	$ 1,500,000		$ 1,500,000	
2 Cloud Enablement Land Migration	$ 1,240,000	$ 1,240,000	$ [illegible]	$ [illegible]	Partial funding in CN # 23 - $4,500,000 and CN #27 - $6,900,000
3 [illegible]	$ 1,270,000	$ 1,270,000		$ 1,270,000	
4 [illegible]	$ 4,000,000	$ 4,000,000	$ [illegible]	$ 4,000,000	Partial funding in CN # 21 - $1,240,000
5 [illegible]	$ 3,750,000	$ 3,750,000		$ 3,750,000	
6 [illegible]	$ 519,600	$ 519,600		$ 519,600	
7 [illegible]	$ 894,000	$ 894,000		$ 894,000	
8 [illegible]	$ 1,300,000	$ 1,300,000		$ 1,300,000	
9 [illegible]	$ 3,100,000	$ 3,100,000		$ 3,100,000	
10 [illegible]	$ 4,000,000	$ 4,000,000		$ 4,000,000	
11 [illegible]	$ 7,800,000	$ 7,800,000		$ 7,800,000	
12 [illegible]	$ 1,800,000	$ 1,800,000		$ 1,800,000	
13 [illegible]	$ 1,000,000	$ 1,000,000		$ 1,000,000	
14 [illegible]	$ 7,800,000	$ [illegible]	$ [illegible]	$ 7,800,000	Partial funding in CN # 21 - $4,900,000
	$ 35,354,210	$ 35,354,210	$ 38,800,000	$ 74,154,210	

Form No. DTMB-3521 (Rev. 4/2012)
AUTHORITY: Act 431 of 1984
COMPLETION: Required
PENALTY: Contract change will not be executed unless form is filed

STATE OF MICHIGAN
DEPARTMENT OF TECHNOLOGY, MANAGEMENT AND BUDGET
PROCUREMENT
P.O. BOX 30026, LANSING, MI 48909
OR
530 W. ALLEGAN, LANSING, MI 48933

CHANGE NOTICE NO. 25
to
CONTRACT NO. 07186200168
between
THE STATE OF MICHIGAN
and

NAME & ADDRESS OF CONTRACTOR:	PRIMARY CONTACT	EMAIL
Client Network Services, Inc. (CNSI) 2277 Research Boulevard Rockville, MD 20850	Tom Sofo	Tom.sofo@cns-inc.com
	TELEPHONE	CONTRACTOR #, MAIL CODE
	(301) 634-4600	

STATE CONTACTS	AGENCY	NAME	PHONE	EMAIL
CONTRACT COMPLIANCE INSPECTOR:	DTMB	John Spitzley	(517) 335-6612	spitzleyj1@michigan.gov
BUYER:	DTMB	Simon Baldwin	(517) 241-3215	baldwins@michigan.gov

CONTRACT SUMMARY:

DESCRIPTION: **Medicaid Services Administration**

INITIAL EFFECTIVE DATE	INITIAL EXPIRATION DATE	INITIAL OPTIONS INCLUDED	CURRENT EXPIRATION DATE
March 14, 2006	September 30, 2011	Two One-Year	September 30, 2018
PAYMENT TERMS	F.O.B	SHIPPED	SHIPPED FROM
N/A	N/A	N/A	N/A

ALTERNATE PAYMENT OPTIONS:			AVAILABLE TO MiDEAL PARTICIPANTS
☐ P-card	☐ Direct Voucher (DV)	☐ Other	☐ YES ☒ NO

MINIMUM DELIVERY REQUIREMENTS:

N/A

DESCRIPTION OF CHANGE NOTICE:

OPTION EXERCISED:	EFFECTIVE DATE OF CHANGE:	EXPIRATION DATE:
☒ NO ☐ YES		September 30, 2018

This change notice reflects the vendor's address change.

Effective immediately this contract is hereby INCREASED to provide funding for various Community Health Administrative Management Payment System (CHAMPS) initiatives not to exceed $54,306,788.00:

1. *Cloud Enablement - $26,000,000*
2. *Cloud Enablement Hardware - $6,424,800*
3. *MICAM Support - $1,800,000*
4. *Cost Settlement - $3,000,000*
5. *Enhancement Funds - Children's' Special Health Care Services - $3,000,000*
6. *Third Party Liability - $1,000,000*
7. *Operational Data Store - $2,956,988*
8. *Managed Care Compliance - $2,500,000*
9. *Document Management Portal - $750,000*
10. *Consumer Engagement - $3,000,000*
11. *Provider Site Visit – Home Help - $2,250,000*
12. *Level of Care Determination - $1,500,000*
13. *IMPACT - $125,000*

CHANGE NOTICE NO.25 to CONTRACT NO. 07186200168

Per Administrative Board Approval on March 10, 2015.

All other terms, conditions, pricing and specifications remain unchanged.

VALUE/COST OF CHANGE NOTICE:	$ 54,306,788.00
ESTIMATED AGGREGATE CONTRACT VALUE:	$ 498,526,074.00

FOR THE CONTRACTOR:	FOR THE STATE:
Client Network Services, Inc. (CNSI)	Kim Stephen
Firm Name	Signature
Authorized Agent Signature	Kim Stephen, Director of the Bureau of Budget and Purchasing
	Name/Title
Arnold S. Mann, SVP, General Counsel	Michigan Department of Community Health
Authorized Agent (Print or Type)	Enter Name of Agency
1/21/16	3/14/16
Date	Date

Form No. DTMB-3521 (Rev. 4/2012)
AUTHOrity: Act 431 of 1984
COMPLETION: Required
PENALTY: Contract changes will not be executed unless form is filed

STATE OF MICHIGAN
DEPARTMENT OF TECHNOLOGY, MANAGEMENT AND BUDGET
PROCUREMENT
P.O. BOX 30026, LANSING, MI 48909
OR
530 W. ALLEGAN, LANSING, MI 48933

CHANGE NOTICE NO. 24
to
CONTRACT NO. 071B6200168
between
THE STATE OF MICHIGAN
and

NAME & ADDRESS OF CONTRACTOR:	PRIMARY CONTACT	EMAIL
Client Network Services, Inc. (CNSI) 2277 Research BLVD Rockville, MD 20850	Tom Sofo	tom.sofo@cns-inc.com
	TELEPHONE	CONTRACTOR #, MAIL CODE
	(301) 634-4606	

STATE CONTACTS	AGENCY	NAME	PHONE	EMAIL
CONTRACT COMPLIANCE INSPECTOR:	DTMB	John Spitzley	(517) 335-6612	spitzleyj1@michigan.gov
BUYER:	DTMB	Steve Motz	(517) 241-3215	motzs@michigan.gov

CONTRACT SUMMARY:

DESCRIPTION: **Medicaid Services Administration**

INITIAL EFFECTIVE DATE	INITIAL EXPIRATION DATE	INITIAL OPTIONS INCLUDED	CURRENT EXPIRATION DATE
March 14, 2006	September 30, 2011	Two One-Year	September 30, 2018
PAYMENT TERMS	F.O.B	SHIPPED	SHIPPED FROM
N/A	N/A	N/A	N/A

ALTERNATE PAYMENT OPTIONS:			AVAILABLE TO MIDEAL PARTICIPANTS	
☐ P-card	☐ Direct Voucher (DV)	☐ Other	☐ YES	☒ NO

MINIMUM DELIVERY REQUIREMENTS:

N/A

DESCRIPTION OF CHANGE NOTICE:

OPTION EXERCISED:	EFFECTIVE DATE OF CHANGE:	EXPIRATION DATE:
☒ NO ☐ YES		September 30, 2018

The following Community Health Administrative Management Payment System (CHAMPS) initiatives have been approved by the Michigan Department of Community Health and their Statements of Work (SOW) are incorporated into this contract: 1) Member Portal, 2) Managed Care and CSHCS, 3) Cloud Enhancement, 4) Provider Site Visit, 5) ODS – Phase 2, 6) DMP Enhancement and 7) Cost Settlement. CHAMPS Enhancements has no change to the existing SOW.

Effective immediately this contract is hereby INCREASED to provide funding for various Community Health Administrative Management Payment System (CHAMPS) initiatives not to exceed $25,611,503.00:

1. Illinois Implementation - $25,611,503

All initiatives funded by this change notice require prior approval by the Michigan Department of Community Health, Medical Services Administration of a project proposal before they are authorized to proceed. Project proposals will be added to the contract through subsequent change notices as they are approved.

CHANGE NOTICE NO.24 to CONTRACT NO. 071B6200160

Per Administrative Board Approval on March 10, 2015.

All other terms, conditions, pricing and specifications remain unchanged.

VALUE/COST OF CHANGE NOTICE:	$ 25,611,503.00
ESTIMATED AGGREGATE CONTRACT VALUE:	$ 444,219,286.00

FOR THE CONTRACTOR:	FOR THE STATE:
Client Network Services, Inc. (CNSI)	Signature
Firm Name	Kim Stephen, Director of the Bureau of Budget and Purchasing
Tom Sofo	Name/Title
Authorized Agent Signature	Michigan Department of Community Health
Tom Sofo	Enter Name of Agency
Authorized Agent (Print or Type)	11-19-15
October 14, 2015	Date
Date	

CHAMPS Claims Attachments Phase II
Statement of Work

Prepared For:
State of Michigan
Department of Community Health
400 South Pine Street
Lansing, Michigan 48909

Prepared By:

CNSI
6465 Millennium Drive, Suite 150
Lansing, MI 48917

December 19, 2014

This document contains proprietary information intended to be provided to key management staff of the State of Michigan. It should not be released to third parties or used for other purposes without the express written consent of CNSI.

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Section 1: Introduction

The Michigan Department of Community Health (MDCH) is a recognized leader in advancing technology to support the business of Medicaid. Recent examples of MDCH's leadership include the implementation of the Community Health Automated Medicaid Processing System (CHAMPS), a state-of-the-art Medicaid management information system (MMIS) certified by the Centers for Medicare & Medicaid Services (CMS) and the Electronic Health Record (EHR) Medicaid Incentive Payment Program (eMIPP) system developed and implemented as the first of its kind in the nation.

The Claims Attachments Phase II Project will implement the Health Insurance Portability and Accountability Act (HIPAA) 277 and 275 transactions in CHAMPS. The 277 transaction sends requests for additional claim information to the payer, the 275 transaction enables providers to send additional information electronically about a claim or encounter to the payer. When complete, CHAMPS will send the additional information requests and accept then process electronic claims attachments.

1.1 Regulatory and Business Drivers for Change

The Health Claims Attachments transaction standard was mandated in the Health Insurance Portability and Accountability Act (HIPAA) of 1996 (Section 1173(a)(2)(B)). In 2010, Section 1104 of the Patient Protection and Affordable Care Act (ACA) identified the final regulations adopting national standards, implementation specifications, and operating rules for health care claims attachments. All payers must be compliant with the claims attachments transactions no later than January 1, 2016.

Health care claim attachments are those documents required by health plans to adjudicate certain claims, there are some claims that require supporting documentation in order to process them. The information contained in these attachments cannot be reported in electronic claims (ASC X12N 837 5010) or Paper claims (in the Remarks field/Reserved for Local Use field) and must be submitted as an attachment.

The intent of this mandate is to make the claim adjudication process more effective and efficient by providing a structured and standard means of requesting clinical/supporting data for health care claims or encounters. The health claims attachments are expected to include a specifically defined set of extracts from the medical record (such as an x-ray, lab result, operative report, and so forth) needed to support the processing of a claim.

1.2 CNSI Capabilities

In partnership with the State of Michigan, CNSI performed the initial implementation of CHAMPS beginning in 2005. Prior to that, CNSI system architects led the development of the electronic Claims Adjudication Management (eCAMS) solution that forms CHAMPS' core. CNSI implemented CHAMPS in 2009 and supported the State in achieving CMS certification of the MMIS in 2011. CNSI's has continued to work with the State to provide innovative, technically sophisticated software solutions to support the State's business needs and to remain compliant with all defined federal requirements. In addition, CNSI has worked collaboratively with the State of Michigan to implement innovative solutions to support the Medicaid program, including mobile platforms for consumer engagement and provider site visit verification, integration with federal systems for Medicaid incentive payments and Medicaid

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expansion. These efforts have resulted in rapid response to federal mandates including HIPAA 5010 electronic data interchange standard, the International Classification of Diseases Revision 10 (ICD-10), ACA modifications, and CORE modifications. Through these and other efforts, CHAMPS has continued to maintain pace with the rapidly changing Medicaid environment and is complaint with all current federal regulations.

CNSI's approach to conducting this project is based on extensive knowledge of CHAMPS design, implementation, and operation since the system became operational. As system software engineers and integrators, CNSI aligns clients' business processes and information systems to allow them to access the right information at the right time, enabling the achievement of their desired business results and creating enterprise value. CNSI has extensive technological experience in the industry combined with flexible tools and methodologies to deliver quality results on time and within budget. CNSI completes jobs for clients by delivering on commitments with speed and purpose in accordance with the client's specifications and expectations.

For the Claims Attachments Phase II project, CNSI will use business, technical, and operational knowledge of the MDCH Medicaid program, CHAMPS system capabilities, and prior experience implementing the HIPAA 5010 transactions. CNSI will apply business and functional knowledge to develop a comprehensive solution for sending the 277 requests and accepting the 275 transactions.

CNSI brings an experienced team of Medicaid and CHAMPS subject matter experts (SMEs), technical and architectural experts, and project management expertise to support this endeavor in the method CNSI has used in previous collaborative efforts for MDCH. CNSI's experience working with MDCH has led to incorporating the following factors in developing this statement of work:

- **CNSI's comprehensive knowledge and experience implementing and supporting HIPAA transaction standards**

  CNSI has in depth knowledge of the HIPAA transaction standards which has ensured that CHAMPS is compliant with all of the mandated HIPAA transactions. This established foundation will be leveraged by the Claims Attachments Phase 2 Project Team to ensure a successful deployment.

- **CNSI's capability to identify and resolve major issues associated with CHAMPS**

  The prompt identification of major issues are an essential component to a project of this scope. CNSI's extensive knowledge of MDCH's current application architecture, infrastructure, and operations will allow it to quickly identify major issues affecting implementation activity. By devoting careful attention to identifying and resolving issues, CNSI will ensure the successful implementation of these new transactions.

- **CNSI's sensitivity to MDCH needs and constraints**

  CNSI is uniquely qualified to remain sensitive to the states' needs implementing the 277/275 transactions. CNSI understands that MDCH and DTMB staff members are involved in multiple implementation efforts in addition to their regular production workload. It is critical to the success of the project that state staff members are involved at the right time and in the right context.

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- **CNSI's proven Capability Maturity Model Integration (CMMI) Level 3-Assessed project processes for software development**
- In April of 2014, CNSI's Health and Human Services Organization Unit was appraised at Maturity Level 3 under Version 1.3 of the CMMI Development Model. The appraisal process for the organization unit included assessment of a project from the Midwest Region in order to reach this milestone. For this initiative, the CNSI Midwest Region will continue to use CMMI-compliant processes to deliver the solution described in this statement of work.

1.3 Proposed Project Organization

CNSI believes this statement of work represents the best possible combination of architecture, technology, support, and experience to complete this project. The proposed team members are each highly qualified within their respective disciplines. The underlying values held by each member of this team include:

- They share the same belief when undertaking a project—**the customer comes first**.
- They value the contribution that each member brings to successfully implement the project.
- They are committed to understanding and incorporating the State's requirements.
- They have a collective understanding of the advanced technologies, business needs, and operational issues necessary to execute the project successfully.
- They possess the knowledge and skills necessary to employ CNSI's Capability Maturity Model Integration (CMMI) Level 3-assessed processes to effectively implement the project.

CNSI's primary objective is the successful implementation and completion of the project. We are confident in our team's ability to achieve that goal. Our team is fully dedicated to **CHAMPS – SIGMA Implementation** project.

The project's success depends on the full and active participation of the MDCH, DTMB, and CNSI's designated staff members from the initial planning to final implementation.

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Figure 49 shows the CNSI organization structure supporting the **CHAMPS – SIGMA Implementation** project.

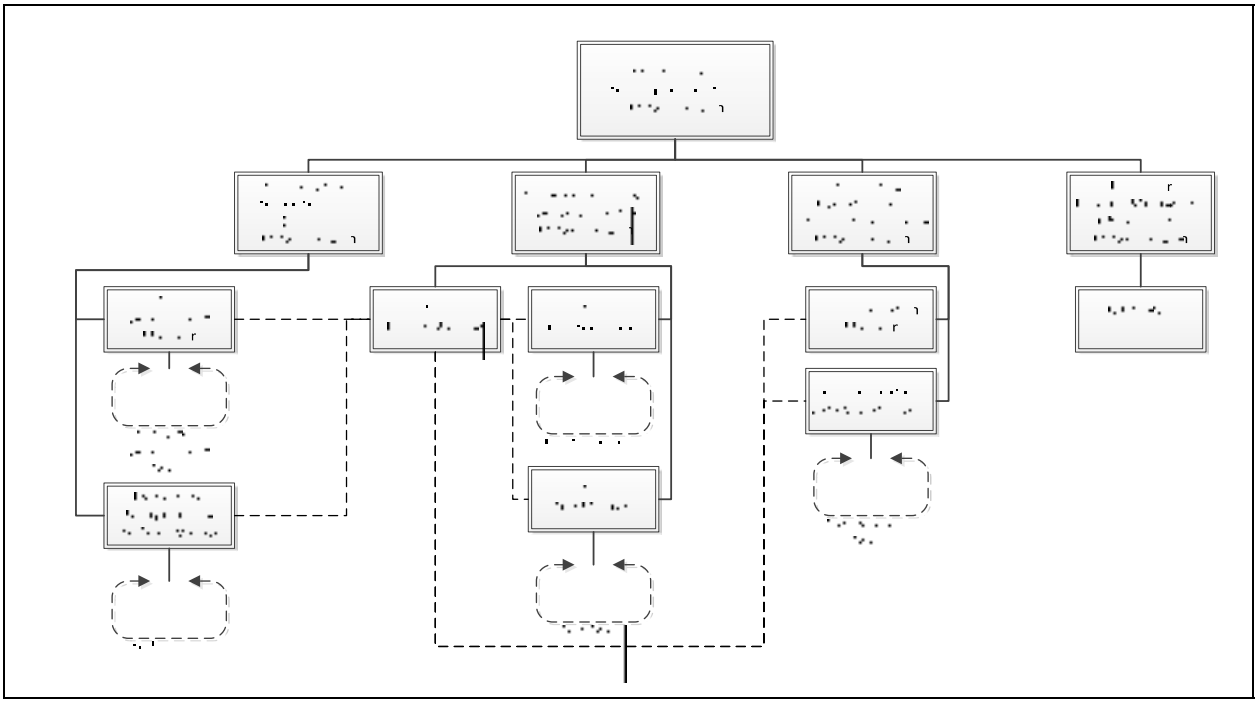

Figure 1. CHAMPS – SIGMA Implementation Project Organization Chart

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Section 2: Project Management Methodology and Tools

This section presents CNSI's project management, technical approaches, methodology, tools, and staged work plan for accomplishing all tasks required for the **CHAMPS – SIGMA Implementation** project. This section describes the scope of activities to be addressed throughout the project, from initiation to final implementation, and the techniques and methodologies the **CHAMPS – SIGMA Implementation** project team will use.

2.1 Project Management Approach

Although all projects are unique, they share common components and processes. The generally accepted process groups defined by the Project Management Body of Knowledge (PMBOK), as incorporated into the CNSI project management process, are:

- **Initiating:** This process group defines the project objectives and grants authority to proceed. For CNSI, the initiating processes are largely incorporated into the proposal development process, during which required partners are identified. This request for statement of work acts as a project charter and preliminary scope statement.
- **Planning:** This process group refines the project objectives and scope and plans the tasks, activities, and steps necessary to meet the project's objectives. The planning processes start during proposal development and proceed following contract award while CNSI works with MDCH to establish and baseline the project management plan (PMP). The PMP is modified and updated as necessary over the course of the project and is the culmination of the planning processes for scope definition and management, time (scheduling), staffing (human resources), communications, and risk management.
- **Executing:** This process group puts the project's plans into motion. This is where the bulk of the work for the project is performed.
- **Monitoring and Controlling:** This process group measures the performance of the project's executing activities and reports these performance results to project managers and stakeholders. Output is used to refine, improve, or change project management (including plans and schedules) as necessary to meet the project's objectives.
- **Closing:** This process group documents the formal acceptance and approval of the project's product and brings all aspects of the project to a close.

CNSI is able to provide consistent project outcomes as a result of integrating its set of repeatable, Midwest iVision360 Delivery Framework practices, within the project management process groups above. **Figure 56** shows how CNSI's project and quality management activities interact with other project activities.

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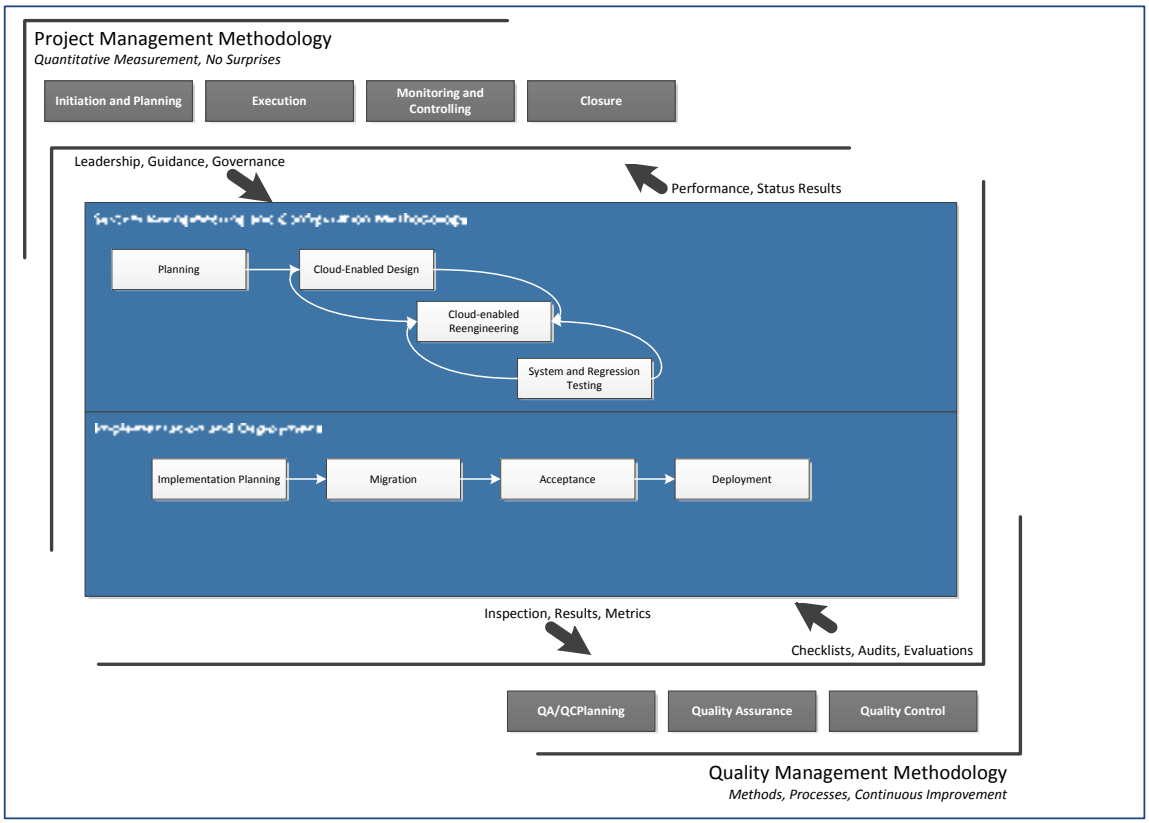

Figure 2. Project Management and Quality Management Activity Integration

CNSI is confident in its capability to apply this proven framework to successfully complete the **CHAMPS – SIGMA Implementation** project. Applying the same framework repeatedly, project after project, ensures a number of advantages for all stakeholders:

- The project management philosophy is firmly entrenched within the entire project team, including CNSI, MDCH, and DTMB.
- Project management is supported as a core competency.
- The project staff is focused on successfully implementing the project.
- Project management, quality management, and cost management processes are fully integrated and their infrastructure is in place.
- Effective project status reporting is established based on project life cycle.
- Project and software development methodologies are well documented.
- Project staff is provided comprehensive training.
- Project information is communicated continuously to the right people at the right time.
- The project is continuously monitored against performance.
- Excellence in quality and delivery are built in.

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- Deliverable review and approval processes are in place.

2.2 Project Methodology

CNSI's integrated approach for this project will use its proven Midwest Region iVision360 framework for the organizing structure, combined with an experienced team of program and project managers, SMEs, technical experts, and change management resources, to support this effort.

Using industry-standard project management methods facilitates the integration of CNSI's extensive system experience with application implementations, methodologies, and delivery tools. While no two engagements are the same, the State expects CNSI to deliver in a consistent, systematic fashion. CNSI will achieve this objective by using the CMMI Maturity Level 3-appraised Midwest iVision360 delivery framework tailored for the **CHAMPS – SIGMA Implementation** project as required. Using this framework will provide the structure for integrating CNSI's capabilities while allowing individual project teams the flexibility to adapt to meet the State's unique requirements and use client-mandated tools. Key benefits provided by the framework include:

- Provides a scalable, integrated collection of assets.
- Provides a consistent level of detail and presentation.
- Supports tailoring to scale, which provides a unique, but consistent, cost-effective delivery approach for the State.
- Uses established common work practices and expectations across project team members.

Investing time to create an effective plan with clear objectives is integral to successful project execution. CNSI's delivery framework provides a structured approach to the planning and execution. While this may appear to require more initial effort than desirable, experience has shown that following these processes reduces the likelihood of mistakes and results in lower risk and faster, more cost-effective delivery.

This standardized approach is a unique blend of the waterfall methodology and iterative, agile development. The advantages of this blend include:

- **User is at the Center:** CNSI's primary motivation for employing the Midwest iVision360 framework is to put the user at the center of the project life-cycle. Software projects succeed or fail largely from the software engineer's understanding of the customer's business rules, requirements, and needs. The more insight the developing organization has, the greater the quality and likelihood of success for the project. Successful projects have high interaction with end users and place the user at the center of the development life cycle. Every phase and task of Midwest iVision360 focuses on interaction and collaboration with the user community. CNSI does this by implementing agile techniques and building working software in an iterative fashion with user validation at periodic intervals.
- **Common Goals:** Users actively participate in requirements definition and design sessions with an integrated team of software engineers, analysts, and test engineers. This method avoids the pitfalls of waterfall development and test methods which leave, for example, test case refinement and execution until the completion of development. It also provides the team with a sense of

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purpose, a goal, and the drive to accomplish the end objective: software that meets the requirements.

- **Early and Often Testing:** Midwest iVision360 provides an opportunity to test early and often so formal system test phases and subsequent test phases are more likely to meet schedule expectations with a lower error-discovery rate.

The collaborative, and somewhat "free-form," nature of iterative, agile development is balanced with the structure and baseline management features of the waterfall stage methodology. By introducing the baseline management features of waterfall, CNSI minimizes the risk of scope creep that is sometimes associated with iterative development. Moreover, our project management processes provide integrated change, issue, and risk management processes. **Table 21** describes the key benefits of each of the industry-standard models that are blended into the Midwest iVision360 framework.

Table 1. SDLC Model Comparison

SDLC Model	Key Benefits Blended into Midwest iVision360
Waterfall	Baseline approval of requirements Structured documents and customer approvals Formalized testing
Iterative/Agile	Frequent customer interaction Decomposing work into small meaningful features that are presented in working software Frequent course corrections Sense of real progress Early and frequent testing
Extreme Programming	Teams formed between developing organization and customer Sense of common vision and goal

The standard Midwest iVision360 delivery framework employs a seven-phased process to organize activities and tasks associated with identifying requirements, designing, developing, and testing software. These phases contain major work packages that must be accomplished to move systematically through the Midwest iVision360 project life-cycle. The phases roll up into three logical stages within this statement of work. The three-stage roll-up provides an easily understandable, top-down structure that facilitates grouping of activities with similar resource requirements and closely related deliverables. **Figure 57**below shows the relationship between the three-stage roll-up and the seven phases of Midwest iVision360.

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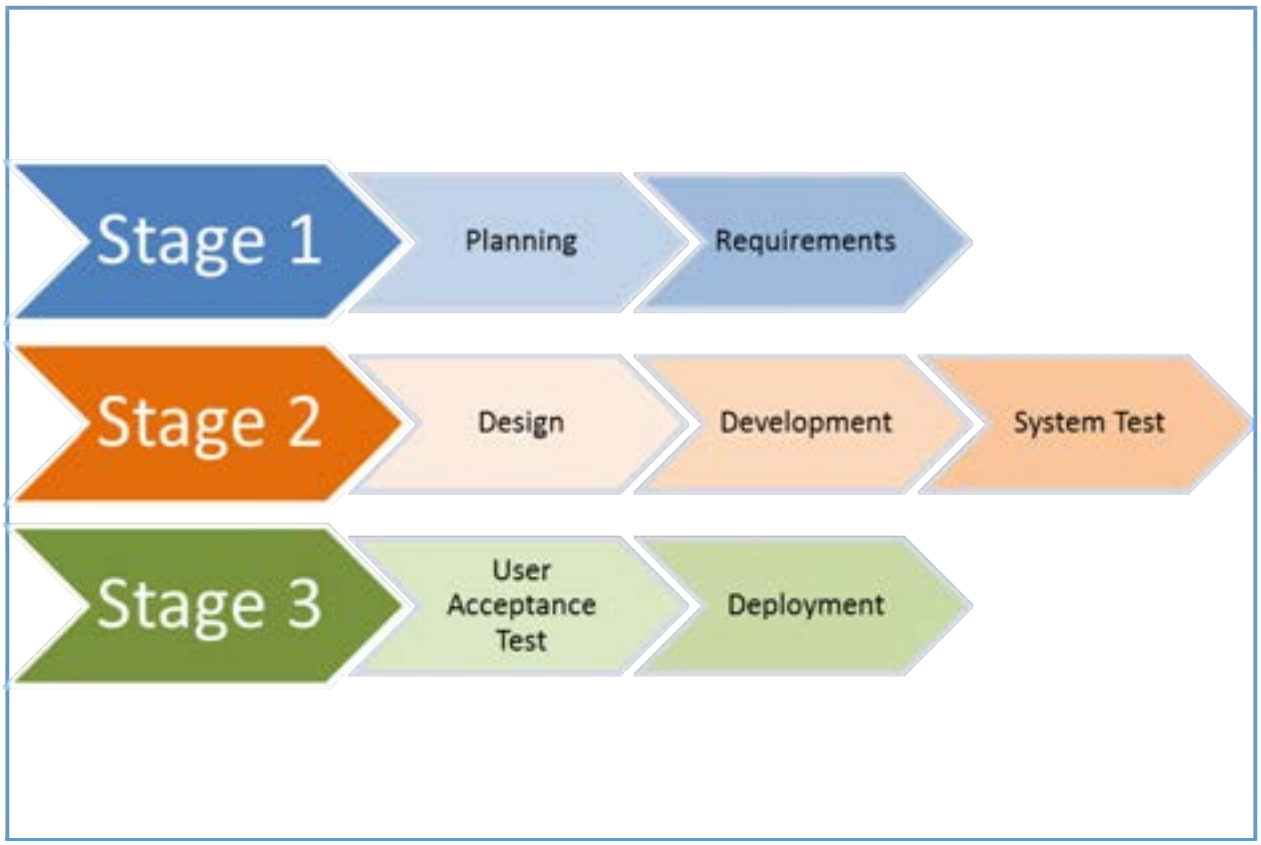

Figure 3. Midwest iVision360 Framework Stage and Phase Relationships

Based on the unique requirements of the **CHAMPS – SIGMA Implementation**, CNSI will tailor its seven-phase Midwest iVision360 framework to the specific needs of this initiative. Major activities and deliverables proposed for each stage in this statement of work can be found in

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Section 3: Solution **Overview** below.

Independent from the project team, CNSI's Program Management Office will conduct internal audits of CNSI process compliance to ensure the team is executing CNSI's standard processes and to incorporate process-improvement findings during the life-cycle of the project.

2.3 Project Management Tools

Tools, when properly applied within the delivery framework, reduce the time to complete a project by providing predefined support processes, templates, documents, and training materials. More importantly, using appropriate tools will help reduces risk and increases efficiency.

CNSI will continue to use the tools already proven effective during the previous undertakings to reduce the time to complete the project and mitigate risk.

Table 23 depicts the tools CNSI will utilize on the project.

Table 2. CNSI Project Tools

Tool	Purpose
Microsoft Office	Develop project deliverables as well as presentations and spreadsheet artifacts needed to support deliverables
Microsoft Project	Develop a detailed project schedule
Microsoft Visio	Develop use case diagrams, technical architecture diagrams, and support process flows
As-One	Repository for deliverables, presentations, and artifacts

While Microsoft Visio, Microsoft Office, and Microsoft Project are industry-standard tools, the following subsection provide additional information about As-One.

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2.3.1 As-One

As-One provides a convenient, secure repository for all program data and will give the State oversight personnel direct visibility into project work products, event calendar, and overall performance. The features of As-One are summarized in **Figure 51**.

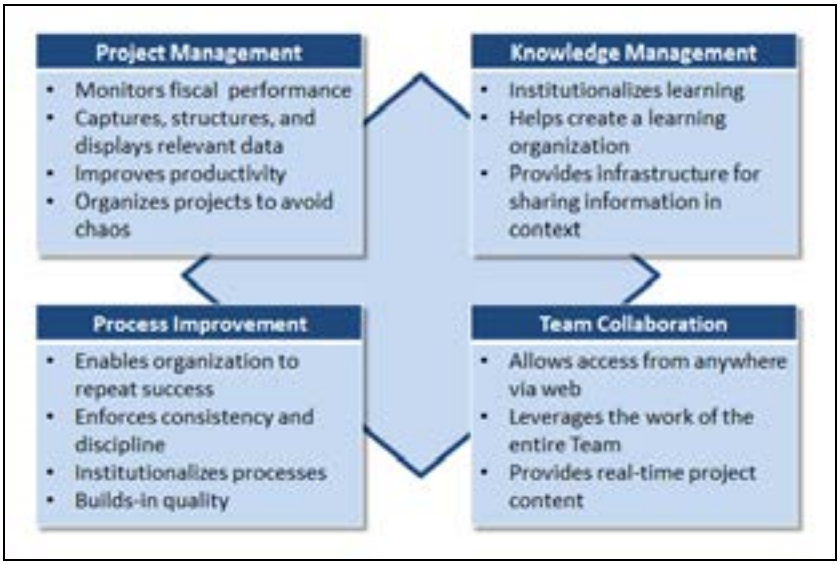

Figure 4. As-One Collaboration and Improvement

The As-One project repository will allow all members of the team to access relevant information and deliverables 24/7 using standard internet browsers such as Internet Explorer, Google Chrome, and Mozilla Firefox. MDCH and CNSI use As-One as their program management portal. Training will be provided for team members new to the program.

Section 3: Solution Overview

This section summarizes CNSI's proposed **CHAMPS – SIGMA Implementation** project, including functional and technical overviews, the proposed project timeline, and the project stages for meeting the objectives of the **CHAMPS – SIGMA Implementation** project. Full business and technical requirements will be elicited and documented as a part of the first phase of the project.

3.1 Functional Overview

At a high level, CHAMPS will be modified to provide the following capabilities to MDCH:

- Ability to accept and process the HIPAA Claims Attachments transactions.
- Ability to store the attachments in FileNet.

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- Ability to load claims attachments while entering claims via Direct Data Entry (DDE), paper or web upload.
- Add an attachment control number to the CHAMPS screens linking the attachment to the claim.

3.2 Technical Overview

CNSI will modify CHAMPS to send 277 requests and receive 275 attachments electronically. Several components in the system will be modified:

- Claims and Payment Processing:
    - Claims processing functionality will be modified to implement the 277 request file.
    - Claims processing functionality will be modified to implement the 275 claims attachment file for both solicited and unsolicited attachments.
- FileNet:
    - FileNet will be configured to store the readable format of the claims attachments.
- EDI/HIPAA transactions:
    - EDI infrastructure will be modified to implement HIPAA 277 and 275 transactions.
    - Edifecs configuration for new transactions.
- Paper Attachment
    - Paper Forms will have fields to accommodate all the details related to the claim attachments.
    - Scanner should be able to read the new fields.
- Electronic Attachment
    - CHAMPS usage for some of the elements will change.
    - New field in DDE or web interface.
- CHAMPS Screen
    - CHAMPS usage for some of the elements will change.
    - Attachment control numbers will be implemented in the appropriate screens.
    - Screens will be updated for new fields.

3.3 Solution Delivery Plan

In this section, CNSI presents the proposed timeline, technical approach, and staged delivery approach for the **CHAMPS – SIGMA Implementation** project.

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A detailed description of the activities and deliverables within each stage is presented in *Section 2.4.2 Phase Approach Work* **Plan**.

CNSI structured this work plan to address the overall relationship and sequence of the work required to complete the project. It effectively uses the professional resources required to successfully complete the work and produce high-quality products in a cost-conscious manner.

The following subsections further describe how CNSI intends to accomplish the goals of the work plan by employing its Midwest iVision360 framework in the proposed approach for the **CHAMPS – SIGMA Implementation** project.

3.3.1 High-Level Timeline

CNSI has created a summary timeline and work plan for the CHAMPS – SIGMA Implementation project. The timeline is shown in **Figure 5** below. The timeline shows the approximate duration of each stage and phase of the work for the CHAMPS – SIGMA Implementation project.

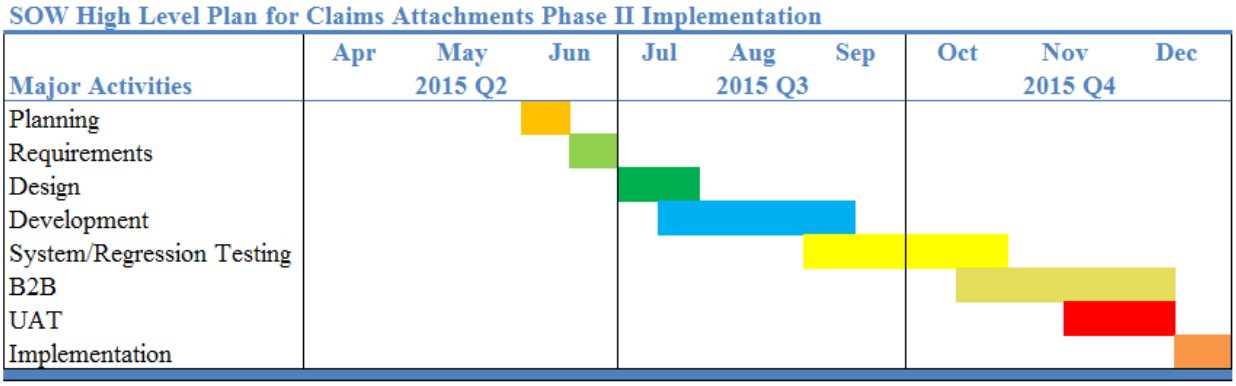

Figure 5. Claims Attachments Phase II High Level Timeline

This timeline was developed based on the estimated effort of the work necessary to accomplish the proposed technical and functional solutions.

The proposed timeline was developed with the goal of optimizing the effective use of the professional resources required to accomplish these scope of work and produce high-quality products in a cost-conscious manner.

3.3.2 Midwest iVision360 Delivery Processes

In this section, CNSI provides an outline of its CMMI Level 3-assessed Midwest iVision360 Framework, which includes a full system development life-cycle (SDLC) model supporting the delivery of the technical solution. CNSI's SDLC processes have been adapted to address the specific needs of the **CHAMPS – SIGMA Implementation** project. CNSI will produce deliverables for each phase of the project.

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CNSI will engage in requirements analysis and design with the customer in order to begin iterative development. CNSI will provide an opportunity for the customer to review design documents prior to the start of system development activity.

Iterative, agile development under the Midwest iVision360 framework is visible in Stage II for the **CHAMPS – SIGMA Implementation** project. During this stage, technical design specifications for new or impacted functions and user stories are constructed in parallel by the software engineers and SMEs. As the impacted function's design is completed, the team-lead plans the iterations required to complete development.

Development work is planned based on a two-week iteration schedule. Software engineers build internal design documentation prior to, and during, the two-week iterations. The first day of each iteration is reserved for startup activities, including finalizing the iteration's internal design documentation. The software engineer meets with the Data Modeling Team on the first day of the iteration and conducts a walkthrough of any required data model changes. The Data Modeling Team makes the required changes to the database schema and approves the physical model for coding.

Development begins once the internal design and pre-development work is completed for the iteration. The software engineer writes internal iteration test scripts in parallel to actual working code and updates screens and other system functions to fit the physical mode. The software engineer executes the iteration test scripts as they complete sections of code. The software engineer builds the code, tests incrementally, and coordinates and communicates with the team through daily stand-up meetings regarding any issues holding up the development work.

Software engineers then test the code against the internal auto-unit-code and manual internal iteration test scripts. As they reach the end of the iteration, they run the code against the functional scripts developed by the Test Team. Discrepancies are identified and corrected. The software engineer retests to ensure all discrepancies are corrected and closed before the iteration ends. The software engineer then conducts a peer review of the code of a given function on the last day of the iteration. The software engineer then updates the code based on the review. When software engineer iteration testing and software code reviews are successfully completed for the iteration, the code is then promoted to the integration test stream. The code is released to the Test Team for system testing when the coding and software engineer iteration testing is completed for all user stories for a given function.

During initial development iterations, the Test Team develops system test cases based on the current CHAMPS solution specifications. During system testing, the Test Team executes system test cases to validate system results against the current production functionality.

For the **CHAMPS – SIGMA Implementation** project, CNSI plans to engage the test and development teams early on to build the regression test suite for the critical functions. This will speed up testing and improve the overall quality of implementation. CNSI understands the importance and sensitivity of the **CHAMPS – SIGMA Implementation** project and the need to ensure it aligns with the environment that is

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already in production. During system testing, regression tests will be performed to demonstrate that the solution continues to function as expected.

As soon as regression testing is completed for a function, CNSI will deliver the code to the UAT environment. CNSI plans to engage the customer as early as possible and well before the beginning of the planned UAT phase. This ensures that enough time is allowed for thorough UAT, which will also reduce the risk of schedule slippage for UAT completion. CNSI will deploy system- and regression-tested functions to the UAT environment as they are completed.

As presented in our initial timeline (**Figure 5** above) UAT will have a 1-month duration. Any delay in the completion of UAT will significantly impact the implementation date. CNSI will work with MDCH to support all UAT activities.

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Figure 53 presents a graphical overview of the Midwest iVision360 framework processes applicable to the **CHAMPS – SIGMA Implementation** project.

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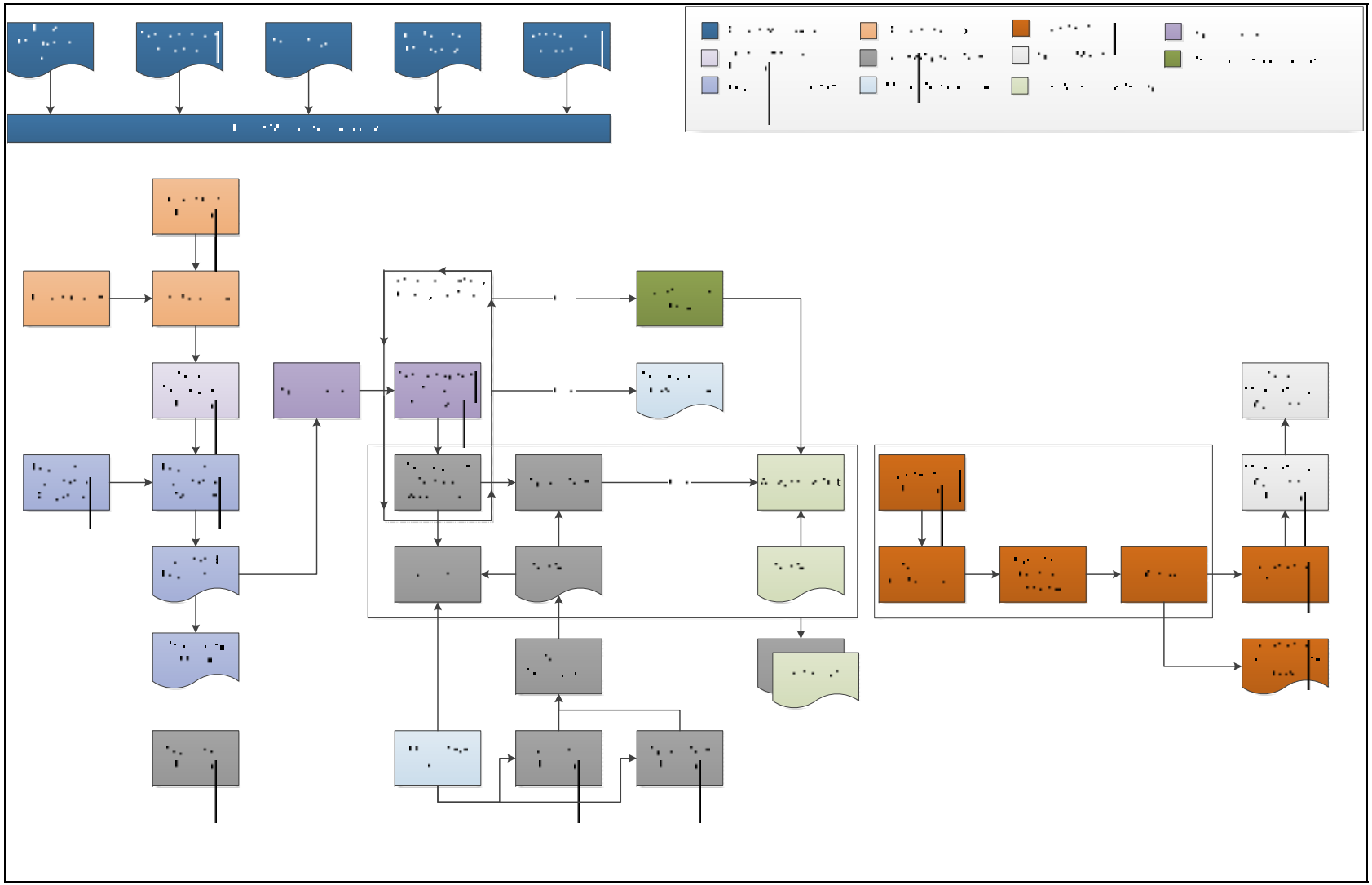

Figure 6. Midwest iVision360 Process Diagram

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3.3.3 Staged Delivery Summary

CNSI proposes a staged delivery of **CHAMPS – SIGMA Implementation** which incorporates the seven phases of CNSI's CMMI Level 3-assessed Midwest iVision360 framework. This top-down approach provides an easily understandable grouping of activities with similar resource requirements and related groupings of deliverables along with three major milestones following each stage to facilitate monitor and control of the initiative.

Figure 61 below summarizes the staged delivery using the seven phases of Midwest iVision360.

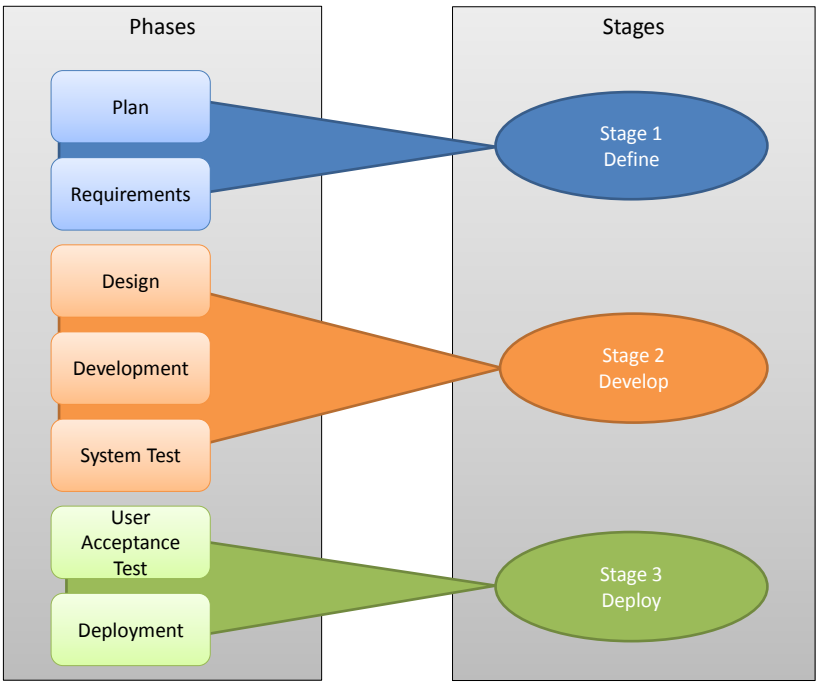

Figure 7. Midwest iVision360 Framework Phases and Stages

Figure 54 provides a high-level overview of the project stages with major activities and anticipated deliverables. Note that the overall timeline presented in **Figure 5** shows a 7-month total duration. The stages shown in **Figure 54** will overlap to accomplish the total work needed in the 10-month duration.

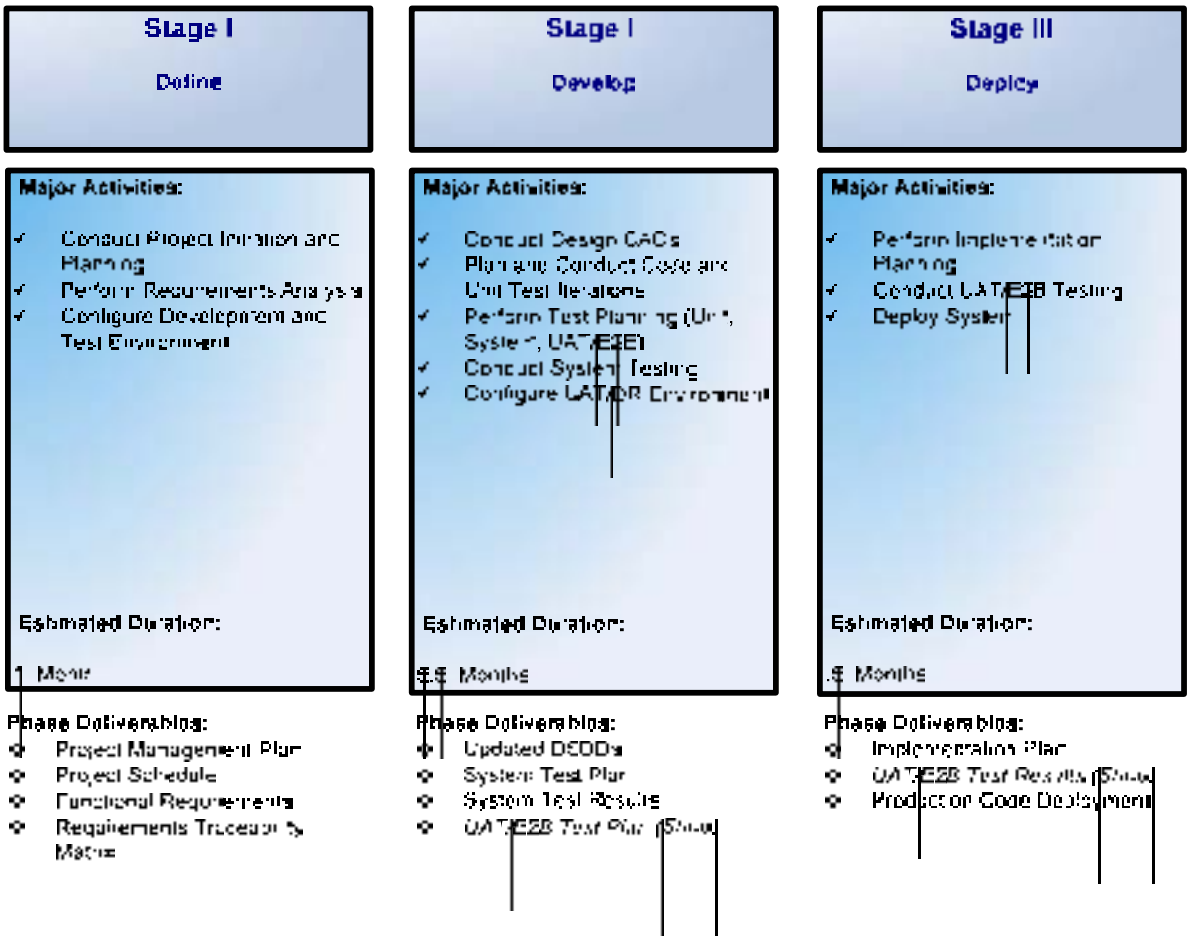

Figure 8. High-Level Project Stages and Activities

With every project, there are critical milestones to be met and work products and deliverables that must be developed and produced in order to provide the inputs necessary to perform the next activity. **Table 27** elaborates on the activities of the proposed 7-month implementation plan, along with the expected deliverables. In **Table 27**, bold text in the deliverables sections indicate formal deliverables; italicized text indicates State acceptance tasks and deliverables.

Table 3. High-Level Activities and Milestones by Stage

Major Activity	Description	Stage
Project Initiation	Establish the project team structure, key stakeholders, and operating guidelines for team activity throughout the course of the project.	Stage I
Project Planning	Develop PMP, schedule, and metrics.	Stage I
Requirements Analysis	Conduct collaborative application development (CAD) sessions to elicit and validate requirements for the	Stage I

Major Activity	Description	Stage
	CHAMPS – SIGMA Implementation project.	
Stage I Deliverables • **Project Management Plan** • **Project Work Plan** • **Requirements Specification Document** • Initial Requirements Traceability		
Design Analysis	Conduct CAD sessions to document detailed system design changes for the **CHAMPS – SIGMA Implementation** project.	Stage II
Test Planning	Conduct detailed test planning for each phase of testing:	Stage II
Software Development	Develop and unit test software required to support the detailed functional design including: • Screens • Functionality (driven by use cases) • Data Models • Reports • Interfaces	Stage II
System Testing	Internal CNSI testing of developed functionality at the component, subsystem, and system level.	Stage II
Stage II Deliverables • **As-Built DSDD** • **Test Plan** • **System Test Results** • Updated On-line Help		
Implementation Planning	Coordinate production installation of the system changes.	Stage II
UAT Support	MDCH testing of all system changes using formal UAT	Stage III

Major Activity	Description	Stage
	test scripts.	
Production Deployment	CNSI and the State of Michigan deploy the modifications in the MDCH production CHAMPS environment.	Stage III
Stage III Deliverables • **Implementation Plan** • Operational Support Forecast Report • Finalized On-line Help • **Code Deployment to Production**		

3.3.3.1 Stage 1 – Initiation and Requirements

Activity 1: Project Initiation

During this activity, CNSI will collaborate with the State of Michigan to identify the key business and technical team members who will participate in the **CHAMPS – SIGMA Implementation** project. CNSI will conduct the formal project kickoff and deliver orientation for the project effort.

The major milestones associated with this activity are:

- Participating team members from the State of Michigan are identified.
- Project kickoff meeting is conducted and project kickoff is completed.

Activity 2 - Project Planning

During this activity, CNSI will develop the PMP. The PMP outlines the standards and procedures for risk, issue, and action item management; project governance plan to coordinate activities between the CNSI project team and the State of Michigan; communications plan; deliverable management plan; project work breakdown structure (WBS); and the baseline schedule.

Milestones associated with this activity include:

- PMP is delivered.
- Project work plan is delivered.

Activity 3 – Requirements Analysis

The goals of the **CHAMPS – SIGMA Implementation** project have been defined at a high-level within this statement of work. During this activity, CNSI will host CAD

sessions to elicit and validate detailed functional and technical requirements. The CAD sessions will include the State of Michigan and CNSI functional and technical SMEs. CNSI will compare the validated requirements with current CHAMPS functionality and technical architecture to determine the impact of the new requirements across all CHAMPS subsystems, including system aspects such as:

- New and modified screens.
- Functionality (use cases).
- Data models.
- Reports.
- Interfaces.

This will result in a requirements specification document which provides a clear, concise, and final definition of each requirement. The approved requirements will be used during the design and development activities in Stage II.

The major milestones associated with this activity are:

- Functional requirements specification document is delivered.
- Approved requirements have been loaded into the requirements repository.

3.3.3.2 Stage II – Design, Coding, and System Testing

Activity 1 – Design Analysis

During this activity, CNSI will host CAD sessions to produce detailed design artifacts. Sessions will be organized and scheduled per requirements for the affected CHAMPS subsystem and the solution's technical architecture. CAD sessions will include State of Michigan and CNSI functional and technical SMEs. Using the existing CHAMPS design and the requirements specification document as a starting point, session participants will identify and document required design changes including system aspects such as:

- Screens.
- Functionality (use cases).
- Data models.
- Reports.
- Interfaces.

This will result in final, revised design artifacts, including use cases and data models, which will be the basis for the development of changes to system functions. CNSI will submit the completed design artifacts to the appropriate State of Michigan decision-maker shortly after the completion of a CAD session. The State of Michigan decision-maker will formally approve the design artifacts via signature on an approval form, similar to the existing CHAMPS enhancement approval process. This approval indicates that design is final and development can begin.

The major milestones associated with this activity are:

- Delivery of the as-built DSDD.

Activity 2 – Test Planning

During this activity, CNSI collaborates with the State of Michigan to determine the required set of tests to be executed. CNSI prepares test scenarios and scripts for each phase of internal testing, including system testing and regression testing. The system test scenarios and scripts are prepared by the CNSI Test Lead. The State of Michigan prepares the UAT test plan and related test scenarios and script during this activity time frame.

Milestones associated with this activity include:

- System test plan is completed.
- System test scenarios and scripts are completed.
- *UAT preparation is completed (State).*

Activity 3 – Software Development

At the beginning of this activity, the development iteration plan is prepared. During this activity, CNSI codes the software changes required to support the updated detailed functional and technical design. Development is performed through a series of bi-weekly development iterations as previously described. Development includes the coding changes as defined in the as-built DSDDs for CHAMPS, including system aspects, such as:

- Screens.
- Functionality (use cases).
- Data models.
- Reports.
- Interfaces.

At the conclusion of each development iteration, the developed code is delivered to the CNSI Test Team. The major milestone associated with this activity is the completion of all development iterations.

Activity 4 – System Testing

During this activity, CNSI tests the developed functionality at the component, subsystem, and system levels in accordance with the test plan. Test results are compiled and at the conclusion of system testing, CNSI performs end-to-end (E2E) regression testing. At the conclusion of this activity, the test manager conducts a test readiness review meeting to ensure all entry criteria for the UAT phase are met.

Milestones associated with this activity include:

- System test results report is delivered.
- Code is deployed to UAT environment.

- UAT begins.

3.3.3.3 Stage III – UAT and Production Deployment

Activity 1 – Implementation Planning

During this activity, CNSI collaborates with the State to coordinate the timing of the production installation of the system changes. The **CHAMPS – SIGMA Implementation** project will be incorporated into the regular CHAMPS operational release implementation schedule. Implementation planning activities will focus on targeting the operational release that will include this initiative and integrating the new features into the release. During this activity, CNSI will review operational support projections for post-deployment support and prepare an operational support forecast report documenting any changes expected post-deployment.

Milestones associated with this activity include:

- Identification of the operational releases where the software will be deployed.
- Development of the implementation plan.
- Preparation of the operational support forecast report.

Activity 2 –B2B Support

During this activity, CNSI provides support to MDCH staff who will conduct. UAT testing will occur after System Testing and throughout UAT. Defects identified are monitored and corrected throughout B2B.

The major milestones associated with this activity include:

- *B2B test results report (State deliverable).*
- Final defect correction report.
- State approval to deploy the software.

Activity 3 –UAT Support

During this activity, CNSI provides support to MDCH staff who will conduct UAT using formal, State-developed test scripts. UAT testing will be aligned with the selected operational releases where the code will be deployed. Defects identified are monitored and corrected throughout UAT.

The major milestones associated with this activity include:

- *UAT test results report (State deliverable).*
- Final defect correction report.
- State approval to deploy the software.

Activity 4 – Production Deployment

During this activity, CNSI and the State of Michigan collaborate to execute the implementation plan. The finalized code will be merged into the selected regular operational release. CNSI deploys the release to the production environment where it is available for use by MDCH staff.

The major milestones associated with this activity include:

- Code is deployed to production.
- Production support begins.

Section 4: General Assumptions and Constraints

CNSI has identified and provided the following general assumptions in regards to the **CHAMPS – SIGMA Implementation** project:

1. MDCH and DTMB will provide access to, and time commitment from, subject matter experts who understand their programs and systems.
2. Edifecs software will be compliant with this transaction.
3. Remediation of FileNet is the responsibility of DTMB and will be completed pursuant to the approved Project Work Plan. Any delays will be evaluated through the project's change management process.
5. The State will plan and execute UAT pursuant to the approved Project Work Plan. Any delays will be evaluated through the project's change management process.

CNSI has identified the following constraints in regards to the **CHAMPS – SIGMA Implementation** project:

1. The federally mandated compliance date for this project is January 1, 2016.

Section 5: Proposed Project Cost

This section of our proposal presents our fixed-price, overall labor cost for completing the **CHAMPS – SIGMA Implementation** project. The cost was derived based on the expected effort required as presented in our initial work plan, composed of the three stages depicted in Figure 54.

The overall cost for implementing enhancement to Claims Attachments Phase II project is $1,250,000.

CHAMPS Managed Care Compliance
Statement of Work

Prepared For:
State of Michigan
Department of Community Health
400 South Pine Street
Lansing, Michigan 48909

Prepared By:

CNSI
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December 19, 2014

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Section 1: Introduction

CNSI is pleased to present this statement of work to enhance the Community Health Automated Medicaid Processing System (CHAMPS) to support the Managed Care enhancements functionality for the Michigan Department of Community Health (MDCH). CNSI proposes to complete the requirements for the **CHAMPS – SIGMA Implementation** project under a fixed-cost agreement.

This project delivers enhanced efficiency and increased cost savings by:

- Improving health plan performance bonus monitoring and management by automating data collection during health plan compliance site visits and aggregation of data for auto-assignment algorithm reporting.
- Generating daily HIPAA 834 enrollment files for distribution to Medicaid Health Plans.
- Providing "copy/paste" functionality within the provider enrollment process to expedite configuration of new managed care providers.

1.1 Regulatory and Business Drivers for Change

Continuing its leadership in advancing technology to support Medicaid, MDCH continuously strives to improve the effectiveness and efficiency of the Medicaid Managed Care program. This project will assist the State in this area by:

- Significantly improving the health plan compliance site visit, performance bonus and auto-assignment algorithm report processes by transferring the current manual data collection process into automated modules within CHAMPS.
- Increasing delivery of care by increasing the frequency of HIPAA 834 managed care enrollment rosters from weekly to daily.
- Increasing the efficiency of the MDCH managed care staff by automating the ability to configure plan ownership data in CHAMPS when configuring new programs.

1.2 CNSI Capabilities

In partnership with the State of Michigan, CNSI performed the initial implementation of CHAMPS beginning in 2005. Prior to that, CNSI system architects led the development of the electronic Claims Adjudication Management (eCAMS) solution that forms CHAMPS' core. CNSI implemented CHAMPS in 2009 and supported the State in achieving CMS certification of the MMIS in 2011. CNSI's has continued to work with the State to provide innovative, technically sophisticated software solutions to support the State's business needs and to remain compliant with all defined federal requirements. In addition, CNSI has worked collaboratively with the State of Michigan to implement innovative solutions to support the Medicaid program, including multiple new managed care benefit plans such as the Autism, Healthy Michigan, Beneficiary Monitoring, Non-Emergency Medical Transportation, Medicare-Medicaid

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Dual Eligibility, and MI Health Link (Integrated Care) plans; mobile platforms for consumer engagement and provider site visit verification; integration with federal systems for Medicaid incentive payments; and Medicaid expansion.

These efforts have resulted in rapid response to federal mandates including Health Insurance Portability and Accountability Act (HIPAA) 5010 electronic data interchange standard, the International Classification of Diseases Revision 10 (ICD-10), Affordable Care Act modifications, and CORE modifications. Through these and other efforts, CHAMPS has continued to maintain pace with the rapidly changing Medicaid environment and is complaint with all current federal regulations.

CNSI's approach to conducting this project is based on extensive knowledge of CHAMPS design, implementation, and operation since the system became operational. As system software engineers and integrators, CNSI aligns clients' business processes and information systems to allow them to access the right information at the right time, enabling the achievement of their desired business results and creating enterprise value. CNSI has extensive technological experience in the industry combined with flexible tools and methodologies to deliver quality results on time and within budget. CNSI completes jobs for clients by delivering on commitments with speed and purpose in accordance with the client's specifications and expectations.

CNSI brings an experienced team of Medicaid and CHAMPS subject matter experts (SMEs), technical and architectural experts, and project management expertise to support this endeavor in the method CNSI has used in previous collaborative efforts for MDCH. CNSI's experience working with MDCH has led to incorporating the following factors in developing this statement of work:

- **CNSI's capability to conduct complex analysis of Medicaid system requirements**

  CHAMPS is a multifunctional MMIS-certified information system compliant with all federal mandates that integrates all Medicaid activities into one complete system. As such, the existing CHAMPS managed care subsystem (designed, developed and implemented by CNSI) is the baseline from which the **CHAMPS – SIGMA Implementation** solution will be implemented. CNSI is positioned to take advantage of the extensive knowledge accumulated during the CHAMPS implementation, HIPAA 5010 migration, ICD-10 assessment project, ICD-10 remediation project, and our MMIS implementations in other states, and strategically apply it to the CHAMPS **CHAMPS – SIGMA Implementation** project.

- **CNSI's capability to identify and resolve major issues associated with CHAMPS**

  The prompt identification of major issues are an essential component to a project of this scope and are particularly important in the reengineering analysis work needed in a project of this nature. CNSI's extensive knowledge of MDCH's current application architecture, infrastructure, and operations will allow it to quickly identify major issues affecting implementation activity. By devoting careful attention to identifying and resolving issues, CNSI will ensure the successful

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implementation of the **CHAMPS – SIGMA Implementation** solution.

- **CNSI's sensitivity to MDCH needs and constraints**

  CNSI is uniquely qualified to remain sensitive to the states' needs developing the **CHAMPS – SIGMA Implementation** solution. Because of its multi-year history of collaboration with MDCH and understanding of CHAMPS, CNSI can provide business and technical expertise in presenting system capabilities. CNSI understands that MDCH and DTMB staff members are involved in multiple implementation efforts in addition to their regular production workload. It is critical to the success of the project that state staff members are involved at the right time and in the right context.

- **CNSI's technical leadership to support MDCH's vision**

  CNSI has shown technical leadership from the beginning with the implementation of CHAMPS. Through CNSI's collaboration with the equally forward-thinking MDCH leadership, the partnership has achieved milestones that moved the Medicaid business to a modern state. The partnership continued to drive innovation through the implementation of eMIPP, HealthBeat, ClaimSure, Provider Site Visit Pro, Document Management Portal, TPL integration, Provider Credentialing Service, myHealthPortal, and myHealthButton.

- **CNSI's proven Capability Maturity Model Integration (CMMI) Level 3-Assessed project processes for software development**

  In April of 2014, CNSI's Health and Human Services Organization Unit was appraised at Maturity Level 3 under Version 1.3 of the CMMI Development Model. The appraisal process for the organization unit included assessment of a project from the Midwest Region in order to reach this milestone. For this initiative, the CNSI Midwest Region will continue to use CMMI-compliant processes to deliver the solution described in this statement of work.

1.3 Proposed Project Organization

CNSI believes this statement of work represents the best possible combination of architecture, technology, support, and experience to complete this project. The proposed team members are each highly qualified within their respective disciplines. The underlying values held by each member of this team include:

- They share the same belief when undertaking a project—**the customer comes first**.
- They value the contribution that each member brings to successfully implement the project.
- They are committed to understanding and incorporating the State's requirements.
- They have a collective understanding of the advanced technologies, business needs, and operational issues necessary to execute the project successfully.

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- They possess the knowledge and skills necessary to employ CNSI's Capability Maturity Model Integration (CMMI) Level 3-assessed processes to effectively implement the project.

CNSI's primary objective is the successful implementation and completion of the project. We are confident in our team's ability to achieve that goal. Our team is fully dedicated to **CHAMPS – SIGMA Implementation** project.

The project's success depends on the full and active participation of the MDCH, DTMB, and CNSI's designated staff members from the initial planning to final implementation.

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Figure 49 shows the CNSI organization structure supporting the **CHAMPS – SIGMA Implementation** project.

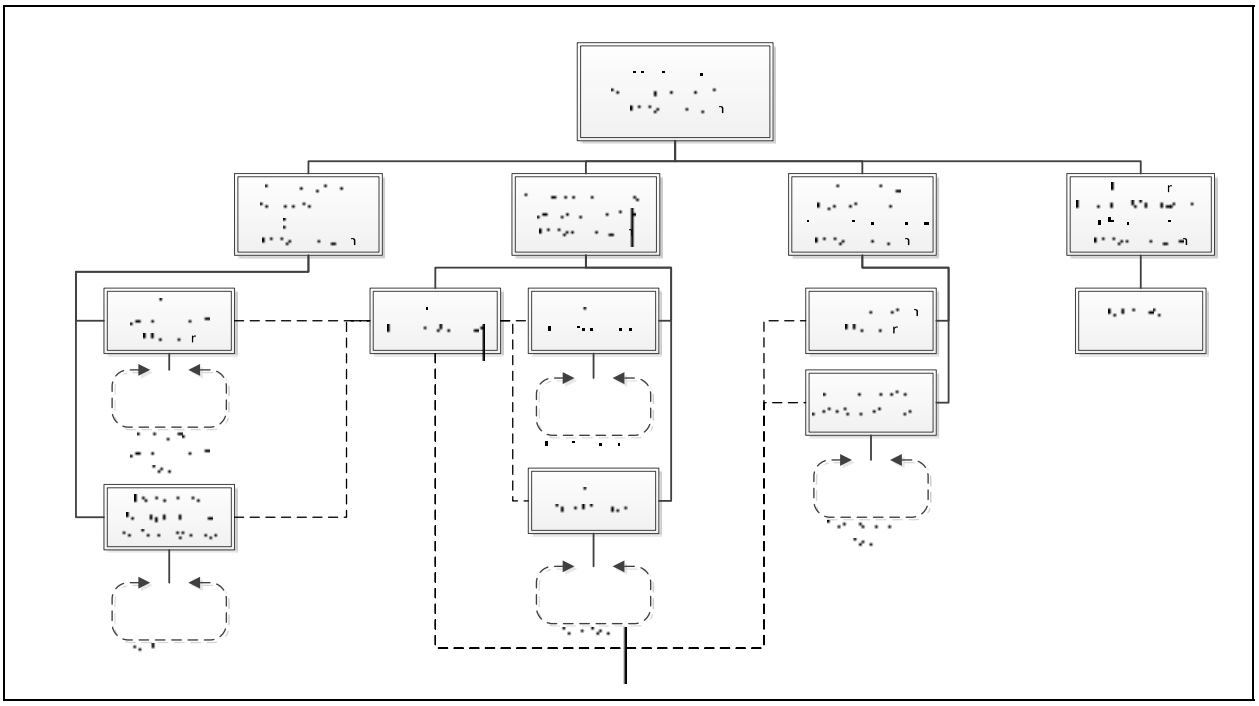

Figure 9. CHAMPS – SIGMA Implementation Project Organization Chart

Section 2: Project Management Methodology and Tools

This section presents CNSI's project management, technical approaches, methodology, tools, and staged work plan for accomplishing all tasks required for the **CHAMPS – SIGMA Implementation** project. This section describes the scope of activities to be addressed throughout the project, from initiation to final implementation, and the techniques and methodologies the **CHAMPS – SIGMA Implementation** project team will use.

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2.1 Project Management Approach

Although all projects are unique, they share common components and processes. The generally accepted process groups defined by the Project Management Body of Knowledge (PMBOK), as incorporated into the CNSI project management process, are:

- **Initiating:** This process group defines the project objectives and grants authority to proceed. For CNSI, the initiating processes are largely incorporated into the proposal development process, during which required partners are identified. This statement of work acts as a project charter and preliminary scope statement.
- **Planning:** This process group refines the project objectives and scope and plans the tasks, activities, and steps necessary to meet the project's objectives. The planning processes start during proposal development and proceed following contract award while CNSI works with MDCH to establish and baseline the project management plan (PMP). The PMP is modified and updated as necessary over the course of the project and is the culmination of the planning processes for scope definition and management, time (scheduling), staffing (human resources), communications, and risk management.
- **Executing:** This process group puts the project's plans into motion. This is where the bulk of the work for the project is performed.
- **Monitoring and Controlling:** This process group measures the performance of the project's executing activities and reports these performance results to project managers and stakeholders. Output is used to refine, improve, or change project management (including plans and schedules) as necessary to meet the project's objectives.
- **Closing:** This process group documents the formal acceptance and approval of the project's product and brings all aspects of the project to a close.

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CNSI is able to provide consistent project outcomes as a result of integrating its set of repeatable, Midwest iVision360 Delivery Framework practices, within the project management process groups above. **Figure 56** shows how CNSI's project and quality management activities interact with other project activities.

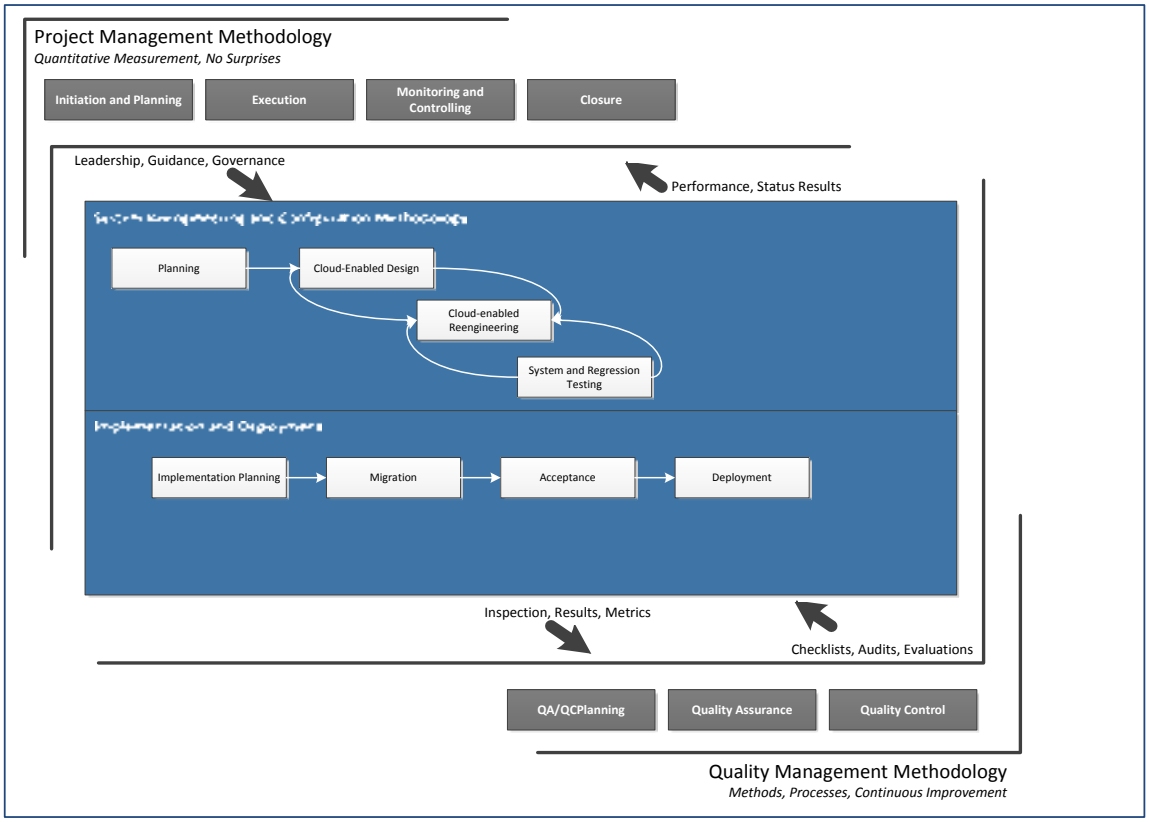

Figure 10. Project Management and Quality Management Activity Integration

CNSI is confident in its capability to apply this proven framework to successfully complete the **CHAMPS – SIGMA Implementation** project. Applying the same framework repeatedly, project after project, ensures a number of advantages for all stakeholders:

- The project management philosophy is firmly entrenched within the entire project team, including CNSI, MDCH, and DTMB.
- Project management is supported as a core competency.
- The project staff is focused on successfully implementing the project.
- Project management, quality management, and cost management processes are fully integrated and their infrastructure is in place.
- Effective project status reporting is established based on project life cycle.
- Project and software development methodologies are well documented.

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- Project staff is provided comprehensive training.
- Project information is communicated continuously to the right people at the right time.
- The project is continuously monitored against performance.
- Excellence in quality and delivery are built in.
- Deliverable review and approval processes are in place.

2.2 Project Methodology

CNSI's integrated approach for this project will use its proven Midwest Region iVision360 framework for the organizing structure, combined with an experienced team of program and project managers, SMEs, technical experts, and change management resources, to support this effort.

Using industry-standard project management methods facilitates the integration of CNSI's extensive system experience with application implementations, methodologies, and delivery tools. While no two engagements are the same, the State expects CNSI to deliver in a consistent, systematic fashion. CNSI will achieve this objective by using the CMMI Maturity Level 3-appraised Midwest iVision360 delivery framework tailored for the **CHAMPS – SIGMA Implementation** project as required. Using this framework will provide the structure for integrating CNSI's capabilities while allowing individual project teams the flexibility to adapt to meet the State's unique requirements and use client-mandated tools. Key benefits provided by the framework include:

- Provides a scalable, integrated collection of assets.
- Provides a consistent level of detail and presentation.
- Supports tailoring to scale, which provides a unique, but consistent, cost-effective delivery approach for the State.
- Uses established common work practices and expectations across project team members.

Investing time to create an effective plan with clear objectives is integral to successful project execution. CNSI's delivery framework provides a structured approach to the planning and execution. While this may appear to require more initial effort than desirable, experience has shown that following these processes reduces the likelihood of mistakes and results in lower risk and faster, more cost-effective delivery.

This standardized approach is a unique blend of the waterfall methodology and iterative, agile development. The advantages of this blend include:

- **User is at the Center:** CNSI's primary motivation for employing the Midwest iVision360 framework is to put the user at the center of the project lifecycle. Software projects succeed or fail largely from the software engineer's understanding of the customer's business rules, requirements, and needs. The more insight the developing organization has, the greater the quality and likelihood of success for the project. Successful projects have high interaction with end users and place the user at the center of the development life cycle. Every phase and task of Midwest iVision360 focuses on interaction and collaboration with the user community. CNSI does this by

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implementing agile techniques and building working software in an iterative fashion with user validation at periodic intervals.

- **Common Goals:** Users actively participate in requirements definition and design sessions with an integrated team of software engineers, analysts, and test engineers. This method avoids the pitfalls of waterfall development and test methods which leave, for example, test case refinement and execution until the completion of development. It also provides the team with a sense of purpose, a goal, and the drive to accomplish the end objective: software that meets the requirements.
- **Early and Often Testing:** Midwest iVision360 provides an opportunity to test early and often so formal system test phases and subsequent test phases are more likely to meet schedule expectations with a lower error-discovery rate.

The collaborative, and somewhat "free-form," nature of iterative, agile development is balanced with the structure and baseline management features of the waterfall stage methodology. By introducing the baseline management features of waterfall, CNSI minimizes the risk of scope creep that is sometimes associated with iterative development. Moreover, our project management processes provide integrated change, issue, and risk management processes. **Table 21** describes the key benefits of each of the industry-standard models that are blended into the Midwest iVision360 framework.

Table 4. SDLC Model Comparison

SDLC Model	Key Benefits Blended into Midwest iVision360
Waterfall	Baseline approval of requirements Structured documents and customer approvals Formalized testing
Iterative/Agile	Frequent customer interaction Decomposing work into small meaningful features that are presented in working software Frequent course corrections Sense of real progress Early and frequent testing
Extreme Programming	Teams formed between developing organization and customer Sense of common vision and goal

The standard Midwest iVision360 delivery framework employs a seven-phased process to organize activities and tasks associated with identifying requirements, designing, developing, and testing software. These phases contain major work packages that must be accomplished to move systematically through the Midwest iVision360 project lifecycle. The phases roll up into three logical stages within this statement of

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work. The three-stage roll-up provides an easily understandable, top-down structure that facilitates grouping of activities with similar resource requirements and closely related deliverables. **Figure 57**below shows the relationship between the three-stage roll-up and the seven phases of Midwest iVision360.

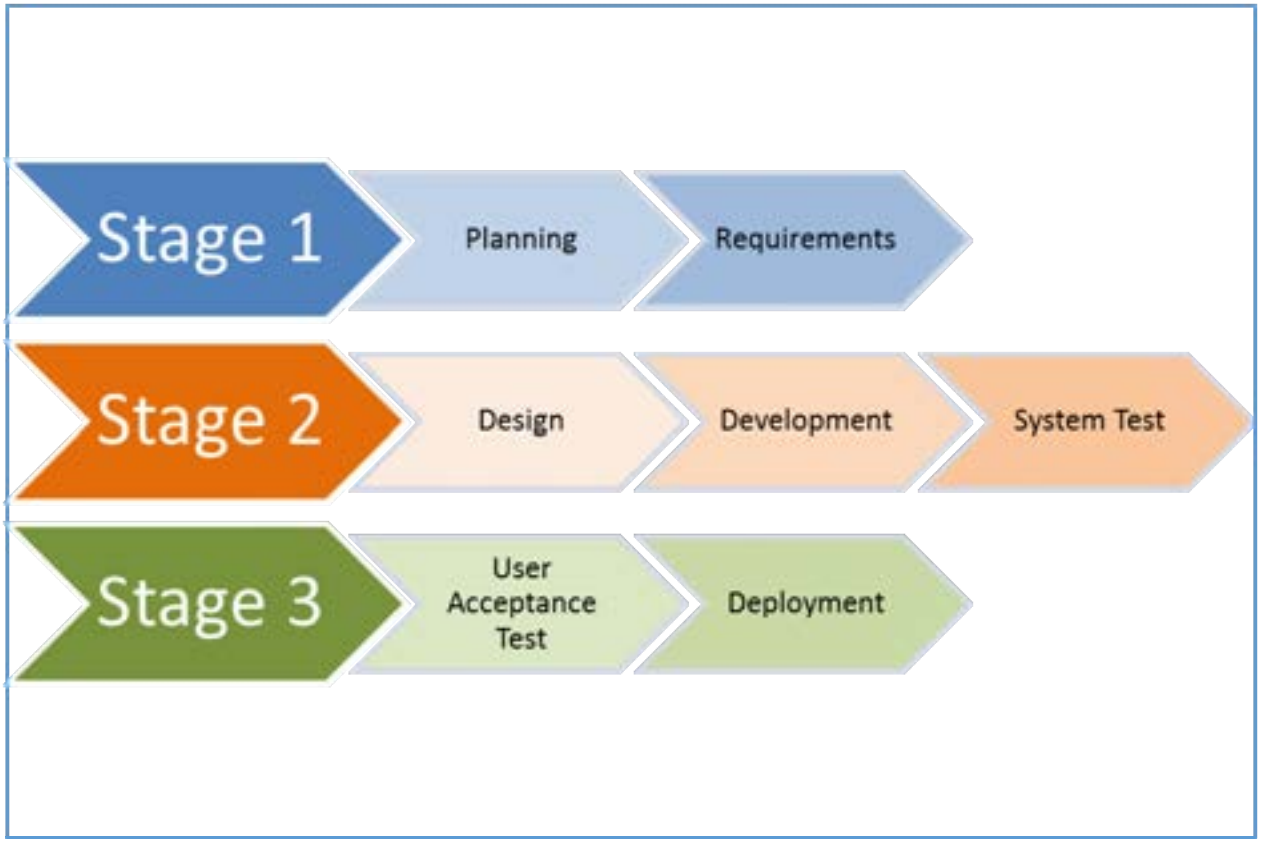

Figure 11. Midwest iVision360 Framework Stage and Phase Relationships

Based on the unique requirements of the **CHAMPS – SIGMA Implementation**, CNSI will tailor its seven-phase Midwest iVision360 framework to the specific needs of this initiative. Major activities and deliverables proposed for each stage in this statement of work can be found in

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Section 3: Solution **Overview** below.

Independent from the project team, CNSI's Program Management Office will conduct internal audits of CNSI process compliance to ensure the team is executing CNSI's standard processes and to incorporate process-improvement findings during the lifecycle of the project.

2.3 Project Management Tools

Tools, when properly applied within the delivery framework, reduce the time to complete a project by providing predefined support processes, templates, documents, and training materials. More importantly, using appropriate tools reduces risk and increases efficiency.

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CNSI will continue to use the tools already proven effective during the previous undertakings to reduce the time to complete the project and mitigate risk. **Table 23** depicts the tools CNSI will utilize on the project.

Table 5. CNSI Project Tools

Tool	Purpose
Microsoft Office	Develop project deliverables as well as presentations and spreadsheet artifacts needed to support deliverables
Microsoft Project	Develop a detailed project schedule
Microsoft Visio	Develop use case diagrams, technical architecture diagrams, and support process flows
As-One	Repository for deliverables, presentations, and artifacts

While Microsoft Visio, Microsoft Office, and Microsoft Project are industry-standard tools, the following subsection provide additional information about As-One.

2.3.1 As-One

As-One provides a convenient, secure repository for all program data and will give the State oversight personnel direct visibility into project work products, event calendar, and overall performance. The features of As-One are summarized in **Figure 51**.

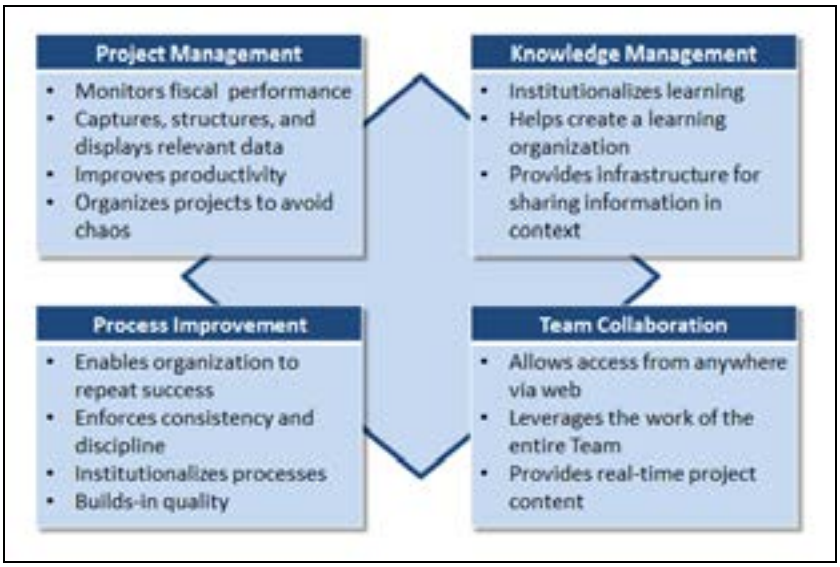

Figure 12. As-One Collaboration and Improvement

The As-One project repository will allow all members of the team to access relevant information and deliverables 24/7 using standard internet browsers such as Internet Explorer, Google Chrome, and

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Mozilla Firefox. MDCH and CNSI use As-One as their program management portal. Training will be provided for team members new to the program.

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Section 3: Solution Overview

This section summarizes CNSI's proposed **CHAMPS – SIGMA Implementation** project, including functional and technical overviews, the proposed project timeline, and the project stages for meeting the objectives of the **CHAMPS – SIGMA Implementation** project. Full business and technical requirements will be elicited and documented as a part of the first phase of the project.

3.1 Functional Overview

At a high level, CHAMPS will be modified to provide the following capabilities to MDCH:

- Improvements in health plan performance bonus monitoring and management by automating data collection during health plan compliance site visits and aggregation of data for auto-assignment algorithm reporting.
- Generate daily HIPAA 834 enrollment files for distribution to Medicaid Health Plans.
- Provide "copy/paste" functionality within the provider enrollment process to expedite configuration of new managed care providers.

3.2 Technical Overview

CNSI will modify CHAMPS to:

- Automate data collection and reporting for health plan compliance site visits and performance bonus management by migrating functionality from the current Microsoft Access data collection tool to CHAMPS. This includes the potential to mine some of the required data directly from CHAMPS encounters. Functionality will include the ability to capture details for the following areas for quality monitoring:
    - **Administrative:** Health plan details related to their organization chart, administrative position, governing body and policy for election of enrollee board members.
    - **Provider:** Health plan pharmacy contracts, toll free telephone facilities, web review, provider network, policies and procedures for communication with providers, and appeals processes.
    - **Member:** Health plan detailed member material, handbook, newsletter, review and maintenance of website, policies and procedures for resolution of member grievances and appeals, and appeal decision results.

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  - **Quality:** Health plan details related to clinical practice guidelines, quality improvement plan (QIP) evaluation and work plan, utilization management (UM) program and effectiveness review, HEDIS IDSS, HEDIS compliance audit report (FAR), performance improvement projects, accreditation and PMR review.
  - **Information Systems:** Health plan details related to maintenance of efficient and effective information systems, written procedures for electronically processing enrollments and disenrollments, consolidated annual report and audited financial statement.
  - **Fraud and Abuse Reporting:** Health plan details of tips and grievances, data mining results, and program integrity form details.

- Produce HIPAA standard 834 beneficiary managed care enrollment rosters each day. Health plans will have daily notification of new or changed enrollees.
- Enable copy/paste" functionality from one program to another within the provider enrollment process to expedite configuration of new managed care providers. This eliminates the need to manually type the detailed contract information when configuring new managed care programs in CHAMPS.

3.3 Solution Delivery Plan

In this section CNSI presents the proposed timeline, technical approach, and staged delivery approach for the CHAMPS – SIGMA **Implementation** project.

A detailed description of the activities and deliverables within each stage is presented in *Section 2.4.2 Phase Approach Work* **Plan**.

CNSI structured this work plan to address the overall relationship and sequence of the work required to complete the project. It effectively uses the professional resources required to successfully complete the work and produce high-quality products in a cost-conscious manner.

The following subsections further describe how CNSI intends to accomplish the goals of the work plan by employing its Midwest iVision360 framework in the proposed approach for the CHAMPS – SIGMA **Implementation** project.

3.3.1 High-Level Timeline

CNSI has created a summary timeline and work plan for the CHAMPS – SIGMA **Implementation** project. The timeline is shown in **Figure 13** below. The timeline shows the approximate duration of each stage and phase of the work for the CHAMPS – SIGMA **Implementation** project.

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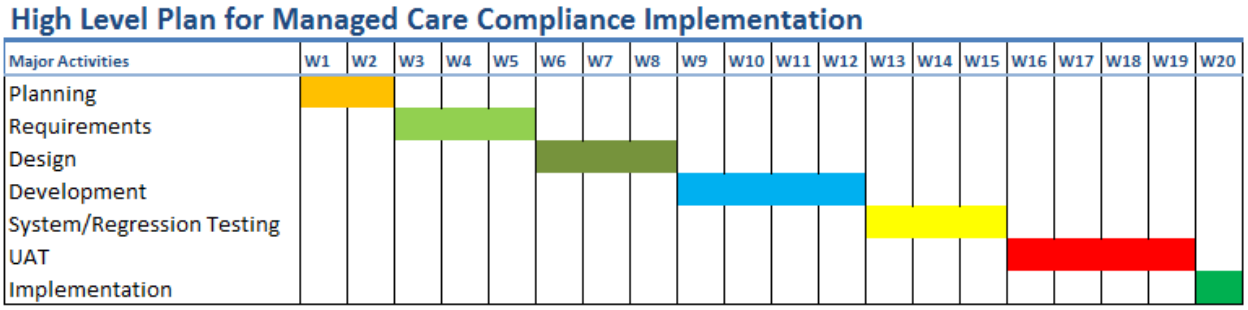

Figure 13. Initial Project Timeline

This timeline was developed based on the estimated effort of the work necessary to accomplish the proposed technical and functional solutions and is aligned with a typical CHAMPS release cycle.

The proposed timeline was developed with the goal of optimizing the effective use of the professional resources required to accomplish these scope of work and produce high-quality products in a cost-conscious manner.

CHAMPS changes for the CHAMPS – SIGMA **Implementation** project will be phased over CHAMPS multiple releases between the R9-6.0 release in September, 2015 and the final 2016 release.

3.3.2 Midwest iVision360 Delivery Processes

In this section, CNSI provides an outline of its CMMI Level 3-assessed Midwest iVision360 Framework, which includes a full system development lifecycle (SDLC) model supporting the delivery of the technical solution. CNSI's SDLC processes have been adapted to address the specific needs of the **CHAMPS – SIGMA Implementation** project. CNSI will produce deliverables for each phase of the project.

CNSI will engage in requirements analysis and design with the customer in order to begin iterative development. CNSI will provide an opportunity for the customer to review design documents prior to the start of system development activity.

Iterative, agile development under the Midwest iVision360 framework is visible in Stage II for the **CHAMPS – SIGMA Implementation** project. During this stage, technical design specifications for new or impacted functions and user stories are constructed in parallel by the software engineers and SMEs. As the impacted function's design is completed, the team lead plans the iterations required to complete development.

Development work is planned based on a two-week iteration schedule. Software engineers build internal design documentation prior to, and during, the two-week iterations. The first day of each iteration is reserved for startup activities, including finalizing the iteration's internal design documentation. The software engineer meets with the Data Modeling Team on the first day of the iteration and conducts a

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walkthrough of any required data model changes. The Data Modeling Team makes the required changes to the database schema and approves the physical model for coding.

Development begins once the internal design and pre-development work is completed for the iteration. The software engineer writes internal iteration test scripts in parallel to actual working code and updates screens and other system functions to fit the physical mode. The software engineer executes the iteration test scripts as they complete sections of code. The software engineer builds the code, tests incrementally, and coordinates and communicates with the team through daily stand-up meetings regarding any issues holding up the development work.

Software engineers then test the code against the internal auto-unit code and manual internal iteration test scripts. As they reach the end of the iteration, they run the code against the functional scripts developed by the Test Team. Discrepancies are identified and corrected. The software engineer retests to ensure all discrepancies are corrected and closed before the iteration ends. The software engineer then conducts a peer review of the code of a given function on the last day of the iteration. The software engineer then updates the code based on the review. When software engineer iteration testing and software code reviews are successfully completed for the iteration, the code is then promoted to the integration test stream. The code is released to the Test Team for system testing when the coding and software engineer iteration testing is completed for all user stories for a given function.

During initial development iterations, the Test Team develops system test cases based on the current CHAMPS solution specifications. During system testing, the Test Team executes system test cases to validate system results against the current production functionality.

For the **CHAMPS – SIGMA Implementation** project, CNSI plans to engage the test and development teams early on to build the regression test suite for the critical functions. This will speed up testing and improve the overall quality of implementation. CNSI understands the importance and sensitivity of the **CHAMPS – SIGMA Implementation** project and the need to ensure it aligns with the environment that is already in production. During system testing, regression tests will be performed to demonstrate that the solution continues to function as expected.

As soon as regression testing is completed for a function, CNSI will deliver the code to the UAT environment. CNSI plans to engage the customer as early as possible and well before the beginning of the planned UAT phase. This ensures that enough time is allowed for thorough UAT, which will also reduce the risk of schedule slippage for UAT completion. CNSI will deploy system- and regression-tested functions to the UAT environment as they are completed.

As presented in our initial timeline (**Figure 13** above), each UAT instance will have a 1-month duration. Any delay in the completion of UAT will significantly impact the implementation date. CNSI will work with MDCH to support all UAT activities.

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Figure 53 presents a graphical overview of the Midwest iVision360 framework processes applicable to the **CHAMPS – SIGMA Implementation** project.

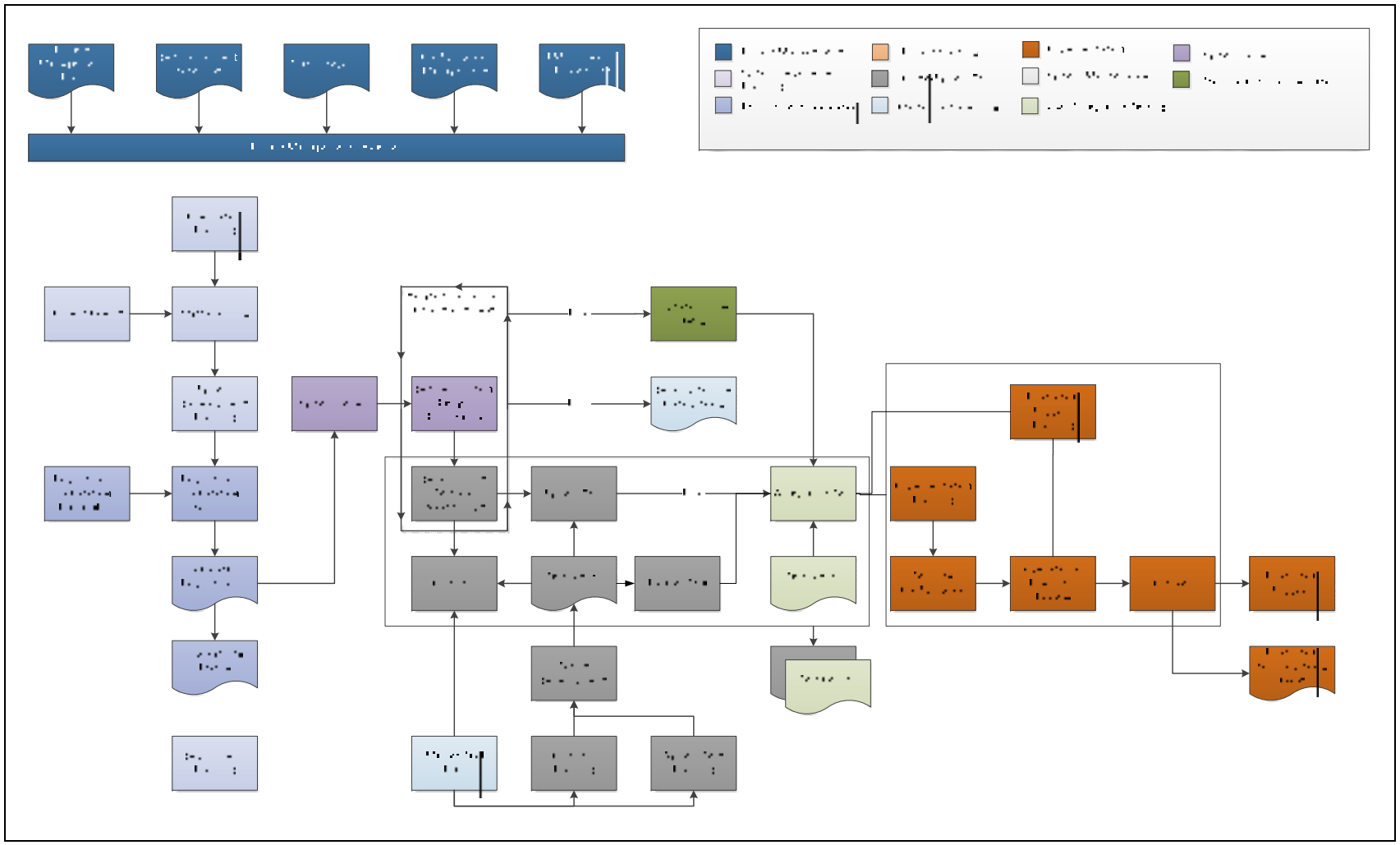

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Figure 14. Midwest iVision360 Process Diagram

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3.3.3 Staged Delivery Summary

CNSI proposes a staged delivery of **CHAMPS – SIGMA Implementation** which incorporates the seven phases of CNSI's CMMI Level 3-assessed Midwest iVision360 framework. This top-down approach provides an easily understandable grouping of activities with similar resource requirements and related groupings of deliverables along with three major milestones following each stage to facilitate monitor and control of the initiative.

Figure 61 below summarizes the staged delivery using the seven phases of Midwest iVision360.

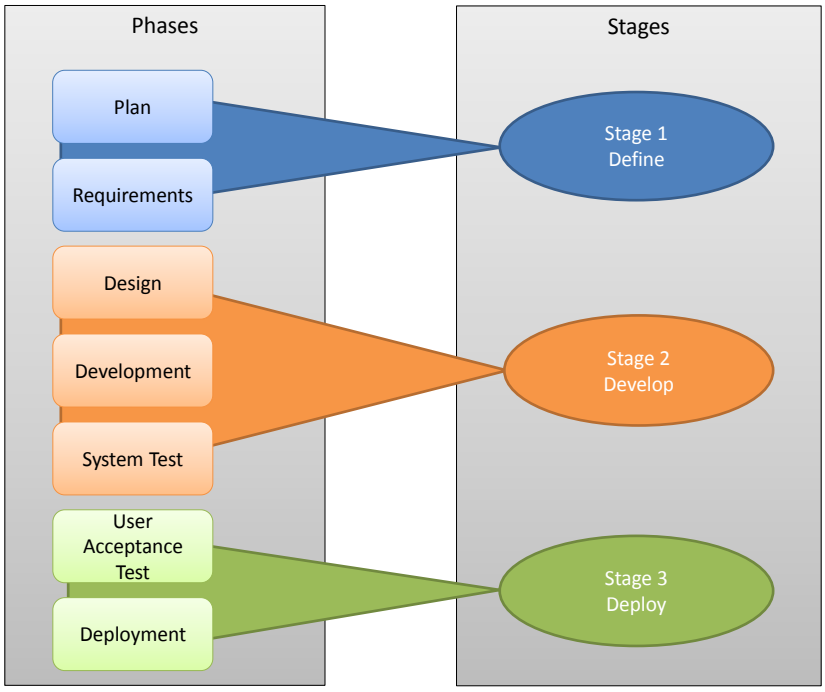

Figure 15. Midwest iVision360 Framework Phases and Stages

Figure 54 provides a high-level overview of the project stages with major activities and anticipated deliverables. Stages II and III occur with each CHAMPS release that includes **CHAMPS – SIGMA Implementation** changes.

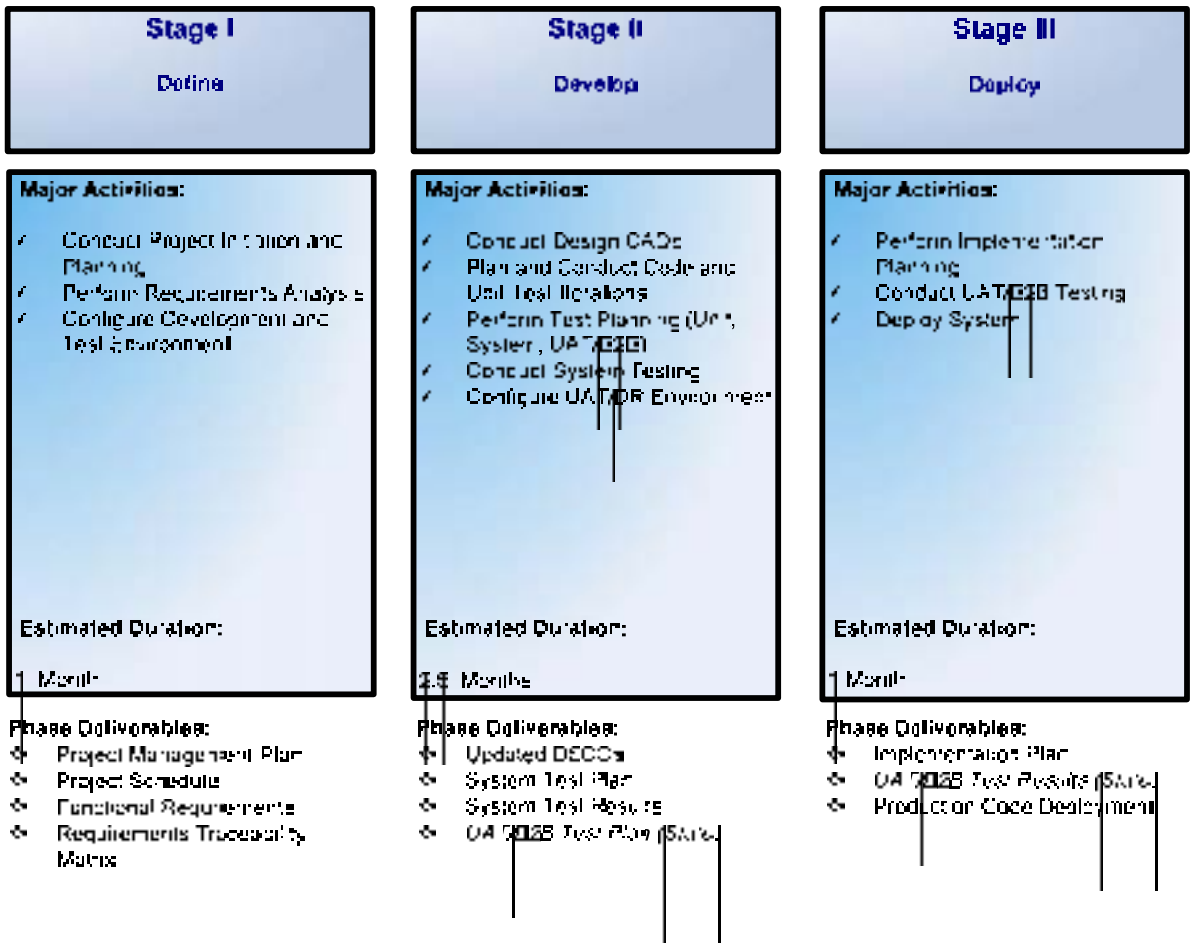

Figure 16. High-Level Project Stages and Activities

With every project, there are critical milestones to be met and work products and deliverables that must be developed and produced in order to provide the inputs necessary to perform the next activity. **Table 27** elaborates on the activities of the proposed 21-month implementation plan, along with the expected deliverables. In **Table 27**, bold text in the deliverables sections indicate formal deliverables; italicized text indicates State acceptance tasks and deliverables.

Table 6. High-Level Activities and Milestones by Stage

Major Activity	Description	Stage
Project Initiation	Establish the project team structure, key stakeholders, and operating guidelines for team activity throughout the course of the project.	Stage I
Project Planning	Develop PMP, schedule, and metrics.	Stage I
Requirements Analysis	Conduct collaborative application development (CAD) sessions to elicit and validate requirements for the **CHAMPS – SIGMA Implementation** project.	Stage I
Stage I Deliverables • Project Management Plan • Project Work Plan • **Requirements Specification Document** • Initial Requirements Traceability		
Design Analysis	Conduct CAD sessions to document detailed system design changes for the **CHAMPS – SIGMA Implementation** project.	Stage II
Test Planning	Conduct detailed test planning for each phase of testing:	Stage II
Software Development	Develop and unit test software required to support the detailed functional design including: • Screens • Functionality (driven by use cases) • Data Models	Stage II

Major Activity	Description	Stage
	• Reports • Interfaces	
System Testing	Internal CNSI testing of developed functionality at the component, subsystem, and system level.	Stage II
Stage II Deliverables • **As-Built DSDD** • Test Plan • **System Test Results** • Updated Online Help		
Implementation Planning	Coordinate production installation of the system changes.	Stage II
UAT Support	MDCH testing of all system changes using formal UAT test scripts.	Stage III
Production Deployment	CNSI and the State of Michigan deploy the modifications in the MDCH production CHAMPS environment.	Stage III
Stage III Deliverables • Implementation Plan • Operational Support Forecast Report • Finalized Online Help • **Code Deployment to Production**		

3.3.3.1 Stage 1 – Initiation and Requirements

Activity 1: Project Initiation

During this activity, CNSI will collaborate with the State of Michigan to identify the key business and technical team members who will participate in the **CHAMPS – SIGMA Implementation** project. CNSI will conduct the formal project kickoff and deliver orientation for the project effort.

The major milestones associated with this activity are:

- Participating team members from the State of Michigan are identified.
- Project kickoff meeting is conducted and project kickoff is completed.

Activity 2 - Project Planning

During this activity, CNSI will develop the PMP. The PMP outlines the standards and procedures for risk, issue, and action item management; project governance plan to coordinate activities between the CNSI project team and the State of Michigan; communications plan; deliverable management plan; project work breakdown structure (WBS); and the baseline schedule.

Milestones associated with this activity include:

- PMP is delivered.
- Project work plan is delivered.

Activity 3 – Requirements Analysis

The goals of the **CHAMPS – SIGMA Implementation** project have been defined at a high-level within this statement of work. During this activity, CNSI will host CAD sessions to elicit and validate detailed functional and technical requirements. The CAD sessions will include the State of Michigan and CNSI functional and technical SMEs. CNSI will compare the validated requirements with current CHAMPS functionality and technical architecture to determine the impact of the new requirements across all CHAMPS subsystems, including system aspects such as:

- New and modified screens.
- Functionality (use cases).
- Data models.
- Reports.
- Interfaces.

This will result in a requirements specification document which provides a clear, concise, and final definition of each requirement. The approved requirements will be used during the design and development activities in Stage II.

The major milestones associated with this activity are:

- Functional requirements specification document is delivered.
- Approved requirements have been loaded into the requirements repository.

3.3.3.2 Stage II – Design, Coding, and System Testing

Activity 1 – Design Analysis

During this activity, CNSI will host CAD sessions to produce detailed design artifacts. Sessions will be organized and scheduled per requirements for the affected CHAMPS subsystem and the solution’s technical architecture. CAD sessions will include State of Michigan and CNSI functional and technical SMEs. Using the existing CHAMPS design and the requirements specification document as a starting

point, session participants will identify and document required design changes including system aspects such as:

- Screens.
- Functionality (use cases).
- Data models.
- Reports.
- Interfaces.

This will result in final, revised design artifacts, including use cases and data models, which will be the basis for the development of changes to system functions. CNSI will submit the completed design artifacts to the appropriate State of Michigan decision-maker shortly after the completion of a CAD session. The State of Michigan decision-maker will formally approve the design artifacts via signature on an approval form, similar to the existing CHAMPS enhancement approval process. This approval indicates that design is final and development can begin.

The major milestones associated with this activity are:

- Delivery of the as-built DSDD.

Activity 2 – Test Planning

During this activity, CNSI collaborates with the State of Michigan to determine the required set of tests to be executed. CNSI prepares test scenarios and scripts for each phase of internal testing, including system testing and regression testing. The system test scenarios and scripts are prepared by the CNSI Test Lead. The State of Michigan prepares the UAT test plan and related test scenarios and script during this activity time frame.

Milestones associated with this activity include:

- System test plan is completed.
- System test scenarios and scripts are completed.
- *UAT preparation is completed (State).*

Activity 3 – Software Development

At the beginning of this activity, the development iteration plan is prepared. During this activity, CNSI codes the software changes required to support the updated detailed functional and technical design. Development is performed through a series of bi-weekly development iterations as previously described. Development includes the coding changes as defined in the as-built DSDDs for CHAMPS, including system aspects, such as:

- Screens.
- Functionality (use cases).
- Data models.

- Reports.
- Interfaces.

At the conclusion of each development iteration, the developed code is delivered to the CNSI Test Team. The major milestone associated with this activity is the completion of all development iterations.

Activity 4 – System Testing

During this activity, CNSI tests the developed functionality at the component, subsystem, and system levels in accordance with the test plan. Test results are compiled and at the conclusion of system testing, CNSI performs end-to-end (E2E) regression testing. At the conclusion of this activity, the test manager conducts a test readiness review meeting to ensure all entry criteria for the UAT phase are met.

Milestones associated with this activity include:

- System test results report is delivered.
- Code is deployed to UAT environment.
- UAT begins.

3.3.3.3 Stage III – UAT and Production Deployment

Activity 1 – Implementation Planning

During this activity, CNSI collaborates with the State to coordinate the timing of the production installation of the system changes. The **CHAMPS – SIGMA Implementation** project will be incorporated into the regular CHAMPS operational release implementation schedule. Implementation planning activities will focus on targeting the operational release that will include this initiative and integrating the new features into the release. During this activity, CNSI will review operational support projections for post-deployment support and prepare an operational support forecast report documenting any changes expected post-deployment.

Milestones associated with this activity include:

- Identification of the operational releases where the software will be deployed.
- Development of the implementation plan.
- Preparation of the operational support forecast report.

Activity 2 –UAT Support

During this activity, CNSI provides support to MDCH staff who will conduct UAT using formal, State-developed test scripts. UAT testing will be aligned with the selected operational releases where the code will be deployed. Defects identified are monitored and corrected throughout UAT.

The major milestones associated with this activity include:

- *UAT test results report (State deliverable).*

- Final defect correction report.
- State approval to deploy the software.

Activity 3 – Production Deployment

During this activity, CNSI and the State of Michigan collaborate to execute the implementation plan. The finalized code will be merged into the selected regular operational release. CNSI deploys the release to the production environment where it is available for use by MDCH staff.

The major milestones associated with this activity include:

- Code is deployed to production.
- Production support begins.

Section 4: General Assumptions and Constraints

CNSI has identified and provided the following general assumptions in regards to the **CHAMPS – SIGMA Implementation** project:

4. MDCH and DTMB will provide access to, and time commitment from, subject matter experts who understand their programs and systems.
5. The State will plan and execute UAT pursuant to the approved Project Work Plan. Any delays will be evaluated through the project's change management process.
6. The As-Built DSDD deliverable consists of individual design artifacts (e.g. use cases, page data models, interfaces) which are added or changes as a result of this project.
7. Managed care capitation payment cycles remain weekly, even though HIPAA 834 enrollment files will be generated daily.

Section 5: Proposed Project Cost

This section of our proposal presents our fixed-price, overall labor cost for completing the **CHAMPS – SIGMA Implementation** project. The cost was derived based on the expected effort required as presented in our initial work plan, composed of the three stages depicted in **Figure 16**.

The overall cost to implement the **CHAMPS – SIGMA Implementation** project is $5,500,000.

CHAMPS Cloud Enablement and Migration
Statement of Work

Prepared For:
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July 31, 2014

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Section 1: Introduction

The Michigan Department of Community Health (MDCH) is a recognized leader in advancing technology to support the business of Medicaid. Recent examples of MDCH's leadership include the implementation of the Community Health Automated Medicaid Processing System (CHAMPS), a state-of-the-art Medicaid management information system (MMIS) certified by the Centers for Medicare & Medicaid Services (CMS) and the Electronic Health Record (EHR) Medicaid Incentive Payment Program (eMIPP) system developed and implemented as the first of its kind in the nation.

This implementation supports a ground-breaking change in the way MMISs are developed, implemented, and delivered by establishing a solution that is able to operate as a multi-tenant cloud-enabled application. This directly supports MDCH agreement to provide services to the State of Illinois Healthcare and Family Services (HFS). Therefore, this statement of work addresses the foundational work necessary to systematically reengineer the CHAMPS solution.

The CHAMPS Cloud Enablement and Migration Project consists of strategically planning and executing this reengineering to create a state-of-the art cloud-enabled solution. This includes establishing the required infrastructure, designing and configuring the applications and interfaces in accordance with current functionality, migrating the data, and executing the final solution implementation.

Once completed, this multi-tenant implementation supports MDCH's ability to offer a MITA-aligned and CMS-certified MMIS to multiples states. This is expected to result in both cost savings and time savings. Unlike a over a standard stand-alone MMIS implemented through the conventional procurement process, implementing the fully operational and certified CHAMPS system is achievable sooner and with fewer resources. This reduces the overall cost and timeline for the implementation.. With the support of the CNSI's CMMI Maturity Level 3 appraised software development processes, this project is expected to require three years to implement.

1.1 Regulatory and Business Drivers for Change

Continuing its leadership in advancing technology to support Medicaid, MDCH has decided to establish the framework to support a cloud-enabled solution. This will position MDCH to offer its services to other state Medicaid programs. This approach will greatly reduce the time and cost of MMIS implementations and operations and positions the State to consider operating CHAMPS as a service for multiple states.

This solution fully embraces the Leverage Condition described in CMS's Enhanced Funding Requirements: Seven Conditions and Standards[1]. The leverage conditions described in this CMS document emphasize:

- **Multi-state efforts** that are developed with the participation and contribution of more than one state. In this case, the foundational solution is created that supports the agreement to provide services to other states in the future.

[1] (Centers for Medicare & Medicaid Services 2011)

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- **Availability for reuse** of components and solutions that can be reused by other states. In this case, the software application and business rules are components will be cloud enabled making them readily available for reuse.
- **Identification of open source, cloud-based, and commercial products** is proposed as a future state to be considered. This effort establishes a cloud-based CHAMPS solution that positions MDCH to move forward with subsequent implementation projects offering the solution to other states.
- **Customization** is noted as a consideration in the context of transfer solutions. MDCH is going far beyond the concept of a transfer solution. The CHAMPS cloud-enabled solution will enable configurable items wherever possible. Therefore, MDCH will be able to evaluate and minimize changes with a common platform.

1.2 CNSI Capabilities

In partnership with the State of Michigan, CNSI performed the initial implementation of CHAMPS beginning in 2005. Prior to that, CNSI system architects led the development of the electronic Claims Adjudication Management (eCAMS) solution that forms CHAMPS' core. CNSI implemented CHAMPS in 2009 and supported the State in achieving CMS certification of the MMIS in 2011. CNSI's has continued to work with the State to provide innovative, technically sophisticated software solutions to support the State's business needs and to remain compliant with all defined federal requirements. In addition, CNSI has worked collaboratively with the State of Michigan to implement innovative solutions to support the Medicaid program, including mobile platforms for consumer engagement and provider site visit verification, integration with federal systems for Medicaid incentive payments and Medicaid expansion, and effective. These efforts have resulted in rapid response to federal mandates including Health Insurance Portability and Accountability Act (HIPAA) 5010 electronic data interchange standard, the International Classification of Diseases Revision 10 (ICD-10), Affordable Care Act modifications, and CORE modifications. Through these and other efforts, CHAMPS has continued to maintain pace with the rapidly changing Medicaid environment and is complaint with all current federal regulations.

CNSI's approach to conducting this project is based on extensive knowledge of CHAMPS design, implementation, and operation since the system became operational. As system software engineers and integrators, CNSI aligns clients' business processes and information systems to allow them to access the right information at the right time, enabling the achievement of their desired business results and creating enterprise value. CNSI has extensive technological experience in the industry combined with flexible tools and methodologies to deliver quality results on time and within budget. CNSI completes jobs for clients by delivering on commitments with speed and purpose in accordance with the client's specifications and expectations.

For the CHAMPS Cloud Enablement and Migration Project, CNSI will use business, technical, and operational knowledge of the MDCH Medicaid program, CHAMPS system capabilities, and other state Medicaid programs to create the cloud-enabled solution that encompasses all CHAMPS functions from the current operational system. CNSI will apply business and functional knowledge to develop an effective cloud-based CHAMPS model, and the project will deliver a comprehensive solution for MDCH.

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CNSI brings an experienced team of Medicaid and CHAMPS subject matter experts (SMEs), technical and architectural experts, and project management expertise to support this endeavor in the method CNSI has used in previous collaborative efforts for MDCH. CNSI's experience working with MDCH has led to incorporating the following factors in developing this statement of work:

- **CNSI's capability to conduct complex analysis of Medicaid system requirements**

  CHAMPS is a multifunctional MMIS-certified information system compliant with all federal mandates that integrates all Medicaid activities into one complete system. As such, the existing CHAMPS application (designed, developed and implemented by CNSI) is the baseline from which the cloud-based solution will be created. CNSI is positioned to take advantage of the extensive knowledge accumulated during the CHAMPS implementation, HIPAA 5010 migration, ICD-10 assessment project, ICD-10 remediation project, and our MMIS implementations in other states, and strategically apply it to the CHAMPS Cloud Enablement and Migration Project.

- **CNSI's capability to identify and resolve major issues associated with CHAMPS**

  The prompt identification of major issues are an essential component to a project of this scope and are particularly important in the reengineering analysis work needed in a project of this nature. CNSI's extensive knowledge of MDCH's current application architecture, infrastructure, and operations will allow it to quickly identify major issues affecting implementation activity. By devoting careful attention to identifying and resolving issues, CNSI will ensure the successful implementation of the cloud-based CHAMPS solution.

- **CNSI's sensitivity to MDCH needs and constraints**

  CNSI is uniquely qualified to remain sensitive to the states' needs developing the CHAMPS cloud-based solution. Because of its multi-year history of collaboration with MDCH and understanding of CHAMPS, CNSI can provide business and technical expertise in presenting system capabilities in a cloud-based framework. CNSI understands that MDCH and DTMB staff members are involved in multiple implementation efforts in addition to their regular production workload. It is critical to the success of the project that state staff members are involved at the right time and in the right context.

- **CNSI's technical leadership to support MDCH's vision**

  CNSI has shown technical leadership from the beginning with the implementation of CHAMPS. Through CNSI's collaboration with the equally forward-thinking MDCH leadership, the partnership has achieved milestones that moved the Medicaid business to a modern state. The partnership continued to drive innovation through the implementation of eMIPP, HealthBeat, ClaimSure, Provider Site Visit Pro, Document Management Portal, TPL integration, Provider Credentialing Service, and myHealthButton. With the implementation of the cloud-enabled CHAMPS solution, MDCH, DTMB, and CNSI are positioned to repeat the success of these implementations and deploy the first cloud-enabled solution in the industry. This project is the next step in continuing to lead innovation in Medicaid and establishes the foundation necessary to offer the cloud-based solution to multiple states reaching an efficiency and effective unprecedented in MMIS implementation.

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- **CNSI's proven Capability Maturity Model Integration (CMMI) Level 3 Assessed project processes for software development**

  In April of 2014, CNSI's project processes for software development underwent an assessment by the CMMI institute. We were awarded CMMI Maturity Level 3 under the CMMI for Development model version 1.3. The appraisal reviewed all project management, software development, and implementation processes applicable to CMMI Maturity Level 3. CNSI will apply these processes to the CHAMPS Cloud Enablement and Migration Project.

1.3 Proposed Project Organization

CNSI believes that this statement of work represents the best possible combination of architecture, technology, support, and experience to complete this project. The proposed team members are each the best possible candidates of their respective disciplines. The underlying logic behind identifying each member of this group is that:

- They share the same philosophical approach for undertaking this project – **the customer comes first**.
- They understand the values that each member brings to successfully implement the project.
- They are committed to understanding and incorporating the State's requirements.
- They understand the necessary advanced technologies, business needs, and operational issues.
- They have the discipline necessary to employ CNSI's Capability Maturity Model Integration (CMMI) level 3 assessed processes to effectively implement the project.

CNSI's primary objective is the successful implementation and completion of the project. We are confident in our team's ability to achieve that goal. CNSI has assembled a team with the best combination of business, technical, operational, and project implementation experience, and expertise. Our team is fully dedicated to CHAMPS Cloud Enablement and Migration Project.

The project's success depends on the full and active participation of the MDCH, DTMB, and CNSI's designated staff members from the initial planning to final implementation.

Figure 49 shows the CNSI organization structure supporting the CHAMPS Cloud Enablement and Migration project.

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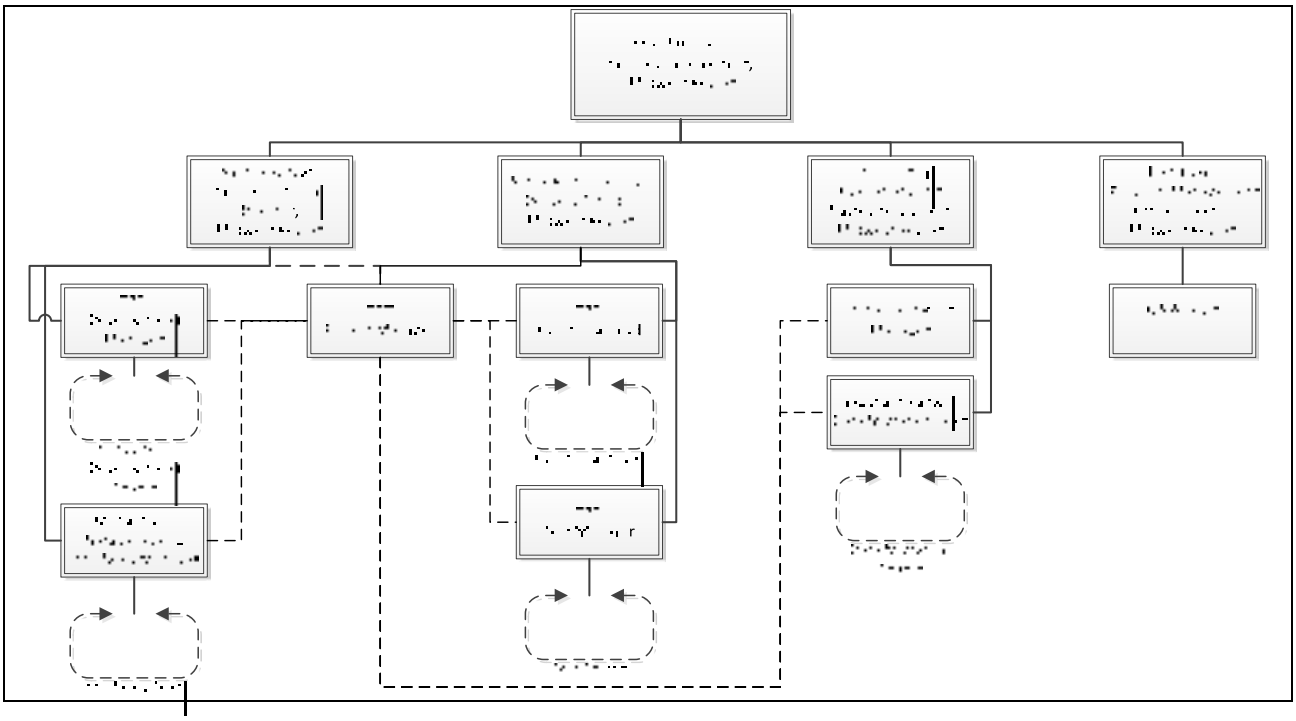

Figure 17. CNSI's Cloud Enablement and Migration Project Organization Chart

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Section 2: Project Management, Methodology, Tools, and Technical Approach

This section presents our project management and technical approaches, methodology, tools, and phased work plan for accomplishing all tasks required for the CHAMPS Cloud Enablement and Migration Project. This section describes the scope of activities to be addressed throughout the project, from the initiation phase to the final implementation, and the techniques and methodologies the CHAMPS Cloud Enablement and Migration Project Team will use. The goal of this section is to demonstrate that CNSI understands how to enable CHAMPS to operate as a multi-tenant cloud-enabled application and to establish the framework that may be leveraged to offer the solution to multiple states.

Each of the following subsections will contain a high-level description of the three phases we will use throughout the project. For each phase, the major activities and anticipated deliverables are presented. This is followed by a high-level description of the major milestones and approximate timelines.

2.1 Project Management Approach

The project's successful implementation relies on the framework and environment provided by project and quality management. **Figure 50** shows CNSI's project and quality management framework and how the related activities interact with other project tasks.

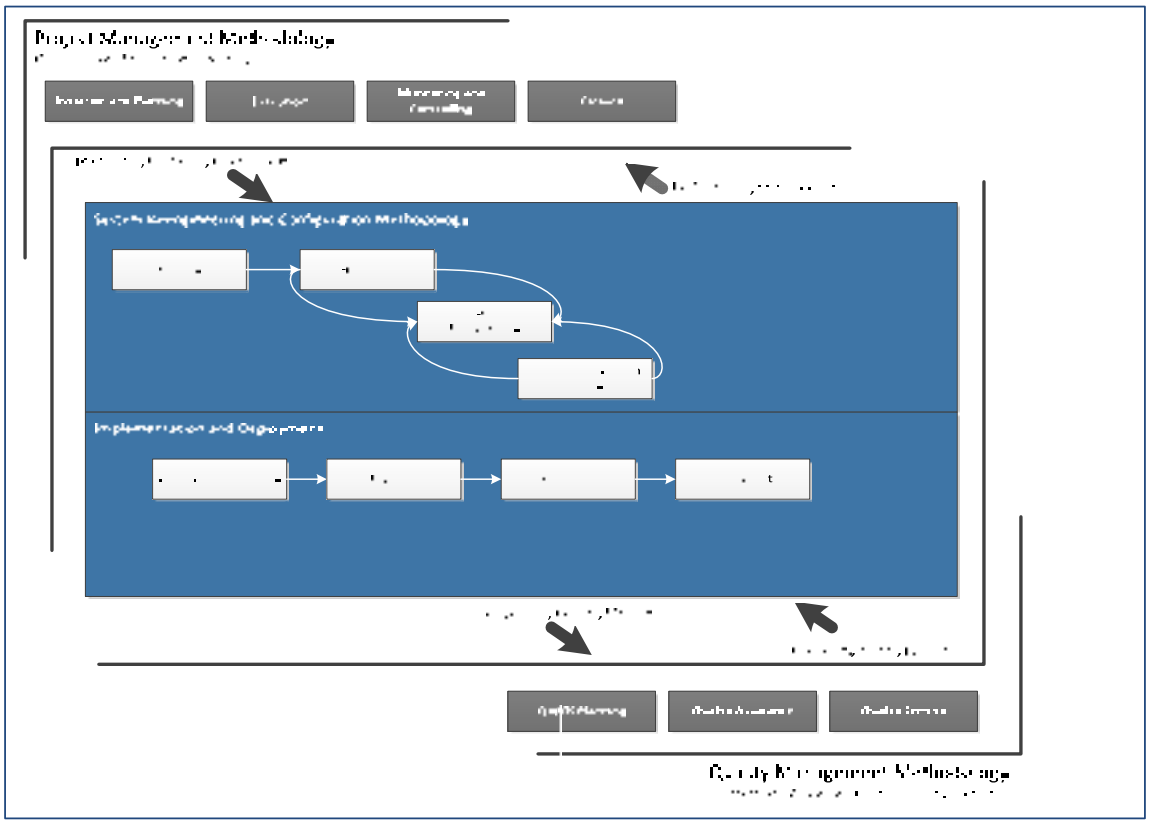

Figure 18. CNSI's Project Management and Quality Management Framework

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Although all projects are unique, they share common components and processes. The generally accepted process groups defined by the Project Management Body of Knowledge (PMBOK), as incorporated into the CNSI project management process, are:

- **Initiating:** This process group defines the project objectives and grants authority to proceed. For CNSI, the initiating processes are largely incorporated into the proposal development process, during which required partners are identified. The request for proposal (RFP) or Statement of Work acts as a project charter and the proposal itself is the preliminary scope statement.
- **Planning:** This process group refines the project objectives and scope and plans the tasks, activities, and steps necessary to meet the project's objectives. The planning processes start during proposal development and proceed following contract award while CNSI works with the MDCH establish and baseline the project management plan (PMP). The PMP is modified and updated as necessary over the course of the project and is the culmination of the planning processes for scope definition and management, time (scheduling), staffing (human resources), communications, and risk management.
- **Executing:** This process group puts the project's plans into motion. This is where the bulk of the work for the project is performed.
- **Monitoring and Controlling:** This process group measures the performance of the project's executing activities and reports these performance results to project managers and stakeholders. Output is used to refine, improve, and/or change project management (including plans and schedules) as necessary to meet the project's objectives.
- **Closing:** This process group documents the formal acceptance and approval of the project's product and brings all aspects of the project to a close.

CNSI is confident in its capability to skillfully apply its proven methodology and project framework to successfully complete the CHAMPS Cloud Enablement and Migration Project. CNSI continually improves its project management processes using lessons learned from previous projects and through the proficiency and continuous education of its program and project managers, senior technical and engineering staff, and senior and corporate management. This ensures a number of advantages:

- The project management philosophy is firmly entrenched within the entire project team, including CNSI, MDCH, and DTMB.
- Project management is a core competency.
- The project staff is focused on successfully implementing the project.
- Project management, quality management, and cost management processes are fully integrated and their infrastructure is in place.
- Effective project status reporting is established throughout the project life cycle.
- Project and software development methodologies are well documented.
- Project staff is provided comprehensive training.
- Project information is communicated continuously to the right people at the right time.

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- The project is continuously monitored against performance.
- Excellence in quality and delivery are built in.
- Deliverable review and approval processes are in place.

2.2 Project Methodology

CNSI's holistic approach for this project will use its proven methodology as the overarching framework and bring an experienced team of program managers, SMEs, technical experts, and change management resources to support this effort.

The project methodology is a framework that facilitates the integration of CNSI's extensive system experience, which is rooted in application implementations, methodologies, and delivery tools. This framework allows CNSI to deliver services to its clients consistently across its footprint and gather continued enhancements for its supporting methodology, thereby providing continued value for its clients.

In April 2014, CNSI's Health and Human Services organization unit was appraised at CMMI Maturity Level 3 for the processes applicable to software development projects. This project will employ the same integrated methodology that combines its best delivery assets. The methodology:

- Provides a scalable, integrated collection of assets.
- Provides a consistent level of detail and presentation.
- Supports tailoring to scale, which provides a unique, but consistent, cost-effective delivery approach for the State.

CNSI's methodology provides a consistent and flexible approach to address the following:

- The **Manage** work approach provides a single, consistent approach to managing CNSI's engagements. Within the Manage Approach is the Quality Management sub-work activity, which verifies that deliverables and processes meet requirements. The Quality Management activity also supports continuous process improvement for the State, as well as the methodology.
- The **Life Cycle** work approach addresses unique expertise while providing overall integration across the full CHAMPS Cloud Enablement and Migration Project life cycle.

CNSI's methodology has the flexibility to be adapted to meet the State's unique requirements while confirming that its experienced staff members follow its established practices. Independent from the project team, CNSI's Program Management Office will conduct internal audits of CNSI process compliance to ensure that the team is executing CNSI's standard processes and to incorporate process improvement findings even during the life-cycle of the project.

While no two engagements are the same, the State expects CNSI to deliver in a consistent, systematic approach. In undertaking this project, CNSI will employ its CMMI Maturity Level 3 appraised iVision360 system development life cycle (SDLC) methodology tailored for the CHAMPS Cloud Enablement and Migration Project. Coupled with iVision360, this approach provides the structure for integrating CNSI's capabilities while allowing individual project teams the flexibility to use client-

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mandated tools. The right assembly of technologies, techniques, and deliverable processes requires the specific experience and expertise found with CNSI's staff.

Investing time to create an effective plan with clear objectives is integral to effective project execution. CNSI's methodology provides a structured approach to the planning process. While this may appear to require more initial effort than desirable, experience has shown that following these processes reduces the likelihood of planning mistakes and results in lower risk and a more cost-effective and rapid delivery.

CNSI's methodology incorporates a consistent approach for identifying, tracking, and measuring the value derived from ongoing projects. CNSI's experience developing and delivering various client projects are incorporated into the project strategy and planning activities. CNSI's CMMI Maturity Level 3 appraised iVision360 system development life cycle (SDLC) methodology has been tailored for the CHAMPS Cloud Enablement and Migration Project. This standardized approach is a unique blend of the waterfall methodology and iterative agile development. CNSI's CMMI Maturity Level 3 appraised iVision360 system development life cycle (SDLC) methodology has been tailored for the CHAMPS Cloud Enablement and Migration Project. This standardized approach is a unique blend of the waterfall methodology and iterative agile development. This offers the following benefits:

- **User is at the Center:** CNSI's primary motivation in developing iVision360 is to put the user at the center of the project life cycle. Software projects succeed or fail largely from the software engineer's understanding of the customer's business rules, requirements, and needs. The more insight the developing organization has, the greater the quality and likelihood of success for the project. Successful projects have high interaction with end users and place the user at the center of the development life cycle. Every phase and task of iVision360 focuses on interaction and collaboration with the user community. CNSI does this by implementing agile techniques and building working software in an iterative fashion with user validation at periodic intervals.
- **Common Goals:** Users actively participate in design configuration sessions with an integrated team of software engineers, analysts, and test engineers. This method avoids the pitfalls of waterfall development and test methods which leave, for example, test case refinement and execution until the completion of development. It also provides the team with a sense of purpose, a goal, and the drive to accomplish the end objective: software that meets the requirements.
- **Early and Often Testing:** iVision360 provides an opportunity to test early and often so formal system test phases and subsequent test phases are more likely to meet schedule expectations with a lower error-discovery rate.

The collaborative, and somewhat "free-form," nature of iterative, agile development is balanced with the structure and baseline management features of the waterfall methodology. By introducing the baseline management features of waterfall, CNSI minimizes the risk of scope creep that is sometimes associated with iterative development. Moreover, implementing and integrating with our project management processes will provide integrated change, issue, and risk management processes. **Table 21** describes the key benefits of each of the industry-standard methodologies that are blended into iVision360.

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Table 7. SDLC Methodology Comparison

Methodology	Key Benefits Blended into iVision360
Waterfall	Baseline approval of requirements Structured documents and customer approvals Formalized testing
Iterative/Agile	Frequent customer interaction Decomposing work into small meaningful features that are presented in working software Frequent course corrections Sense of real progress Early and frequent testing
Extreme Programming	Teams formed between developing organization and customer Sense of common vision and goal

The iVision360 methodology uses a phased process to organize tasks associated with building, configuring, and testing software. These phases represent major bodies of work that must be accomplished to move systematically through the project life cycle. **Table 22** describes the phases of iVision360.

Table 8. iVision360 Phases and Artifacts

Supporting Task	Major Activities	Artifacts
Configuration Management	Support change management Perform configuration identification, control, and status reporting Provide baseline management	Configuration Management Plan Configuration Status Reports Release Notes
Data Model Support	Develop scripts to maintain standard data in the system's databases Develop scripts to maintain the data structure for the system's databases	Data Modification Scripts Schema Modification Scripts Logical and Physical Data Model Data Dictionary
System and Data Administration	Maintain servers and configuration Establish and maintain connectivity between sites Manage database configurations Lead performance improvement initiatives	Performance Testing Plan Performance Test Results System Configuration Information Database Configuration Information

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The customized version of iVision360 adapted for the purposed of this project is presented in Section 2.4.1.

2.3 Project Management Tools

Tools, when properly applied within the methodology framework, will reduce the time to complete a project by providing predefined processes, templates, documents, and training materials. More importantly, use of the appropriate tools will help reduce risk and increase efficiency.

CNSI will continue to use the tools already proven effective during the previous undertakings to reduce the time to complete the project and mitigate risk.

Table 23 depicts the tools CNSI will utilize on the project.

Table 9. CNSI Project Tools

Tool	Purpose
Microsoft Visio	Develop use case diagrams, technical architecture diagrams, and support process flows
Microsoft Office	Develop project deliverables as well as presentations and spreadsheet artifacts needed to support deliverables
As-One	Repository for deliverables, presentations, and artifacts
Microsoft Project	Develop a detailed project schedule

While Microsoft Visio, Microsoft Office, and Microsoft Project are industry-standard tools, the following subsections provide additional information about As-One and CNSI's requirements traceability method.

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2.3.1 As-One

Believing that continuous collaboration and information-sharing are key factors to successful project execution, CNSI will use As-One, its web-based enterprise program management solution. **Figure 51** illustrates how As-One is designed to support team collaboration, knowledge management, and process improvement. As-One will provide a convenient, secure, repository for all program data and will give the State oversight personnel direct visibility into project work products, event calendar, and overall performance.

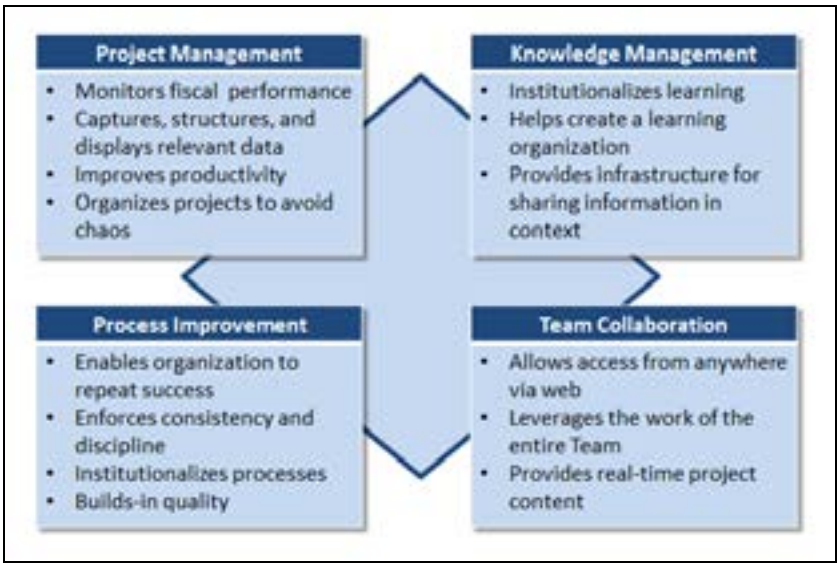

Figure 19. As-One Collaboration and Improvement

As-One is an "out-of-the-box" solution that supports CNSI's program management philosophy: experienced people, managed processes, and enabling technology.

As-One will allow the State's users to share real-time data specific to the user's authority. With As-One, permission to view or download documents can be controlled at the organization, team, and/or individual levels. As-One features collaborative calendaring , a comprehensive risk register, issue and action item management functions, iterative development planning and monitoring features, and project change control log. The As-One project repository will allow all members of the team to access relevant information and deliverables 24 X 7 using standard internet browsers such as Internet Explorer, Chrome, and Mozilla Firefox. MDCH and CNSI use As-One as their program management portal. Training will be provided for team members new to the program.

2.3.2 Requirements Traceability

CNSI will update the existing requirements traceability using its requirements traceability spreadsheet template with both use cases and test cases. The requirements traceability matrix will be loaded with the relevant Medicaid Information Technology Architecture (MITA) 3.0 business processes along with their mapping to CHAMPS use cases.

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2.4 Technical and Phased Approach Work Plan

CNSI has created an initial work plan and timeline for the CHAMPS Cloud Enablement and Migration Project. This work plan describes the expected activities for the proposed phases. This information is presented in **Figure 52** below. A detailed description of the activities within each phase is presented in **2.4.2 Phase Approach Work Plan**.

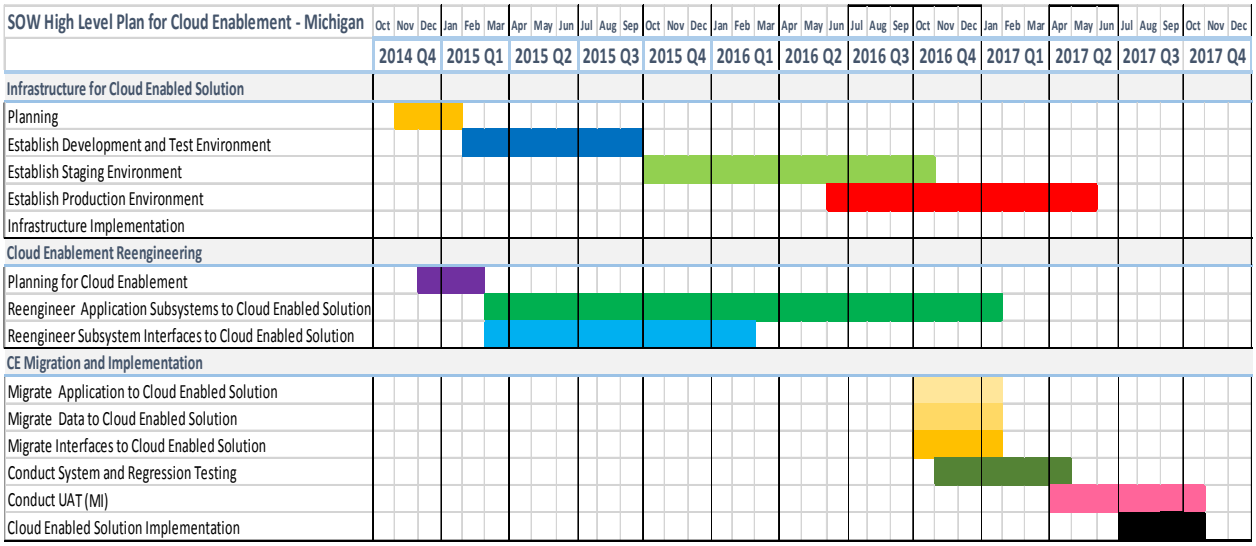

Figure 20. Initial Project Work Plan

CNSI structured this work plan to address the overall relationships of the numerous phases and activities required to complete the project. It effectively uses the professional resources required to accomplish these activities and produce high-quality products in a cost-conscious manner. To ensure effective use of project resources, request for enhancements to existing CHAMPS functionality will be managed through the project change control process where the impact on project scope, timeline and budget are determined. The effort for approved requests will be decremented from the 30,000 hours allocated to the Cloud Enablement and Migration Implementation.

The CHAMPS Cloud Enablement and Migration Project will establish the foundation to support a multi-tenant MMIS solution based on the following key architecture principles:

- Resource Sharing: One code base will be deployed to support multiple tenants on a shared infrastructure platform.
- Scalability: The resources deployed as part of the project will have the ability to gracefully scale to the growing number of transactions and users.
- Maintainability: The solution will be comprised of a single code base to support centralized management of enhancements and system corrections.
- Customization: The applications deployed will be flexible and accommodate tenant-specific configuration of business and data rules.

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- Usability: The user interface will be configurable through tenant-specific customization allowing for different tenants to have unique branding.

2.4.1 iVision360 Iterative Configuration, Testing, and Documentation Approach

In this section, CNSI provides an outline of its CMMI level 3 assessed iVision360 SDLC. The SDLC is a full-featured methodology that includes standard design and development processes. For the CHAMPS Cloud Enablement and Migration Project, requirements validation, design and most development activities are not necessary. CNSI's SDLC processes have been adapted to address the specific needs of this Cloud Enablement and Migration effort. CNSI will produce deliverables for each phase of the project.

CNSI will engage in iterative analysis and design with the customer in order to begin iterative reengineering. CNSI will provide an opportunity for the customer to review design documents prior to the start of system-configuration activity. At the end of all iterations for a phase, an overall document will also be produced for final delivery and acceptance to the customer prior to the start of UAT.

The iterative/agile portion of the iVision360 methodology is visible in Phase II for the CHAMPS Cloud Enablement and Migration Project. During this phase, technical design specifications for impacted functions and user stories are constructed in parallel by the software engineers and SMEs. As the impacted function's design is being completed, the team-lead plans the iterations required to complete configuration.

The configuration work is planned based on a two-week iteration schedule. Software engineers build internal design documentation prior to, and during, the two-week iterations. The first day of each iteration is reserved for startup activities, including finalizing the iteration's internal design documentation. The software engineer meets with the Data Modeling Team on the first day of the iteration and conducts a walkthrough of any required data model changes. The Data Modeling Team makes the required changes to the database schema and approves the physical model for coding.

Configuration begins once the internal design and pre-configuration work is completed for the iteration. The software engineer writes internal iteration test scripts in parallel to actual working code and updates screens and other system functions to fit the physical mode. The software engineer executes the iteration test scripts as they complete sections of configuration or code. The software engineer builds the code, tests incrementally, and coordinates and communicates with the team through daily stand-up meetings regarding any issues holding up the configuration work.

This approach ensures that the software engineers are not working in silos. It avoids the traditional approach of throwing design documentation "over the fence" to software engineers to begin coding, only to later discover that major rework is required halfway through the configuration process.

Software engineers then test the code against the internal auto-unit-code and manual internal iteration test scripts. As they reach the end of the iteration, they run the code against the functional scripts developed by the Test Team. Discrepancies are identified and corrected. The software engineer retests to ensure all discrepancies are corrected and closed before the iteration ends. The software engineer then conducts a peer review of the code of a given function on the last day of the iteration. The software engineer then

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updates the code based on the review. When software engineer iteration testing and software code reviews are successfully completed for the iteration, the code is then promoted to the integration test stream. The code is released to the Test Team for system testing when the coding and software engineer iteration testing is completed for all user stories for a given function.

During initial development iterations, the Test Team develops system test cases based on the current CHAMPS solution specifications. During system testing, the Test Team executes system test cases to validate system results against the current production functionality.

For the CHAMPS Cloud Enablement and Migration Project, CNSI plans to engage the test and development teams early on to build the regression test suite for the critical functions. This will speed up testing and improve the overall quality of implementation. CNSI understands the importance and sensitivity of the CHAMPS Cloud Enablement and Migration Project and the need to ensure it aligns with the environment that is already in production. During system testing, regression tests will be performed to demonstrate that the solution continues to function and meets the current specifications after the migration to the cloud-enabled solution.

As soon as regression testing is completed for a function, CNSI will deliver the code to the UAT environment. CNSI plans to engage the customer as early as possible and well before the beginning of the planned UAT phase. This ensures that enough time is allowed for thorough UAT, which will also reduce the risk of schedule slippage for UAT completion. CNSI will deploy system- and regression-tested functions to the UAT environment as they are completed.

As presented in our initial work plan and timeline (**Figure 52**), UAT will have a nine-month duration. Any delay in the completion of UAT will significantly impact the implementation date. CNSI will work with MDCH to support all UAT activities.

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Figure 53 presents a graphical overview of the iVision360 methodology processes applicable to the CHAMPS Cloud Enablement and Migration project.

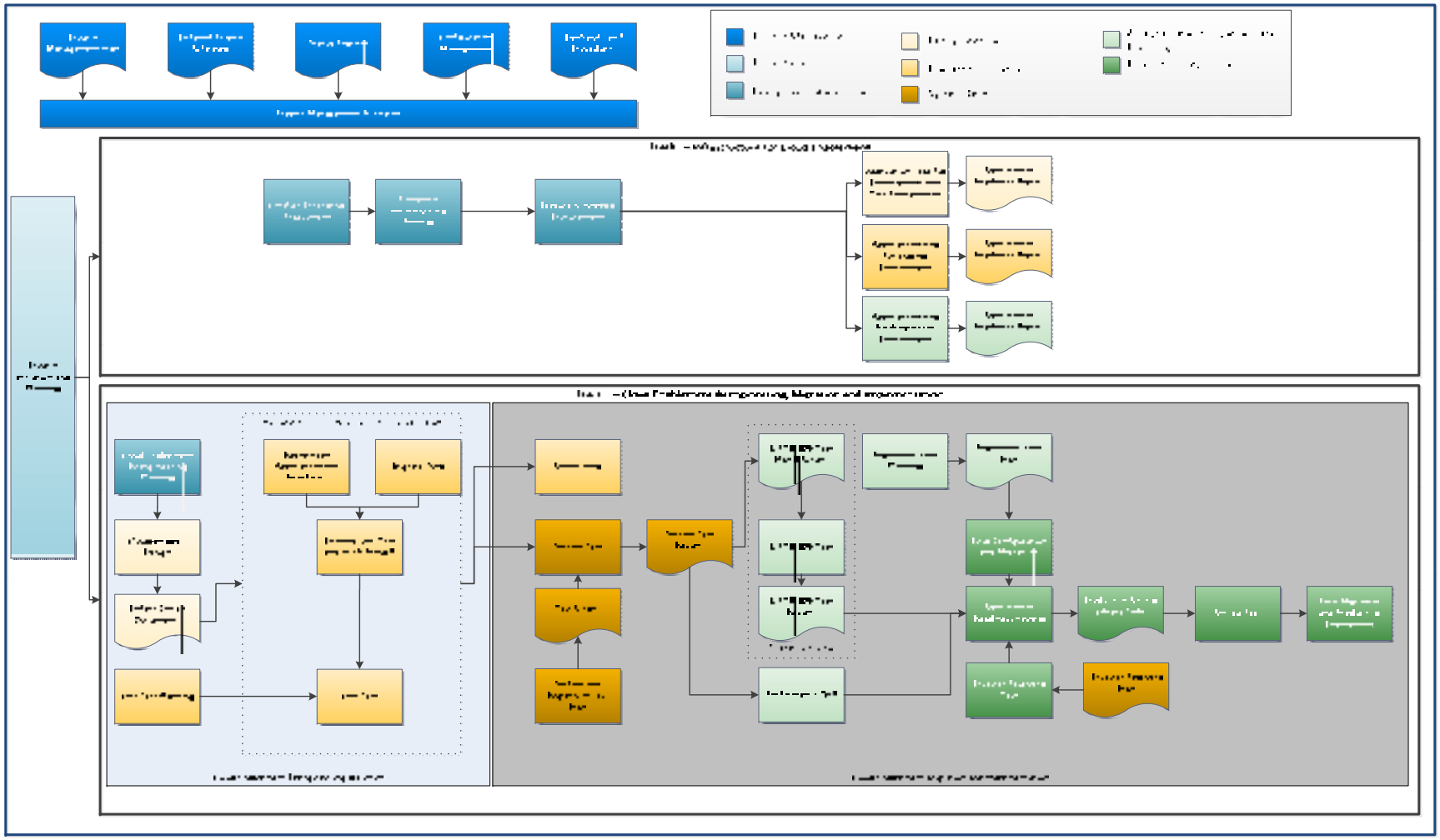

Figure 21. iVision360 Process Diagram

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2.4.2 Phase Approach Work Plan

CNSI proposes a three-phased approach to the implementation and rollout of the CHAMPS Cloud Enablement and Migration Implementation Project.

The three phases are as follows:

- **Phase I:** Planning and Analysis
- **Phase II:** System Reengineering and System Testing
- **Phase III:** User Acceptance Testing, Migration and Implementation

Figure 54 provides a high-level overview of the project phases with major activities and anticipated deliverables. Note that the overall timeline presented in **Figure 52** shows a 36-month total duration. The phases shown in **Figure 54** will overlap to accomplish the total work needed in the 36-month duration.

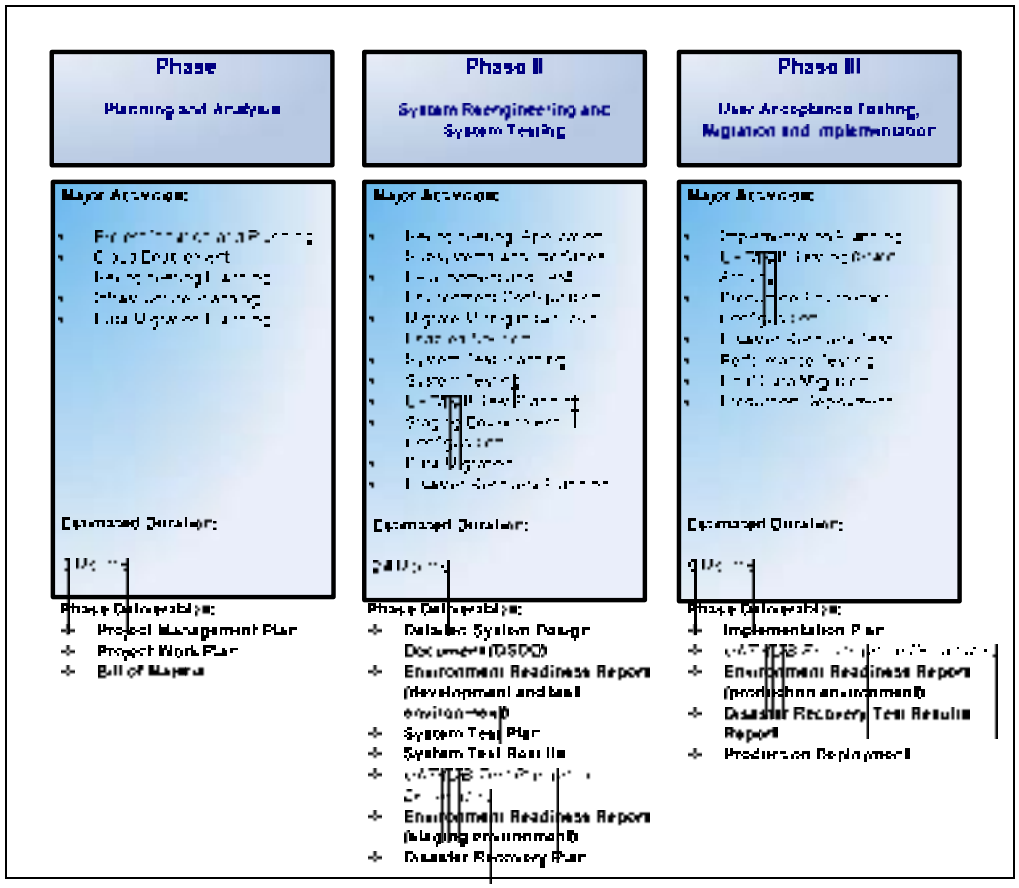

Figure 22. High-Level Project Phases and Activities

As presented in the initial work plan (**Figure 52**), the tight implementation schedule will result in an overlap between all the phases. This will allow configuration and testing activities to begin as early as possible.

With every project, there are critical milestones to be met and work products and deliverables that must be developed and produced in order to provide the inputs necessary to perform the next activity. **Table 24**

elaborates on the activities of the proposed 36-month implementation plan, along with the expected deliverables. In Table 4, bold text in the deliverables sections indicate formal deliverables; italicized text indicates State acceptance tasks and deliverables.

Table 10. High-Level Activities and Milestones by Phase

Activities	Description	Phases
Project Initiation and Planning	This will establish the project team structure and communication processes with the different stakeholders. In addition, the Project Management Plan and Work Plans are developed.	Phase I
Cloud Enablement Reengineering Planning	CNSI reviews the existing design and identifies the technical components that will be configurable in the multi-tenant solution and plans for the necessary reengineering activities.	Phase I
Infrastructure Planning	CNSI will review the infrastructure requirements for the cloud-enabled solution and develop the bill of material to support execution of the enablement project.	Phase I
Phase I Deliverables: • **Project Management Plan** • **Project Work Plan** • **Bill of Material**		
Reengineering Application Subsystems and Interfaces	CNSI documents the design specifications for the configurable technical components of the multi-tenant solution and configures the application and interfaces to the cloud-enabled model. Once complete, the configured solution is delivered to the Test Team for System Testing.	Phase II
Development and Test Environment Configuration	CNSI works with DTMB to deploy and configure the infrastructure environments to support development and testing.	Phase II
Migrate Michigan to Cloud Enabled Solution	By subsystem and using an agile, iterative approach, migrate Michigan functionality to the cloud-enabled platform and conduct related peer reviews and unit testing concluding with release of the code for system testing.	Phase II
System Test Planning	Test plans and related test case and test data are created for the System Test phase.	Phase II
System Testing	CNSI will conduct System Testing. At the conclusion of the System Test phase, CNSI will prepare a complete report of test results.	Phase II
UAT/B2B Test Planning (State Activity)	*State staff review approved DSDDs and develop test plans, test cases, and test data to support UAT and B2B testing of the cloud-enabled system.*	Phase II
Staging Environment	CNSI works with DTMB to deploy and configure the infrastructure for	Phase

Configuration	the staging environment.	II
Data Migration	CNSI migrates existing databases to the cloud-enabled platform.	Phase II
Disaster Recovery Planning	CNSI will create the plan for disaster recovery of the could-enabled solution.	Phase II
Phase II Deliverables: • **Detailed System Design Document (DSDD)** • **Environment Readiness Report (Development and Test Environment)** • **System Test Plan** • **System Test Results** • ***UAT Test Plan (State deliverable)*** • **Environment Readiness Report (Staging Environment)** • **Disaster Recovery Plan**		
Implementation Planning	CSNI will develop the plan for deployment to production, which will include detail implementation checklists, the final implementation calendar, and related artifacts. This is a joint activity that includes input from DTMB and other State stakeholder.	Phase III
UAT/B2B Testing (State Activity)	*The State team will conduct UAT and B2B Testing. At the conclusion of the UAT/B2B phase, the State team will prepare a complete report of test results.*	*Phase III*
Production Environment Configuration	CNSI works with DTMB to deploy and configure the infrastructure for the production environment.	Phase III
Disaster Recovery Test	CNSI conducts disaster recovery test to verify documented process and procedures documented in the Disaster Recovery Plan and provide a detailed report of the test results.	Phase III
Performance Testing	CNSI conducts performance testing to verify compliance with existing performance metrics.	Phase III
Final Data Migration	CNSI performs final migration of data to production databases.	Phase III
Production Deployment	Implementation of the cloud-enabled solution with all current functions operational in production.	Phase III
Phase III Deliverables: • **Implementation Plan** • ***UAT Test Results (State Deliverable)*** • **Environment Readiness Report (Production Environment)**		

- **Disaster Recovery Test Results Report**
- **Production Environment**
- **Production Deployment**

Phase I – Planning and Analysis

Activity 1 – Project Initiation and Planning

Project Initiation focuses on the creation of the project plan by project management. The project plan defines the project's purpose and goals and sets the timeframe and timeline of when goals are expected to be met. Project planning activities will be coordinated with MDCH and DTMB.

During Project Planning, CNSI, MDCH, and DTMB, management will establish working relationships and identify the staff members required to support the initiative. Once the team members are identified, they will familiarize themselves with the project scope and objectives.

CNSI will prepare the project work plan and any customizations necessary for the project management plan, which will include standards and guidelines for the various teams to work with each other.

The Deliverables Management section of the project management plan will define all formal deliverables for the project along with the organizational units involved in preparing, reviewing, and approving the project deliverables.

Milestones associated with this activity include:

- Team members are identified and committed to the effort.
- Project Management Plan is delivered.
- Project Work Plan is delivered.

Activity 2 – Cloud Enablement Reengineering Planning

During this activity, CNSI will start with reviewing the existing design of the system and identifying the technical components that be modified to support the multi-tenant cloud-enabled solution. Once this inventory is identified, CNSI will then identifying specific reengineering standards for each technical component and defining the configuration activities required to transition from the current technology to the final could-enabled solution. The plan will also address activities to migrate existing data.

The milestone for this activity is the creation of CNSI internal iteration plan that accounts for the required reengineering activities.

Activity 3 – Infrastructure Planning

Infrastructure Planning consists of CNSI working collaboratively with DTMB team members to confirm the infrastructure requirements for the cloud-enabled solution. CNSI will leverage the infrastructure analysis completed during the pre-project planning as the starting point for this effort, and upon the review and agreement of the requisite elements of the solution with DTMB, CNSI with the cooperation of

DTMB will complete the architecture assessment and finalize the bill of material (BOM). The BOM will define the recommended hardware and software procurements for the project. Once approved, the BOM baseline is created for the project from which CNSI will procure hardware and DTMB will procure software licenses.

The milestones for this activity include:

- The Bill of Material is delivered.
- The enterprise assessment (EA) documentation is submitted.

Activity 4 – Data Migration Planning

Data migration is a critical activity for the CHAMOS Could Enablement Project. Data migration is the process of replicating the data from the CHAMPS legacy database to the new cloud-enabled environments. Conversion planning includes identifying the specific methods and procedures for cloning the database in the exiting databased and moving that to the new infrastructure.

The milestone for this activity is the creation of CNSI internal data migration checklist that accounts for the required migration activities.

Phase II – System Reengineering and System and Regression Testing

Activity 1 – Reengineer Application Subsystems and Interfaces

During this activity, CNSI will document the specific technical elements that will be configurable within the multi-tenant solution. This documentation will provide the foundation for working with future states because it will define those elements of the solution that will be flexible and revised to be tenant specific in branding and presentation. Once these configurable items are documented, CNSI will reengineer the applications and interfaces to support this multi-tenant model. In addition, CNSI will define and configure the necessary scripts to migrate the existing data to the could-enabled solution.

The milestone associated with this activity include is the delivery of the DSDD.

Activity 2 – Development and Test Environment Configuration

During this activity, CNSI and DTMB work together to configure the infrastructure resources allocated to the environments for development and test. These environments must be provisioned with sufficient hardware, related software licenses, capacity, and connectivity for State and CNSI staff. The new environments will need to be initialized with CHAMPS software, database schemas, and test data.

The milestones for this activity include:

- A fully provisioned and connected development and test environment.
- Operational Readiness Report (development and test environment).

Activity 3 – Migrate Michigan to Cloud Enabled Solution

During this activity, CNSI system engineers construct the cloud-enabled platform pursuant to the approved DSDD. To accomplish this, CNSI will leverage the existing technical toolsets and standards

which include bi-weekly iterations for development, peer review and unit test activities. As development iterations are completed, the newly configured software is promoted to testing. Any anomalies revealed through the testing process are corrected and redeployed to the test environment for validation. The iterative development- test process is repeated until all existing Michigan functionality has been delivered to testing.

The milestone for this this activity is delivery of Michigan CHAMPS functionality into the cloud-enabled platform for System Testing.

Activity 4 – System Test Planning

During this activity, CNSI will collaborate with MDCH and DTMB to produce detailed test plans and schedules for each phase of testing, including unit, system, and UAT/B2B testing. CNSI will develop unit and system test cases and data to support system testing of the cloud-enabled solution.

Milestones for this activity include:

- System and Regression Test Plan is delivered.
- UAT/B2B Test Plan is completed (State activity).

Activity 5 – System Testing

CNSI will conduct system and regression testing during this activity. This involves executing the system and regression portions of the System and Regression Test Plan documented in Activity 2. In addition, CNSI will correct any anomalies uncovered during the execution of the testing, and recording the results. At the conclusion of the system and regression testing, CNSI will prepare a complete report of the test results.

The milestones for this activity are:

- Delivery of the System Test Results Report.
- System tested software promoted to UAT/B2B test environment.

Activity 6 – UAT/B2B Test Planning

Planning for UAT and business to business (B2B) testing is the key state activity that positions MDCH to test the software deployed on the new infrastructure. The transition to the CHAMPS Cloud-enabled platform represents a major change. Fully exercising the system through user acceptance testing provides the State with confidence that the software is performing as described in the approved design.

The B2B plan is an extension of UAT into the State's business partner community. The B2B plan will define how the State plans to engage the business community for testing the cloud-enabled solution prior to deployment Rather than the detailed UAT plan which generally exercises all aspects of the new system, the B2B plan is more targeted to the functions the business community uses, such as different methods of claims submission and prior authorization submission and approval.

The major milestone for this activity is completion of the UAT and B2B Test Plans.

Activity 7 – Staging Environment Configuration

During this activity, CNSI and DTMB work together to configure the infrastructure resources allocated to the environments for the staging environment. This environment must be provisioned with sufficient hardware, related software licenses, capacity, and connectivity for State and CNSI staff. The new environment will need to be initialized with CHAMPS software, database schemas, and test data.

The milestones for this activity include:

- A fully provisioned and connected staging environment.
- Operational Readiness Report (staging environment).

Activity 8 – Data Migration

During this activity, CNSI data migration engineers will create a clone of the existing production database and configure the replication between the existing and the new databases. Once this is complete, the data migration engineers will incrementally sync the data between the existing and cloud-enabled databases. After each sync process is completed, a smoke test will be completed to verify the data. Any anomalies will be investigated and corrected.

The milestones for this activity are:

- Completion of clone production database snapshot.
- Configuration of replication on new infrastructure.
- Synced and verified data sets.

Activity 9 – Disaster Recovery Planning

During this activity, CNSI will collaborate with MDCH and DTMB to document the disaster and recovery processes and procedures to include with the Disaster Recovery Plan for the cloud-enabled CHAMPS environment and solution. This includes defining the activities necessary to fail over to the back-up location in the event to of a disaster declaration, including the data and application recovery timelines, contact and communication processes, and step by step recovery procedures. When complete, the Disaster Recovery Plan will be the baseline for the multi-tenant solution.

The milestone associated with this activity is the Disaster Recovery Plan is delivered.

Phase III – User Acceptance Testing and Implementation

Activity 1 – Implementation Planning

During this activity, CNSI, MDCH, and DTMB will plan for the implementation of the CHAMPS cloud-enabled solution. CNSI will conduct implementation planning meetings to ensure all necessary activities are captured and assigned. Through the meetings, an implementation calendar and checklist will be developed. The results of the planning meetings will be documented in the implementation plan, which will include the detailed checklist of activities necessary leading up to final deployment. .

Milestones associated with this activity include:

- Key participants for implementation planning are identified and assigned.
- Implementation planning and review meetings are completed.
- Implementation Plan is delivered (including the calendar and checklist).

Activity 2 – UAT/B2B Testing (State Activity)

CNSI recognizes that UAT and B2B testing is owned by the customer. However, it is an integral part of the system life cycle. Through UAT, MDCH will validate and verify that the CHAMPS cloud solution works as the same as the current system. During this activity, testing is conducted with migrated data. Successful completion of UAT and B2B testing is a critical component of the entrance criteria for the production deployment.

CNSI will support MDCH and DTMB in conducting formal UAT and B2B testing. CNSI's activities to support UAT testing include running back end interfaces, processing HIPAA transaction files, testing with interface partners and analyzing and correcting any defects reported. During this activity, data migration and interfaces will also be verified and validated. B2B testing with interface partners will be completed. Any anomalies uncovered in this activity will be corrected and the related conversion activity will be re-executed.

The milestone associated with this test is State acknowledgement of successful test completion. The State may optionally prepare and deliver a UAT results report to their management.

Activity 3 – Production Environment Configuration

During this activity, CNSI and DTMB work together to configure the infrastructure resources allocated to the environments for the production environment. This environment must be provisioned with sufficient hardware, related software licenses, capacity, and connectivity for State and CNSI staff. The new environment will need to be initialized with CHAMPS software, database schemas, and test data.

The milestones for this activity include:

- A fully provisioned and connected production environment.
- Operational Readiness Report (production environment).

Activity 4 – Disaster Recovery Testing

During this activity MDCH, DTMB, and CNSI work together to execute the Disaster Recovery Plan delivered in **Activity 4 – Data Migration Planning**. The outcome and results of this test will be documented, and any system configuration anomalies are corrected.

The milestone for this activity is completion of the Disaster Recovery Test Results Report.

Activity 5 – Performance Testing

During this activity, CNSI test engineers will conduct performance testing in conjunction with UAT of the new CHAMPS cloud-enabled solution to ensure current performance metrics are maintained within the new environments. Any identified performance bottlenecks will be corrected and retested during this testing activity to ensure all performance service levels are achieved. At the conclusion of the performance testing, CNSI will prepare a complete report of the test results.

The milestone for this activity is completion of the Performance Testing.

Activity 6– Final Data Migration

During this activity, CNSI data migration engineers execute the data migration to the production environment. Once the database migration is complete, a smoke test is completed to verify the data sets.

The major milestone for this activity is fully-synced data sets in the production environment.

Activity 7 – Production Deployment

The production deployment will be conducted upon completion of the activities described in the Implementation Plan. The deployment will be a joint effort between CNSI and State resources and will be led by CNSI. This activity includes final preparation of the production environment, deployment of code packages and migration of data to the production environment.

Milestones associated with this activity include:

- Final migration of the application, data, and interfaces is completed.
- All pre-implementation tasks and events are completed.
- State approval to implement is received.
- The production installation is verified.
- The production installation is released to user community.

Section 3: General Assumptions

CNSI has identified and provided the following general assumptions in regards to the CHAMPS Cloud Enablement and Migration Implementation Project:

8. MDCH and DTMB will provide access to, and time commitment from, subject matter experts who understand their programs and systems.
9. DTMB will procure the software licenses required for the cloud-enabled solution pursuant to the approved BOM and Project Work Plan.
10. Remediation of MICAM, SSO, FileNet and DEG is the responsibility of DTMB and will be completed pursuant to the approved Project Work Plan. Any delays will be evaluated through the project's change management process.
11. The CHAMPS cloud-enabled solution will consist of the functionality present or planned in the CHAMPS system up to and including Major Release 5.1.
12. The CHAMPS cloud-enabled solution will be comprised of the CHAMPS subsystems and interfaces.
13. DTMB will complete the installation of the hardware and configure the firewall security settings pursuant to the approved Project Work Plan. Any delays will be evaluated through the project's change management process.
14. The State will plan and execute UAT pursuant to the approved Project Work Plan. Any delays will be evaluated through the project's change management process.

Section 4: Proposed Project Cost

This section of our proposal presents our fixed price overall labor cost and hardware estimates for completing the CHAMPS Cloud Enablement and Migration Project. The cost was derived based on the expected effort required as presented in our initial work plan, composed of the three phases depicted in Figure 54. The total fixed price labor cost for the CHAMPS Cloud Enablement and Migration Project is $ 31,740,000.

The CNSI software licensing and maintenance cost will be added to the total budget.

CHAMPS Enhancements for Provider Site Visit Pro Statement of Work

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Lansing, MI 48917

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Section 1: Introduction

The Michigan Department of Community Health (MDCH) is a recognized leader in advancing technology to support the business of Medicaid. Recent examples of MDCH's leadership include the implementation of ICD-10 system code modifications and implementation of an automated provider site visit management and tracking system that integrates seamlessly with support in the Centers for Medicare & Medicaid Support (CMS) certified Community Health Automated Medicaid Processing System (CHAMPS). When CMS instituted mandatory, unannounced site visits for certain categories of high risk providers, MDCH responded by implementing the CNSI's technically advanced mobile application "Site Visit Pro." Site Visit Pro® uses mobile technology to support online real-time data capture while MDCH is at the site conducting their evaluation. Site Visit Pro focuses on identifying, and proactively preventing, fraud and abuse of the Medicaid program. The **CHAMPS – SIGMA Implementation** initiative will expand the services of the system to extended support for high risk home help providers, who provide personal services to Medicaid beneficiaries such as bathing, dressing and toileting.

. When the **CHAMPS – SIGMA Implementation** initiative is completed MDCH will have greater capabilities for enrollment and ongoing management of high risk home help providers and better integration of home help information across multiple MDCH systems. The planned feature set will also provide foundation application functionality for use in the Illinois Michigan Program Alliance for Core Technology (IMPACT) and CHAMPS Cloud implementation projects which are expected to kick-off during 2015. The initiative is offered as a fixed-cost effort that is expected to be implemented over twelve calendar months.

1.1 Regulatory and Business Drivers for Change

Under the provisions of the federal regulations at 42 CFR 455 Subpart E 455.432, Medicaid providers must meet all standards associated with the provider screening provision of the act. This is applicable to both currently enrolled providers and new providers undergoing the enrollment process. For high- and moderate-risk providers—such as home health agencies, durable medical equipment suppliers, and end-stage renal disease facilities CMS has mandated additional controls in the form of site visits to validate that the providers are actually performing their work in a suitable facility. MDCH includes home help providers in the same category of high risk providers.

The initial implementation of Site Visit Pro replaced manual processes where field notes taken by the MDCH examiners during a site visit, were transcribed onto paper forms and then stored in paper files. Scheduling site visits was also a manual process. This resulted in delays in approval of enrollment requests from providers where site verification was required. With Site Visit Pro, the site verification information is entered real-time using mobile technology. Throughput of enrollments awaiting site verification increased with a corresponding decline in the average time for approval of a new or re-

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enrollment. Site visit records are now stored electronically. Site Visit Pro interfaces with CHAMPS to maintain a date-spanned indicator that serves to provide forecasting of upcoming site visits.

With the home help provider community a paper-driven process much like the original site visit process is currently being used. Site Visit Pro has demonstrated the effectiveness of mobile technologies in streamlining work processes and reducing processing time. MDCH now seeks to transfer these concepts to the home help provider community.

The State of Michigan's Home Help Program is a MDCH and Department of Human Services (DHS) jointly governed Personal Care Benefit program funded through the State's Medicaid Plan. The program provides support to elderly and disabled adults that require physical assistance in their activities (for example: bathing, toileting, transferring, feeding, grooming, etc.). The intent of the program is to provide caregiver support for eligible beneficiaries to remain independent in their communities. As of 2014, the program is reimbursing more than 70,000 home help providers who are administering caregiver supportive services to more than 60,000 beneficiaries.

While the Home Help Program is conducted state-wide and provides necessary services to thousands of eligible beneficiaries, its practices have not avoided scrutiny. The June 2014 release of the Michigan Office of the Auditor General's (OAG) Performance Audit findings of the Home Help Program exposed systemic deficiencies in procedures, regulation, and accountability. The OAG report had 13 findings:

- Provider Service Log or Invoice Documentation
- ASW Contacts with Clients and Providers
- Payments for Services for Ineligible Clients
- Unemployment Insurance (UI) Claims
- Agency Pay Rates for Nonqualified Providers
- Criminal History Checks
- Client Case File Review Exceptions
- Management Use of Client Case File Reviews
- Controls to Prevent or Recover HHP Payments for Hospitalized Clients
- Controls to Prevent or Recover HHP Payments for Clients in a Nursing Facility
- Review of Undeliverable W-2 Forms
- Referral of Suspected Client and Provider Frauds
- Data Reporting System

MDCH and DHS is acting swiftly to begin to correct the OAG recommended changes. This effort will establish and implement features to manage and valididate services performed by the home help providers that render care to Michigan Medicaid beneficiaries. The **CHAMPS – SIGMA Implementation** will tie together Site Visit Pro, CHAMPS, Adult Services Authorized Payments (ASAP) and Adult Services Comprehensive Assessment Program (ASCAP) systems to ensure that a common source of enrolled provider data and payment data is available throughout the State's Medicaid enterprise.

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This initiative will further enhance MDCH's capabilities to perform work supporting the Medicaid Information Technology Infrastructure (MITA) Business Architecture areas of Performance Management (PE) and Enrollment and Eligibility (EE):

- PE01 Identify Utilization Anomalies: By providing real-time support for validating and authorizing home help services before they are delivered.
- PE04 Determine Adverse Action Incident: By identifying incorrect billing events
- EE06 Enroll Provider: By ensuring home help providers are qualified and verified on enrollment, reenrollment and billing.

1.2 CNSI Capabilities

Since 2006, CNSI has worked in close partnership to establish and maintain Michigan's state-of-the-art Medicaid system: CHAMPS. In collaboration with MDCH and DTMB, We have developed and implemented more than 2000 enhancements and multiple major initiatives. Highlights of our shared history include:

- CHAMPS claims implementation in 2009
- CHAMPS encounters implementation in 2010
- MMIS Certification and eMIPP initial implementation in 2011
- HIPAA 5010 implementation in 2012
- ICD-10 Assessment; HealthBeat, myHealthButton pilot and Affordable Care Act Provider Modification, and IMPACT eMIPP implementation (Illinois) in 2013
- ICD-10 software code deployment phase, CORE Certification, Healthy Michigan, Member Portal, and Site Visit Pro in 2014

All of these projects have supported MDCH's vision of a modern, responsive, healthcare environment supporting Michigan Medicaid beneficiaries. CNSI's has continued to work with the State to provide innovative, technically sophisticated software solutions to support the State's business needs and to remain compliant with all defined federal requirements. Through these and other efforts, CHAMPS has continued to maintain pace with the rapidly changing Medicaid environment and is complaint with all current federal regulations.

As system software engineers and integrators, CNSI aligns clients' business processes and information systems to allow them to access the right information at the right time, enabling the achievement of their desired business results and creating enterprise value. CNSI has extensive technological experience in the industry combined with flexible tools and methodologies to deliver quality results on time and within budget. CNSI completes jobs for clients by delivering on commitments with speed and purpose in accordance with the client's specifications and expectations.

CNSI's approach to conducting the **CHAMPS – SIGMA Implementation** is based on our extensive knowledge of CHAMPS design, implementation, and operations as well as our unique position as the architects, system integrators and

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implementers of MDCH's the Site Visit Pro product. CNSI has repeatedly demonstrated its ability to support the forward-looking vision of the MDCH organization.

In conducting the work for the **CHAMPS – SIGMA Implementation** initiative, CNSI will use its considerable business, technical and operational knowledge of the MDCH Medicaid program, CHAMPS system capabilities, the existing CHAMPS functionalities, and its knowledge of building and deploying mobile solutions such as myHealthButton and Site Visit Pro. CNSI brings an experienced team of Medicaid and CHAMPS subject matter experts (SMEs), technical and architectural experts, and project management expertise to support the **CHAMPS – SIGMA Implementation** initiative in the method CNSI has used in previous collaborative efforts for MDCH. CNSI's experience working with MDCH has led to incorporating the following factors in developing this statement of work:

- **CNSI's ability to introduce technical innovation to the State's Medicaid operation**

  CNSI has introduced mobile technology and direct consumer engagement to the Medicaid program through the myHealthButton pilot project that introduced consumer engagement mobile phone applications and the Member Portal to support better beneficiary health outcomes. Other recent examples of CNSI's technical innovation include HealthBeat application, Provider Site Visit Pro, and ClaimSure. HealthBeat monitors CHAMPS activity such as claim and encounter auto-adjudication rates, and number of benefit inquiries processed per hour throughout the day and displays it graphically 24 hours a day, 7 days a week. Provider Site Visit Pro uses a mobile tablet-based application that allows MDCH provider site visit inspectors the ability to capture site visit data and facility pictures in real-time. Inverting the "pay and chase model", ClaimSure uses data analytics to detect improperly billed claims prior to payment. The ClaimSure data analytics engine has saved the state more than $33 million to date. The collaboration between MDCH and CNSI continues to lead the nation in modernizing State Medicaid technology.

- **CNSI's capability to conduct complex analysis of Medicaid and Consumer Engagement system requirements**

  CHAMPS is a multifunction MMIS-certified information system compliant with all federal mandates that integrates all Medicaid activities into one complete system. Through implementation of new features for home help and for Site Visit Pro, which were designed, developed and implemented by CNSI, MDCH is positioned to take advantage of the extensive knowledge CNSI accumulated during these prior implementations.

- **CNSI's capability to identify and resolve major issues associated with CHAMPS**

  The prompt identification of major issues are an essential component to a project of this scope and are particularly important in the reengineering analysis work needed in a project of this nature. CNSI's extensive knowledge of MDCH's current application architecture, infrastructure, and operations will allow it to quickly identify major issues affecting implementation activity. By

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devoting careful attention to identifying and resolving issues, CNSI will ensure the successful implementation of the cloud-based CHAMPS solution.

- **CNSI's sensitivity to the State of Michigan's needs and constraints**

  CNSI is uniquely qualified to remain sensitive to the State's needs and constraints in defining the project's approach. The team will employ an orderly, structured, professional approach that is sufficiently flexible to respond to changes in requirements that evolve from additional understanding. Overall, CNSI has "hands-on" experience of what does and does not work.

- **CNSI's proven Capability Maturity Model Integration (CMMI) Level-3 assessed project processes for software development**

  In April of 2014, CNSI's Health and Human Services Organization Unit was appraised at Maturity Level-3 under version 1.3 of the CMMI Development model. The appraisal process for the organization unit included assessment of a project from the Midwest Region in order to reach this milestone. For this initiative, CNSI Midwest will continue to use CMMI-compliant processes to deliver the solution described in this Statement of Work.

1.3 Proposed Project Organization

CNSI believes this statement of work represents the best possible combination of architecture, technology, support, and experience to complete this project. The proposed team members are each highly qualified within their respective disciplines. The underlying values held by each member of this team include:

- They share the same belief when undertaking a project—**the customer comes first**.
- They value the contribution that each member brings to successfully implement the project.
- They are committed to understanding and incorporating the State's requirements.
- They have a collective understanding of the advanced technologies, business needs, and operational issues necessary to execute the project successfully.
- They possess the knowledge and skills necessary to employ CNSI's Capability Maturity Model Integration (CMMI) Level-3-assessed processes to effectively implement the project.

CNSI's primary objective is the successful implementation and completion of the project. We are confident in our team's ability to achieve that goal. Our team is fully dedicated to **CHAMPS – SIGMA Implementation** project.

The project's success depends on the full and active participation of the MDCH, DTMB, and CNSI's designated staff members from the initial planning to final implementation.

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Figure 49 shows the CNSI organization structure supporting the **CHAMPS – SIGMA Implementation** project.

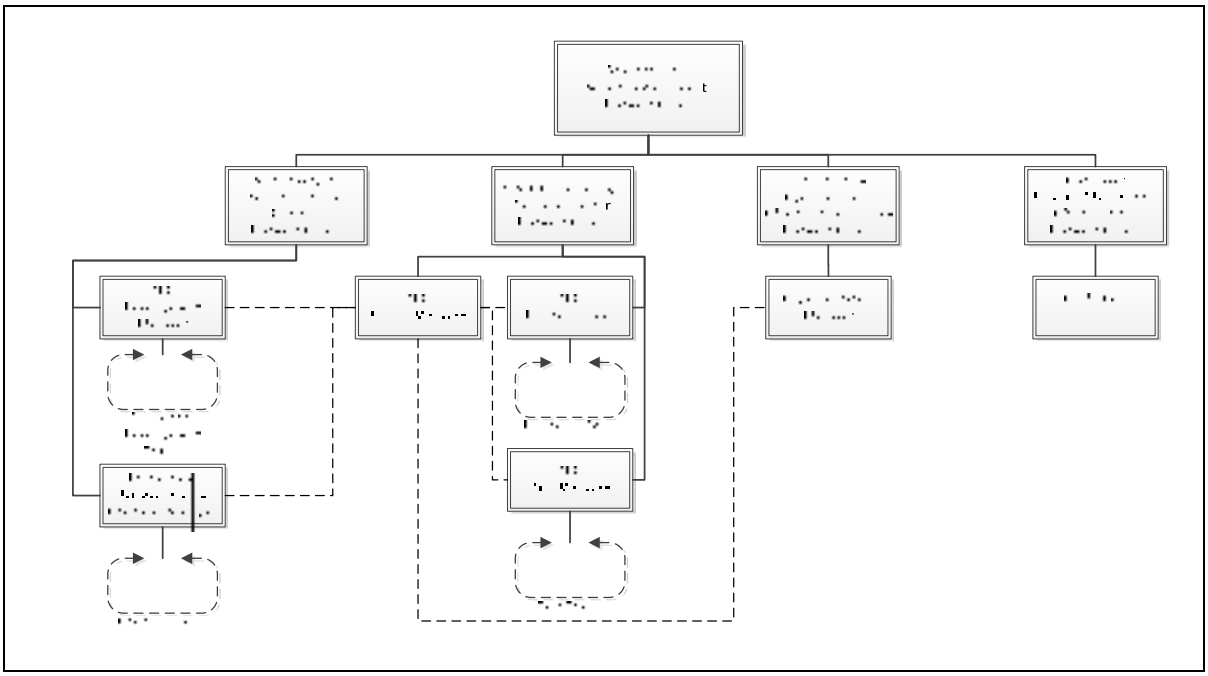

Figure 23. CHAMPS – SIGMA Implementation Project Organization Chart

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Section 2: Project Management Methodology and Tools

This section presents CNSI's project management, technical approaches, methodology, and tools and staged work plan for accomplishing all tasks required for the **CHAMPS – SIGMA Implementation** project. This section describes the scope of activities to be addressed throughout the project, from initiation to final implementation, and the techniques and methodologies the **CHAMPS – SIGMA Implementation** project team will use.

2.1 Project Management Approach

Although all projects are unique, they share common components and processes. The generally accepted process groups defined by the Project Management Body of Knowledge (PMBOK), as incorporated into the CNSI project management process, are:

- **Initiating:** This process group defines the project objectives and grants authority to proceed. For CNSI, the initiating processes are largely incorporated into the proposal development process, during which required partners are identified. This statement of work acts as a project charter and preliminary scope statement.
- **Planning:** This process group refines the project objectives and scope and plans the tasks, activities, and steps necessary to meet the project's objectives. The planning processes start during proposal development and proceed following contract award while CNSI works with MDCH to establish and baseline the project management plan (PMP). The PMP is modified and updated as necessary over the course of the project and is the culmination of the planning processes for scope definition and management, time (scheduling), staffing (human resources), communications, and risk management.
- **Executing:** This process group puts the project's plans into motion. This is where the bulk of the work for the project is performed.
- **Monitoring and Controlling:** This process group measures the performance of the project's executing activities and reports these performance results to project managers and stakeholders. Output is used to refine, improve, or change project management (including plans and schedules) as necessary to meet the project's objectives.
- **Closing:** This process group documents the formal acceptance and approval of the project's product and brings all aspects of the project to a close.

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CNSI is able to provide consistent project outcomes as a result of integrating its set of repeatable, Midwest iVision360 Delivery Framework practices, within the project management process groups above. **Figure 56** shows how CNSI's project and quality management activities interact with other project activities.

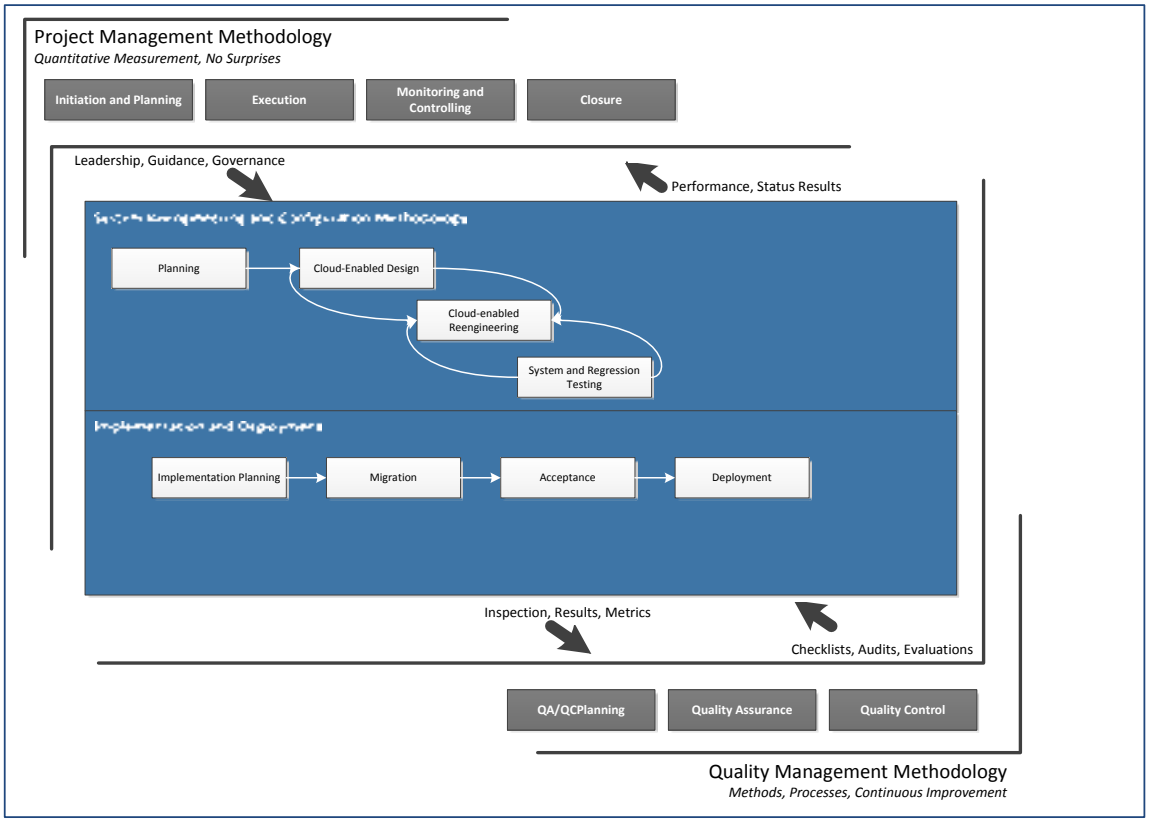

Figure 24. Project Management and Quality Management Activity Integration

CNSI is confident in its capability to apply this proven framework to successfully complete the **CHAMPS – SIGMA Implementation** project. Applying the same framework repeatedly, project after project, ensures a number of advantages for all stakeholders:

- The project management philosophy is firmly entrenched within the entire project team, including CNSI, MDCH, and DTMB.
- Project management is supported as a core competency.
- The project staff is focused on successfully implementing the project.
- Project management, quality management, and cost management processes are fully integrated and their infrastructure is in place.
- Effective project status reporting is established based on project life cycle.
- Project and software development methodologies are well documented.

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- Project staff is provided comprehensive training.
- Project information is communicated continuously to the right people at the right time.
- The project is continuously monitored against performance.
- Excellence in quality and delivery are built in.
- Deliverable review and approval processes are in place.

2.2 Project Methodology

CNSI's integrated approach for this project will use its proven Midwest Region iVision360 framework for the organizing structure, combined with an experienced team of program and project managers, SMEs, technical experts, and change management resources to support this effort.

Using industry-standard project management methods facilitates the integration of CNSI's extensive system experience with application implementations, methodologies, and delivery tools. While no two engagements are the same, the State expects CNSI to deliver in a consistent, systematic fashion. CNSI will achieve this objective by using the CMMI Maturity Level-3 appraised Midwest iVision360 delivery framework tailored for the **CHAMPS – SIGMA Implementation** project as required. Using this framework will provide the structure for integrating CNSI's capabilities while allowing individual project teams the flexibility to adapt to meet the State's unique requirements and use client-mandated tools. Key benefits provided by the framework include:

- Provides a scalable, integrated collection of assets.
- Provides a consistent level of detail and presentation.
- Supports tailoring to scale, which provides a unique, but consistent, cost-effective delivery approach for the State.
- Uses established common work practices and expectations across project team members.

Investing time to create an effective plan with clear objectives is integral to successful project execution. CNSI's delivery framework provides a structured approach to the planning and execution. While this may appear to require more initial effort than desirable, experience has shown that following these processes reduces the likelihood of mistakes and results in lower risk and faster, more cost-effective delivery.

This standardized approach is a unique blend of the waterfall methodology and iterative, agile development. The advantages of this blend include:

- **User is at the Center:** CNSI's primary motivation for employing the Midwest iVision360 framework is to put the user at the center of the project lifecycle. Software projects succeed or fail largely from the software engineer's understanding of the customer's business rules, requirements, and needs. The more insight the developing organization has, the greater the quality and likelihood of success for the project. Successful projects have high interaction with end users and place the user at the center of the development life cycle. Every phase and task of Midwest iVision360 focuses on interaction and collaboration with the user community. CNSI does this by

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implementing agile techniques and building working software in an iterative fashion with user validation at periodic intervals.

- **Common Goals:** Users actively participate in requirements definition and design sessions with an integrated team of software engineers, analysts, and test engineers. This method avoids the pitfalls of waterfall development and test methods which leave, for example, test case refinement and execution until the completion of development. It also provides the team with a sense of purpose, a goal, and the drive to accomplish the end objective: software that meets the requirements.
- **Early and Often Testing:** Midwest iVision360 provides an opportunity to test early and often so formal system test phases and subsequent test phases are more likely to meet schedule expectations with a lower error-discovery rate.

The collaborative, and somewhat "free-form," nature of iterative, agile development is balanced with the structure and baseline management features of the waterfall stage methodology. By introducing the baseline management features of waterfall, CNSI minimizes the risk of scope creep that is sometimes associated with iterative development. Moreover, our project management processes provide integrated change, issue, and risk management processes. **Table 21** describes the key benefits of each of the industry-standard models that are blended into the Midwest iVision360 framework.

Table 11. SDLC Model Comparison

SDLC Model	Key Benefits Blended into Midwest iVision360
Waterfall	Baseline approval of requirements Structured documents and customer approvals Formalized testing
Iterative/Agile	Frequent customer interaction Decomposing work into small meaningful features that are presented in working software Frequent course corrections Sense of real progress Early and frequent testing
Extreme Programming	Teams formed between developing organization and customer Sense of common vision and goal

The standard Midwest iVision360 delivery framework employs a seven-phased process to organize activities and tasks associated with identifying requirements, designing, developing, and testing software.

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These phases contain major work packages that must be accomplished to move systematically through the Midwest iVision360 project lifecycle. The phases roll up into three logical stages within this statement of work. The three-stage roll-up provides an easily understandable, top-down structure that facilitates grouping of activities with similar resource requirements and closely related deliverables. **Figure 57** below shows the relationship between the three-stage roll-up and the seven phases of Midwest iVision360.

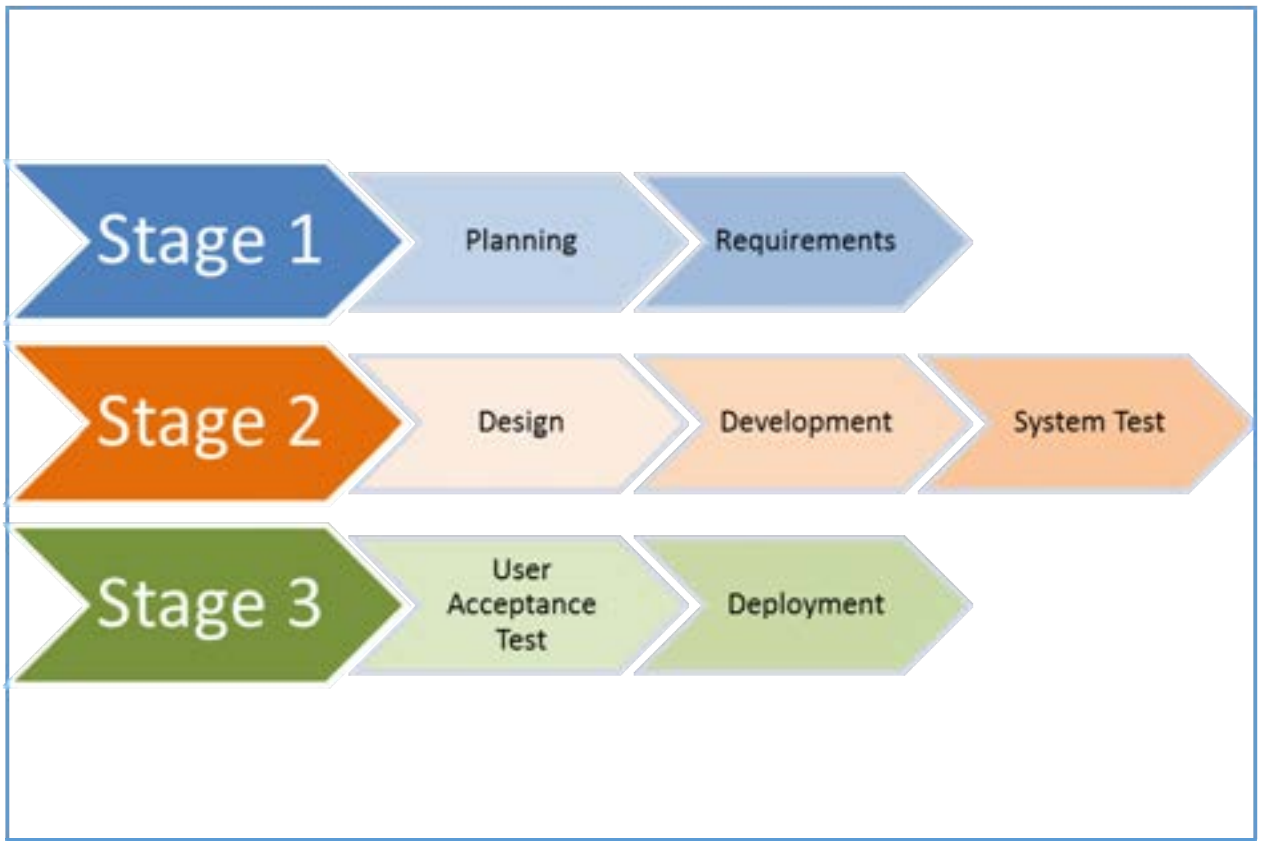

Figure 25. Midwest iVision360 Framework Stage and Phase Relationships

Based on the unique requirements of the **CHAMPS – SIGMA Implementation**, CNSI will tailor its seven-phase Midwest iVision360 framework to the specific needs of this initiative. Major activities and deliverables proposed for each stage in this statement of work can be found in *Section 3: Solution Overview* below.

Independent from the project team, CNSI's Program Management Office will conduct internal audits of CNSI process compliance to ensure the team is executing CNSI's standard processes and to incorporate process-improvement findings during the lifecycle of the project.

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2.3 Project Management Tools

Tools, when properly applied within the delivery framework, reduce the time to complete a project by providing predefined support processes, templates, documents, and training materials. More importantly, using appropriate tools reduces risk and increase efficiency.

CNSI will continue to use the tools already proven effective during the previous undertakings to reduce the time to complete the project and mitigate risk.

Table 23 depicts the tools CNSI will utilize on the project.

Table 12. CNSI Project Tools

Tool	Purpose
Microsoft Office	Develop project deliverables as well as presentations and spreadsheet artifacts needed to support deliverables
Microsoft Project	Develop a detailed project schedule
Microsoft Visio	Develop use case diagrams, technical architecture diagrams, and support process flows
As-One	Repository for deliverables, presentations, and artifacts

While Microsoft Visio, Microsoft Office, and Microsoft Project are industry-standard tools, the following subsection provide additional information about As-One.

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2.3.1 As-One

As-One provides a convenient, secure repository for all program data and will give the State oversight personnel direct visibility into project work products, event calendar, and overall performance. The features of As-One are summarized in **Figure 51**.

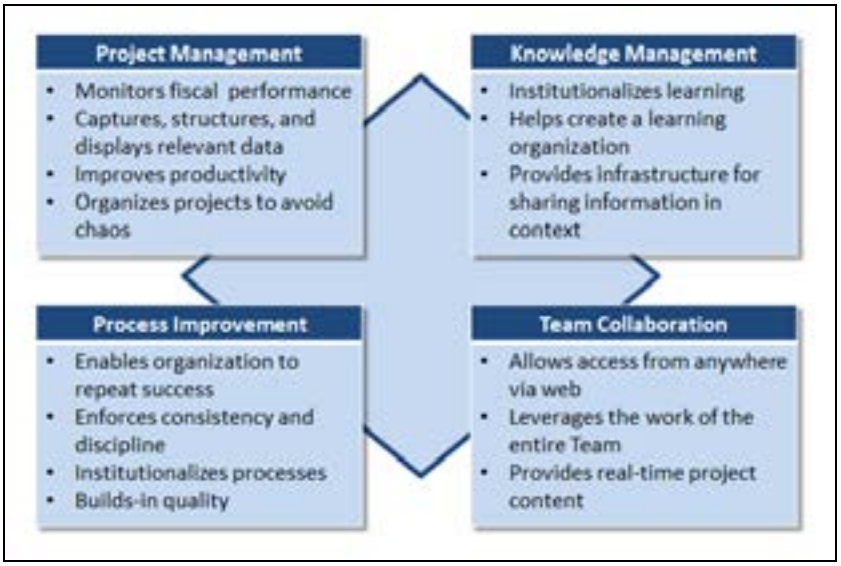

Figure 26. As-One Collaboration and Improvement

The As-One project repository will allow all members of the team to access relevant information and deliverables 24/7 using standard internet browsers such as Internet Explorer, Google Chrome, and Mozilla Firefox. MDCH and CNSI use As-One as their program management portal. Training will be provided for team members new to the program.

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Section 3: Solution Overview

This section summarizes CNSI's proposed **CHAMPS – SIGMA Implementation** project, including functional and technical overviews, the proposed project timeline, and the project stages for meeting the objectives of the **CHAMPS – SIGMA Implementation** project. Full business and technical requirements will be elicited and documented as a part of the first phase of the project.

3.1 Functional Overview

- There are two primary areas of functional enhancement to **the Site Visit Pro** product
    - **CHAMPS Provider Enrollment subsystem**
    - **The Electronic Service Verification (ESV)** solution

At a high level, the **CHAMPS Provider Enrollment** subsystem will be enhanced to:

- Accept and process enrollments for home help providers including.
    - Identify verification including name, address, and Social Security Number .
    - Background checks for criminal and sex offender history.
    - Credential verification (where required).
- Process payment for home help providers based on validated beneficiary site visits.
- Support payment suspense reasons unique to home help providers.
- Support association of home help providers to home help agencies similar to the functions supported for servicing only providers in the medical community.
- Interface with the State's Home Help Provider Registry.

The **ESV** solution will be enhanced to preform additional functions to support beneficiary management; State home help provider management and data coordination activities; and expanded and enhanced provider support.

Beneficiary management support:

- Perform beneficiary validation and authorization for services in real-time.
- Capture and process
- Capture and process retroactive authorization changes.

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State home help management features:

- Interface with the State's ASAP, ASCAP and Data Warehouse systems.
- View and manage payments including the ability to approve ESV information under specific circumstances.
- Produce audit and error reports.
- Print ESV information (applicable to providers as well).

Provider-facing features:

- Support ESV validation through mobile technology such as iPhone and Android Phones.
- Ability to view ESV information.
- Ability to view payment information.
- Reminder alerts when ESV information is not submitted per the schedule.
- Prompt for address validation when submitting ESV information.
- Update ESV information after retroactive authorization is approved.

3.2 Technical Overview

CNSI will modify CHAMPS to support additional features for enrolling and managing home help providers. This work is primarily configuration of enrollment rules. Enhancements to the interface with the Provider Credentialing Service (PCS) module of the CHAMPS Provider subsystem will be necessary to extended criminal and sex offender screening. No major architectural changes are anticipated for CHAMPS.

CNSI will modify ESV to correctly display on mobile devices. This will require an adaptive layout that:

- Allows CHAMPS to be displayed on multiple types of mobile devices.
- Re-sizes correctly for the specific device.
- Renders correctly in both landscape and portrait display modes.

The mobile feature will also support entry and real-time validation of ESV data. Home help providers will need to apply for and access ESV through Single Sign-On. These capabilities will be delivered through mobile-accessible pages consistent with the current user interface and technical framework for ESV.

3.3 Solution Delivery Plan

In this section CNSI presents the proposed timeline, technical approach, and staged delivery approach for the **CHAMPS – SIGMA Implementation** project.

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A detailed description of the activities and deliverables within each stage is presented in *Section 2.4.2 Phase Approach Work* **Plan**.

CNSI structured this work plan to address the overall relationship and sequence of the work required to complete the project. It effectively uses the professional resources required to successfully complete the work and produce high-quality products in a cost-conscious manner.

The following subsections further describe how CNSI intends to accomplish the goals of the work plan by employing its Midwest iVision360 framework in the proposed approach for the **CHAMPS – SIGMA Implementation** project.

3.3.1 High Level Timeline

CNSI has created a summary timeline and work plan for the **CHAMPS – SIGMA Implementation** project. The timeline is shown in **Figure 59** below. The timeline shows the approximate duration of each stage and phase of the work for the **CHAMPS – SIGMA Implementation** project.

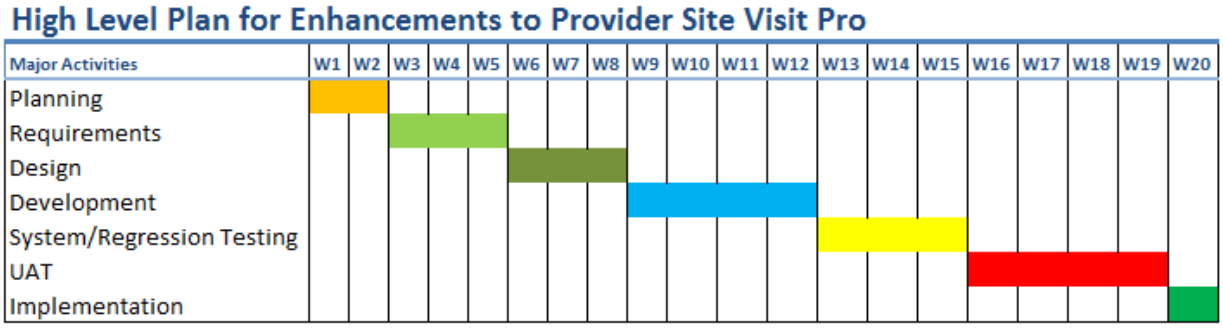

Figure 27. Initial Project Timeline

This timeline was developed based on the estimated effort of the work necessary to accomplish the proposed technical and functional solutions.

The proposed timeline was developed with the goal of optimizing the effective use of the professional resources required to accomplish these scope of work and produce high-quality products in a cost-conscious manner.

3.3.2 Midwest iVision360 Delivery Processes

In this section, CNSI provides an outline of its CMMI Level-3-assessed Midwest iVision360 Framework, which includes a full system development lifecycle (SDLC) model supporting the delivery of the technical solution. CNSI's SDLC processes have been adapted to address the specific needs of the

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CHAMPS – SIGMA Implementation project. CNSI will produce deliverables for each phase of the project.

CNSI will engage in requirements analysis and design with the customer in order to begin iterative development. CNSI will provide an opportunity for the customer to review design documents prior to the start of system development activity.

Iterative, agile development under the Midwest iVision360 framework is visible in Stage II for the **CHAMPS – SIGMA Implementation** project. During this stage, technical design specifications for new or impacted functions and user stories are constructed in parallel by the software engineers and SMEs. As the impacted function's design is completed, the Team Lead plans the iterations required to complete development.

Development work is planned based on a two-week iteration schedule. Software engineers build internal design documentation prior to, and during, the two-week iterations. The first day of each iteration is reserved for startup activities, including finalizing the iteration's internal design documentation. The software engineer meets with the Data Modeling team on the first day of the iteration and conducts a walkthrough of any required data model changes. The Data Modeling team makes the required changes to the database schema and approves the physical model for coding.

Development begins once the internal design and pre-development work is completed for the iteration. The software engineer writes internal iteration test scripts in parallel to actual working code and updates screens and other system functions to fit the physical mode. The software engineer executes the iteration test scripts as they complete sections of code. The software engineer builds the code, tests incrementally, and coordinates and communicates with the team through daily stand-up meetings regarding any issues holding up the development work.

Software engineers then test the code against the internal auto-unit code and manual internal iteration test scripts. As they reach the end of the iteration, they run the code against the functional scripts developed by the Test Team. Discrepancies are identified and corrected. The software engineer retests to ensure all discrepancies are corrected and closed before the iteration ends. The software engineer then conducts a peer review of the code of a given function on the last day of the iteration. The software engineer then updates the code based on the review. When software engineer iteration testing and software code reviews are successfully completed for the iteration, the code is then promoted to the integration test stream. The code is released to the Test Team for system testing when the coding and software engineer iteration testing is completed for all user stories for a given function.

During initial development iterations, the Test Team develops system test cases based on the current CHAMPS solution specifications. During system testing, the Test Team executes system test cases to validate system results against the current production functionality.

For the **CHAMPS – SIGMA Implementation** project, CNSI plans to engage the test and development teams early on to build the regression test suite for the critical functions. This will speed up testing and improve the overall quality of implementation. CNSI understands the

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importance and sensitivity of the **CHAMPS – SIGMA Implementation** project and the need to ensure it aligns with the environment that is already in production. During system testing, regression tests will be performed to demonstrate that the solution continues to function as expected.

As soon as regression testing is completed for a function, CNSI will deliver the code to the UAT environment. CNSI plans to engage the customer as early as possible and well before the beginning of the planned UAT phase. This ensures that enough time is allowed for thorough UAT, which will also reduce the risk of schedule slippage for UAT completion. CNSI will deploy system- and regression-tested functions to the UAT environment as they are completed.

As presented in our initial timeline (**Figure 27** above), UAT for each release will have a 1-month duration. Any delay in the completion of UAT will significantly impact the implementation date. CNSI will work with MDCH to support all UAT activities.

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Figure 53 presents a graphical overview of the Midwest iVision360 framework processes applicable to the **CHAMPS – SIGMA Implementation** project.

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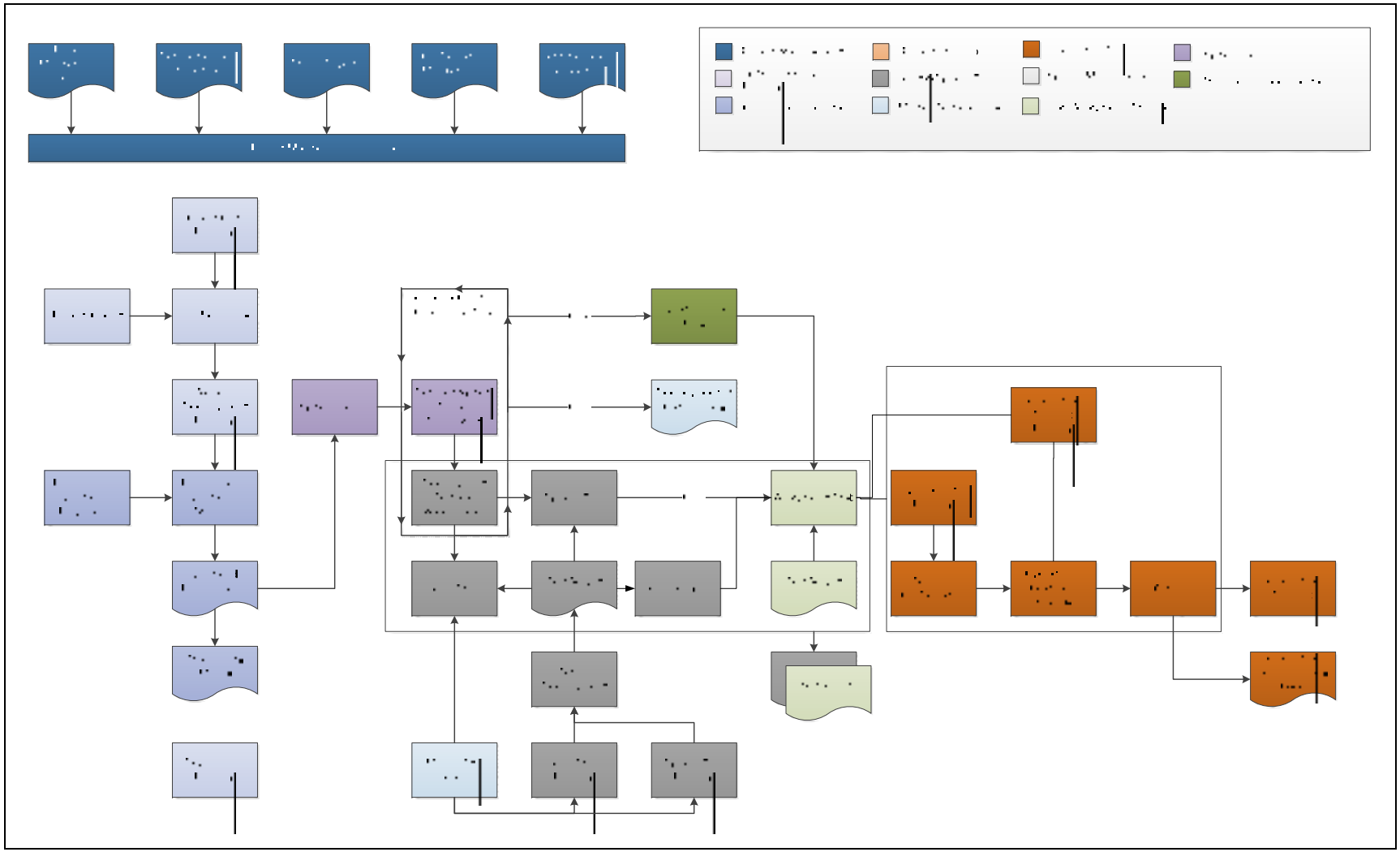

Figure 28. Midwest iVision360 Process Diagram

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3.3.3 Staged Delivery Summary

CNSI proposes a staged delivery of **CHAMPS – SIGMA Implementation** which incorporates the seven phases of CNSI's CMMI Level-3-assessed Midwest iVision360 framework. This top-down approach provides an easily understandable grouping of activities with similar resource requirements and related groupings of deliverables along with three major milestones following each stage to facilitate monitor and control of the initiative.

Figure 61 below summarizes the staged delivery using the seven phases of Midwest iVision360.

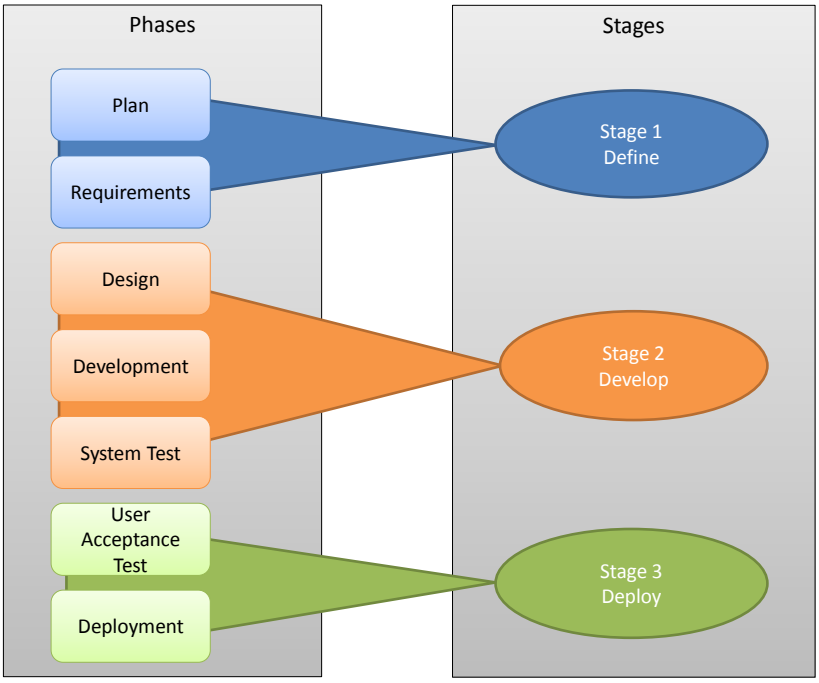

Figure 29. Midwest iVision360 Framework Phases and Stages

Figure 54 provides a high-level overview of the project stages with major activities and anticipated deliverables for each release. Note that the Project Initiation activity and the Project Management Plan and Project Schedule deliverables are done once for the project. The remaining activities repeat for each release cycle.

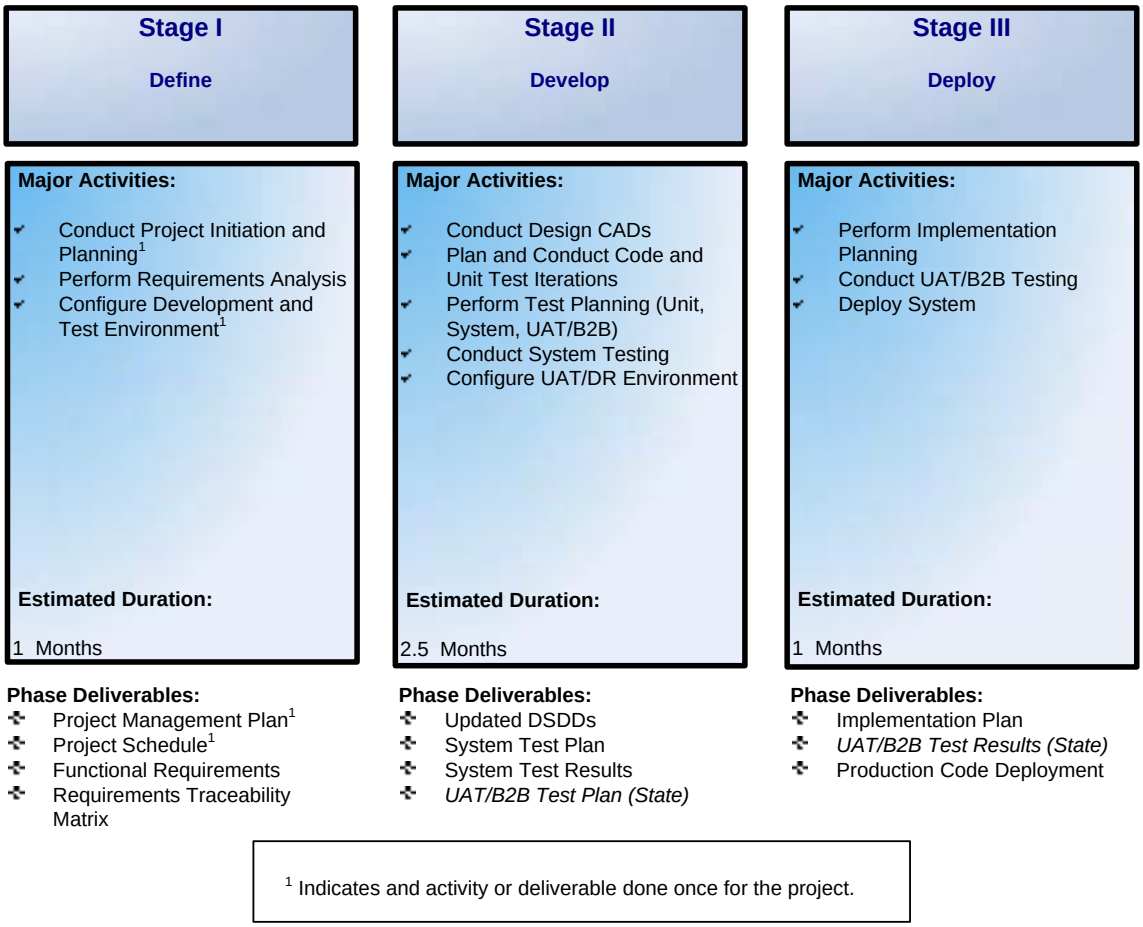

Figure 30. High-Level Project Stages and Activities

With every project, there are critical milestones to be met and work products and deliverables that must be developed and produced in order to provide the inputs necessary to perform the next activity. **Table 27** elaborates on the activities for each release over of the proposed 12-month implementation plan, along with the expected deliverables. In **Table 27**, bold text in the deliverables sections indicate formal deliverables; italicized text indicates State acceptance tasks and deliverables.

Table 13. High-Level Activities and Milestones by Stage

Major Activity	Description	Stage
Project Initiation	Establish the project team structure, key stakeholders, and operating guidelines for team activity throughout the course of the project.	Stage I
Project Planning	Develop project management plan, schedule and metrics.	Stage I
Requirements Analysis	Conduct collaborative application development (CAD) sessions to elicit and validate requirements for the **CHAMPS – SIGMA Implementation** project.	Stage I
Stage I Deliverables • **Project Management Plan** • **Project Work Plan** • **Requirements Specification Document** • Initial Requirements Traceability		
Design Analysis	Conduct CAD sessions to document detailed system design changes for the **CHAMPS – SIGMA Implementation** project.	Stage II
Test Planning	Conduct detailed test planning for each phase of testing:	Stage II
Software Development	Develop and unit test software required to support the detailed functional design including: • Screens • Functionality (driven by use cases) • Data Models • Reports • Interfaces	Stage II
System Testing	Internal CNSI testing of developed functionality at the component, subsystem, and system level.	Stage II
Stage II Deliverables		

Major Activity	Description	Stage
• **As-Built DSDD** • **Test Plan** • **System Test Results** • Updated Online Help		
Implementation Planning	Coordinate production installation of the system changes.	Stage II
UAT Support	MDCH testing of all system changes using formal UAT test scripts.	Stage III
Production Deployment	CNSI and the State of Michigan deploy the modifications in the MDCH production CHAMPS environment.	Stage III
Stage III Deliverables • **Implementation Plan** • Operational Support Forecast Report • Finalized Online Help • **Code Deployment to Production**		

3.3.3.1 Stage 1 – Initiation and Requirements

Activity 1: Project Initiation

During this activity, CNSI will collaborate with the State of Michigan to identify the key business and technical team members who will participate in the **CHAMPS – SIGMA Implementation** project. CNSI will conduct the formal project kickoff and deliver orientation for the project effort.

The major milestones associated with this activity are:

- Participating team members from the State of Michigan are identified.
- Project kickoff meeting is conducted and project kickoff is completed.

Activity 2 - Project Planning

During this activity, CNSI will develop the PMP. The PMP outlines the standards and procedures for risk, issue, and action item management; project governance plan to coordinate activities between the CNSI project team and the State of Michigan; communications plan; deliverable management plan; project work breakdown structure (WBS); and the baseline schedule.

Milestones associated with this activity include:

- PMP is delivered.
- Project work plan is delivered.

Activity 3 – Requirements Analysis

The goals of the **CHAMPS – SIGMA Implementation** project have been defined at a high-level within this statement of work. During this activity, CNSI will host CAD sessions to elicit and validate detailed functional and technical requirements. The CAD sessions will include the State of Michigan and CNSI functional and technical SMEs. CNSI will compare the validated requirements with current CHAMPS functionality and technical architecture to determine the impact of the new requirements across all CHAMPS subsystems, including system aspects such as:

- New and modified screens.
- Functionality (use cases).
- Data models.
- Reports.
- Interfaces.

This will result in a requirements specification document which provides a clear, concise, and final definition of each requirement. The approved requirements will be used during the design and development activities in Stage II.

The major milestones associated with this activity are:

- Functional requirements specification document is delivered.
- Approved requirements have been loaded into the requirements repository.

3.3.3.2 Stage II – Design, Coding, and System Testing

Activity 1 – Design Analysis

During this activity, CNSI will host CAD sessions to produce detailed design artifacts. Sessions will be organized and scheduled per requirements for the affected CHAMPS subsystem and the solution's technical architecture. CAD sessions will include State of Michigan and CNSI functional and technical SMEs. Using the existing CHAMPS design and the requirements specification document as a starting point, session participants will identify and document required design changes including system aspects such as:

- Screens.
- Functionality (use cases).
- Data models.

- Reports.
- Interfaces.

This will result in final, revised design artifacts, including use cases and data models, which will be the basis for the development of changes to system functions. CNSI will submit the completed design artifacts to the appropriate State of Michigan decision-maker shortly after the completion of a CAD session. The State of Michigan decision-maker will formally approve the design artifacts via signature on an approval form, similar to the existing CHAMPS enhancement approval process. This approval indicates that design is final and development can begin.

The major milestones associated with this activity are:

- Delivery of the as-built DSDD.

Activity 2 – Test Planning

During this activity, CNSI collaborates with the State of Michigan to determine the required set of tests to be executed. CNSI prepares test scenarios and scripts for each phase of internal testing, including system testing and regression testing. The system test scenarios and scripts are prepared by the CNSI Test Lead. The State of Michigan prepares the UAT test plan and related test scenarios and script during this activity time frame.

Milestones associated with this activity include:

- System test plan is completed.
- System test scenarios and scripts are completed.
- *UAT preparation is completed (State).*

Activity 3 – Software Development

At the beginning of this activity, the development iteration plan is prepared. During this activity, CNSI codes the software changes required to support the updated detailed functional and technical design. Development is performed through a series of bi-weekly development iterations as previously described. Development includes the coding changes as defined in the as-built DSDDs for CHAMPS, including system aspects, such as:

- Screens.
- Functionality (use cases).
- Data models.
- Reports.
- Interfaces.

At the conclusion of each development iteration, the developed code is delivered to the CNSI Test Team. The major milestone associated with this activity is the completion of all development iterations.

Activity 4 – System Testing

During this activity, CNSI tests the developed functionality at the component, subsystem, and system levels in accordance with the test plan. Test results are compiled and at the conclusion of system testing, CNSI performs end-to-end (E2E) regression testing. At the conclusion of this activity, the test manager conducts a test readiness review meeting to ensure all entry criteria for the UAT phase are met.

Milestones associated with this activity include:

- System test results report is delivered.
- Code is deployed to UAT environment.
- UAT begins.

3.3.3.3 Stage III – UAT and Production Deployment

Activity 1 – Implementation Planning

During this activity, CNSI collaborates with the State to coordinate the timing of the production installation of the system changes. The **CHAMPS – SIGMA Implementation** project will be incorporated into the regular CHAMPS operational release implementation schedule. Implementation planning activities will focus on targeting the operational release that will include this initiative and integrating the new features into the release. During this activity, CNSI will review operational support projections for post-deployment support and prepare an Operational Support Forecast Report documenting any changes expected post-deployment.

Milestones associated with this activity include:

- Identification of the operational releases where the software will be deployed.
- Development of the implementation plan.
- Operational Forecast Report.

Activity 2 –UAT Support

During this activity, CNSI provides support to MDCH staff who will conduct UAT using formal, State-developed test scripts. UAT testing will be aligned with the selected operational releases where the code will be deployed. Defects identified are monitored and corrected throughout UAT.

The major milestones associated with this activity include:

- *UAT Test Results Report (State Deliverable)*.
- Final defect correction report.
- State approval to deploy the software.

Activity 3 – Production Deployment

During this activity, CNSI and the State of Michigan collaborate to execute the implementation plan. The finalized code will be merged into the selected regular operational release. CNSI deploys the release to the production environment where it is available for use by MDCH staff.

The major milestones associated with this activity include:

- Code is deployed to production.
- Production support begins.

Section 4: General Assumptions and Constraints

CNSI has identified and provided the following general assumptions in regards to the **CHAMPS – SIGMA Implementation** project:

15. MDCH and DTMB will provide access to, and time commitment from, subject matter experts who understand their programs and systems.
16. MDCH and DTMB will be responsible for making and required changes to the ASAP and ASCAP systems to interface with the ESV solution in accordance with the approved Project Work Plan. Any delays will be evaluation through the project's change management process.
17. The State will plan and execute UAT in accordance with the approved Project Work Plan. Any delays will be evaluated through the project's change management process.

CNSI has identified the following no specific constraints in regards to the **CHAMPS – SIGMA Implementation** project.

Section 5: Proposed Project Cost

This section of our proposal presents our fixed-price, overall labor cost for completing the **CHAMPS – SIGMA Implementation** project. The cost was derived based on the expected effort required as presented in our initial work plan, composed of the three stages depicted in Figure 54.

The overall cost for implementing enhancement to Provider Site Visit Pro project is $3,000,000.

CHAMPS Cost Settlement
Statement of Work

Prepared For:
State of Michigan
Department of Community Health
400 South Pine Street
Lansing, Michigan 48909

Prepared By:

CNSI
6465 Millennium Drive, Suite 150
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December 15, 2014

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Section 1: Introduction

The Michigan Department of Community Health (MDCH) is a recognized leader in advancing technology to support the business of Medicaid. Recent examples of MDCH's leadership include the implementation of the Community Health Automated Medicaid Processing System (CHAMPS), a state-of-the-art Medicaid management information system (MMIS) certified by the Centers for Medicare & Medicaid Services (CMS) and the Electronic Health Record (EHR) Medicaid Incentive Payment Program (eMIPP) system developed and implemented as the first of its kind in the nation.

This implementation supports new CHAMPS functionality by incorporating the Cost Settlement processes into the CHAMPS system. Both the Hospital and Clinic Reimbursement Division and Long Term Care Division cost settlement processes will be covered. Therefore, this statement of work addresses the foundational work necessary to incorporate these processes into the CHAMPS solution.

Once completed, this solution will support the following processes:

- Medicaid Interim Payments (MIP) and Capital Interim Payments (CIP)
- School Based Services (SBS) Cost Settlement
- State Psych Hospitals Cost Settlement
- Local Public Health Departments (LPHD) Cost Settlement
- Capital Accruals
- Clinic Accruals
- Rural Health Clinic (RHC) and Federally Qualified Health Clinic (FQHC) Rate Setting
- Clinic Cost Settlement
- Graduate Medical Education (GME) Payments
- Disproportionate Share Hospitals (DSH) Payments
- Hospital Cost Settlement
- Health Maintenance Organization (HMO) Medicaid Quarterly Report data compilation
- Informal and Formal Appeals
- Long Term Care Facilities Cost Settlement
- Office of Audit Cost Settlement

This implementation is expected to result in both cost savings and time savings. With the support of the CNSI's CMMI Maturity Level 3 appraised software development processes, this project is expected to require two years to implement.

1.1 Regulatory and Business Drivers for Change

Cost Settlement is a labor and data intensive process that reconciles over $2 billion in interim and initial settlement payments against submitted Medicaid allowable costs during the settlement period. Gross Adjustments are initiated for settlement payments, to recover funds if overpayment has been made during the settlement period or to address under payments to the Provider. The State is interested in creating a new system that is less labor intensive, saving the State time and money.

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The settlement process varies considerably depending on the Provider type. There is much internal interaction as the sequential settlement tasks are completed. This task monitoring is a manual or semi-manual process. Two very labor intensive processes are:

- Cost Report monitoring which includes format and data validation, extraction of data and creation of database records for future use in rate determination and settlement calculations.
- Cost Settlement summaries, which again vary by Provider, include intricate calculations are completed and internally reviewed for accuracy; the settlement is then communicated to the Provider.

The Cost Settlement process also includes a time sensitive appeal process. An Informal Appeal can be initiated prior to the Final Settlement. If a Final Settlement has been issued, and there is disagreement on behalf of the Provider within the time allotted, a Formal Appeal is initiated. A Formal Appeal, if not settled in discussions with HCRD or the Appeals Division, can include addressing the appeal in court.

1.2 CNSI Capabilities

In partnership with the State of Michigan, CNSI performed the initial implementation of CHAMPS beginning in 2005. Prior to that, CNSI system architects led the development of the electronic Claims Adjudication Management (eCAMS) solution that forms CHAMPS' core. CNSI implemented CHAMPS in 2009 and supported the State in achieving CMS certification of the MMIS in 2011. CNSI's has continued to work with the State to provide innovative, technically sophisticated software solutions to support the State's business needs and to remain compliant with all defined federal requirements. In addition, CNSI has worked collaboratively with the State of Michigan to implement innovative solutions to support the Medicaid program, including mobile platforms for consumer engagement and provider site visit verification, integration with federal systems for Medicaid incentive payments and Medicaid expansion, and effective. These efforts have resulted in rapid response to federal mandates including Health Insurance Portability and Accountability Act (HIPAA) 5010 electronic data interchange standard, the International Classification of Diseases Revision 10 (ICD-10), Affordable Care Act modifications, and CORE modifications. Through these and other efforts, CHAMPS has continued to maintain pace with the rapidly changing Medicaid environment and is complaint with all current federal regulations.

CNSI's approach to conducting this project is based on extensive knowledge of CHAMPS design, implementation, and operation since the system became operational. As system software engineers and integrators, CNSI aligns clients' business processes and information systems to allow them to access the right information at the right time, enabling the achievement of their desired business results and creating enterprise value. CNSI has extensive technological experience in the industry combined with flexible tools and methodologies to deliver quality results on time and within budget. CNSI completes jobs for clients by delivering on commitments with speed and purpose in accordance with the client's specifications and expectations.

For the Cost Settlement Project, CNSI will use business, technical, and operational knowledge of the MDCH Medicaid program, CHAMPS system capabilities, and other state Medicaid programs to create a solution that encompasses all cost settlement functions from the current operational system. The project will deliver a comprehensive solution for MDCH.

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CNSI brings an experienced team of Medicaid and CHAMPS subject matter experts (SMEs), technical and architectural experts, and project management expertise to support this endeavor in the method CNSI has used in previous collaborative efforts for MDCH. CNSI's experience working with MDCH has led to incorporating the following factors in developing this statement of work:

- **CNSI's capability to conduct complex analysis of Medicaid system requirements**

  CHAMPS is a multifunctional MMIS-certified information system compliant with all federal mandates that integrates all Medicaid activities into one complete system. CNSI is positioned to take advantage of the extensive knowledge accumulated during the CHAMPS implementation, HIPAA 5010 migration, ICD-10 assessment project, ICD-10 remediation project, and our MMIS implementations in other states, and strategically apply it to the CHAMPS Cost Settlement Project.

- **CNSI's capability to identify and resolve major issues associated with CHAMPS**

  The prompt identification of major issues are an essential component to a project of this scope and are particularly important in the reengineering analysis work needed in a project of this nature. CNSI's extensive knowledge of MDCH's current application architecture, infrastructure, and operations will allow it to quickly identify major issues affecting implementation activity. By devoting careful attention to identifying and resolving issues, CNSI will ensure the successful implementation of the cost settlement CHAMPS solution.

- **CNSI's sensitivity to MDCH needs and constraints**

  CNSI is uniquely qualified to remain sensitive to the states' needs developing the CHAMPS cost settlement solution. CNSI understands that MDCH and DTMB staff members are involved in multiple implementation efforts in addition to their regular production workload. It is critical to the success of the project that state staff members are involved at the right time and in the right context.

- **CNSI's technical leadership to support MDCH's vision**

  CNSI has shown technical leadership from the beginning with the implementation of CHAMPS. Through CNSI's collaboration with the equally forward-thinking MDCH leadership, the partnership has achieved milestones that moved the Medicaid business to a modern state. The partnership continued to drive innovation through the implementation of eMIPP, HealthBeat, ClaimSure, Provider Site Visit Pro, Document Management Portal, TPL integration, Provider Credentialing Service, and myHealthButton.

    - **CNSI's proven Capability Maturity Model Integration (CMMI) Level 3 Assessed project processes for software development**

  In April of 2014, CNSI's Health and Human Services Organization Unit was appraised at Maturity Level 3 under Version 1.3 of the CMMI Development Model. The appraisal process for the organization unit included assessment of a project from the Midwest Region in order to reach this milestone. For this initiative, the CNSI Midwest Region will continue to use CMMI-compliant processes to deliver the solution described in this statement of work.

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1.3 Proposed Project Organization

CNSI believes this statement of work represents the best possible combination of architecture, technology, support, and experience to complete this project. The proposed team members are each highly qualified within their respective disciplines. The underlying values held by each member of this team include:

- They share the same belief when undertaking a project— – **the customer comes first**.
- They value the contribution that each member brings to successfully implement the project.
- They are committed to understanding and incorporating the State's requirements.
- They have a collective understanding of the advanced technologies, business needs, and operational issues necessary to execute the project successfully.
- They possess the knowledge and skills necessary to employ CNSI's Capability Maturity Model Integration (CMMI) Level 3-assessed processes to effectively implement the project.

CNSI's primary objective is the successful implementation and completion of the project. We are confident in our team's ability to achieve that goal. Our team is fully dedicated to the **CHAMPS – SIGMA Implementation** project.

The project's success depends on the full and active participation of the MDCH, DTMB, and CNSI's designated staff members from the initial planning to final implementation.

Figure 49 shows the CNSI organization structure supporting the **CHAMPS – SIGMA Implementation** project.

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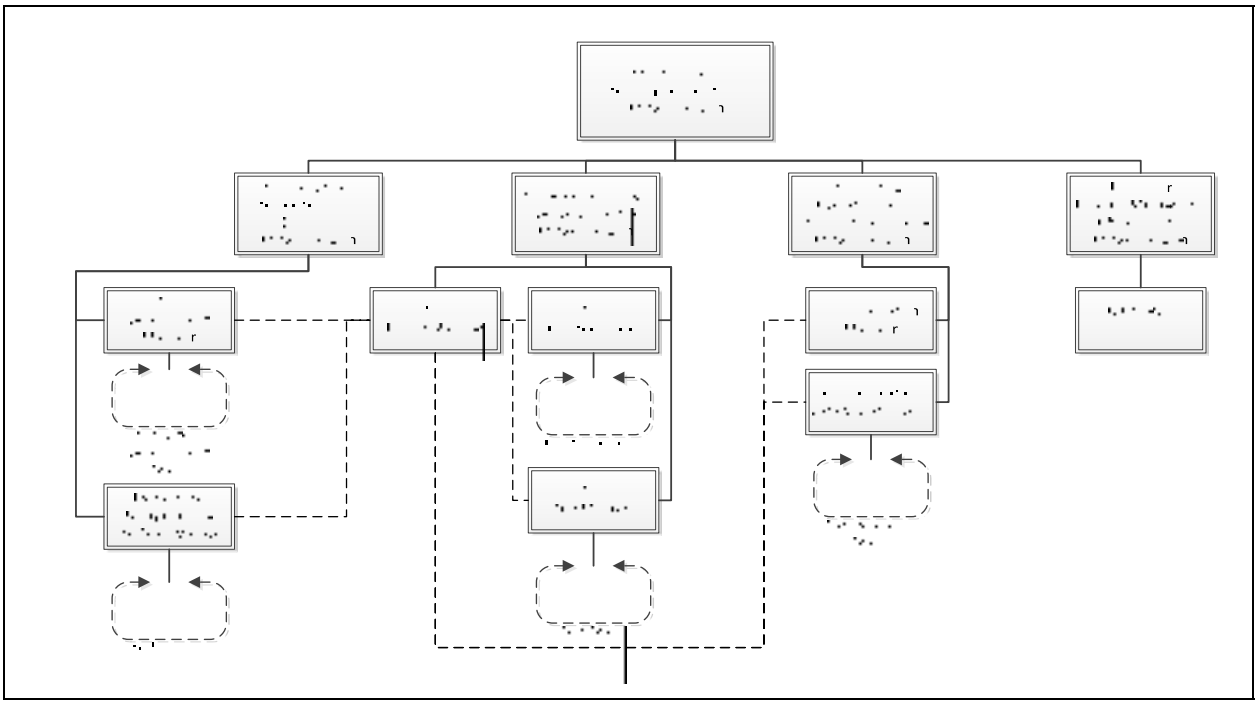

Figure 31. CHAMPS – SIGMA Implementation Organization Chart

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Section 2: Project Management Methodology and Tools

This section presents our project management, technical approaches, methodology, tools, and staged work plan for accomplishing all tasks required for the **CHAMPS – SIGMA Implementation** project. This section describes the scope of activities to be addressed throughout the project, from initiation to final implementation, and the techniques and methodologies the **CHAMPS – SIGMA Implementation** project team will use.

2.1 Project Management Approach

Although all projects are unique, they share common components and processes. The generally accepted process groups defined by the Project Management Body of Knowledge (PMBOK), as incorporated into the CNSI project management process, are:

- **Initiating:** This process group defines the project objectives and grants authority to proceed. For CNSI, the initiating processes are largely incorporated into the proposal development process, during which required partners are identified. This statement of work acts as a project charter and preliminary scope statement.
- **Planning:** This process group refines the project objectives and scope and plans the tasks, activities, and steps necessary to meet the project's objectives. The planning processes start during proposal development and proceed following contract award while CNSI works with MDCH to establish and baseline the project management plan (PMP). The PMP is modified and updated as necessary over the course of the project and is the culmination of the planning processes for scope definition and management, time (scheduling), staffing (human resources), communications, and risk management.
- **Executing:** This process group puts the project's plans into motion. This is where the bulk of the work for the project is performed.
- **Monitoring and Controlling:** This process group measures the performance of the project's executing activities and reports these performance results to project managers and stakeholders. Output is used to refine, improve, or change project management (including plans and schedules) as necessary to meet the project's objectives.
- **Closing:** This process group documents the formal acceptance and approval of the project's product and brings all aspects of the project to a close.

CNSI is able to provide consistent project outcomes as a result of integrating its set of repeatable, Midwest iVision360 Delivery Framework practices, within the project management process groups above. **Figure 56** shows how CNSI's project and quality management activities interact with other project activities.

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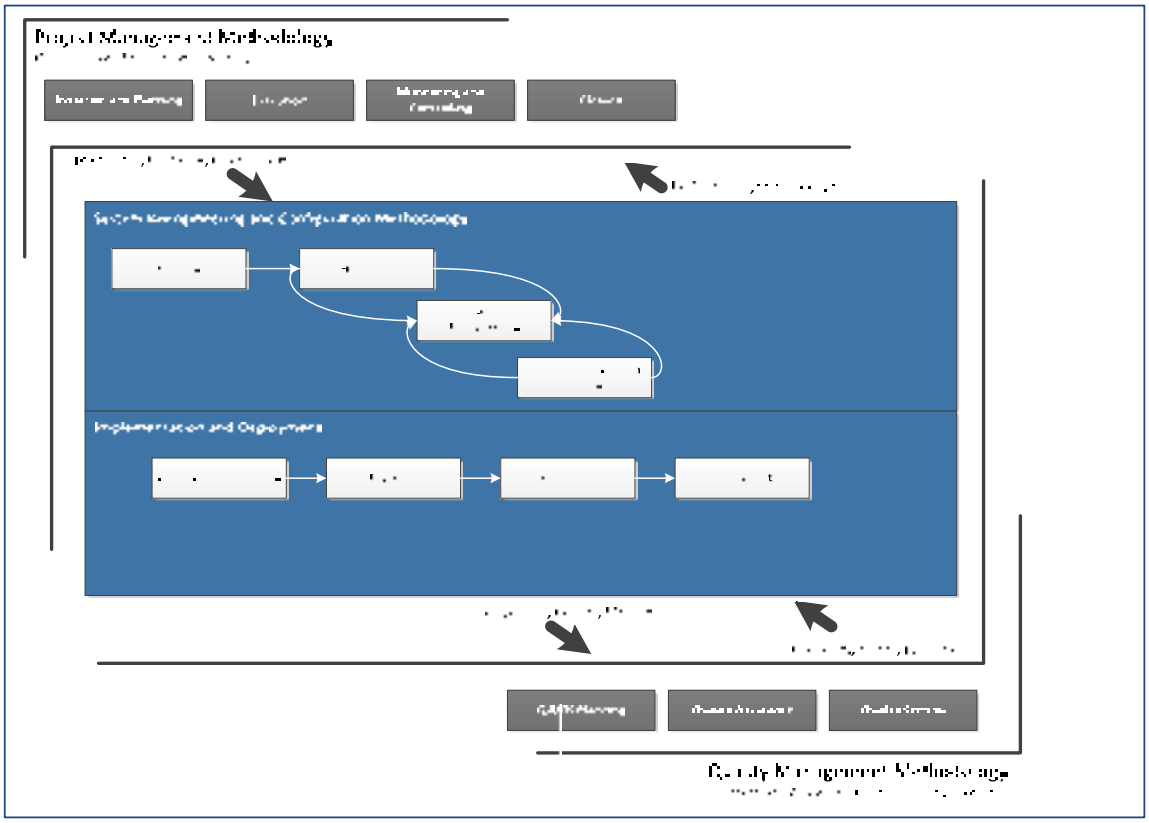

Figure 32. Project Management and Quality Management Activity Integration

CNSI is confident in its capability to apply this proven framework to successfully complete the **CHAMPS – SIGMA Implementation** project. Applying the same framework repeatedly, project after project, ensures a number of advantages for all stakeholders:

- The project management philosophy is firmly entrenched within the entire project team, including CNSI, MDCH, and DTMB.
- Project management is supported as a core competency.
- The project staff is focused on successfully implementing the project.
- Project management, quality management, and cost management processes are fully integrated and their infrastructure is in place.
- Effective project status reporting is established based on project life cycle.
- Project and software development methodologies are well documented.
- Project staff is provided comprehensive training.
- Project information is communicated continuously to the right people at the right time.
- The project is continuously monitored against performance.
- Excellence in quality and delivery are built in.

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- Deliverable review and approval processes are in place.

2.2 Project Methodology

CNSI's integrated approach for this project will use its proven Midwest Region iVision360 framework for the organizing structure, combined with an experienced team of program and project managers, SMEs, technical experts, and change management resources, to support this effort.

Using industry-standard project management methods facilitates the integration of CNSI's extensive system experience with application implementations, methodologies, and delivery tools. While no two engagements are the same, the State expects CNSI to deliver in a consistent, systematic fashion. CNSI will achieve this objective by using the CMMI Maturity Level 3 - appraised Midwest iVision360 delivery framework tailored for the **CHAMPS – SIGMA Implementation** project as required. Using this framework will provide the structure for integrating CNSI's capabilities while allowing individual project teams the flexibility to adapt to meet the State's unique requirements and use client-mandated tools. Key benefits provided by the framework include:

- Provides a scalable, integrated collection of assets.
- Provides a consistent level of detail and presentation.
- Supports tailoring to scale, which provides a unique, but consistent, cost-effective delivery approach for the State.
- Uses established common work practices and expectations across project team members.

Investing time to create an effective plan with clear objectives is integral to successful project execution. CNSI's delivery framework provides a structured approach to the planning and execution. While this may appear to require more initial effort than desirable, experience has shown that following these processes reduces the likelihood of mistakes and results in lower risk and faster, more cost-effective delivery.

This standardized approach is a unique blend of the waterfall methodology and iterative, agile development. The advantages of this blend include:

- **User is at the Center:** CNSI's primary motivation for employing the Midwest iVision360 framework is to put the user at the center of the project lifecycle. Software projects succeed or fail largely from the software engineer's understanding of the customer's business rules, requirements, and needs. The more insight the developing organization has, the greater the quality and likelihood of success for the project. Successful projects have high interaction with end users and place the user at the center of the development life cycle. Every phase and task of Midwest iVision360 focuses on interaction and collaboration with the user community. CNSI does this by implementing agile techniques and building working software in an iterative fashion with user validation at periodic intervals.
- **Common Goals:** Users actively participate in requirements definition and design sessions with an integrated team of software engineers, analysts, and test engineers. This method avoids the pitfalls of waterfall development and test methods which leave, for example, test case refinement and execution until the completion of development. It also provides the team with a sense of

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purpose, a goal, and the drive to accomplish the end objective: software that meets the requirements.

- **Early and Often Testing:** Midwest iVision360 provides an opportunity to test early and often so formal system test phases and subsequent test phases are more likely to meet schedule expectations with a lower error-discovery rate.

The collaborative, and somewhat "free-form," nature of iterative, agile development is balanced with the structure and baseline management features of the waterfall stage methodology. By introducing the baseline management features of waterfall, CNSI minimizes the risk of scope creep that is sometimes associated with iterative development. Moreover, our project management processes provide integrated change, issue, and risk management processes. **Table 21** describes the key benefits of each of the industry-standard models that are blended into the Midwest iVision360 framework.

Table 14. SDLC Model Comparison

SDLC Model	Key Benefits Blended into Midwest iVision360
Waterfall	Baseline approval of requirements Structured documents and customer approvals Formalized testing
Iterative/Agile	Frequent customer interaction Decomposing work into small meaningful features that are presented in working software Frequent course corrections Sense of real progress Early and frequent testing
Extreme Programming	Teams formed between developing organization and customer Sense of common vision and goal

The standard Midwest iVision360 delivery framework employs a seven-phased process to organize activities and tasks associated with identifying requirements, designing, developing, and testing software. These phases contain major work packages that must be accomplished to move systematically through the Midwest iVision360 project lifecycle. The phases roll up into three logical stages within this statement of work. The three-stage roll-up provides an easily understandable, top-down structure that facilitates grouping of activities with similar resource requirements and closely related deliverables. **Figure 57** below shows the relationship between the three-stage roll-up and the seven phases of Midwest iVision360.

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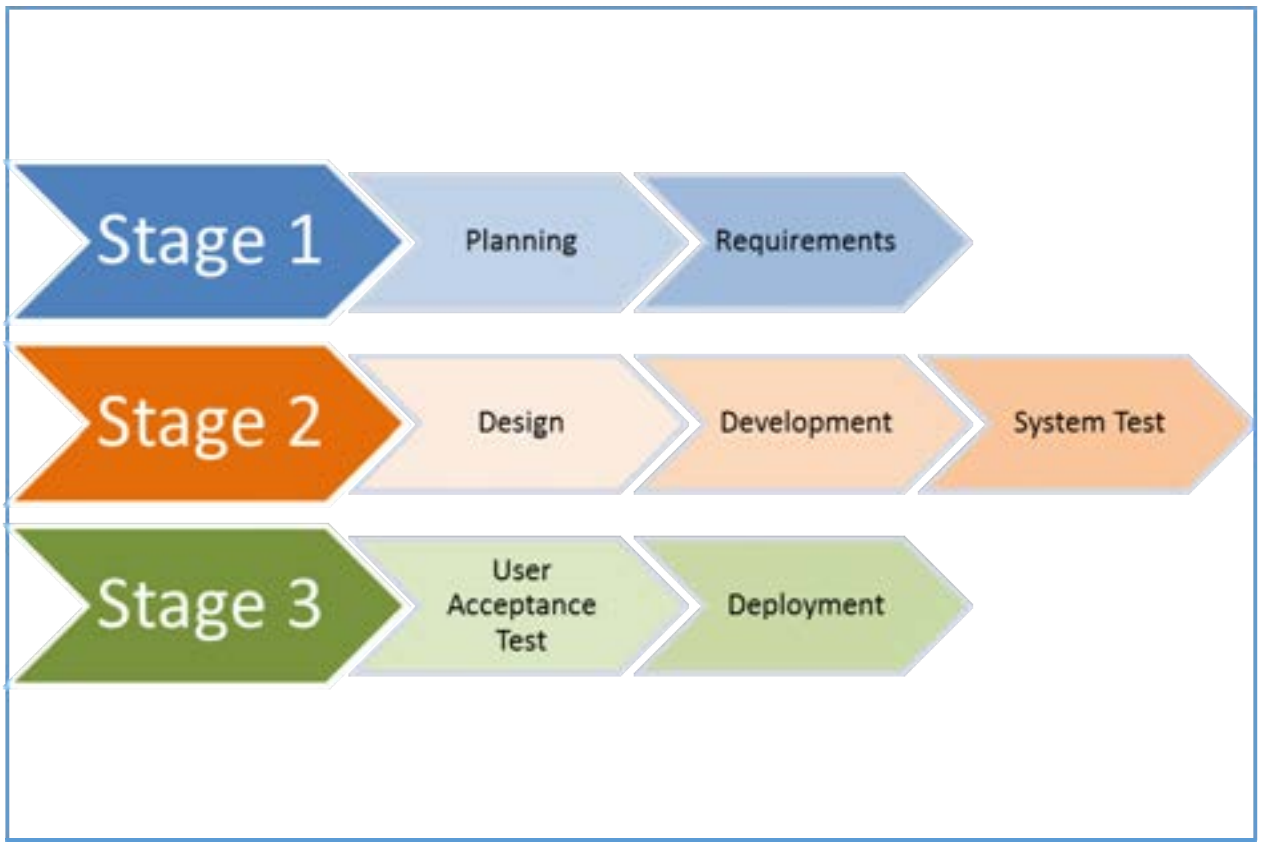

Figure 33. Midwest iVision360 Framework Stage and Phase Relationships

Based on the unique requirements of the **CHAMPS – SIGMA Implementation**, CNSI will tailor its seven-phase Midwest iVision360 framework to the specific needs of this initiative. Major activities and deliverables proposed for each stage in this statement of work can be found in

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Section 3: Solution **Overview** below.

Independent from the project team, CNSI's Program Management Office will conduct internal audits of CNSI process compliance to ensure the team is executing CNSI's standard processes and to incorporate process-improvement findings during the life-cycle of the project.

2.3 Project Management Tools

Tools, when properly applied within the delivery framework, reduce the time to complete a project by providing predefined support processes, templates, documents, and training materials. More importantly, using appropriate tools reduces risk and increases efficiency.

CNSI will continue to use the tools already proven effective during the previous undertakings to reduce the time to complete the project and mitigate risk.

Table 23 depicts the tools CNSI will utilize on the project.

Table 15. CNSI Project Tools

Tool	Purpose
Microsoft Office	Develop project deliverables as well as presentations and spreadsheet artifacts needed to support deliverables
Microsoft Project	Develop a detailed project schedule
Microsoft Visio	Develop use case diagrams, technical architecture diagrams, and support process flows
As-One	Repository for deliverables, presentations, and artifacts

While Microsoft Visio, Microsoft Office, and Microsoft Project are industry-standard tools, the following subsection provide additional information about As-One.

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2.3.1 As-One

As-One provides a convenient, secure repository for all program data and will give the State oversight personnel direct visibility into project work products, event calendar, and overall performance. The features of As-One are summarized in **Figure 51**.

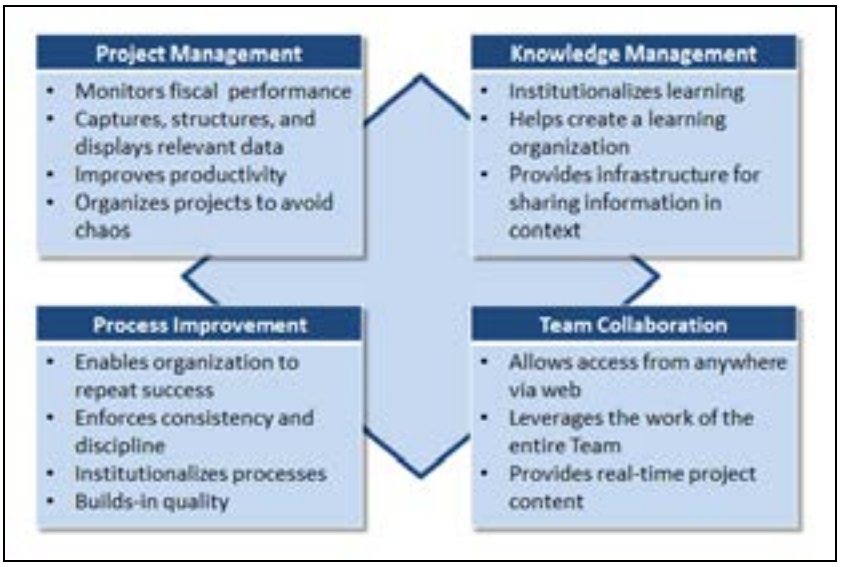

Figure 34. As-One Collaboration and Improvement

The As-One project repository will allow all members of the team to access relevant information and deliverables 24/ 7 using standard internet browsers such as Internet Explorer, Google Chrome, and Mozilla Firefox. MDCH and CNSI use As-One as their program management portal. Training will be provided for team members new to the program.

Section 3: Solution Overview

This section summarizes CNSI's proposed **CHAMPS – SIGMA Implementation** project, including functional and technical overviews, the proposed project timeline, and the project stages for meeting the objectives of the **CHAMPS – SIGMA Implementation** project. Full business and technical requirements will be elicited and documented as a part of the first phase of the project.

3.1 Functional Overview

At a high level, CHAMPS will be modified to provide the following capabilities to MDCH:

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- Workflow functionality which tracks the various cost settlement tasks and their statuses then notifies task assignees of various status changes, due dates and other process impacts, is required throughout this process. In addition the workflow functionality will:
    - Allow for Audits to be performed
    - Allow approvals to be made
    - Allow notes to be made at each step.
    - Track formal and informal appeals statuses.
- Electronically version and archive all paper (working papers, cost reports, settlement packages etc.) and correspondence exchanged throughout this process.
- Screens to allow input of cost settlement data that is applicable to the provider type and settlement being performed.
- Perform validations of the cost settlement data values entered by providers.
- Allow cost reports and other financial reports and forms to be loaded into the system, extract the data in these reports and perform validations of the data.
- Retrieve and display paid claims data for each Hospital, Clinic and Long Term Care Facility for a pre-defined time period.
- Perform various calculations from simple comparisons to complex financial calculations based on various data sources, including but not limited to paid claims data, cost settlement data, financial data.
- Display calculation results in the new screens integrating the appropriate security for State staff versus Providers.
- Allow State staff to enter data in some of the cost settlement screens.
- Allow comments to be added to the settlement screens.
- Create screens to calculate and display Rural and FQHC rates.
- Automatically generate gross adjustments based on settlement calculations and after final approval by State staff.
- Automate the cancellation of certain payments based on the failure to complete certain workflow steps.
- Accept and Process interface data from various sources.
- Generate letters based on the type of settlement being performed, the step in the workflow and the status of the workflow step.
- Generate provider specific settlement packages.
- Add additional data elements to the Provider Enrollment screens that are currently tracked in other applications or spreadsheets. Including but not limited to:
    - Cost Report due dates

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  - Licensed Beds
  - Facility Status
  - MIP
  - CIP
  - GME
  - Additional Notes

- Store all documents received and generated in FileNet, maintain version control of these documents.
- Allow multiple levels of access and security to the data and screens, such as allowing a Settlement Worker to view and edit data, Auditors can only view data but add comments, Providers can add and edit data but not view all calculations.
- All information will be easily accessible and delivery processes as well as time spent on document/data requests will be tracked in compliance with the Freedom of Information Act (FOIA).

3.2 Technical Overview

CNSI will modify CHAMPS by:

- Adding a new Cost Settlement Subsystem.
- Introducing workflow functionality.
- Closely integrating the receipt and creation of all form and report storage in FileNet.
- Rendering entered and extracted cost settlement data in screens.
- Developing new interfaces to accept data that is currently received from other entities.
- Creating new profiles to regulate the access of data based on specific roles.

These capabilities will be delivered through CHAMPS list and dialog pages consistent with the current user interface and technical framework for CHAMPS.

3.3 Solution Delivery Plan

In this section, CNSI presents the proposed timeline, technical approach, and staged delivery approach for the **CHAMPS – SIGMA Implementation** project.

A detailed description of the activities and deliverables within each stage is presented in *Section 2.4.2 Phase Approach Work* **Plan**.

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CNSI structured this work plan to address the overall relationship and sequence of the work required to complete the project. It effectively uses the professional resources required to successfully complete the work and produce high-quality products in a cost-conscious manner.

The following subsections further describe how CNSI intends to accomplish the goals of the work plan by employing its Midwest iVision360 framework in the proposed approach for the **CHAMPS – SIGMA Implementation** project.

3.3.1 High-Level Timeline

CNSI has created a summary timeline and work plan for the CHAMPS – **SIGMA Implementation** project. The timeline is shown in **Figure 13** below. The timeline shows the approximate duration of each stage and phase of the work for the CHAMPS – **SIGMA Implementation** project.

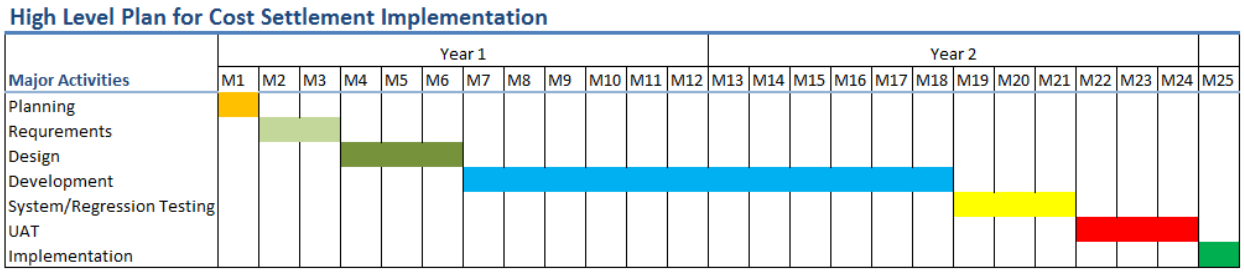

Figure 35. Initial Project Timeline

This timeline was developed based on the estimated effort of the work necessary to accomplish the proposed technical and functional solutions. The cost settlement subsystem will be delivered in multiple phases.

The proposed timeline was developed with the goal of optimizing the effective use of the professional resources required to accomplish these scope of work and produce high-quality products in a cost-conscious manner.

3.3.2 Midwest iVision360 Delivery Processes

In this section, CNSI provides an outline of its CMMI Level 3 -assessed Midwest iVision360 Framework, which includes a full system development lifecycle (SDLC) model supporting the delivery of the technical solution. CNSI's SDLC processes have been adapted to address the specific needs of the **CHAMPS – SIGMA Implementation** project. CNSI will produce deliverables for each phase of the project.

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CNSI will engage in requirements analysis and design with the customer in order to begin iterative development. CNSI will provide an opportunity for the customer to review design documents prior to the start of system development activity.

Iterative, agile development under the Midwest iVision360 framework is visible in Stage II for the **CHAMPS – SIGMA Implementation** project. During this stage, technical design specifications for new or impacted functions and user stories are constructed in parallel by the software engineers and SMEs. As the impacted function's design is completed, the team-lead plans the iterations required to complete development.

Development work is planned based on a two-week iteration schedule. Software engineers build internal design documentation prior to, and during, the two-week iterations. The first day of each iteration is reserved for startup activities, including finalizing the iteration's internal design documentation. The software engineer meets with the Data Modeling Team on the first day of the iteration and conducts a walkthrough of any required data model changes. The Data Modeling Team makes the required changes to the database schema and approves the physical model for coding.

Development begins once the internal design and pre-development work is completed for the iteration. The software engineer writes internal iteration test scripts in parallel to actual working code and updates screens and other system functions to fit the physical mode. The software engineer executes the iteration test scripts as they complete sections of code. The software engineer builds the code, tests incrementally, and coordinates and communicates with the team through daily stand-up meetings regarding any issues holding up the development work.

Software engineers then test the code against the internal auto-unit-code and manual internal iteration test scripts. As they reach the end of the iteration, they run the code against the functional scripts developed by the Test Team. Discrepancies are identified and corrected. The software engineer retests to ensure all discrepancies are corrected and closed before the iteration ends. The software engineer then conducts a peer review of the code of a given function on the last day of the iteration. The software engineer then updates the code based on the review. When software engineer iteration testing and software code reviews are successfully completed for the iteration, the code is then promoted to the integration test stream. The code is released to the Test Team for system testing when the coding and software engineer iteration testing is completed for all user stories for a given function.

During initial development iterations, the Test Team develops system test cases based on the current CHAMPS solution specifications. During system testing, the Test Team executes system test cases to validate system results against the current production functionality.

For the **CHAMPS – SIGMA Implementation** project, CNSI plans to engage the test and development teams early on to build the regression test suite for the critical functions. This will speed up testing and improve the overall quality of implementation. CNSI understands the importance and sensitivity of the **CHAMPS – SIGMA Implementation** project and the need to ensure it aligns with the environment that is

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already in production. During system testing, regression tests will be performed to demonstrate that the solution continues to function as expected.

As soon as regression testing is completed for a function, CNSI will deliver the code to the UAT environment. CNSI plans to engage the customer as early as possible and well before the beginning of the planned UAT phase. This ensures that enough time is allowed for thorough UAT, which will also reduce the risk of schedule slippage for UAT completion. CNSI will deploy system- and regression-tested functions to the UAT environment as they are completed.

As presented in our initial timeline (**Figure 13** above) UAT will have a 21-month duration. Any delay in the completion of UAT will significantly impact the implementation date. CNSI will work with MDCH to support all UAT activities.

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Figure 53 presents a graphical overview of the Midwest iVision360 framework processes applicable to the **CHAMPS – SIGMA Implementation** project.

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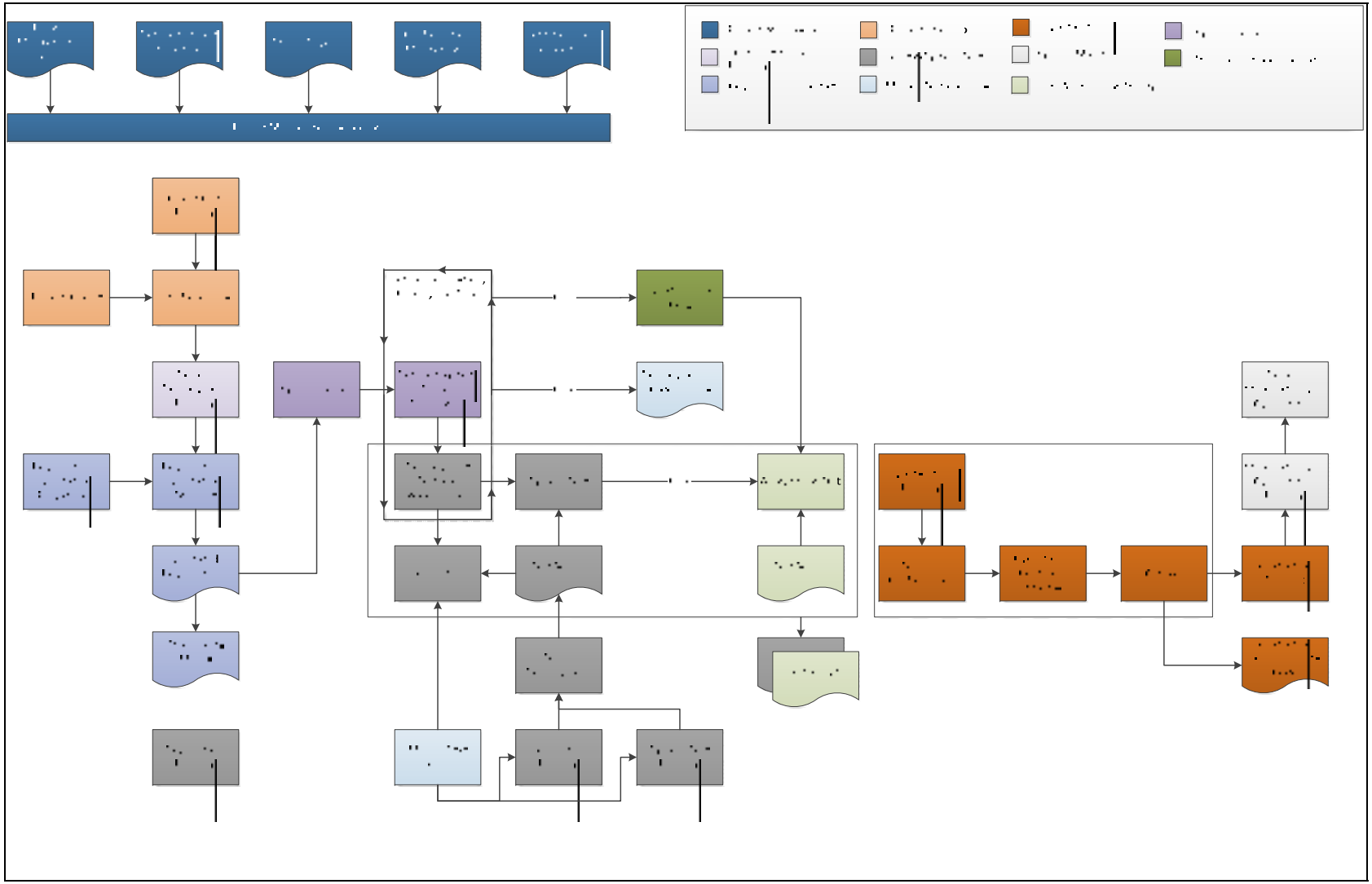

Figure 36. Midwest iVision360 Process Diagram

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3.3.3 Staged Delivery Summary

CNSI proposes a staged delivery of **CHAMPS – SIGMA Implementation** which incorporates the seven phases of CNSI's CMMI Level 3 -assessed Midwest iVision360 framework. This top-down approach provides an easily understandable grouping of activities with similar resource requirements and related groupings of deliverables along with three major milestones following each stage to facilitate monitor and control of the initiative.

Figure 61 below summarizes the staged delivery using the seven phases of Midwest iVision360.

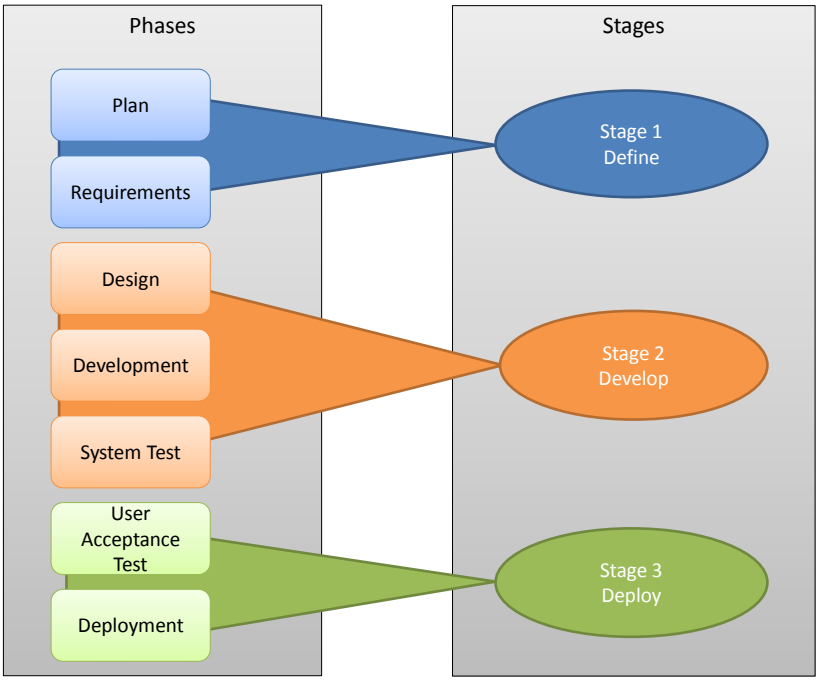

Figure 37. Midwest iVision360 Framework Phases and Stages

Figure 54 provides a high-level overview of the project stages with major activities and anticipated deliverables. Note that the overall timeline presented in **Figure 13** shows a 21-month total duration. The stages shown in **Figure 54** will overlap to accomplish the total work needed in the 24-month duration.

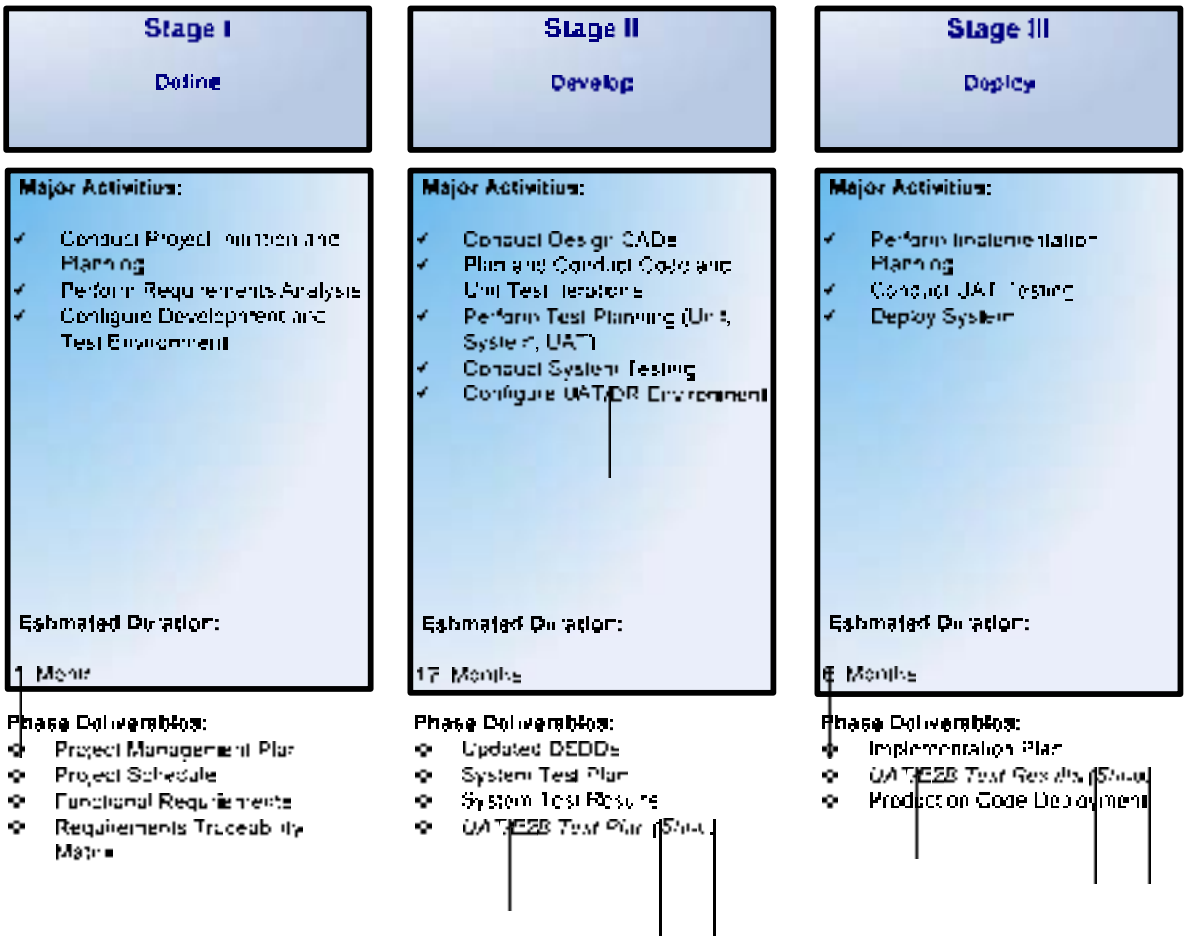

Figure 38. High-Level Project Stages and Activities

With every project, there are critical milestones to be met and work products and deliverables that must be developed and produced in order to provide the inputs necessary to perform the next activity. **Table 27** elaborates on the activities of the proposed 21-month implementation plan, along with the expected deliverables. In **Table 27**, bold text in the deliverables sections indicate formal deliverables; italicized text indicates State acceptance tasks and deliverables.

Table 16. High-Level Activities and Milestones by Stage

Major Activity	Description	Stage
Project Initiation	Establish the project team structure, key stakeholders, and operating guidelines for team activity throughout the course of the project.	Stage I
Project Planning	Develop PMP, schedule, and metrics.	Stage I
Requirements Analysis	Conduct collaborative application development (CAD) sessions to elicit and validate requirements for the	Stage I

Major Activity	Description	Stage
	CHAMPS – SIGMA Implementation project.	
Stage I Deliverables • **Project Management Plan** • **Project Work Plan** • **Requirements Specification Document** • Initial Requirements Traceability		
Design Analysis	Conduct CAD sessions to document detailed system design changes for the **CHAMPS – SIGMA Implementation** project.	Stage II
Test Planning	Conduct detailed test planning for each phase of testing:	Stage II
Software Development	Develop and unit test software required to support the detailed functional design including: • Screens • Functionality (driven by use cases) • Data Models • Reports • Interfaces	Stage II
System Testing	Internal CNSI testing of developed functionality at the component, subsystem, and system level.	Stage II
Stage II Deliverables • **As-Built DSDD** • **Test Plan** • **System Test Results** • Updated Online Help		
Implementation Planning	Coordinate production installation of the system changes.	Stage II
UAT Support	MDCH testing of all system changes using formal UAT	Stage III

Major Activity	Description	Stage
	test scripts.	
Production Deployment	CNSI and the State of Michigan deploy the modifications in the MDCH production CHAMPS environment.	Stage III
Stage III Deliverables • **Implementation Plan** • Operational Support Forecast Report • Finalized Online Help • **Code Deployment to Production**		

3.3.3.1 Stage 1 – Initiation and Requirements

Activity 1: Project Initiation

During this activity, CNSI will collaborate with the State of Michigan to identify the key business and technical team members who will participate in the **CHAMPS – SIGMA Implementation** project. CNSI will conduct the formal project kickoff and deliver orientation for the project effort.

The major milestones associated with this activity are:

- Participating team members from the State of Michigan are identified.
- Project kickoff meeting is conducted and project kickoff is completed.

Activity 2 - Project Planning

During this activity, CNSI will develop the PMP. The PMP outlines the standards and procedures for risk, issue, and action item management; project governance plan to coordinate activities between the CNSI project team and the State of Michigan; communications plan; deliverable management plan; project work breakdown structure (WBS); and the baseline schedule.

Milestones associated with this activity include:

- PMP is delivered.
- Project work plan is delivered.

Activity 3 – Requirements Analysis

The goals of the **CHAMPS – SIGMA Implementation** project have been defined at a high-level within this statement of work. During this activity, CNSI will host CAD

sessions to elicit and validate detailed functional and technical requirements. The CAD sessions will include the State of Michigan and CNSI functional and technical SMEs. CNSI will compare the validated requirements with current CHAMPS functionality and technical architecture to determine the impact of the new requirements across all CHAMPS subsystems, including system aspects such as:

- New and modified screens.
- Functionality (use cases).
- Data models.
- Reports.
- Interfaces.

This will result in a requirements specification document which provides a clear, concise, and final definition of each requirement. The approved requirements will be used during the design and development activities in Stage II.

The major milestones associated with this activity are:

- Functional requirements specification document is delivered.
- Approved requirements have been loaded into the requirements repository.

3.3.3.2 Stage II – Design, Coding, and System Testing

Activity 1 – Design Analysis

During this activity, CNSI will host CAD sessions to produce detailed design artifacts. Sessions will be organized and scheduled per requirements for the affected CHAMPS subsystem and the solution's technical architecture. CAD sessions will include State of Michigan and CNSI functional and technical SMEs. Using the existing CHAMPS design and the requirements specification document as a starting point, session participants will identify and document required design changes including system aspects such as:

- Screens.
- Functionality (use cases).
- Data models.
- Reports.
- Interfaces.

This will result in final, revised design artifacts, including use cases and data models, which will be the basis for the development of changes to system functions. CNSI will submit the completed design artifacts to the appropriate State of Michigan decision-maker shortly after the completion of a CAD session. The State of Michigan decision-maker will formally approve the design artifacts via signature on an approval form, similar to the existing CHAMPS enhancement approval process. This approval indicates that design is final and development can begin.

The major milestones associated with this activity are:

- Delivery of the as-built DSDD.

Activity 2 – Test Planning

During this activity, CNSI collaborates with the State of Michigan to determine the required set of tests to be executed. CNSI prepares test scenarios and scripts for each phase of internal testing, including system testing and regression testing. The system test scenarios and scripts are prepared by the CNSI Test Lead. The State of Michigan prepares the UAT test plan and related test scenarios and script during this activity time frame.

Milestones associated with this activity include:

- System test plan is completed.
- System test scenarios and scripts are completed.
- *UAT preparation is completed (State).*

Activity 3 – Software Development

At the beginning of this activity, the development iteration plan is prepared. During this activity, CNSI codes the software changes required to support the updated detailed functional and technical design. Development is performed through a series of bi-weekly development iterations as previously described. Development includes the coding changes as defined in the as-built DSDDs for CHAMPS, including system aspects, such as:

- Screens.
- Functionality (use cases).
- Data models.
- Reports.
- Interfaces.

At the conclusion of each development iteration, the developed code is delivered to the CNSI Test Team. The major milestone associated with this activity is the completion of all development iterations.

Activity 4 – System Testing

During this activity, CNSI tests the developed functionality at the component, subsystem, and system levels in accordance with the test plan. Test results are compiled and at the conclusion of system testing, CNSI performs end-to-end (E2E) regression testing. At the conclusion of this activity, the test manager conducts a test readiness review meeting to ensure all entry criteria for the UAT phase are met.

Milestones associated with this activity include:

- System test results report is delivered.
- Code is deployed to UAT environment.

- UAT begins.

3.3.3.3 Stage III – UAT and Production Deployment

Activity 1 – Implementation Planning

During this activity, CNSI collaborates with the State to coordinate the timing of the production installation of the system changes. The **CHAMPS – SIGMA Implementation** project will be incorporated into the regular CHAMPS operational release implementation schedule. Implementation planning activities will focus on targeting the operational release that will include this initiative and integrating the new features into the release. During this activity, CNSI will review operational support projections for post-deployment support and prepare an operational support forecast report documenting any changes expected post-deployment.

Milestones associated with this activity include:

- Identification of the operational releases where the software will be deployed.
- Development of the implementation plan.
- Preparation of the operational support forecast report.

Activity 2 –UAT Support

During this activity, CNSI provides support to MDCH staff who will conduct UAT using formal, State-developed test scripts. UAT testing will be aligned with the selected operational releases where the code will be deployed. Defects identified are monitored and corrected throughout UAT.

The major milestones associated with this activity include:

- *UAT test results report (State deliverable).*
- Final defect correction report.
- State approval to deploy the software.

Activity 3 – Production Deployment

During this activity, CNSI and the State of Michigan collaborate to execute the implementation plan. The finalized code will be merged into the selected regular operational release. CNSI deploys the release to the production environment where it is available for use by MDCH staff.

The major milestones associated with this activity include:

- Code is deployed to production.
- Production support begins.

Section 4: General Assumptions and Constraints

CNSI has identified and provided the following general assumptions in regards to the **CHAMPS – SIGMA Implementation** project:

18. MDCH and DTMB will provide access to, and time commitment from, subject matter experts who understand their programs and systems.
19. Remediation of MICAM, SSO, FileNet and DEG is the responsibility of DTMB and will be completed pursuant to the approved Project Work Plan. Any delays will be evaluated through the project's change management process.
20. The cost settlement system will stay up to date with cost reporting changes and implement those changes as they go in effect.
21. The State will plan and execute UAT pursuant to the approved Project Work Plan. Any delays will be evaluated through the project's change management process.

Section 5: Proposed Project Cost

This section of our proposal presents our fixed-price, overall labor cost for completing the **CHAMPS – SIGMA Implementation** project. The cost was derived based on the expected effort required as presented in our initial work plan, composed of the three stages depicted in Figure 54.

The overall cost for implementing enhancement to Cost Settlement project is $7,500,000.

CHAMPS Operational Data Store Phase 2
Statement of Work

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December, 12, 2014

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Section 1: Introduction

The Michigan Department of Community Health (MDCH) is a recognized leader in advancing technology to support the business of Medicaid. As part of the earlier Operational Data Store (ODS) Phase 1 initiative, CNSI responded to MDCH's pressing need to have an integrated operational data environment that contains the Medicaid claims and managed care data necessary to provide a robust ad-hoc reporting and analytics platform that is physically and structurally distinct from the CHAMPS transactional system. Specifically, the ODS Phase 1 initiative provided MDCH with the ability to seamlessly perform a multitude of ad-hoc reporting and data analytics on the paid / denied claims data (including gross adjustments) as well as on managed care rate cohorts and payments. With built-in capabilities to dynamically model a wide array of ad-hoc / analytic requests supported by features to drill-up / drill-down on the operational data, along with easily configurable and reusable pre-defined filters, the ODS Phase 1 initiative greatly simplified the overall user experience to effectively address day-to-day business needs. The CHAMPS ODS platform has successfully laid the foundation for building an expanded set of analytics for MDCH.

The ODS Phase 2 implementation will leverage the foundation and framework laid in the ODS Phase 1 platform to build and expand the ad-hoc reporting and analytic capabilities created for claims data. This will facilitate a multi-view orientation that includes encounters, managed care, eligibility and enrollment, and third-party liability (TPL) data.

The CHAMPS Operational Data Store Phase 2 project continues to implement the vision of ODS Phase 1, complying with the CMS mandates and the Medicaid Information Technology Architecture (MITA) Seven Standards and Conditions by providing greater information-sharing, broader and easier access, enhanced data-integration, and strengthened ad-hoc reporting and analytic capabilities. This is accomplished through building a comprehensive operational data repository. With the support of the CNSI's CMMI Maturity Level 3-appraised software development processes, this project is expected to require 20 months to implement, spanning two major releases.

1.1 Regulatory and Business Drivers for Change

As MDCH moves more towards a performance-based, capitated managed care model along with a consumer- and provider-centric push, the information technology (IT) tools used to manage the Medicaid enterprise evolves from transactional systems towards analytical and ad-hoc reporting solutions. This corresponds to MDCH's shift from managing each claim to managing the Medicaid population with a focus on "population health." Thus, ad-hoc reporting and analytics is evolving as the "core" of the CHAMPS Medicaid enterprise, enabling a new era of data-driven decision making wherein State users effectively use ODS data to decide within the purview of their responsibility at all levels of the organization and the delivery system.

With the ODS Phase 1 implementation, CNSI built the foundation to not only provide ad-hoc reporting capabilities, but also an analytics platform to facilitate data analysis from multiple perspectives. These capabilities were built taking into consideration the evolving nature of the Medicaid enterprise, along with full support to work with the cloud implementation of CHAMPS so ODS becomes part of the cloud

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offering and available to other states in the future. The CHAMPS Operational Data Store Phase 2 project will leverage the existing foundation to address the following business drivers that are shaping up the Medicaid landscape for Michigan:

- Facilitate the analysis of beneficiary eligibility and claims data based upon an array of combinations of demographic, eligibility, diagnosis, procedure, and/or any other service-related characteristics.
- Healthy Michigan Program (HMP) cost-share which mandates cost-sharing (including co-pays) not to exceed 5 percent of the beneficiary's annual household income. Adopting healthy behaviors would result in a reduced cost-share percentage for beneficiaries.
- Health Risk Assessment (HRA)-based incentives to plan providers providing services to Healthy Michigan Plan members. State users can leverage the HRA data to build data marts within the ODS to analyze population cohorts over time as to the healthy choices being made and improvements in program costs.
- Tracking the demographic trends of consumers by associating the county-level information available from Medicaid encounters with the beneficiary data from Medicaid eligibility and enrollment to determine capitated versus actual payments to health plans, which could be used to better manage the health plan contracted rates.
- Provide State users with ad-hoc reporting capabilities employing statistical / analytical techniques to analyze other insurance coverages to enhance the TPL functionality. These could translate to direct cost savings to the State, as it would ease the need for the CHAMPS system to search through a plethora of third party coverage records thus enabling the State to focus more on the core business functions.

In addition, there is an immediate need to provide expanded decision support capabilities, with features including managing health outcomes as an integral part of contractor performance, managing other contractor performance items (not associated with health outcomes), and a greater visibility of access to care issues. This should allow for more relevant data to be made available on a timely basis to decision makers, including program integrity and executive leaders. The combination of dimensional data along with near real-time, normalized relational data in the ODS will provide MDCH the ability to perform analyses such as:

- Monitoring population health trends.
- Monitoring performance standards and health outcomes on a near real-time basis in order to provide feedback to health plans on the quality of care, as well as administer incentives, such as those associated with future MCO contracts.
- Benchmarking data to establish program norms and goals for use in the Medicaid enterprise.
- Identifying utilization anomalies for further analysis.

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1.2 CNSI Capabilities

In partnership with the State of Michigan, CNSI performed the initial implementation of CHAMPS beginning in 2005. Prior to that, CNSI system architects led the development of the electronic Claims Adjudication Management (eCAMS) solution that forms CHAMPS' core. CNSI implemented CHAMPS in 2009 and supported the State in achieving CMS certification of the Medicaid management information system (MMIS) in 2011. CNSI has continued to work with the State to provide innovative, technically sophisticated software solutions to support the State's business needs and remain compliant with all defined federal requirements. In addition, CNSI has worked collaboratively with the State of Michigan to implement innovative solutions to support the Medicaid program, including HealthBeat, Home Help Provider Credentialing and Enrollment, mobile platforms for Consumer Engagement and Provider Site Visit Pro, integration with federal systems for Medicaid incentive payments, and Medicaid expansion. Through these and other efforts, CHAMPS has continued to maintain pace with the rapidly changing Medicaid environment and is compliant with all current federal regulations.

CNSI's approach to conducting this project is based on extensive knowledge of CHAMPS design, implementation, and operation since the system became operational. As system software engineers and integrators, CNSI aligns its clients' business processes and information systems to allow them access to the right information at the right time, enabling the achievement of their desired business results and creating enterprise value. CNSI has extensive technological experience in the industry, combined with flexible tools and methodologies, allowing it to deliver quality results on time and within budget. CNSI completes jobs for clients by delivering on commitments with speed and purpose in accordance with the client's specifications and expectations.

For the CHAMPS Operational Data Store Phase 2 project, CNSI will use business, technical, and operational knowledge of the MDCH Medicaid program, CHAMPS capabilities, the ODS solution framework developed and implemented as part of ODS Phase 1, and other State Medicaid programs to create the ODS solution that encompasses the applicable business functions pertaining to Medicaid encounters, eligibility and enrollment, and TPL from the current operational system. CNSI will apply business and functional knowledge to develop an effective ODS model and the project will deliver a comprehensive solution for MDCH.

CNSI brings an experienced team of Medicaid and CHAMPS subject matter experts (SMEs), technical and architectural experts, and project management expertise to support this endeavor in the method CNSI has used in previous collaborative efforts for MDCH. CNSI's experience working with MDCH has led to incorporating the following factors in developing this statement of work:

- **CNSI's understanding of transactional system operations and data warehouse reporting**

  CNSI operates Medicaid systems and has developed data warehouses for multiple states, which provides CNSI with a thorough understanding of the challenges of real-time reporting from both of these solutions. CNSI will apply its understanding to design and develop an efficient and effective ODS to meet the State's real-time reporting requirements.

- **CNSI's capability to conduct complex analysis of Medicaid system requirements**

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CHAMPS is a multifunctional, CMS-certified information system compliant with all federal mandates that integrates all Medicaid activities into one complete system. As such, the existing CHAMPS application (designed, developed, and implemented by CNSI) is the baseline from which the ODS solution will be created. Working collaboratively with MDCH, CNSI is positioned to leverage its extensive experience in implementing cutting-edge solutions to strategically apply it to the CHAMPS Operational Data Store Phase 2 project.

- **CNSI's capability to identify and resolve major issues associated with CHAMPS**

  The prompt identification of major issues are an essential component to a project of this scope and are particularly important in the reengineering analysis work needed in a project of this nature. CNSI's extensive knowledge of MDCH's current application architecture, infrastructure, and operations will allow it to quickly identify major issues affecting implementation activity. By devoting careful attention to identifying and resolving issues, CNSI will ensure the successful implementation of the ODS solution.

- **CNSI's sensitivity to MDCH needs and constraints**

  CNSI is uniquely qualified to remain sensitive to the State's needs developing the ODS solution. Because of its multi-year history of collaboration with MDCH and understanding of CHAMPS, CNSI can provide business and technical expertise in presenting system capabilities for the ODS framework. CNSI understands that MDCH and DTMB staff members are involved in multiple implementation efforts in addition to their regular production workload. It is critical to the success of the project that State staff members are involved at the right time and in the right context.

- **CNSI's technical leadership to support MDCH's vision**

  CNSI has shown technical leadership from the beginning with the implementation of CHAMPS. Through CNSI's collaboration with the equally forward-thinking MDCH leadership, the partnership has achieved milestones that moved the Medicaid business to a modern state. The partnership continued to drive innovation through the implementation of eMIPP, HealthBeat, ClaimsSure, Provider Site Visit Pro, Document Management Portal, TPL integration, TPL PA-593 implementation, Provider Credentialing Service, and myHealthButton. With the implementation of the CHAMPS Operational Data Store Phase 2 project, MDCH, DTMB, and CNSI are positioned to repeat the success of the ODS Phase 1 implementation and continue to lead innovations in Medicaid.

  In April of 2014, CNSI's Health and Human Services Organization Unit was appraised at Maturity Level 3 under Version 1.3 of the Capability Maturity Model Integrated (CMMI) Development Model. The appraisal process for the organization unit included assessment of a project from the Midwest Region in order to reach this milestone. For this initiative, the CNSI Midwest Region will continue to use CMMI-compliant processes to deliver the solution described in this statement of work.

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1.3 Proposed Project Organization

CNSI believes this statement of work represents the best possible combination of architecture, technology, support, and experience to complete this project. The proposed team members are each highly qualified within their respective disciplines. The underlying values held by each member of this team include:

- They share the same belief when undertaking a project—**the customer comes first**.
- They value the contribution that each member brings to successfully implement the project.
- They are committed to understanding and incorporating the State's requirements.
- They have a collective understanding of the advanced technologies, business needs, and operational issues necessary to execute the project successfully.
- They possess the knowledge and skills necessary to employ CNSI's CMMI Level 3-assessed processes to effectively implement the project.

CNSI's primary objective is the successful implementation and completion of the project. We are confident in our team's ability to achieve that goal. Our team is fully dedicated to **CHAMPS – SIGMA Implementation** project.

The project's success depends on the full and active participation of the MDCH, DTMB, and CNSI's designated staff members from the initial planning to final implementation.

Figure 49 shows the CNSI organization structure supporting the **CHAMPS – SIGMA Implementation** project.

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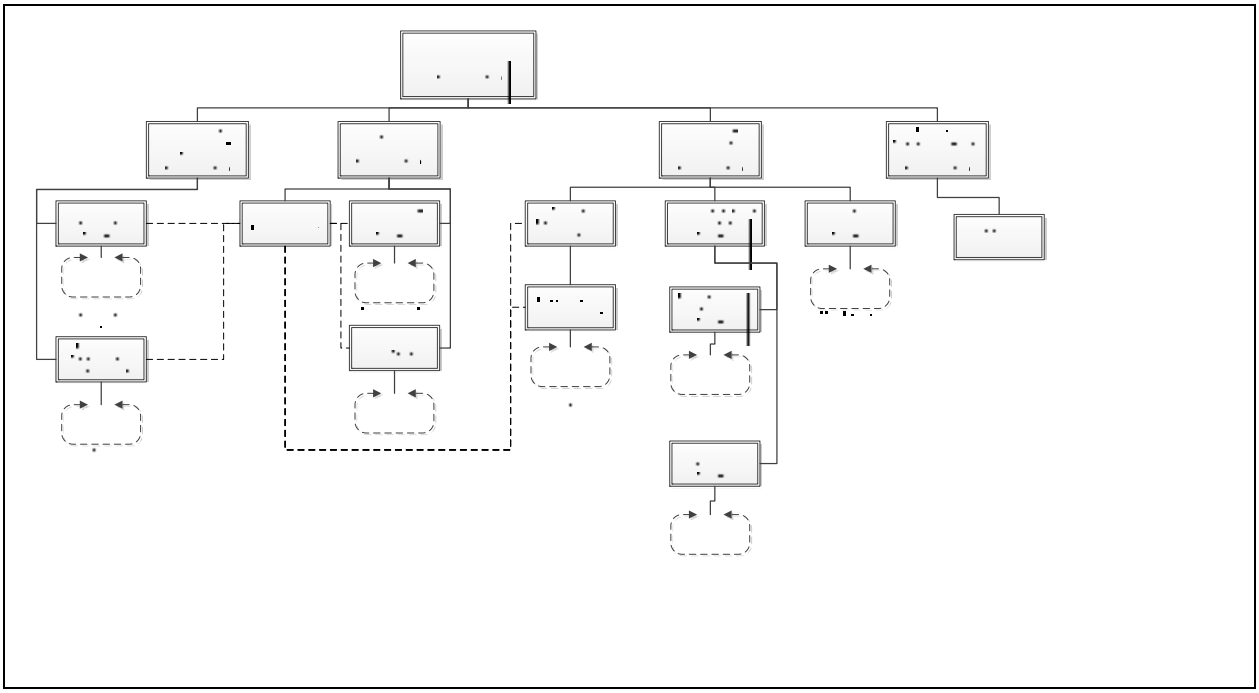

Figure 39. CHAMPS – SIGMA Implementation Project Organization Chart

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Section 2: Project Management Methodology and Tools

This section presents our project management and technical approaches, methodology, and tools and staged work plan for accomplishing all tasks required for the **CHAMPS – SIGMA Implementation** project. This section describes the scope of activities to be addressed throughout the project, from initiation to final implementation, and the techniques and methodologies the **CHAMPS – SIGMA Implementation** project team will use.

2.1 Project Management Approach

Although all projects are unique, they share common components and processes. The generally accepted process groups defined by the Project Management Body of Knowledge (PMBOK), as incorporated into the CNSI project management process, are:

- **Initiating:** This process group defines the project objectives and grants authority to proceed. For CNSI, the initiating processes are largely incorporated into the proposal development process, during which required partners are identified. This statement of work acts as a project charter and preliminary scope statement.
- **Planning:** This process group refines the project objectives and scope and plans the tasks, activities, and steps necessary to meet the project's objectives. The planning processes start during proposal development and proceed following contract award while CNSI works with MDCH establish and baseline the project management plan (PMP). The PMP is modified and updated as necessary over the course of the project and is the culmination of the planning processes for scope definition and management, time (scheduling), staffing (human resources), communications, and risk management.
- **Executing:** This process group puts the project's plans into motion. This is where the bulk of the work for the project is performed.
- **Monitoring and Controlling:** This process group measures the performance of the project's executing activities and reports these performance results to project managers and stakeholders. Output is used to refine, improve, or change project management (including plans and schedules) as necessary to meet the project's objectives.
- **Closing:** This process group documents the formal acceptance and approval of the project's product and brings all aspects of the project to a close.

CNSI is able to provide consistent project outcomes as a result of integrating its set of repeatable, Midwest iVision360 Delivery Framework practices, within the project management process groups

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above. **Figure 56** shows how CNSI's project and quality management activities interact with other project activities.

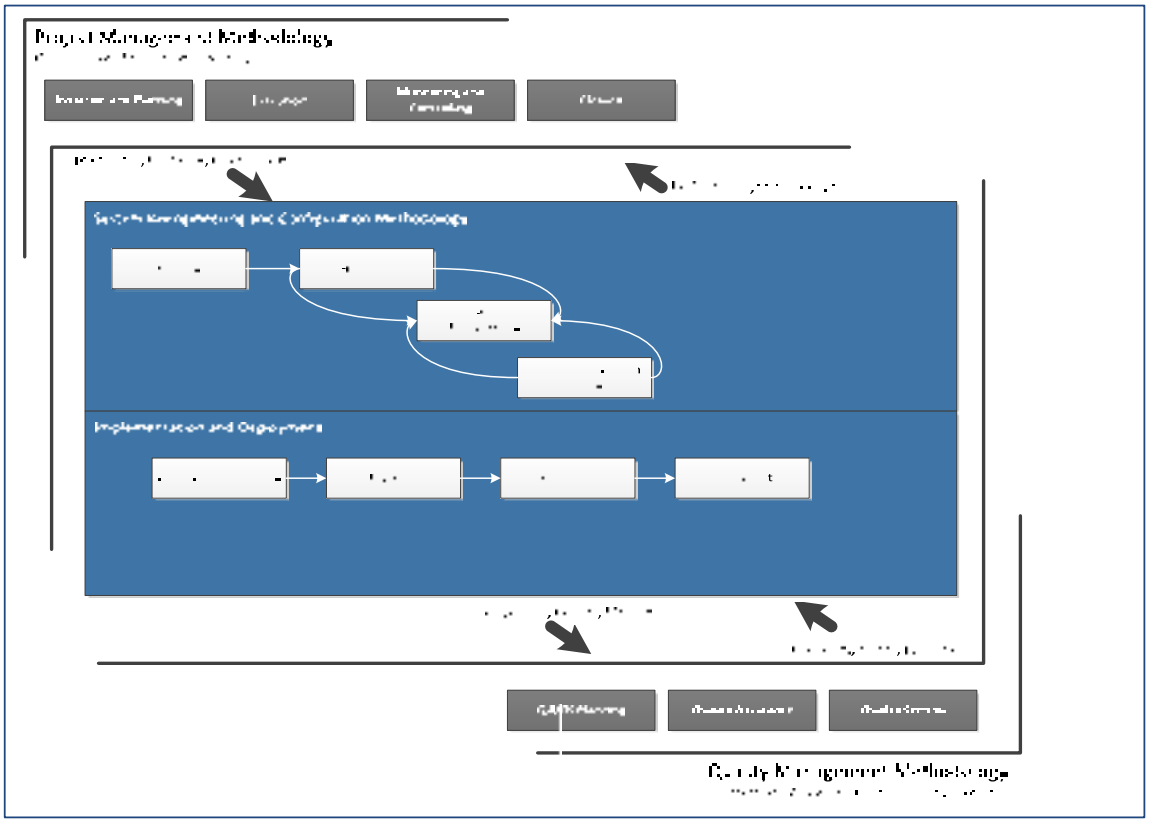

Figure 40. Project Management and Quality Management Activity Integration

CNSI is confident in its capability to apply this proven framework to successfully complete the **CHAMPS – SIGMA Implementation** project. Applying the same framework repeatedly, project after project, ensures a number of advantages for all stakeholders:

- The project management philosophy is firmly entrenched within the entire project team, including CNSI, MDCH, and DTMB.
- Project management is supported as a core competency.
- The project staff is focused on successfully implementing the project.
- Project management, quality management, and cost management processes are fully integrated and their infrastructure is in place.
- Effective project status reporting is established based on project life cycle.
- Project and software development methodologies are well documented.
- Project staff is provided comprehensive training.

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- Project information is communicated continuously to the right people at the right time.
- The project is continuously monitored against performance.
- Excellence in quality and delivery are built in.
- Deliverable review and approval processes are in place.

2.2 Project Methodology

CNSI's integrated approach for this project will use its proven Midwest Region iVision360 framework for the organizing structure, combined with an experienced team of program and project managers, SMEs, technical experts, and change management resources, to support this effort.

Using industry-standard project management methods facilitates the integration of CNSI's extensive system experience with application implementations, methodologies, and delivery tools. While no two engagements are the same, the State expects CNSI to deliver in a consistent, systematic fashion. CNSI will achieve this objective by using the CMMI Maturity Level 3-appraised Midwest iVision360 delivery framework tailored for the **CHAMPS – SIGMA Implementation** project as required. Using this framework will provide the structure for integrating CNSI's capabilities while allowing individual project teams the flexibility to adapt to meet the State's unique requirements and use client-mandated tools. Key benefits provided by the framework include:

- Provides a scalable, integrated collection of assets.
- Provides a consistent level of detail and presentation.
- Supports tailoring to scale, which provides a unique, but consistent, cost-effective delivery approach for the State.
- Uses established common work practices and expectations across project team members.

Investing time to create an effective plan with clear objectives is integral to successful project execution. CNSI's delivery framework provides a structured approach to the planning and execution. While this may appear to require more initial effort than desirable, experience has shown that following these processes reduces the likelihood of mistakes and results in lower risk and faster, more cost-effective delivery.

This standardized approach is a unique blend of the waterfall methodology and iterative, agile development. The advantages of this blend include:

- **User is at the Center:** CNSI's primary motivation for employing the Midwest iVision360 framework is to put the user at the center of the project lifecycle. Software projects succeed or fail largely from the software engineer's understanding of the customer's business rules, requirements, and needs. The more insight the developing organization has, the greater the quality and likelihood of success for the project. Successful projects have high interaction with end users and place the user at the center of the development life cycle. Every phase and task of Midwest iVision360 focuses on interaction and collaboration with the user community. CNSI does this by

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implementing agile techniques and building working software in an iterative fashion with user validation at periodic intervals.

- **Common Goals:** Users actively participate in requirements definition and design sessions with an integrated team of software engineers, analysts, and test engineers. This method avoids the pitfalls of waterfall development and test methods which leave, for example, test case refinement and execution until the completion of development. It also provides the team with a sense of purpose, a goal, and the drive to accomplish the end objective: software that meets the requirements.
- **Early and Often Testing:** Midwest iVision360 provides an opportunity to test early and often so formal system test phases and subsequent test phases are more likely to meet schedule expectations with a lower error-discovery rate.

The collaborative, and somewhat "free-form," nature of iterative, agile development is balanced with the structure and baseline management features of the waterfall stage methodology. By introducing the baseline management features of waterfall, CNSI minimizes the risk of scope creep that is sometimes associated with iterative development. Moreover, our project management processes provide integrated change, issue, and risk management processes. **Table 21** describes the key benefits of each of the industry-standard models that are blended into the Midwest iVision360 framework.

Table 17. SDLC Model Comparison

SDLC Model	Key Benefits Blended into Midwest iVision360
Waterfall	Baseline approval of requirements Structured documents and customer approvals Formalized testing
Iterative/Agile	Frequent customer interaction Decomposing work into small meaningful features that are presented in working software Frequent course corrections Sense of real progress Early and frequent testing
Extreme Programming	Teams formed between developing organization and customer Sense of common vision and goal

The standard Midwest iVision360 delivery framework employs a seven-phased process to organize activities and tasks associated with identifying requirements, designing, developing, and testing software. These phases contain major work packages that must be accomplished to move systematically through the Midwest iVision360 project life cycle. The phases roll up into three logical stages within this statement of work. The three-stage roll-up provides an easily understandable, top-down structure that facilitates

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grouping of activities with similar resource requirements and closely related deliverables. **Figure 57**below shows the relationship between the three-stage roll-up and the seven phases of Midwest iVision360.

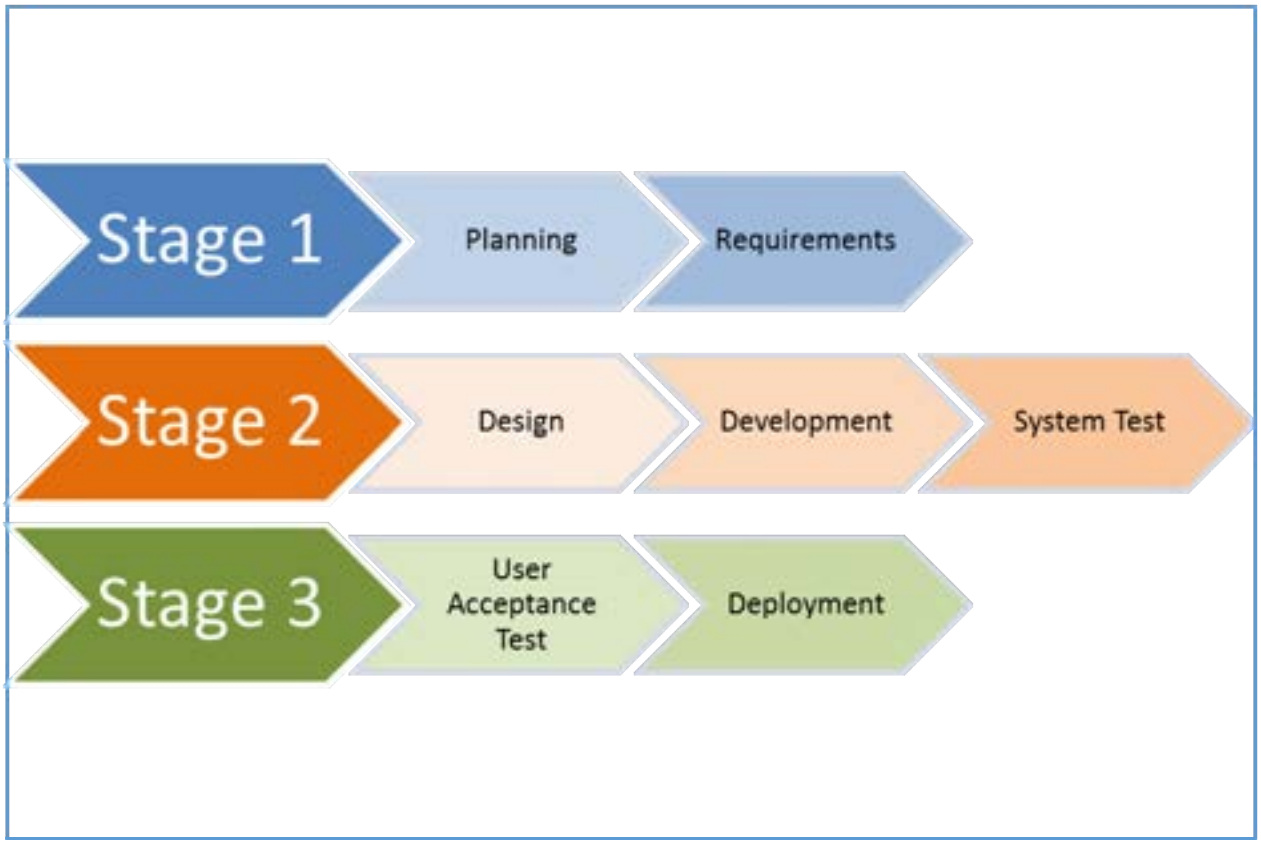

Figure 41. Midwest iVision360 Framework Stage and Phase Relationships

Based on the unique requirements of the **CHAMPS – SIGMA Implementation**, CNSI will tailor its seven-phase Midwest iVision360 framework to the specific needs of this initiative. Major activities and deliverables proposed for each stage in this statement of work can be found in

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Section 3: Solution **Overview** below.

Independent from the project team, CNSI's Program Management Office will conduct internal audits of CNSI process compliance to ensure the team is executing CNSI's standard processes and to incorporate process-improvement findings during the lifecycle of the project.

2.3 Project Management Tools

Tools, when properly applied within the delivery framework, reduce the time to complete a project by providing predefined support processes, templates, documents, and training materials. More importantly, using appropriate tools reduces risk and increases efficiency.

CNSI will continue to use the tools already proven effective during the previous undertakings to reduce the time to complete the project and mitigate risk.

Table 23 depicts the tools CNSI will utilize on the project.

Table 18. CNSI Project Tools

Tool	Purpose
Microsoft Office	Develop project deliverables as well as presentations and spreadsheet artifacts needed to support deliverables
Microsoft Project	Develop a detailed project schedule
Microsoft Visio	Develop use case diagrams, technical architecture diagrams, and support process flows
As-One	Repository for deliverables, presentations, and artifacts

While Microsoft Visio, Microsoft Office, and Microsoft Project are industry-standard tools, the following subsection provide additional information about As-One.

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2.3.1 As-One

As-One provides a convenient, secure repository for all program data and will give the State oversight personnel direct visibility into project work products, event calendar, and overall performance. The features of As-One are summarized in **Figure 51**.

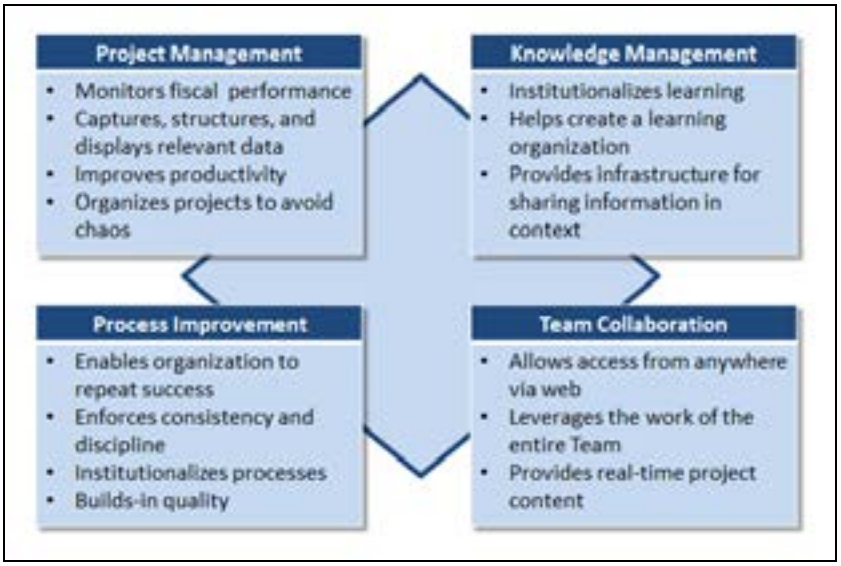

Figure 42. As-One Collaboration and Improvement

The As-One project repository will allow all members of the team to access relevant information and deliverables 24/7 using standard internet browsers such as Internet Explorer, Google Chrome, and Mozilla Firefox. MDCH and CNSI use As-One as their program management portal. Training will be provided for team members new to the program.

Section 3: Solution Overview

This section summarizes CNSI's proposed **CHAMPS – SIGMA Implementation** project, including functional and technical overviews, the proposed project timeline, and the project stages for meeting the objectives of the **CHAMPS – SIGMA Implementation** project. Full business and technical requirements will be elicited and documented as a part of the first phase of the project.

3.1 Functional Overview

At a high level, the CHAMPS ODS will be modified to provide support for the Medicaid encounters, eligibility and enrollment, and TPL business functions. The ODS will source the daily transactional data

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from the CHAMPS OLTP system, for the aforementioned business areas, to provide the following ODS capabilities to MDCH:

3.1.1 Subject-Oriented

The ODS will contain specific data unique to a set of required business functions. As a result, the data will represent specific subject areas.

3.1.2 Integrated

Data in the ODS will be sourced from various MDCH applications. The source data will be taken through a set of ETL operations that include cleansing and transformative processes. These processes will be based on rules that have been created through business requirements for data quality and standardization.

3.1.3 Current (Non-Historical)

The data in the ODS will be near–date (timing to be determined during the project) and the current status of the data will be provided from the sourcing applications.

3.1.4 Detailed

ODS data will be primarily used to support MDCH operational business functions. This means there will be a specific level of granularity based on business requirements that dictate the level of detail ODS data will have.

3.2 Technical Overview

Through the CHAMPS Operational Data Store Phase 2 project, CNSI will determine what an appropriate ODS solution would consist of. This decision-making process would require MDCH business analysts and the data management teams to assess business processes that must be executed to complete transactions or operational reporting requests. The focus will be on Medicaid encounters, eligibility and enrollment, and TPL business functions leveraging on the framework that has already been built and refined for CHAMPS ODS Phase 1. These assessments are truly effective when utilizing an approach that includes business process management (BPM).

An ODS is generally defined as a set of logically related data structures within a database. The data within an ODS is integrated, volatile, and at a non-historical, granular level designed to address a set of operational functions for a specific business purpose. The ODS must also be based on the organization's enterprise standards for data management. On the candidate set of business functions (Medicaid encounters, eligibility and enrollment, and TPL), the focus will be on data dependencies with close attention to any issues or pain points where inefficiencies and ineffectiveness are highlighted.

The capabilities of timely and functional data (refer to *Section 1.1 Regulatory and Business Drivers for Change*) will be delivered through CHAMPS and consistent with current frameworks.

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Figure 43 below shows a high-level ODS system/process flow. The blocks shaded in "dark red" are meant to indicate the commercial off-the-shelf (COTS) solutions and products being leveraged for this initiative.

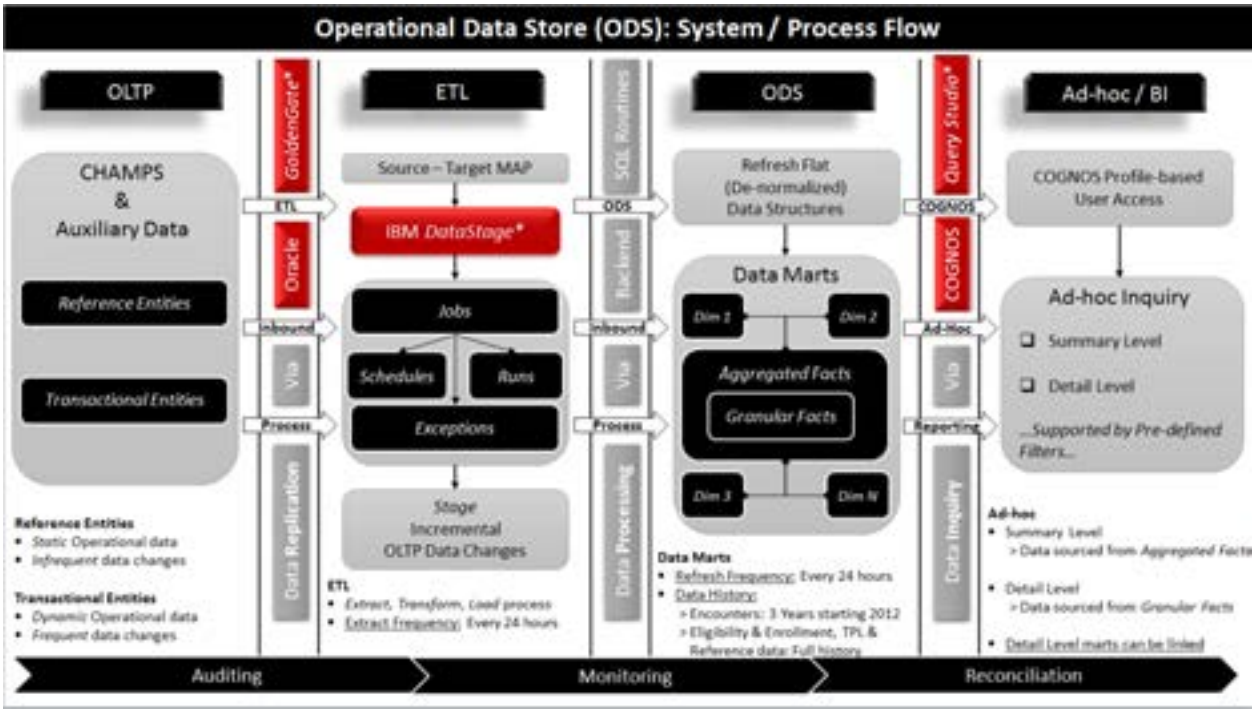

Figure 43. System and Process Flow

The CHAMPS Operational Data Store Phase 2 project will leverage the existing ODS, which is an independent database that is structurally distinct and physically separate from the CHAMPS transactional database. The ODS will source the "transactional" data from CHAMPS, also referred to as the Online Transaction Processing (OLTP) system, and then, via a series of transformations/processing, will make the data available in ODS for consumption through COGNOS and/or business intelligence (BI) ad-hoc reporting. Auditing, monitoring, and reconciliation will be performed after each process by compiling the count of data changes (addition/modification/removal) and handle any exceptions, as needed. The various steps involved in the ODS process flow are summarized below in **Table 19**.

Table 19. ODS Process Flow

Step No.	Process Area	Solution Used	Processing Details	Next Step
1	OLTP	Oracle GoldenGate	Oracle GoldenGate to replicate the CHAMPS data, for reference and transactional entities, and store them in the CHAMPS replication environment.	Data flows to the ETL process area via *ETL Inbound Process*
2	ETL	IBM DataStage	Pull the data from the CHAMPS replication environment (GoldenGate) for all changes since the prior load/run.	Data flows to the ODS core process area via *ODS*

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Step No.	Process Area	Solution Used	Processing Details	Next Step
			Execute the extract, transform, load (ETL) process via two steps as outlined below: **ETL Step A** Execute the ETL jobs, per the pre-defined schedules, to identify and load all OLTP transactional data changes (incremental) since the prior load/run onto the ETL staging tables. **ETL Step B** Using the incremental data changes compiled in ETL Step A for every applicable table, populate the ETL Base Transactional (de-normalized) data structures. The ETL Base Transactional data structures will hold the data from one or more CHAMPS tables.	*Inbound Process*
3	ODS	Oracle	Using the ETL Base Transactional (de-normalized) data, refresh the Granular Facts. The Granular Facts will contain the set of data elements (Facts/Dimensions/Degenerate Dimensions) for all transactional data, from the candidate set of business functions, which will drive the ad-hoc inquiry. Using the Granular Facts, refresh the Aggregated Facts.	Data is available for *COGNOS Ad-hoc Inquiry*
4	Ad-Hoc / BI	IBM COGNOS Query Studio	The Detail and Summary level ad-hoc inquiries can be performed now that the ODS data is made available.	Data is available for reporting/analytics/ BI for end users

In addition, the ODS solution, will be designed to account for every transactional change (be it an addition, modification, or removal) originating from the CHAMPS OLTP system that has changed during a pre-configured refresh window. During the refresh window, the solution ensures that the “transactional change” is accounted for and fully reconciled while transitioning and transforming the data as it moves from OLTP to ODS. In the event of a maintenance downtime, failure, or suspended refresh, the solution will dynamically account for transactional changes related to the applicable business functions that were added/modified/removed since the last refresh time, which could span more than the pre-configured refresh window.

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With the advent of the Operational Data Store (ODS) for FFS Adjudicated Claims, the Michigan Department of Community Health (MDCH) has the ability to seamlessly perform a multitude of ad-hoc reporting and data analytics on the paid / denied "adjudicated" claims data (including gross adjustments). With built-in capabilities to dynamically model a wide array of ad-hoc / analytic requests supported by features to drill-up / drill-down on the operational data, along with easily configurable and reusable pre-defined filters, the ODS Phase 1 initiative greatly simplifies the overall user experience to effectively address day-to-day business needs.

There is another component within FFS Claims that is vital for the day-to-day operations for the State's claim resolution team and something that needs to be managed equally importantly: Work-in-process (WIP) / Suspended claims. The WIP / Suspended claims represent an area, within the CHAMPS Claims functional area, that allows for the transitory storage of claims that are being loaded (either via DDE/online, paper submission or HIPAA EDI) and eventually adjudicated as well as those claims that could not be adjudicated (processed as paid or denied) earlier due to the setting of a certain edit / business rule, improper billing determination (ClaimsSure), Account Code assignment failure, and so on. Whatever the reason might be, the onus is still on the State staff to manually review and resolve the claim so that it could be resubmitted for adjudication to be either paid or denied on a timely basis. To facilitate the manual review and resolution of a claim, the State staff currently relies heavily on the CHAMPS Claims Resolution screens. Since there could be thousands of claims that might have to be resolved to release the claim for adjudication (depending on the day-to-day claims load), the State team not only relies on the CHAMPS Claims Resolution screens, but also requires the support from CNSI to help analyze the claims as part of the weekly capacity planning operational processes. In this regard, with the introduction of a near real-time ODS data mart for Suspended / WIP claims, the State staff would be provided with self-service capabilities to help conduct a multi-dimensional analysis of the transitory claims to be able to make quick decisions as to how to clear the backlog to keep CHAMPS compliant with the CMS mandated 90 day prompt pay. The ODS would also help redirect the operational resources (both State & CNSI) to focus more on the day-to-day technological / business needs.

3.3 Solution Delivery Plan

In this section, CNSI presents the proposed timeline, technical approach, and staged delivery approach for the **CHAMPS – SIGMA Implementation** project. A detailed description of the activities and deliverables within each stage is presented in *Section 2.4.2 Phase Approach Work* **Plan**.

CNSI structured this work plan to address the overall relationship and sequence of the work required to complete the project. It effectively uses the professional resources required to successfully complete the work and produce high-quality products in a cost-conscious manner.

The following subsections further describe how CNSI intends to accomplish the goals of the work plan by employing its Midwest iVision360 framework in the proposed approach for the **CHAMPS – SIGMA Implementation** project.

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3.3.1 High-Level Timeline

CNSI has created a summary timeline and work plan for the CHAMPS – SIGMA Implementation project. The CHAMPS – SIGMA Implementation project is expected to be tested and released in multiple production releases. The release-specific timeline is shown in Figure 44 and Figure 45 below. The timeline shows the approximate duration of each Stage/Phase of the work for the CHAMPS – SIGMA Implementation project.

- **ODS Phase 2 (Release 1) Implementation:** Release 1 will address the functionality for the Medicaid Encounters business function.
- **ODS Phase 2 (Release 2) Implementation:** Release 2 will address the functionality for the Medicaid Eligibility and Enrollment and TPL business functions.

Figure 44 provides high-level timeline for Release 1.

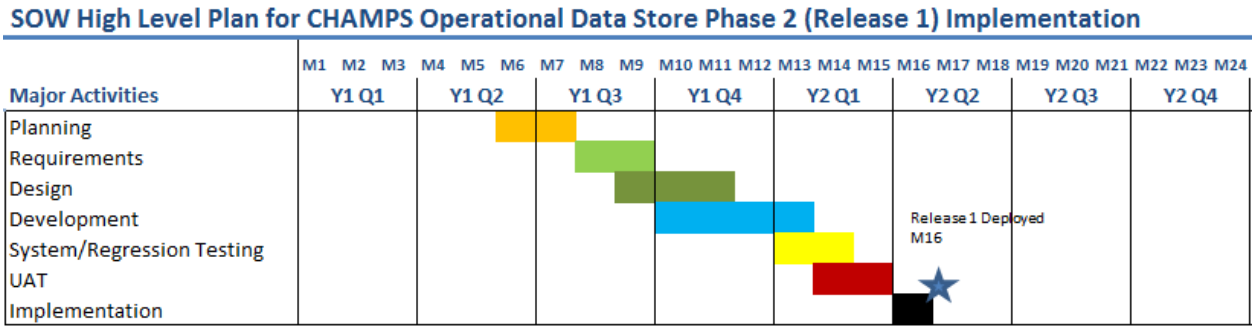

Figure 44. Initial Project Timeline (Release 1)

Figure 45 provides high-level timeline for Release 2.

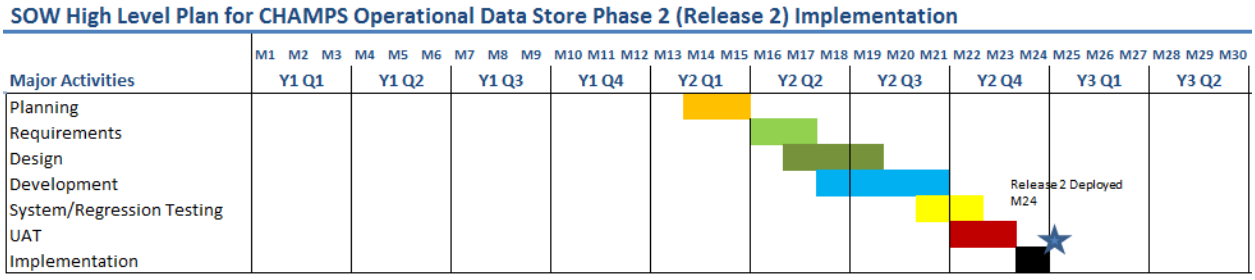

Figure 45. Initial Project Timeline (Release 2)

This timeline was developed based on the estimated effort of the work necessary to accomplish the proposed technical and functional solutions.

The proposed timeline was developed with the goal of optimizing the effective use of the professional resources required to accomplish these scope of work and produce high-quality products in a cost-conscious manner.

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3.3.2 Midwest iVision360 Delivery Processes

In this section, CNSI provides an outline of its CMMI Level 3-assessed Midwest iVision360 Framework which includes a full system development lifecycle (SDLC) model supporting the delivery of the technical solution CNSI's SDLC processes have been adapted to address the specific needs of the **CHAMPS – SIGMA Implementation** project. CNSI will produce deliverables for each phase of the project.

CNSI will engage in requirements analysis and design with the customer in order to begin iterative development. CNSI will provide an opportunity for the customer to review design documents prior to the start of system development activity.

Iterative, agile development under the Midwest iVision360 framework is visible in Stage II for the **CHAMPS – SIGMA Implementation** project. During this stage, technical design specifications for new or impacted functions and user stories are constructed in parallel by the software engineers and SMEs. As the impacted function's design is completed, the team lead plans the iterations required to complete development.

Development work is planned based on a two-week iteration schedule. Software engineers build internal design documentation prior to, and during, the two-week iterations. The first day of each iteration is reserved for startup activities, including finalizing the iteration's internal design documentation. The software engineer meets with the Data Modeling Team on the first day of the iteration and conducts a walkthrough of any required data model changes. The Data Modeling Team makes the required changes to the database schema and approves the physical model for coding.

Development begins once the internal design and pre-development work is completed for the iteration. The software engineer writes internal iteration test scripts in parallel to actual working code and updates screens and other system functions to fit the physical mode. The software engineer executes the iteration test scripts as they complete sections of code. The software engineer builds the code, tests incrementally, and coordinates and communicates with the team through daily stand-up meetings regarding any issues holding up the development work.

Software engineers then test the code against the internal auto-unit code and manual internal iteration test scripts. As they reach the end of the iteration, they run the code against the functional scripts developed by the Test Team. Discrepancies are identified and corrected. The software engineer retests to ensure all discrepancies are corrected and closed before the iteration ends. The software engineer then conducts a peer review of the code of a given function on the last day of the iteration. The software engineer then updates the code based on the review. When software engineer iteration testing and software code reviews are successfully completed for the iteration, the code is then promoted to the integration test stream. The code is released to the Test Team for system testing when the coding and software engineer iteration testing is completed for all user stories for a given function.

During initial development iterations, the Test Team develops system test cases based on the current CHAMPS solution specifications. During system testing, the Test Team executes system test cases to validate system results against the current production functionality.

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For the **CHAMPS – SIGMA Implementation** project, CNSI plans to engage the test and development teams early on to build the regression test suite for the critical functions. This will speed up testing and improve the overall quality of implementation. CNSI understands the importance and sensitivity of the **CHAMPS – SIGMA Implementation** project and the need to ensure it aligns with the environment that is already in production. During system testing, regression tests will be performed to demonstrate that the solution continues to function as expected.

As soon as regression testing is completed for a function, CNSI will deliver the code to the UAT environment. CNSI plans to engage the customer as early as possible and well before the beginning of the planned UAT phase. This ensures that enough time is allowed for thorough UAT, which will also reduce the risk of schedule slippage for UAT completion. CNSI will deploy system- and regression-tested functions to the UAT environment as they are completed.

As presented in our initial timeline (**Figure 44** and **Figure 45** above) UAT will have a 2-month duration. Any delay in the completion of UAT will significantly impact the implementation date. CNSI will work with MDCH to support all UAT activities.

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Figure 46 presents a graphical overview of the Midwest iVision360 framework processes applicable to the **CHAMPS – SIGMA Implementation** project.

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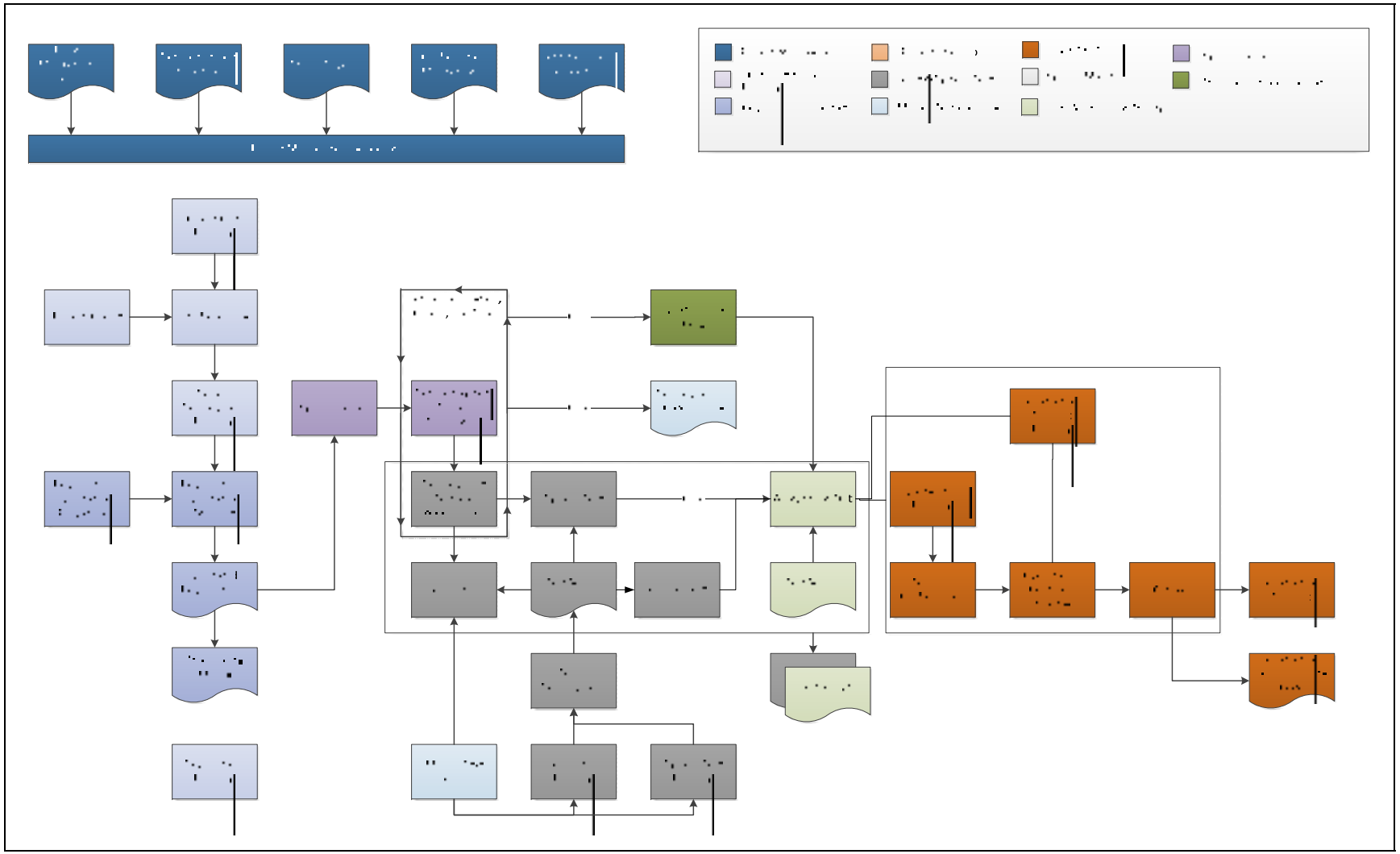

Figure 46. Midwest iVision360 Process Diagram

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3.3.3 Staged Delivery Summary

CNSI proposes a staged delivery of **CHAMPS – SIGMA Implementation** which incorporates the seven phases of CNSI's CMMI Level 3-assessed Midwest iVision360 framework. This top-down approach provides an easily understandable grouping of activities with similar resource requirements and related groupings of deliverables along with three major milestones following each stage to facilitate monitor and control of the initiative.

Figure 47 below summarizes the staged delivery using the seven phases of Midwest iVision360.

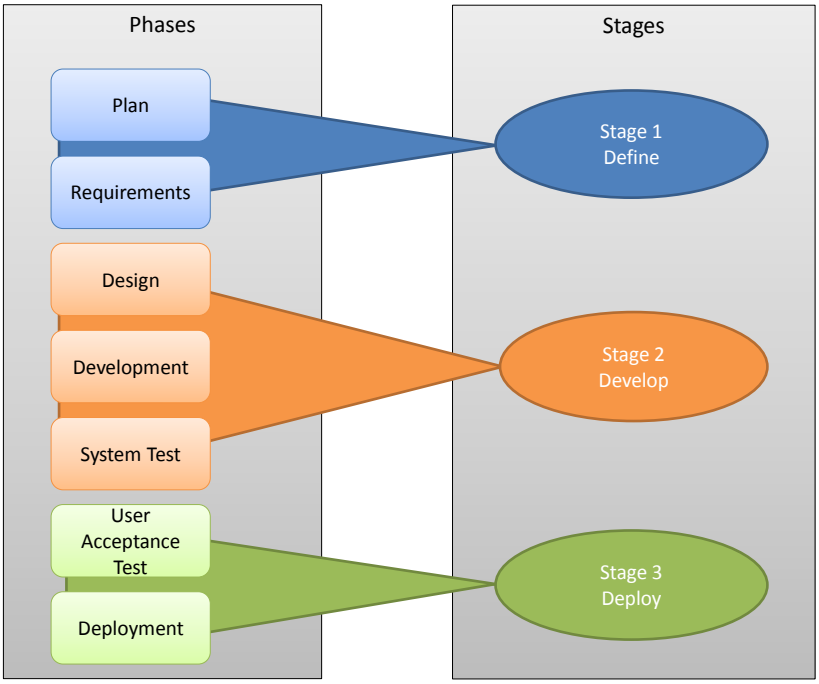

Figure 47. Midwest iVision360 Framework Phases and Stages

Figure 48 provides a high-level overview of the project stages with major activities and anticipated deliverables. Note that the overall timeline presented in **Figure 44** and **Figure 45** shows an 11-month total duration for each of the two releases. The stages shown in **Figure 48** will overlap to accomplish the total work needed in the 11-month duration for each of the two releases.

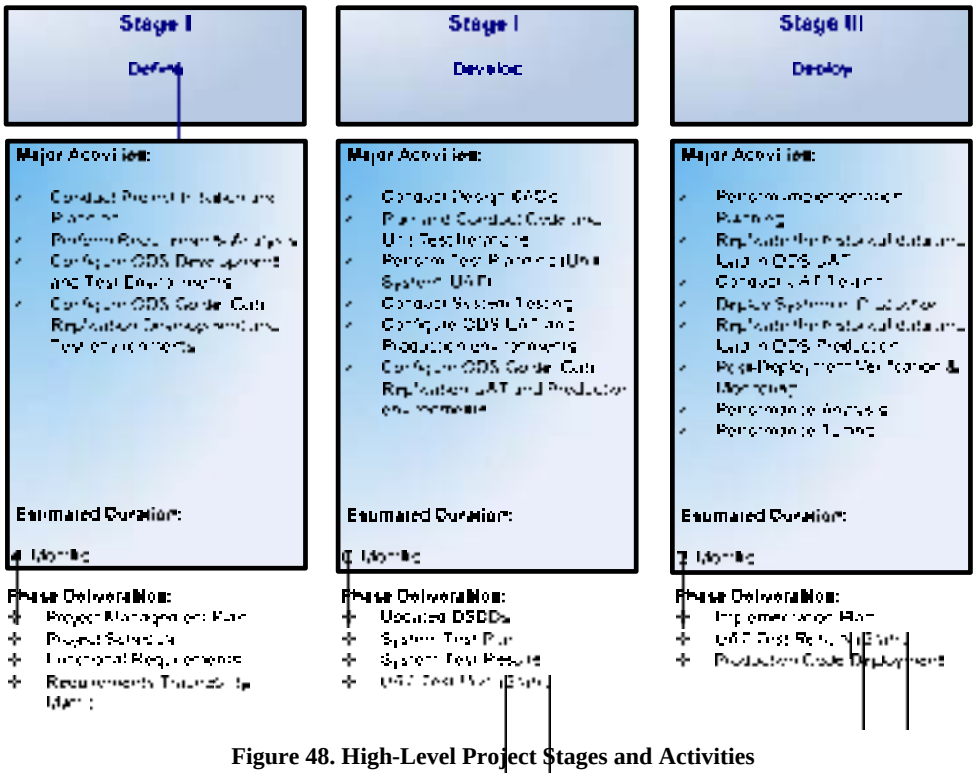

Figure 48. High-Level Project Stages and Activities

With every project, there are critical milestones to be met and work products and deliverables that must be developed and produced in order to provide the inputs necessary to perform the next activity. **Table 27** elaborates on the activities of the proposed 11-month implementation plan (for each of the two releases), along with the expected deliverables. In **Table 27**, bold text in the deliverables sections indicate formal deliverables; italicized text indicates State acceptance tasks and deliverables.

Table 20. High-Level Activities and Milestones by Stage

Major Activity	Description	Stage
Project Initiation	Establish the project team structure, key stakeholders, and operating guidelines for team activity throughout the course of the project.	Stage I
Project Planning	Develop PMP, schedule, and metrics.	Stage I
Requirements Analysis	Conduct collaborative application development (CAD) sessions to elicit and validate requirements for **CHAMPS – SIGMA Implementation** project.	Stage I
ODS Dev / Test Configuration	Configure and setup the ODS Development and Test	Stage I

Major Activity	Description	Stage
	environments.	
ODS GoldenGate Replication Dev / Test Configuration	Configure and setup the ODS GoldenGate Replication Development and Test environments.	Stage I
Stage I Deliverables • **Project Management Plan** • **Project Work Plan** • **Requirements Specification Document** • Initial Requirements Traceability		
Design Analysis	Conduct CAD sessions to document detailed system design changes for **CHAMPS – SIGMA Implementation** project.	Stage II
Test Planning	Conduct detailed test planning for each phase of testing:	Stage II
Software Development	Develop and unit test software required to support the detailed functional design including: • Screens • Functionality (driven by use cases) • Data Models • Reports • Interfaces	Stage II
System Testing	Internal CNSI testing of developed functionality at the component, subsystem, and system level.	Stage II
ODS UAT / Prod Configuration	Configure and setup the ODS UAT and Production environments.	Stage II
ODS GoldenGate Replication UAT / Prod Configuration	Configure and setup the ODS GoldenGate Replication UAT and Production environments.	Stage II
Stage II Deliverables • **As-Built DSDD** • **Test Plan** • **System Test Results**		

Major Activity	Description	Stage
Implementation Planning	Coordinate production installation of the system changes.	Stage III
ODS UAT Historical Data Load	Replicate the CHAMPS UAT data and then load it in the ODS UAT environment.	Stage III
UAT Support	MDCH testing of all system changes using formal UAT test scripts.	Stage III
Production Deployment	CNSI and the State of Michigan deploy the modifications in the MDCH production CHAMPS ODS environment.	Stage III
ODS Prod Historical Data Load	Replicate the CHAMPS Production data and then load it in the ODS Production environment.	Stage III
Post-Deployment Verification	Perform a sanity check of all system functions after code deployment to ensure all features function as designed.	Stage III
Stage III Deliverables • **Implementation Plan** • Operational Support Forecast Report • **Code Deployment to Production**		

3.3.3.1 Stage 1 – Initiation and Requirements

Activity 1: Project Initiation

During this activity, CNSI will collaborate with the State of Michigan to identify the key business and technical team members who will participate in the **CHAMPS – SIGMA Implementation** project. CNSI will conduct the formal project kickoff and deliver orientation for the project effort.

The major milestones associated with this activity are:

- Participating team members from the State of Michigan are identified.
- Project kickoff meeting is conducted and project kickoff is completed.

Activity 2 - Project Planning

During this activity, CNSI will develop the PMP. The PMP outlines the standards and procedures for risk, issue, and action item management; project governance plan to coordinate activities between the CNSI project team and the State of Michigan; communications plan; deliverable management plan; project work breakdown structure (WBS); and the baseline schedule.

Milestones associated with this activity include:

- PMP is delivered.
- Project work plan is delivered.

Activity 3 – Requirements Analysis

The goals of the **CHAMPS – SIGMA Implementation** project have been defined at a high-level within this statement of work. During this activity, CNSI will host CAD sessions to elicit and validate detailed functional and technical requirements. The CAD sessions will include the State of Michigan and CNSI functional and technical SMEs. CNSI will compare the validated requirements with current CHAMPS ODS functionality and technical architecture to determine the impact of the new requirements across all CHAMPS subsystems, including system aspects such as:

- New and modified screens.
- Functionality (use cases).
- Data models.
- Reports.
- Interfaces.

This will result in a requirements specification document which provides a clear, concise, and final definition of each requirement. The approved requirements will be used during the design and development activities in Stage II.

The major milestones associated with this activity are:

- Functional requirements specification document is delivered.
- Approved requirements have been loaded into the requirements repository.

Activity 4 - ODS Dev / Test Configuration

During this activity, CNSI will configure the ODS development and test environments to be able to support the iterative development and testing effort as per the PMP.

Milestone associated with this activity include:

- ODS environment configuration and setup is completed.

Activity 5 - ODS GoldenGate Replication Dev / Test Configuration

During this activity, CNSI will configure the ODS GoldenGate Replication development and test environments to support the iterative development and testing effort as per the PMP. With the setup for replication in place, the solution would be able to track all data changes in the applicable source environment (CHAMPS) and propagate the changes to the target environment (ODS) via Oracle GoldenGate.

Milestone associated with this activity include:

- ODS GoldenGate Replication environment configuration and setup is completed.

3.3.3.2 Stage II – Design, Coding, and System Testing

Activity 1 – Design Analysis

During this activity, CNSI will host CAD sessions to produce detailed design artifacts. Sessions will be organized and scheduled per requirements for the affected CHAMPS subsystem and the solution's technical architecture. CAD sessions will include State of Michigan and CNSI functional and technical SMEs. Using the existing CHAMPS design and the requirements specification document as a starting point, session participants will identify and document required design changes including system aspects such as:

- Screens.
- Functionality (use cases).
- Data models.
- Reports.
- Interfaces.

This will result in final, revised design artifacts, including use cases and data models, which will be the basis for the development of changes to system functions. CNSI will submit the completed design artifacts to the appropriate State of Michigan decision-maker shortly after the completion of a CAD session. The State of Michigan decision-maker will formally approve the design artifacts via signature on an approval form, similar to the existing CHAMPS enhancement approval process. This approval indicates that design is final and development can begin.

The major milestones associated with this activity are:

- Delivery of the as-built DSDD.

Activity 2 – Test Planning

During this activity, CNSI collaborates with the State of Michigan to determine the required set of tests to be executed. CNSI prepares test scenarios and scripts for each phase of internal testing, including system testing and regression testing. The system test scenarios and scripts are prepared by the CNSI Test Lead.

The State of Michigan prepares the UAT test plan and related test scenarios and script during this activity time frame.

Milestones associated with this activity include:

- System test plan is completed.
- System test scenarios and scripts are completed.
- *UAT preparation is completed (State).*

Activity 3 – Software Development

At the beginning of this activity, the development iteration plan is prepared. During this activity, CNSI codes the software changes required to support the updated detailed functional and technical design. Development is performed through a series of bi-weekly development iterations as previously described. Development includes the coding changes as defined in the as-built DSDDs for CHAMPS, including system aspects, such as:

- Screens.
- Functionality (use cases).
- Data models.
- Reports.
- Interfaces.

At the conclusion of each development iteration, the developed code is delivered to the CNSI Test Team. The major milestone associated with this activity is the completion of all development iterations.

Activity 4 – System Testing

During this activity, CNSI tests the developed functionality at the component, subsystem, and system levels in accordance with the test plan. Test results are compiled and at the conclusion of system testing, CNSI performs end-to-end (E2E) regression testing. At the conclusion of this activity, the test manager conducts a test readiness review meeting to ensure all entry criteria for the UAT phase are met.

Milestones associated with this activity include:

- System test results report is delivered.
- Code is deployed to UAT environment.
- UAT begins.

Activity 5 - ODS UAT/Production Configuration

During this activity, CNSI will configure the ODS UAT and production environments to support the testing and implementation effort, as per the PMP.

Milestone associated with this activity include:

- ODS environment configuration and setup is completed.

Activity 6 - ODS GoldenGate Replication UAT/Production Configuration

During this activity, CNSI will configure the ODS GoldenGate Replication UAT and production environments to support the testing and implementation effort as per the PMP. With the setup for replication in place, the solution would be able to track all data changes in the applicable source environment (CHAMPS) and propagate the changes to the target environment (ODS) via Oracle GoldenGate.

Milestone associated with this activity include:

- ODS GoldenGate Replication environment configuration and setup is completed.

3.3.3.3 Stage III – UAT and Production Deployment

Activity 1 – Implementation Planning

During this activity, CNSI collaborates with the State to coordinate the timing of the production installation of the system changes. The **CHAMPS – SIGMA Implementation** project will be incorporated into the regular CHAMPS operational release implementation schedule. Implementation planning activities will focus on targeting the operational release that will include this initiative and integrating the new features into the release. During this activity, CNSI will review operational support projections for post-deployment support and prepare an operational support forecast report documenting any changes expected post-deployment.

Milestones associated with this activity include:

- Identification of the operational releases where the software will be deployed.
- Development of the implementation plan.
- Preparation of the operational support forecast report.

Activity 2 - ODS UAT Historical Data Load

During this activity, CNSI will load the historical data from the CHAMPS UAT environment to the ODS UAT environment. This is considered the base transactional (Day 0) data that would be used to build the ODS data marts.

Milestone associated with this activity include:

- ODS historical data refresh is completed.

Activity 3 –UAT Support

During this activity, CNSI provides support to MDCH staff who will conduct UAT using formal, State-developed test scripts. UAT testing will be aligned with the selected operational releases where the code will be deployed. Defects identified are monitored and corrected throughout UAT.

The major milestones associated with this activity include:

- *UAT test results report (State deliverable).*
- Final defect correction report.
- State approval to deploy the software.

Activity 4 – Production Deployment

During this activity, CNSI and the State of Michigan collaborate to execute the implementation plan. The finalized code will be merged into the selected regular operational release. CNSI deploys the release to the production environment where it is available for use by MDCH staff.

The major milestones associated with this activity include:

- Code is deployed to production.
- Production support begins.

Activity 5 - ODS Production Historical Data Load

During this activity, CNSI will load the historical data from the CHAMPS production environment to the ODS production environment. This is considered the base transactional (Day 0) data that would be used to build the ODS data marts.

Milestone associated with this activity include:

- ODS historical data refresh is completed.

Activity 6 – Post-Deployment Verification

This activity involves verifying the correct installation and operation for all system components. During this activity, CNSI performs a sanity check of all system functions after code deployment to ensure all features function as designed.

The major milestones associated with this activity include:

- Verify queues operation.
- Verify interfaces operation.
- Verify ODS extract operation.
- Verify all production job schedules:
    - Interface schedules
    - ODS extract schedules
    - Queue schedules

•

Section 4: General Assumptions and Constraints

CNSI has identified and provided the following general assumptions in regards to the **CHAMPS – SIGMA Implementation** project:

22. MDCH and DTMB will provide access to, and time commitment from, SMEs who understand their programs and systems.
23. The CHAMPS Operational Data Store Phase 2 solution will leverage the existing infrastructure and build upon the framework already implemented as part of CHAMPS Operational Data Store Phase 1.
24. The Center for Shared Services (CSS) will provide sufficient capacity for the testing and production servers in accordance with the timelines of the project.
25. The functional business requirements currently defined as the CHAMPS Operational Data Store Phase 2 requirements will be used as the basis for the requirements validation activity. Should these requirements prove to be incomplete or inaccurate, change management may be necessary to extend or modify the timeline for this effort.
26. The implementation of the CHAMPS Operational Data Store Phase 2 project will align with the agreed operational release calendar.
27. The solution developed for the CHAMPS Operational Data Store Phase 2 project will meet all applicable State technical and security standards.
28. The State will plan and execute UAT pursuant to the approved project work plan. Any delays will be evaluated through the project's change management process.

Section 5: Proposed Project Cost

This section of our proposal presents our fixed-price, overall labor cost for completing the **CHAMPS – SIGMA Implementation** project. The cost was derived based on the expected effort required as presented in our initial work plan, composed of the three stages depicted in **Figure 48**.

The overall cost for implementing the **CHAMPS – SIGMA Implementation** Project is $3,500,000.

CHAMPS Consumer Engagement Solution Initiative
Statement of Work

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December 19, 2014

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Section 1: Introduction

The Michigan Department of Community Health (MDCH) has been an early adopter of consumer-oriented healthcare. For the State's Medicaid beneficiaries, MDCH's overarching goal is to empower its beneficiaries to responsibly manage their health. In support of this goal, MDCH is sponsoring the Consumer Engagement Solution Initiative to provide its beneficiaries with practical tools for personal and family health management.

The Consumer Engagement Solution Initiative will result in the implementation of a member-accessible web portal and a companion mobile application: the myHealthPortal application and the MyHealthButton mobile application. In addition, this initiative will include support for beneficiary advanced health directives and implementation of the CNSI's Electronic Fusion Repository (eFRM) management product. eFRM integrates member's administrative information with clinical information thereby providing critical insights and actionable intelligence regarding their health. This initiative is expected to be implemented as a fixed-cost engagement with an overall timeline of 24 months.

1.1 Regulatory and Business Drivers for Change

The Consumer Engagement Solution Initiative will provide the tools for MDCH to support Governor Rick Snyder's goal of a "Healthier Michigan" and related initiatives such as the "Michigan 4X4 Plan". These plans address state-wide concerns including the fact that Michigan has a high obesity rate with an estimated which includes 32 percent of adults and 17 percent of youth. Obesity directly impacts a person's overall health and is the root cause of many chronic illnesses, such as Type 2 diabetes and heart disease. As reported in "*The Diabetes Burden Report and the Michigan Diabetes Action Plan 2011-2014*"[1], Michigan has an estimated 2 million citizens who are diagnosed as pre-diabetic and 1.65 million citizens that are diagnose as diabetic. In this same report it is noted that the lifetime healthcare cost for an individual with diabetes is 2.6 times higher than a non-diabetic individual.

The State of Michigan's Medicaid program serves vulnerable populations who are statistically more likely to suffer from chronic medical conditions resulting in financial burden assumed by Medicaid coverage. The Consumer Engagement project will enable Michigan achieve MDCH's "Michigan 4x4 Plan", by empowering the members to have access to their critical information and by allowing them to actively engage in managing their health. The Consumer Engagement solutions to be enhanced through this initiative are an important part of the strategy to engage beneficiaries in better persona health management.

In addition, the project will also enable the State of Michigan to continue to expand its footprint with the rising trend towards "consumerism" in the healthcare space. The consumer-centric approach is expected to help improve health outcomes of Michigan Medicaid population while potentially to reducing healthcare costs as beneficiaries use these tools to follow a healthier lifestyle.

Consumer-driven reforms encourage individuals to actively engage in managing their own health and in the health care market. In both private and public spheres, such reforms are becoming more common

[1] http://www.michigan.gov/documents/mdch/2011_Impact_of_Diabetes_365234_7.pdf

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throughout the US. This relatively new trend towards "consumerism" is spawned by an overall shift in the way we, as a nation, think about health care. The new "consumer model" engages individuals in health care decision-making by shifting greater financial responsibility to consumers, increasing transparency in price and encouraging competition. It is thought that well-informed consumers who bear greater financial responsibility for their health care decisions will act as natural regulators of cost and increase overall satisfaction with the system.

CNSI's continued focus and research in 'healthcare consumerism' has resulted with pioneering products and solutions in the consumer engagement space. These solutions will be leveraged for the Consumer Engagement Solution Initiative to maximize the results for the State of Michigan

1.2 CNSI Capabilities

Since 2006, CNSI has worked in close partnership to establish and maintain Michigan's state-of-the-art Medicaid system: CHAMPS. In collaboration with MDCH and DTMB, We have developed and implemented more than 2000 enhancements and multiple major initiatives. Highlights of our shared history include:

- CHAMPS claims implementation in 2009
- CHAMPS encounters implementation in 2010
- MMIS Certification and eMIPP initial implementation in 2011
- HIPAA 5010 implementation in 2012
- ICD-10 Assessment, HealthBeat, myHealthButton pilot and Affordable Care Act Provider Modification, and IMPACT eMIPP implementation (Illinois) in 2013
- ICD-10 software code deployment phase, CORE Certification, Healthy Michigan, Home Help, and Site Visit Pro in 2014

All of these projects have supported MDCH's vision of a modern, responsive, healthcare environment supporting Michigan Medicaid beneficiaries. CNSI's has continued to work with the State to provide innovative, technically sophisticated software solutions to support the State's business needs and to remain compliant with all defined federal requirements. Through these and other efforts, CHAMPS has continued to maintain pace with the rapidly changing Medicaid environment and is complaint with all current federal regulations.

As system software engineers and integrators, CNSI aligns clients' business processes and information systems to allow them to access the right information at the right time, enabling the achievement of their desired business results and creating enterprise value. CNSI has extensive technological experience in the industry combined with flexible tools and methodologies to deliver quality results on time and within budget. CNSI completes jobs for clients by delivering on commitments with speed and purpose in accordance with the client's specifications and expectations.

CNSI will use its considerable business, technical, and operational knowledge of the MDCH Medicaid program, CHAMPS system capabilities provide an attractive environment to facilitate individual beneficiary health management and engagement in self-management of health concerns. CNSI brings an experienced team of Medicaid and CHAMPS subject matter experts (SMEs), technical and architectural experts, and project management expertise to support the Consumer Engagement Solution Initiative in the

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method CNSI has used in previous collaborative efforts for MDCH. CNSI's experience working with MDCH has led to incorporating the following factors in developing this statement of work:

- **CNSI's ability to introduce technical innovation to the State's Medicaid operation**

  Recent examples of CNSI's technical innovation include HealthBeat application, Provider Site Visit Pro, and ClaimSure. HealthBeat monitors CHAMPS activity such as claim and encounter auto-adjudication rates, and number of benefit inquiries processed per hour throughout the day and displays it graphically 24 hours a day, 7 days a week. Provider Site Visit Pro uses a mobile tablet-based application that allows MDCH provider site visit inspectors the ability to capture site visit data and facility pictures in real-time. Inverting the "pay and chase model", ClaimSure uses data analytics to detect improperly billed claims prior to payment. The ClaimSure data analytics engine has saved the state more than $33 million to date. The collaboration between MDCH and CNSI continues to lead the nation in modernizing State Medicaid technology.

- **CNSI's capability to conduct complex analysis of Medicaid and Consumer Engagement system requirements**

  CHAMPS is a multifunctional MMIS-certified information system compliant with all federal mandates that integrates all Medicaid activities into one complete system. Through implementation of CHAMPS, upgrades to support Healthy Michigan which supports a much larger beneficiary base, and the pilot project for myHealthButton mobile which was the precursor to this initiative. All of these projects were designed, developed and implemented by CNSI. With the Consumer Engagement Solution Initiative MDCH is positioned to take advantage of the extensive knowledge CNSI accumulated during these prior implementations.

- **CNSI's capability to identify and resolve major issues associated with CHAMPS**

  The prompt identification of major issues are an essential component to a project of this scope and are particularly important in the reengineering analysis work needed in a project of this nature. CNSI's extensive knowledge of MDCH's current application architecture, infrastructure, and operations will allow it to quickly identify major issues affecting implementation activity. By devoting careful attention to identifying and resolving issues, CNSI will ensure the successful implementation of the cloud-based CHAMPS solution.

- **CNSI's sensitivity to the State of Michigan's needs and constraints**

  CNSI is uniquely qualified to remain sensitive to the State's needs and constraints in defining the project's approach. The team will employ an orderly, structured, professional approach that is sufficiently flexible to respond to changes in requirements that evolve from additional understanding. Overall, CNSI has "hands-on" experience of what does and does not work.

- **CNSI's proven Capability Maturity Model Integration (CMMI) Level 3-assessed project processes for software development**

  In April of 2014, CNSI's Health and Human Services Organization Unit was appraised at Maturity Level 3 under Version 1.3 of the CMMI Development Model. The appraisal process for the organization unit included assessment of a project from the Midwest Region in order to reach

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this milestone. For this initiative, the CNSI Midwest Region will continue to use CMMI-compliant processes to deliver the solution described in this statement of work.

1.3 Proposed Project Organization

CNSI believes this statement of work represents the best possible combination of architecture, technology, support, and experience to complete this project. The proposed team members are each highly qualified within their respective disciplines. The underlying values held by each member of this team include:

- They share the same belief when undertaking a project—**the customer comes first.**
- They value the contribution that each member brings to successfully implement the project.
- They are committed to understanding and incorporating the State's requirements.
- They have a collective understanding of the advanced technologies, business needs, and operational issues necessary to execute the project successfully.
- They possess the knowledge and skills necessary to employ CNSI's Capability Maturity Model Integration (CMMI) Level 3-assessed processes to effectively implement the project.

CNSI's primary objective is the successful implementation and completion of the project. We are confident in our team's ability to achieve that goal. Our team is fully dedicated to Consumer Engagement Solution Initiative project.

The project's success depends on the full and active participation of the MDCH, DTMB, and CNSI's designated staff members from the initial planning to final implementation.

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Statement of Work

Figure 1 shows the CNSI organization structure supporting the Consumer Engagement Solution Initiative project.

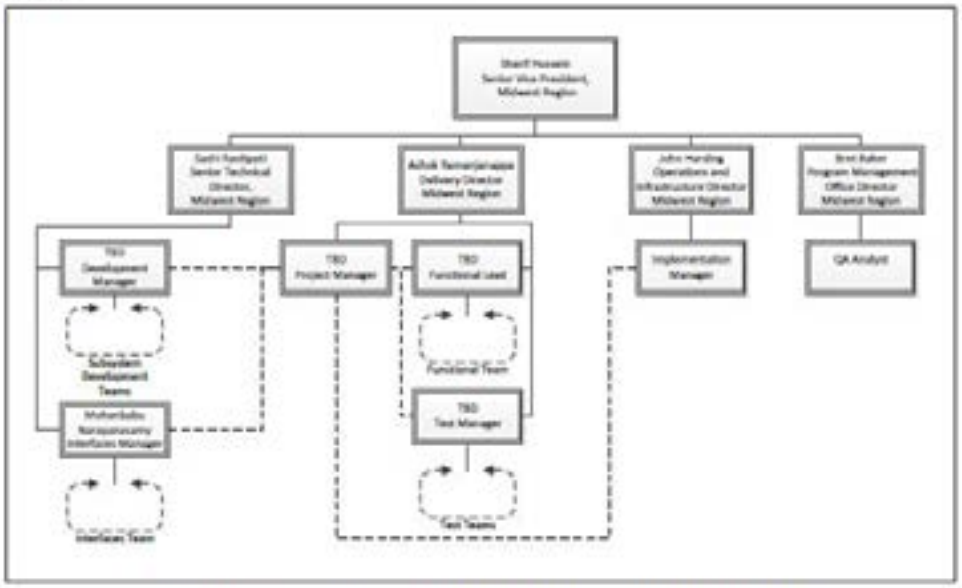

Figure 1. Consumer Engagement Solution Initiative Project Organization Chart

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Section 2: Project Management Methodology and Tools

This section presents CNSI's project management, technical approaches, methodology, tools, and staged work plan for accomplishing all tasks required for the Consumer Engagement Solution Initiative project. This section describes the scope of activities to be addressed throughout the project, from initiation to final implementation, and the techniques and methodologies the Consumer Engagement Solution Initiative project team will use.

2.1 Project Management Approach

Although all projects are unique, they share common components and processes. The generally accepted process groups defined by the Project Management Body of Knowledge (PMBOK), as incorporated into the CNSI project management process, are:

- **Initiating:** This process group defines the project objectives and grants authority to proceed. For CNSI, the initiating processes are largely incorporated into the proposal development process, during which required partners are identified. This statement of work acts as a project charter and preliminary scope statement.
- **Planning:** This process group refines the project objectives and scope and plans the tasks, activities, and steps necessary to meet the project's objectives. The planning processes start during proposal development and proceed following contract award while CNSI works with MDCH to establish and baseline the project management plan (PMP). The PMP is modified and updated as necessary over the course of the project and is the culmination of the planning processes for scope definition and management, time (scheduling), staffing (human resources), communications, and risk management.
- **Executing:** This process group puts the project's plans into motion. This is where the bulk of the work for the project is performed.
- **Monitoring and Controlling:** This process group measures the performance of the project's executing activities and reports these performance results to project managers and stakeholders. Output is used to refine, improve, or change project management (including plans and schedules) as necessary to meet the project's objectives.
- **Closing:** This process group documents the formal acceptance and approval of the project's product and brings all aspects of the project to a close.

CNSI is able to provide consistent project outcomes as a result of integrating its set of repeatable, Midwest iVision360 Delivery Framework practices, within the project management process groups above. Figure 2 shows how CNSI's project and quality management activities interact with other project activities.

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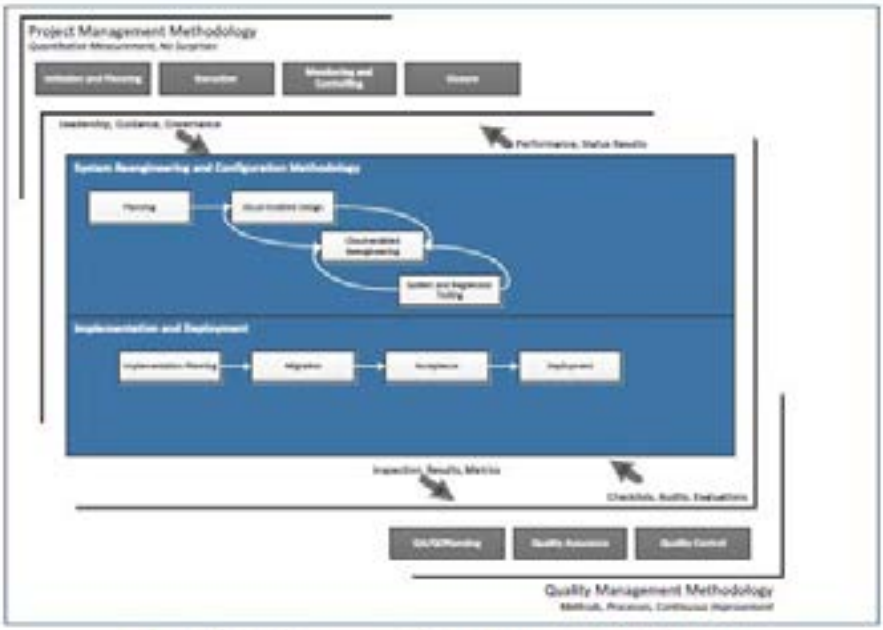

Figure 2. Project Management and Quality Management Activity Integration

CNSI is confident in its capability to apply this proven framework to successfully complete the Consumer Engagement Solution Initiative project. Applying the same framework repeatedly, project after project, ensures a number of advantages for all stakeholders:

- The project management philosophy is firmly entrenched within the entire project team, including CNSI, MDCH, and DTMB.
- Project management is supported as a core competency.
- The project staff is focused on successfully implementing the project.
- Project management, quality management, and cost management processes are fully integrated and their infrastructure is in place.
- Effective project status reporting is established based on project life cycle.
- Project and software development methodologies are well documented.
- Project staff is provided comprehensive training.
- Project information is communicated continuously to the right people at the right time.
- The project is continuously monitored against performance.
- Excellence in quality and delivery are built in.

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- Deliverable review and approval processes are in place.

2.2 Project Methodology

CNSI's integrated approach for this project will use its proven Midwest Region iVision360 framework for the organizing structure, combined with an experienced team of program and project managers, SMEs, technical experts, and change management resources, to support this effort.

Using industry-standard project management methods facilitates the integration of CNSI's extensive system experience with application implementations, methodologies, and delivery tools. While no two engagements are the same, the State expects CNSI to deliver in a consistent, systematic fashion. CNSI will achieve this objective by using the CMMI Maturity Level 3-appraised Midwest iVision360 delivery framework tailored for the Consumer Engagement Solution Initiative project as required. Using this framework will provide the structure for integrating CNSI's capabilities while allowing individual project teams the flexibility to adapt to meet the State's unique requirements and use client-mandated tools. Key benefits provided by the framework include:

- Provides a scalable, integrated collection of assets.
- Provides a consistent level of detail and presentation.
- Supports tailoring to scale, which provides a unique, but consistent, cost-effective delivery approach for the State.
- Uses established common work practices and expectations across project team members.

Investing time to create an effective plan with clear objectives is integral to successful project execution. CNSI's delivery framework provides a structured approach to the planning and execution. While this may appear to require more initial effort than desirable, experience has shown that following these processes reduces the likelihood of mistakes and results in lower risk and faster, more cost-effective delivery.

This standardized approach is a unique blend of the waterfall methodology and iterative, agile development. The advantages of this blend include:

- **User is at the Center:** CNSI's primary motivation for employing the Midwest iVision360 framework is to put the user at the center of the project lifecycle. Software projects succeed or fail largely from the software engineer's understanding of the customer's business rules, requirements, and needs. The more insight the developing organization has, the greater the quality and likelihood of success for the project. Successful projects have high interaction with end users and place the user at the center of the development life cycle. Every phase and task of Midwest iVision360 focuses on interaction and collaboration with the user community. CNSI does this by implementing agile techniques and building working software in an iterative fashion with user validation at periodic intervals.
- **Common Goals:** Users actively participate in requirements definition and design sessions with an integrated team of software engineers, analysts, and test engineers. This method avoids the pitfalls of waterfall development and test methods which leave, for example, test case refinement and execution until the completion of development. It also provides the team with a sense of

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purpose, a goal, and the drive to accomplish the end objective: software that meets the requirements.

- **Early and Often Testing:** Midwest iVision360 provides an opportunity to test early and often so formal system test phases and subsequent test phases are more likely to meet schedule expectations with a lower error-discovery rate.

The collaborative, and somewhat "free-form," nature of iterative, agile development is balanced with the structure and baseline management features of the waterfall stage methodology. By introducing the baseline management features of waterfall, CNSI minimizes the risk of scope creep that is sometimes associated with iterative development. Moreover, our project management processes provide integrated change, issue, and risk management processes. Table 1 describes the key benefits of each of the industry-standard models that are blended into the Midwest iVision360 framework.

Table 1. SDLC Model Comparison

SDLC Model	Key Benefits Blended into Midwest iVision360
Waterfall	Baseline approval of requirements Structured documents and customer approvals Formalized testing
Iterative/Agile	Frequent customer interaction Decomposing work into small meaningful features that are presented in working software Frequent course corrections Sense of real progress Early and frequent testing
Extreme Programming	Teams formed between developing organization and customer Sense of common vision and goal

The standard Midwest iVision360 delivery framework employs a seven-phased process to organize activities and tasks associated with identifying requirements, designing, developing, and testing software. These phases contain major work packages that must be accomplished to move systematically through the Midwest iVision360 project lifecycle. The phases roll up into three logical stages within this statement of work. The three-stage roll-up provides an easily understandable, top-down structure that facilitates grouping of activities with similar resource requirements and closely related deliverables. Figure 3 below shows the relationship between the three-stage roll-up and the seven phases of Midwest iVision360.

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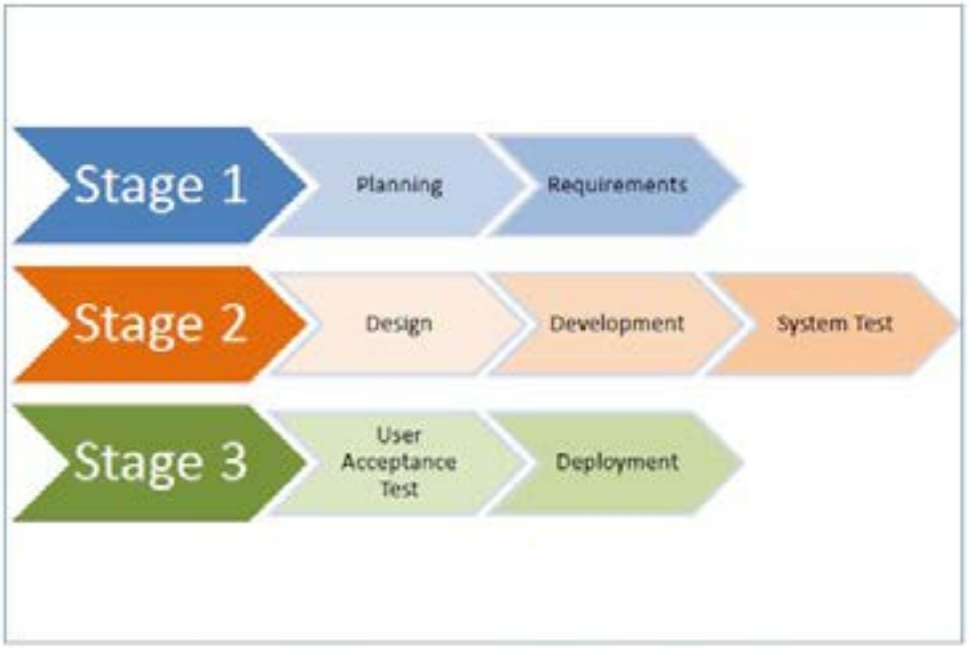

Figure 3. Midwest iVision360 Framework Stage and Phase Relationships

Based on the unique requirements of the Consumer Engagement Solution Initiative, CNSI will tailor its seven-phase Midwest iVision360 framework to the specific needs of this initiative. Major activities and deliverables proposed for each stage in this statement of work can be found in *Section 3: Solution Overview* below.

Independent from the project team, CNSI's Program Management Office will conduct internal audits of CNSI process compliance to ensure the team is executing CNSI's standard processes and to incorporate process-improvement findings during the lifecycle of the project.

2.3 Project Management Tools

Tools, when properly applied within the delivery framework, reduce the time to complete a project by providing predefined support processes, templates, documents, and training materials. More importantly, using appropriate tools reduces risk and increases efficiency.

CNSI will continue to use the tools already proven effective during the previous undertakings to reduce the time to complete the project and mitigate risk.

Table 2 depicts the tools CNSI will utilize on the project.

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Table 2. CNSI Project Tools

Tool	Purpose
Microsoft Office	Develop project deliverables as well as presentations and spreadsheet artifacts needed to support deliverables
Microsoft Project	Develop a detailed project schedule
Microsoft Visio	Develop use case diagrams, technical architecture diagrams, and support process flows
As-One	Repository for deliverables, presentations, and artifacts

While Microsoft Visio, Microsoft Office, and Microsoft Project are industry-standard tools, the following subsection provide additional information about As-One.

2.3.1 As-One

As-One provides a convenient, secure repository for all program data and will give the State oversight personnel direct visibility into project work products, event calendar, and overall performance. The features of As-One are summarized in Figure 4.

Figure 4. As-One Collaboration and Improvement

The As-One project repository will allow all members of the team to access relevant information and deliverables 24/7 using standard internet browsers such as Internet Explorer, Google Chrome, and Mozilla Firefox. MDCH and CNSI use As-One as their program management portal. Training will be provided for team members new to the program.

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Section 3: Solution Overview

This section summarizes CNSI's proposed Consumer Engagement Solution Initiative project, including functional and technical overviews, the proposed project timeline, and the project stages for meeting the objectives of the Consumer Engagement Solution Initiative project. Full business and technical requirements will be elicited and documented as a part of the first phase of the project.

CNSI's consumer engagement solution is composed of the following:

- **Member Portal: myHealthPortal**, a multi-layered online member portal application, providing real-time health information to Michigan Medicaid members.
- **Mobile Member Access: myHealthButton:** Standards-based mobile application to support mobile enablement of critical member services over mobile devices.
- **eFRM:** Standards-based, service-oriented integration of myHealthButton and myHealthPortal with eFRM to leverage fusion datasets comprising of members' administrative and clinical information.

3.1 Functional Overview

The overall goal of the Consumer Engagement Solution Initiative is to provide Medicaid members with the ability to view their information through the myHealthButton and myHealthPortal. Access to the consumer engagement solution will require members to go through a secure authentication process. Limited public access which will allow users the ability to use the "Provider Search" feature, the "Contact Us" feature; and view frequently asked questions (FAQs) without signing on to the application.

myHealthButton and myHealthPortal will enable beneficiaries to securely access personal health information and Medicaid benefits. CNSI's eFRM product will provide fusion of members' health information comprising of administrative and clinical information (To be referred as the 'Fusion dataset'). This fusion data set can be made available for providing timely health alerts and actionable insights to members and laying a foundation for advanced analytics for consumption by other stakeholders such as providers and State staff, in the long run.

Table 3 summarizes public access functionalities and Table 4 summarizes secured access functions of the myHealthPortal and myHealthButton applications. Table 5 summarizes the extended functions to be achieved through integration with myHealthPortal, myHealthButton and eFRM. Table 7 summarizes additional value added features that will be a part of the consumer engagement solution. Because of the size and complexity of this initiative, functionality will be rolled out over multiple releases.

Table 3: myHealthPortal – Public Access Functionalities

Functional Group	Feature Description
Registration	• Ability to register as a new user (member) by creating username and password.

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Functional Group	Feature Description
	• Ability to the registered users to add additional members to the account.
Log In	• Ability to login to the application with valid credentials (username / password) created during registration and access the secured area with Medicaid Member's data.
Provider Search	• Ability to view and search for providers with multiple criteria. • Ability to start an email and send details of the provider via email. • Ability to map driving directions and bus route to a provider from any location (location in the profile, current location or any other location).
System Messages	• Ability to display General system maintenance messages.

Table 4: Secured Access Portal Functionalities

Functional Group	Feature Description
Demographics	• Ability to view and access personal information maintained within MMIS and view the information of all members associated with the profile • Ability to be able to report/update incorrect demographic information by triggering a request to the appropriate system
Provider Search	• Ability to search for Providers based on multiple criteria. • Ability to record any appointments with a provider and send email alerts and view the appointment calendar at any time. • Ability to maintain a list of favorite providers to quickly access the provider information from the dashboard.
Insurances	• Ability to provide members with on-line view of the current Insurance details on file. • Ability to add, remove or change any other insurance coverage. • Ability to display payments made through the buy-in system for Medicare. • Ability to view and print health card image. • Ability to allow members to request a new card.
Eligibility and Benefits	• Ability to provide members with view only capability of current eligibility and benefit plan information. • Ability to the CSHCS users to fill out a form to submit for annual financial review.

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Functional Group	Feature Description
	• Ability to navigate to appropriate links based on benefit plans – Maximus portal, Michigan Enrolls Online portal
User Messages	• Ability to provide user specific messages within the restricted, secure areas of myHealthPortal and myHealthButton, such as the dashboard .It will be specific to the member or members of the account on view.
Claims	• Ability to provide members with on-line and real-time view of the pending and history claim data for services rendered by providers, in line with confidentiality and privacy regulations (EOB rules). • Ability to quickly search the member claims history information by date of service, claim number and provider name. • Ability to allow a user to alert improper billing.
Prior Authorization	• Ability to provide members with on-line and real-time view of the current and historical service authorizations data. • Ability to quickly search the member authorization history information by authorization request date, authorization number, service type, authorization tracking number and provider name.
Admin Console	• Ability to setup general system maintenance messages and user maintenance messages for a period.

Advance Directives	• Ability to establish and store advanced directives for health decisions.
	• Ability to allow members to use myHealthButton and myHealthPortal to connect to advanced directive repositories in Michigan including:
	  ○ Michigan Peace of Mind Registry (under development)
	  ○ MiWay Directory (under development)

Other Features	In addition to the features available in the unsecured site, members will have additional features listed below: • Ability to complete an online survey through the portal. • Ability to complete health risk assessment survey to track current health behaviors and health measures. • Ability to view member communications such as letters/calls through the portal. • Ability to provide useful tools, such as FAQ information related to the Medicaid program, and hover-over help for key required fields within the site. • Ability to the authorized user to provide consent for exchange of personal health

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Functional Group	Feature Description
	information (PHI) data. • Ability to be able to raise a complaint. • Ability to the users to "take a tour" of the portal. • Ability to support multilingual functionality - Spanish.
System Features	• The Member Portal application will conform to eMichigan guidelines – Americans with Disabilities Act (ADA). • Ability to track a user's activity in the application. • The MICAM application will support 30 minutes inactivity timeout for the "citizen" user type. • The MICAM application will support 15 minutes inactivity timeout for the "State worker" user type. • The logout functionality from the application will log the user out and return to the MICAM application subscription page. • The application will be cross-browser compatible with the following: ○ Microsoft IE 9.0 or above ○ Firefox 3.0 and above ○ Chrome 3.0 and above ○ Safari 4.x and above • The application will support a responsive layout on mobile/tablet browsers. • The application will support 500 concurrent users. The system will support 50000 users in the first year.

Table 5: myHealthPortal/myHealthButton and eFRM Integration Functionalities

Integration Requirement	Description
Member-Specific Clinical Information	• Ability to integrate myHealthPortal and myHealthButton with eFRM data store and display member specific clinical information such as: Problems, allergies, medications, immunization records, encounters, plans, lab results and procedures. • Ability to provide a summarized view of the clinical and administrative data of a member. • Ability to display 4 key healthy measures of Michigan 4x4 health and wellness plan.

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	member health statistics such as BMI
Member Specific Fusion Information	• Ability to integrate with eFRM fusion data which provides transformation and normalization of information utilizing health care industry standards HL7 and CCD and other data-exchange formats like XML. • Ability to provide a summarized view of Clinical and administrative data.
Integration & Deployment	• Implementation of technical components to integrate with eFRM.

Table 6. Other Value Added Features

Functional Group	Description
Intuitive Member Benefits display	• Ability to display a Member's benefits in a highly intuitive and user-friendly manner so that: o The Member has granular and readily actionable information regarding the services covered by his plan, and the level of coverage
Patient Content Capture	• Ability to capture Patient's consent for the release of his/her Electronic Medical Records
Pre-treatment OOP Cost Estimates	• Ability to calculate and display on myHealthPortal and myHealthButton, Pre-treatment Out of Pocket Cost Estimates for the Member, by taking into account: o Treatment Plan submitted by the Provider o Benefit Plan terms o Past Treatment Data

3.2 Technical Overview

The application will be built based on Industry standard usability principles in order to support a superior user experience to the members. Technically, the consumer engagement solution (myHealthButton and myHealthPortal) will follow the Model-View-Controller (MVC) multi-layered architecture. There will be a well-defined separation of architecture layers and a component-based development that will make it modular and scalable enabling easier maintainability and extensibility. **Error! Reference source not found.** provides the conceptual view of CNSI's consumer engagement solution. This figure shows logical layers and the required components of the consumer engagement solution, at a high level.

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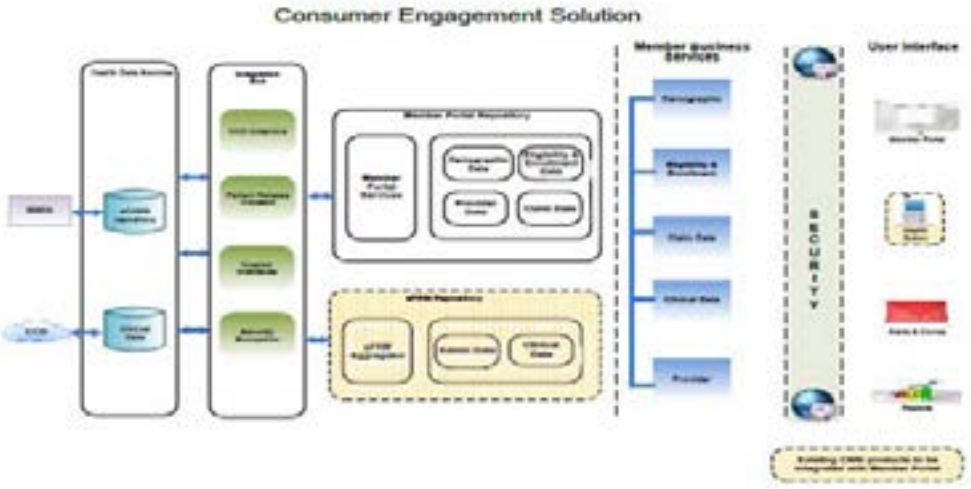

Figure 5. Consumer Engagement Solution Conceptual View

The following list summarizes the architecture layers of the proposed consumer engagement solution:

- **Health Data Sources** – This layer will provide Health Data from various channels. This includes member information available in CHAMPS, and clinical data from CCDs.
- **Integration Bus** – The integration bus is used for designing and implementing communication between mutually interacting software applications in a service-oriented architecture (SOA).
- **myHealthPortal and eFRM Repositories** – These are the repositories of data that is used and processed by consumer engagement solution.
- **Member Business Services** – All of the supported member business services are managed in this layer.
- **Security** – Authentication and Authorization rights of users will be managed in this layer.
- **User Interface Layer** – The different means of accessing the consumer engagement solution.

3.3 Solution Delivery Plan

In this section, CNSI presents the proposed timeline, technical approach, and staged delivery approach for the Consumer Engagement Solution Initiative project.

A detailed description of the activities and deliverables within each stage is presented in *Section 3.3.3 Staged Delivery Summary*.

CNSI structured this work plan to address the overall relationship and sequence of the work required to complete the project. It effectively uses the professional resources required to successfully complete the work and produce high-quality products in a cost-conscious manner.

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The following subsections further describe how CNSI intends to accomplish the goals of the work plan by employing its Midwest iVision360 framework in the proposed approach for the Consumer Engagement Solution Initiative project.

3.3.1 High-Level Timeline

CNSI has created a summary timeline and work plan for the Consumer Engagement Solution Initiative project. The timeline is shown in Figure 6 below. The timeline shows the approximate duration of each stage and phase of the work for the Consumer Engagement Solution Initiative project.

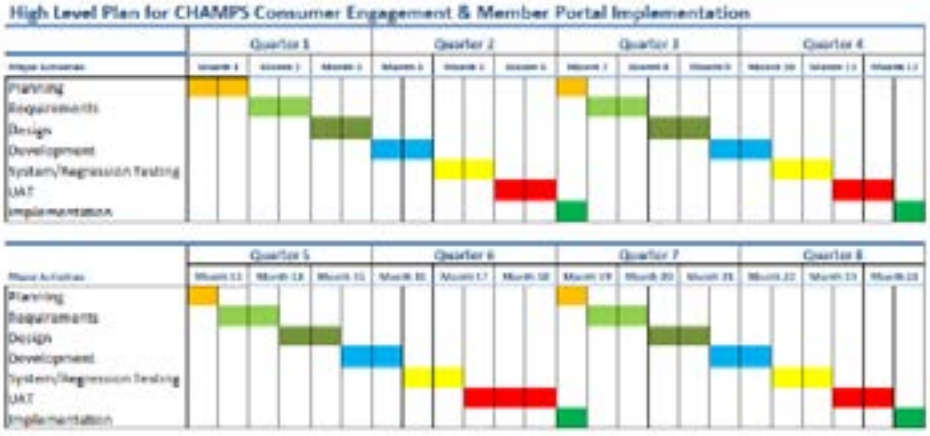

Figure 6. Initial Project Timeline

This timeline was developed based on the estimated effort of the work necessary to accomplish the proposed technical and functional solutions.

The proposed timeline was developed with the goal of optimizing the effective use of the professional resources required to accomplish these scope of work and produce high-quality products in a cost-conscious manner.

- CHAMPS changes for Consumer Engagement Solution Initiative requirements will be phased over multiple CHAMPS releases in 2015, as depicted in Table 3, Table 4 and Table 5 above in Section

3.1 Functional Overview above. The timeline provided in Figure 6 summarizes the standard timeframes for each release. CNSI plans to complete the implementation over multiple releases during 2015 and 2016.

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3.3.2 Midwest iVision360 Delivery Processes

In this section, CNSI provides an outline of its CMMI Level 3-assessed Midwest iVision360 Framework, which includes a full system development lifecycle (SDLC) model supporting the delivery of the technical solution. CNSI's SDLC processes have been adapted to address the specific needs of the Consumer Engagement Solution Initiative project. CNSI will produce deliverables for each phase of the project.

CNSI will engage in requirements analysis and design with the customer in order to begin iterative development. CNSI will provide an opportunity for the customer to review design documents prior to the start of system development activity.

Iterative, agile development under the Midwest iVision360 framework is visible in Stage II for the Consumer Engagement Solution Initiative project. During this stage, technical design specifications for new or impacted functions and user stories are constructed in parallel by the software engineers and SMEs. As the impacted function's design is completed, the team lead plans the iterations required to complete development.

Development work is planned based on a two-week iteration schedule. Software engineers build internal design documentation prior to, and during, the two-week iterations. The first day of each iteration is reserved for startup activities, including finalizing the iteration's internal design documentation. The software engineer meets with the Data Modeling team on the first day of the iteration and conducts a walkthrough of any required data model changes. The Data Modeling team makes the required changes to the database schema and approves the physical model for coding.

Development begins once the internal design and pre-development work is completed for the iteration. The software engineer writes internal iteration test scripts in parallel to actual working code and updates screens and other system functions to fit the physical mode. The software engineer executes the iteration test scripts as they complete sections of code. The software engineer builds the code, tests incrementally, and coordinates and communicates with the team through daily stand-up meetings regarding any issues holding up the development work.

Software engineers then test the code against the internal auto-unit code and manual internal iteration test scripts. As they reach the end of the iteration, they run the code against the functional scripts developed by the Test Team. Discrepancies are identified and corrected. The software engineer retests to ensure all discrepancies are corrected and closed before the iteration ends. The software engineer then conducts a peer review of the code of a given function on the last day of the iteration. The software engineer then updates the code based on the review. When software engineer iteration testing and software code reviews are successfully completed for the iteration, the code is then promoted to the integration test stream. The code is released to the Test Team for system testing when the coding and software engineer iteration testing is completed for all user stories for a given function.

During initial development iterations, the Test Team develops system test cases based on the current CHAMPS solution specifications. During system testing, the Test Team executes system test cases to validate system results against the current production functionality.

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For the Consumer Engagement Solution Initiative project, CNSI plans to engage the test and development teams early on to build the regression test suite for the critical functions. This will speed up testing and improve the overall quality of implementation. CNSI understands the importance and sensitivity of the Consumer Engagement Solution Initiative project and the need to ensure it aligns with the environment that is already in production. During system testing, regression tests will be performed to demonstrate that the solution continues to function as expected.

As soon as regression testing is completed for a function, CNSI will deliver the code to the UAT environment. CNSI plans to engage the customer as early as possible and well before the beginning of the planned UAT phase. This ensures that enough time is allowed for thorough UAT, which will also reduce the risk of schedule slippage for UAT completion. CNSI will deploy system- and regression-tested functions to the UAT environment as they are completed. The Consumer Engagement Solution Initiative will be implemented over a series of multiple releases. The activities described above are performed for each release.

As presented in the timeline (**Error! Reference source not found.**Figure 6 above), each release cycle will reserve a minimum of four weeks for UAT. Any delay in the completion of UAT will significantly impact the release implementation date. CNSI will work with MDCH to support all UAT activities.

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Figure 7 presents a graphical overview of the Midwest iVision360 framework processes applicable to the Consumer Engagement Solution Initiative project.

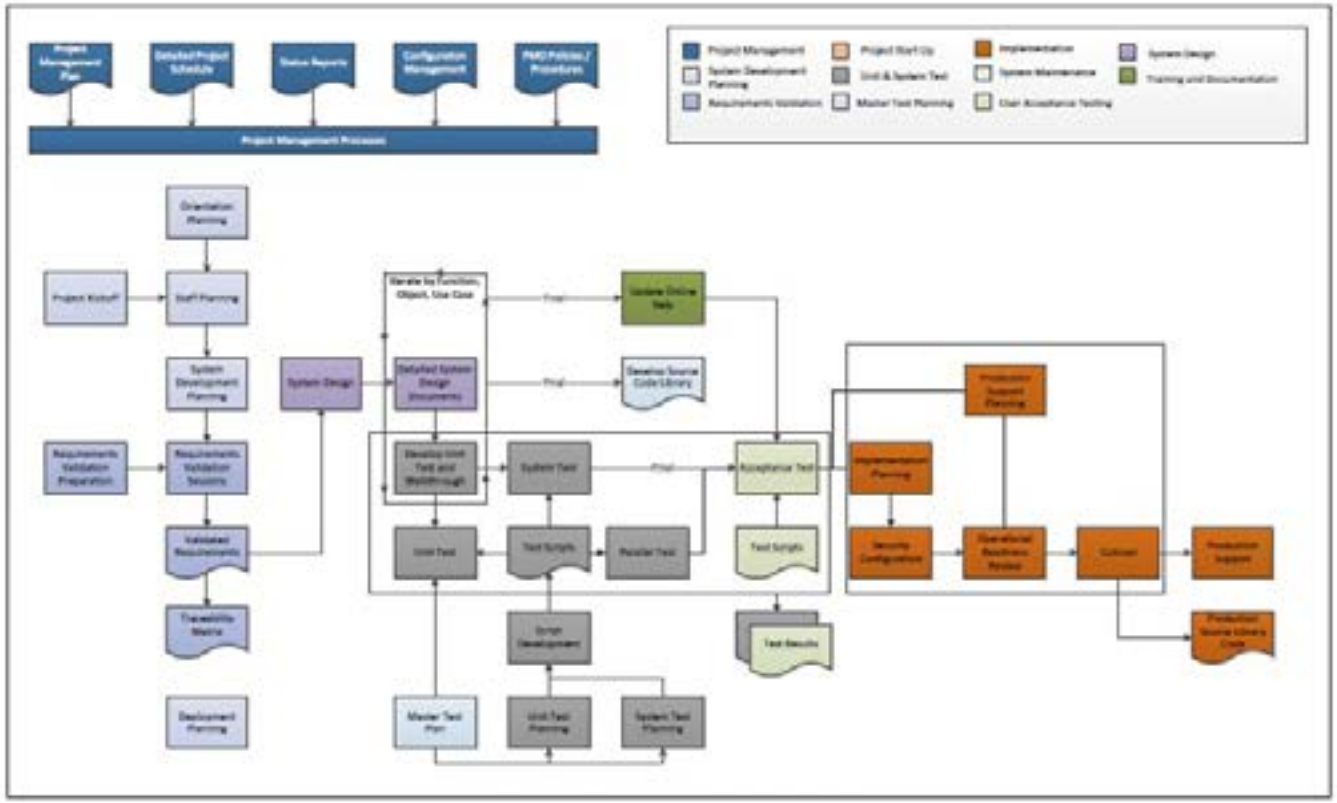

Figure 7. Midwest iVision360 Process Diagram

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3.3.3 Staged Delivery Summary

CNSI proposes a staged delivery of Consumer Engagement Solution Initiative which incorporates the seven phases of CNSI's CMMI Level 3-assessed Midwest iVision360 framework. This top-down approach provides an easily understandable grouping of activities with similar resource requirements and related groupings of deliverables along with three major milestones following each stage to facilitate monitor and control of the initiative.

Figure 8 below summarizes the staged delivery using the seven phases of Midwest iVision360.

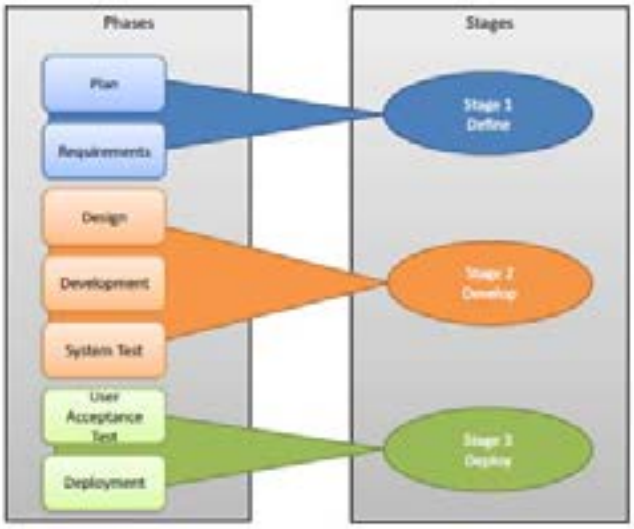

Figure 8. Midwest iVision360 Framework Phases and Stages

Figure 9 provides a high-level overview of the project stages with major activities and anticipated deliverables for each release. Note that the Project Initiation activity and the Project Management Plan and Project Schedule deliverables are performed or created once for the project. The remaining activities repeat for each release cycle.

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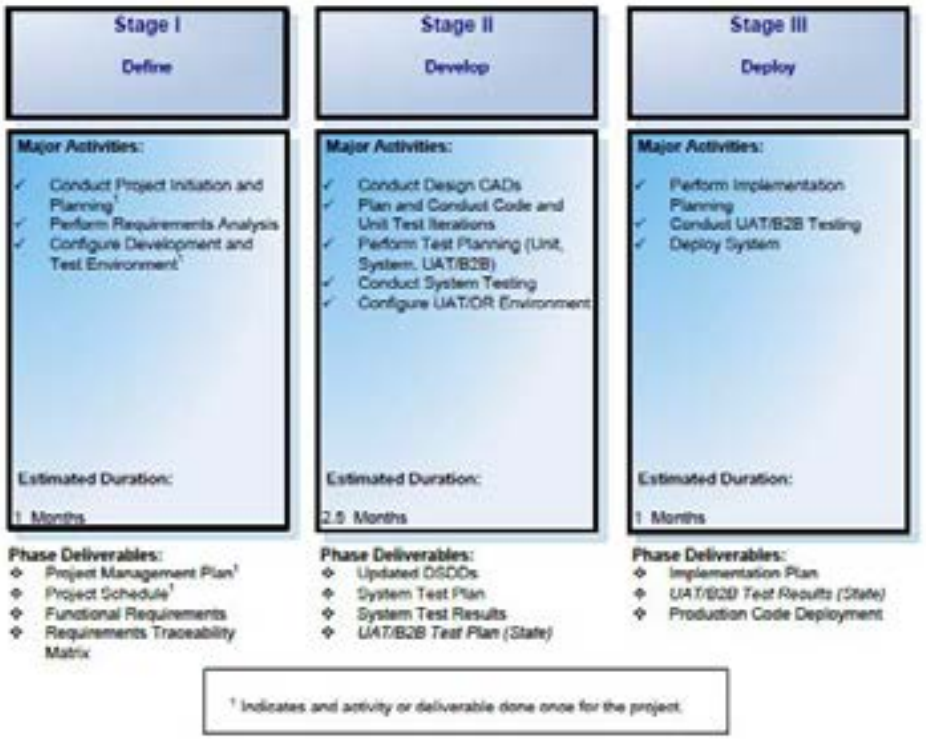

Figure 9. High-Level Project Stages and Activities

With every project, there are critical milestones to be met and work products and deliverables that must be developed and produced in order to provide the inputs necessary to perform the next activity. Table 7 elaborates on the activities of the proposed 24-month implementation plan, along with the expected deliverables. In Table 7, bold text in the deliverables sections indicate formal deliverables; italicized text indicates State acceptance tasks and deliverables.

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Table 7. High-Level Activities and Milestones by Stage

Major Activity	Description	Stage
Project Initiation	Establish the project team structure, key stakeholders, and operating guidelines for team activity throughout the course of the project.	Stage I
Project Planning	Develop PMP, schedule, and metrics.	Stage I
Requirements Analysis	Conduct collaborative application development (CAD) sessions to elicit and validate requirements for the Consumer Engagement Solution Initiative project.	Stage I
Stage I Deliverables • **Project Management Plan** • **Project Work Plan** • **Requirements Specification Document** • Initial Requirements Traceability		
Design Analysis	Conduct CAD sessions to document detailed system design changes for the Consumer Engagement Solution Initiative project.	Stage II
Test Planning	Conduct detailed test planning for each phase of testing.	Stage II
Software Development	Develop and unit test software required to support the detailed functional design including: • Screens • Functionality (driven by use cases) • Data Models • Reports • Interfaces	Stage II
System Testing	Internal CNSI testing of developed functionality at the component, subsystem, and system level.	Stage II
Stage II Deliverables • **As-Built DSDD** • **Test Plan** • **System Test Results**		
Implementation Planning	Coordinate production installation of the system changes.	Stage II

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Major Activity	Description	Stage
UAT Support	MDCH testing of all system changes using formal UAT test scripts.	Stage III
Production Deployment	CNSI and the State of Michigan deploy the modifications in the MDCH production CHAMPS environment.	Stage III
Stage III Deliverables • **Implementation Plan** • Operational Support Forecast Report • **Code Deployment to Production**		

3.3.3.1 Stage 1 – Initiation and Requirements

Activity 1: Project Initiation

During this activity, CNSI will collaborate with the State of Michigan to identify the key business and technical team members who will participate in the Consumer Engagement Solution Initiative project. CNSI will conduct the formal project kickoff and deliver orientation for the project effort. This activity is performed once for the project and will cover activity for all releases.

The major milestones associated with this activity are:

- Participating team members from the State of Michigan are identified.
- Project kickoff meeting is conducted and project kickoff is completed.

Activity 2 - Project Planning

During this activity, CNSI will develop the PMP. The PMP outlines the standards and procedures for risk, issue, and action item management; project governance plan to coordinate activities between the CNSI project team and the State of Michigan; communications plan; deliverable management plan; project work breakdown structure (WBS); and the baseline schedule. This activity is performed once for the project and will cover activity for all releases.

Milestones associated with this activity include:

- PMP is delivered.
- Project work plan is delivered.

Activity 3 – Requirements Analysis

The goals of the Consumer Engagement Solution Initiative project have been defined at a high-level within this statement of work. During this activity, CNSI will host CAD sessions to elicit and validate detailed functional and technical requirements. The CAD sessions will include the State of Michigan and CNSI functional and technical SMEs. CNSI will compare the validated requirements with current

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CHAMPS functionality and technical architecture to determine the impact of the new requirements across all CHAMPS subsystems, including system aspects such as:

- New and modified screens.
- Functionality (use cases).
- Data models.
- Reports.
- Interfaces.

This will result in a requirements specification document which provides a clear, concise, and final definition of each requirement. The approved requirements will be used during the design and development activities in Stage II.

The major milestones associated with this activity are:

- Functional requirements specification document is delivered.
- Approved requirements have been loaded into the requirements repository.

3.3.3.2 Stage II – Design, Coding, and System Testing

Activity 1 – Design Analysis

During this activity, CNSI will host CAD sessions to produce detailed design artifacts. Sessions will be organized and scheduled per requirements for the affected CHAMPS subsystem and the solution's technical architecture. CAD sessions will include State of Michigan and CNSI functional and technical SMEs. Using the existing CHAMPS design and the requirements specification document as a starting point, session participants will identify and document required design changes including system aspects such as:

- Screens.
- Functionality (use cases).
- Data models.
- Reports.
- Interfaces.

This will result in final, revised design artifacts, including use cases and data models, which will be the basis for the development of changes to system functions. CNSI will submit the completed design artifacts to the appropriate State of Michigan decision-maker shortly after the completion of a CAD session. The State of Michigan decision-maker will formally approve the design artifacts via signature on an approval form, similar to the existing CHAMPS enhancement approval process. This approval indicates that design is final and development can begin.

The major milestones associated with this activity are:

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- Delivery of the as-built DSDD.

Activity 2 – Test Planning

During this activity, CNSI collaborates with the State of Michigan to determine the required set of tests to be executed. CNSI prepares test scenarios and scripts for each phase of internal testing, including system testing and regression testing. The system test scenarios and scripts are prepared by the CNSI Test Lead. The State of Michigan prepares the UAT test plan and related test scenarios and script during this activity time frame.

Milestones associated with this activity include:

- System test plan is completed.
- System test scenarios and scripts are completed.
- *UAT preparation is completed (State).*

Activity 3 – Software Development

At the beginning of this activity, the development iteration plan is prepared. During this activity, CNSI codes the software changes required to support the updated detailed functional and technical design. Development is performed through a series of bi-weekly development iterations as previously described. Development includes the coding changes as defined in the as-built DSDDs for CHAMPS, including system aspects, such as:

- Screens.
- Functionality (use cases).
- Data models.
- Reports.
- Interfaces.

At the conclusion of each development iteration, the developed code is delivered to the CNSI Test Team. The major milestone associated with this activity is the completion of all development iterations.

Activity 4 – System Testing

During this activity, CNSI tests the developed functionality at the component, subsystem, and system levels in accordance with the test plan. Test results are compiled and at the conclusion of system testing, CNSI performs end-to-end (E2E) regression testing. At the conclusion of this activity, the test manager conducts a test readiness review meeting to ensure all entry criteria for the UAT phase are met.

Milestones associated with this activity include:

- System test results report is delivered.
- Code is deployed to UAT environment.
- UAT begins.

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3.3.3.3 Stage III – UAT and Production Deployment

Activity 1 – Implementation Planning

During this activity, CNSI collaborates with the State to coordinate the timing of the production installation of the system changes. The Consumer Engagement Solution Initiative project will be incorporated into the regular CHAMPS operational release implementation schedule. Implementation planning activities will focus on targeting the operational release that will include this initiative and integrating the new features into the release.

Milestones associated with this activity include:

- Identification of the operational releases where the software will be deployed.
- Development of the implementation plan.
- Preparation of the operational support forecast report.

Activity 2 –UAT Support

During this activity, CNSI provides support to MDCH staff who will conduct UAT using formal, State-developed test scripts. UAT testing will be aligned with the selected operational releases where the code will be deployed. Defects identified are monitored and corrected throughout UAT.

The major milestones associated with this activity include:

- *UAT test results report (State deliverable).*
- Final defect correction report.
- State approval to deploy the software.

Activity 3 – Production Deployment

During this activity, CNSI and the State of Michigan collaborate to execute the implementation plan. The finalized code will be merged into the selected regular operational release. CNSI deploys the release to the production environment where it is available for use by MDCH staff.

The major milestones associated with this activity include:

- Code is deployed to production.
- Production support begins.

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Section 4: General Assumptions and Constraints

CNSI has identified and provided the following general assumptions in regards to the Consumer Engagement Solution Initiative project:

1. MDCH and DTMB will provide access to, and time commitment from, subject matter experts who understand their programs and systems.
2. The solution only covers the design and implementation of the myHealthButton and myHealthPortal applications. It is assumed that through this project myHealthButton and myHealthPortal applications will only be integrated with CNSI's existing solutions and products, CHAMPS and eFRM.
3. The ability to realize the full functional capabilities of eFRM is contingent on the availability of clinical information in CCD format and other dependent datasets.
4. The State will plan and execute UAT pursuant to the approved Project Work Plan. Any delays will be evaluated through the project's change management process.

CNSI has identified the following constraints in regards to the Consumer Engagement Solution Initiative project:

1. This initiative will be implemented over multiple CHAMPS releases. Identification and approval of business requirements must be completed in coordination with the production release cutoff dates. Any delay in approval will result in the requirement being moved to the next available release.

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Section 5: Proposed Project Cost

This section of our proposal presents our fixed-price, overall labor cost for completing the Consumer Engagement Solution Initiative project. The cost was derived based on the expected effort required as presented in our initial work plan, composed of the three stages depicted in Figure 9. The total fixed-price labor cost for the Consumer Engagement Solution Initiative Project is $8,000,000.

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CNSI
CHAMPS Consumer Engagement Solution Initiative
Statement of Work

Section 5: Appendices

5.1 Appendix A: eFRM

Figure 10. eFRM Fact Sheet

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5.2 Appendix B: myHealthButton

Figure 11. myHealthButton Fact Sheet

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Form No. DTMB-3521 (Rev. 4/2012)
AUTHORITY: Act 431 of 1984
COMPLETION: Required
PENALTY: Contract change will not be executed unless form is filed

STATE OF MICHIGAN
DEPARTMENT OF TECHNOLOGY, MANAGEMENT AND BUDGET
PROCUREMENT
P.O. BOX 30026, LANSING, MI 48909
OR
530 W. ALLEGAN, LANSING, MI 48933

CHANGE NOTICE NO. 23
to
CONTRACT NO. 071B6200168
between
THE STATE OF MICHIGAN
and

NAME & ADDRESS OF CONTRACTOR:	PRIMARY CONTACT	EMAIL
Client Network Services, Inc. (CNSI) 2277Research BLVD Rockville, MD 20850	Tom Sofo	tom.sofo@cns-inc.com
	TELEPHONE	CONTRACTOR #, MAIL CODE
	(301) 634-4606	

STATE CONTACTS	AGENCY	NAME	PHONE	EMAIL
CONTRACT COMPLIANCE INSPECTOR:	DTMB	John Spitzley	(517) 335-6612	spitzleyj1@michigan.gov
BUYER:	DTMB	Steve Motz	(517) 241-3215	motzs@michigan.gov

CONTRACT SUMMARY:

DESCRIPTION: **Medicaid Services Administration**

INITIAL EFFECTIVE DATE	INITIAL EXPIRATION DATE	INITIAL OPTIONS INCLUDED	CURRENT EXPIRATION DATE
March 14, 2006	September 30, 2011	Two One-Year	September 30, 2018
PAYMENT TERMS	F.O.B	SHIPPED	SHIPPED FROM
N/A	N/A	N/A	N/A

ALTERNATE PAYMENT OPTIONS:
☐ P-card ☐ Direct Voucher (DV) ☐ Other

AVAILABLE TO MIDEAL PARTICIPANTS
☐ YES ☒ NO

MINIMUM DELIVERY REQUIREMENTS:
N/A

DESCRIPTION OF CHANGE NOTICE:

OPTION EXERCISED:	EFFECTIVE DATE OF CHANGE:	EXPIRATION DATE:
☒ NO ☐ YES		September 30, 2018

Effective immediately this contract is hereby INCREASED to provide funding for various Community Health Administrative Management Payment System (CHAMPS) initiatives not to exceed $13,239,679.00:

1. Member Portal - $700,000
2. Managed Care and CSCHS - $4,330,000
3. Cloud Enhancement - $4,500,000
4. Provider Site Visit - $750,000
5. ODS – Phase 2 - $543,012
6. DMP Enhancement - $1,250,000
7. Cost Settlement - $500,000
8. CHAMPS Enhancements - $866,667

Total Change Notice is $13,239,679.

All initiatives funded by this change notice require prior approval by the Michigan Department of Community Health, Medical Services Administration of a project proposal before they are authorized to proceed. Project

proposals will be added to the contract through subsequent change notices as they are approved.

Per Administrative Board Approval on March 10, 2015.

All other terms, conditions, pricing and specifications remain unchanged.

VALUE/COST OF CHANGE NOTICE:	$ 13,239,679.00
ESTIMATED AGGREGATE CONTRACT VALUE:	$ 418,607,783.00

CHANGE NOTICE NO.23 to CONTRACT NO. 071B6200168

FOR THE CONTRACTOR:	FOR THE STATE:
Client Network Services, Inc. (CNSI) Firm Name	Kim Stephen Signature
Tom Sofo Authorized Agent Signature	Kim Stephen, Director of the Bureau of Budget and Purchasing Name/Title
Tom Sofo Authorized Agent (Print or Type)	Michigan Department of Community Health Enter Name of Agency
September 16, 2015 Date	11/4/15 Date

Form No. DTMB-3521 (Rev. 4/2012)
AUTHORITY: Act 431 of 1984
COMPLETION: Required
PENALTY: Contract change will not be executed unless form is filed

STATE OF MICHIGAN
DEPARTMENT OF TECHNOLOGY, MANAGEMENT AND BUDGET
PROCUREMENT
P.O. BOX 30026, LANSING, MI 48909
OR
530 W. ALLEGAN, LANSING, MI 48933

CHANGE NOTICE NO. 22
to
CONTRACT NO. 071B6200168
between
THE STATE OF MICHIGAN
and

NAME & ADDRESS OF CONTRACTOR:	PRIMARY CONTACT	EMAIL
Client Network Services, Inc. (CNSI) 2277 Research BLVD Rockville, MD 20850	Tom Sofo	tom.sofo@cns-inc.com
	TELEPHONE	CONTRACTOR #, MAIL CODE
	(301) 634-4606	

STATE CONTACTS	AGENCY	NAME	PHONE	EMAIL
CONTRACT COMPLIANCE INSPECTOR:	DTMB	John Spitzley	(517) 335-6612	spitzleyj1@michigan.gov
BUYER:	DTMB	Steve Motz	(517) 241-3215	motzs@michigan.gov

CONTRACT SUMMARY:			
DESCRIPTION: **Medicaid Services Administration**			
INITIAL EFFECTIVE DATE	INITIAL EXPIRATION DATE	INITIAL OPTIONS INCLUDED	CURRENT EXPIRATION DATE
March 14, 2006	September 30, 2011	Two One-Year	September 30, 2018
PAYMENT TERMS	F.O.B	SHIPPED	SHIPPED FROM
N/A	N/A	N/A	N/A
ALTERNATE PAYMENT OPTIONS:			AVAILABLE TO MiDEAL PARTICIPANTS
☐ P-card ☐ Direct Voucher (DV) ☐ Other			☐ YES ☒ NO
MINIMUM DELIVERY REQUIREMENTS:			
N/A			

DESCRIPTION OF CHANGE NOTICE:		
OPTION EXERCISED: ☒ NO ☐ YES	EFFECTIVE DATE OF CHANGE: May 1, 2015	EXPIRATION DATE: September 30, 2018

The following Community Health Administrative Management Payment System (CHAMPS) initiatives have been approved by the Michigan Department of Community Health and their Statements of Work (SOW) are incorporated into this contract: 1) Health Kids Dental and CSHCS Eligibility Determination, 2) Health Michigan Plan Future Releases for 2015, 3) SIGMA Interface Project, and 4) Cloud Hardware – CHAMPS Cloud Enablement Initiative. The ICD 10 Go-live Extension is a date extension of the original project through 9/30/16 there is no change to the existing SOW.

All other terms, conditions, pricing and specifications remain unchanged.

Per Administrative Board Approval on March 10, 2015.

VALUE/COST OF CHANGE NOTICE:	$ 0.00
ESTIMATED AGGREGATE CONTRACT VALUE:	$ 405,368,104.00

Attachment 12.1

CHAMPS Cloud Enablement and Migration

Statement of Work

Prepared For:
State of Michigan
Department of Community Health
400 South Pine Street
Lansing, Michigan 48909

Prepared By:

CNSI
6465 Millennium Drive, Suite 150
Lansing, MI 48917

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Section 1: Introduction

The Michigan Department of Community Health (MDCH) is a recognized leader in advancing technology to support the business of Medicaid. Recent examples of MDCH's leadership include the implementation of the Community Health Automated Medicaid Processing System (CHAMPS), a state-of-the-art Medicaid management information system (MMIS) certified by the Centers for Medicare & Medicaid Services (CMS) and the Electronic Health Record (EHR) Medicaid Incentive Payment Program (eMIPP) system developed and implemented as the first of its kind in the nation.

This implementation supports a ground-breaking change in the way MMISs are developed, implemented, and delivered by establishing a solution that is able to operate as a multi-tenant cloud-enabled application. This directly supports MDCH agreement to provide services to the State of Illinois Healthcare and Family Services (HFS). Therefore, this statement of work addresses the foundational work necessary to systematically reengineer the CHAMPS solution.

The CHAMPS Cloud Enablement and Migration Project consists of strategically planning and executing this reengineering to create a state-of-the art cloud-enabled solution. This includes establishing the required infrastructure, designing and configuring the applications and interfaces in accordance with current functionality, migrating the data, and executing the final solution implementation.

Once completed, this multi-tenant implementation supports MDCH's ability to offer a MITA-aligned and CMS-certified MMIS to multiples states. This is expected to result in both cost savings and time savings. Unlike a over a standard stand-alone MMIS implemented through the conventional procurement process, implementing the fully operational and certified CHAMPS system is achievable sooner and with fewer resources. This reduces the overall cost and timeline for the implementation.. With the support of the CNSI's CMMI Maturity Level 3 appraised software development processes, this project is expected to require three years to implement with additional 9 months of stabilization and optimization.

1.1 Regulatory and Business Drivers for Change

Continuing its leadership in advancing technology to support Medicaid, MDCH has decided to establish the framework to support a cloud-enabled solution. This will position MDCH to offer its services to other state Medicaid programs. This approach will greatly reduce the time and cost of MMIS implementations and operations and positions the State to consider operating CHAMPS as a service for multiple states.

This solution fully embraces the Leverage Condition described in CMS's Enhanced Funding Requirements: Seven Conditions and Standards[2]. The leverage conditions described in this CMS document emphasize:

- **Multi-state efforts** that are developed with the participation and contribution of more than one state. In this case, the foundational solution is created that supports the agreement to provide services to other states in the future.

[2] (Centers for Medicare & Medicaid Services 2011)

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- **Availability for reuse** of components and solutions that can be reused by other states. In this case, the software application and business rules are components will be cloud enabled making them readily available for reuse.
- **Identification of open source, cloud-based, and commercial products** is proposed as a future state to be considered. This effort establishes a cloud-based CHAMPS solution that positions MDCH to move forward with subsequent implementation projects offering the solution to other states.
- **Customization** is noted as a consideration in the context of transfer solutions. MDCH is going far beyond the concept of a transfer solution. The CHAMPS cloud-enabled solution will enable configurable items wherever possible. Therefore, MDCH will be able to evaluate and minimize changes with a common platform.

1.2 CNSI Capabilities

In partnership with the State of Michigan, CNSI performed the initial implementation of CHAMPS beginning in 2005. Prior to that, CNSI system architects led the development of the electronic Claims Adjudication Management (eCAMS) solution that forms CHAMPS' core. CNSI implemented CHAMPS in 2009 and supported the State in achieving CMS certification of the MMIS in 2011. CNSI's has continued to work with the State to provide innovative, technically sophisticated software solutions to support the State's business needs and to remain compliant with all defined federal requirements. In addition, CNSI has worked collaboratively with the State of Michigan to implement innovative solutions to support the Medicaid program, including mobile platforms for consumer engagement and provider site visit verification, integration with federal systems for Medicaid incentive payments and Medicaid expansion, and effective. These efforts have resulted in rapid response to federal mandates including Health Insurance Portability and Accountability Act (HIPAA) 5010 electronic data interchange standard, the International Classification of Diseases Revision 10 (ICD-10), Affordable Care Act modifications, and CORE modifications. Through these and other efforts, CHAMPS has continued to maintain pace with the rapidly changing Medicaid environment and is complaint with all current federal regulations.

CNSI's approach to conducting this project is based on extensive knowledge of CHAMPS design, implementation, and operation since the system became operational. As system software engineers and integrators, CNSI aligns clients' business processes and information systems to allow them to access the right information at the right time, enabling the achievement of their desired business results and creating enterprise value. CNSI has extensive technological experience in the industry combined with flexible tools and methodologies to deliver quality results on time and within budget. CNSI completes jobs for clients by delivering on commitments with speed and purpose in accordance with the client's specifications and expectations.

For the CHAMPS Cloud Enablement and Migration Project, CNSI will use business, technical, and operational knowledge of the MDCH Medicaid program, CHAMPS system capabilities, and other state Medicaid programs to create the cloud-enabled solution that encompasses all CHAMPS functions from the current operational system. CNSI will apply business and functional knowledge to develop an effective cloud-based CHAMPS model, and the project will deliver a comprehensive solution for MDCH.

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CNSI brings an experienced team of Medicaid and CHAMPS subject matter experts (SMEs), technical and architectural experts, and project management expertise to support this endeavor in the method CNSI has used in previous collaborative efforts for MDCH. CNSI's experience working with MDCH has led to incorporating the following factors in developing this statement of work:

- **CNSI's capability to conduct complex analysis of Medicaid system requirements**

  CHAMPS is a multifunctional MMIS-certified information system compliant with all federal mandates that integrates all Medicaid activities into one complete system. As such, the existing CHAMPS application (designed, developed and implemented by CNSI) is the baseline from which the cloud-based solution will be created. CNSI is positioned to take advantage of the extensive knowledge accumulated during the CHAMPS implementation, HIPAA 5010 migration, ICD-10 assessment project, ICD-10 remediation project, and our MMIS implementations in other states, and strategically apply it to the CHAMPS Cloud Enablement and Migration Project.

- **CNSI's capability to identify and resolve major issues associated with CHAMPS**

  The prompt identification of major issues are an essential component to a project of this scope and are particularly important in the reengineering analysis work needed in a project of this nature. CNSI's extensive knowledge of MDCH's current application architecture, infrastructure, and operations will allow it to quickly identify major issues affecting implementation activity. By devoting careful attention to identifying and resolving issues, CNSI will ensure the successful implementation of the cloud-based CHAMPS solution.

- **CNSI's sensitivity to MDCH needs and constraints**

  CNSI is uniquely qualified to remain sensitive to the states' needs developing the CHAMPS cloud-based solution. Because of its multi-year history of collaboration with MDCH and understanding of CHAMPS, CNSI can provide business and technical expertise in presenting system capabilities in a cloud-based framework. CNSI understands that MDCH and DTMB staff members are involved in multiple implementation efforts in addition to their regular production workload. It is critical to the success of the project that state staff members are involved at the right time and in the right context.

- **CNSI's technical leadership to support MDCH's vision**

  CNSI has shown technical leadership from the beginning with the implementation of CHAMPS. Through CNSI's collaboration with the equally forward-thinking MDCH leadership, the partnership has achieved milestones that moved the Medicaid business to a modern state. The partnership continued to drive innovation through the implementation of eMIPP, HealthBeat, ClaimSure, Provider Site Visit Pro, Document Management Portal, TPL integration, Provider Credentialing Service, and myHealthButton. With the implementation of the cloud-enabled CHAMPS solution, MDCH, DTMB, and CNSI are positioned to repeat the success of these implementations and deploy the first cloud-enabled solution in the industry. This project is the next step in continuing to lead innovation in Medicaid and establishes the foundation necessary to offer the cloud-based solution to multiple states reaching an efficiency and effective unprecedented in MMIS implementation.

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- **CNSI's proven Capability Maturity Model Integration (CMMI) Level 3 Assessed project processes for software development**

  In April of 2014, CNSI's project processes for software development underwent an assessment by the CMMI institute. We were awarded CMMI Maturity Level 3 under the CMMI for Development model version 1.3. The appraisal reviewed all project management, software development, and implementation processes applicable to CMMI Maturity Level 3. CNSI will apply these processes to the CHAMPS Cloud Enablement and Migration Project.

1.3 Proposed Project Organization

CNSI believes that this statement of work represents the best possible combination of architecture, technology, support, and experience to complete this project. The proposed team members are each the best possible candidates of their respective disciplines. The underlying logic behind identifying each member of this group is that:

- They share the same philosophical approach for undertaking this project – **the customer comes first**.
- They understand the values that each member brings to successfully implement the project.
- They are committed to understanding and incorporating the State's requirements.
- They understand the necessary advanced technologies, business needs, and operational issues.
- They have the discipline necessary to employ CNSI's Capability Maturity Model Integration (CMMI) level 3 assessed processes to effectively implement the project.

CNSI's primary objective is the successful implementation and completion of the project. We are confident in our team's ability to achieve that goal. CNSI has assembled a team with the best combination of business, technical, operational, and project implementation experience, and expertise. Our team is fully dedicated to CHAMPS Cloud Enablement and Migration Project.

The project's success depends on the full and active participation of the MDCH, DTMB, and CNSI's designated staff members from the initial planning to final implementation.

Figure 49 shows the CNSI organization structure supporting the CHAMPS Cloud Enablement and Migration project.

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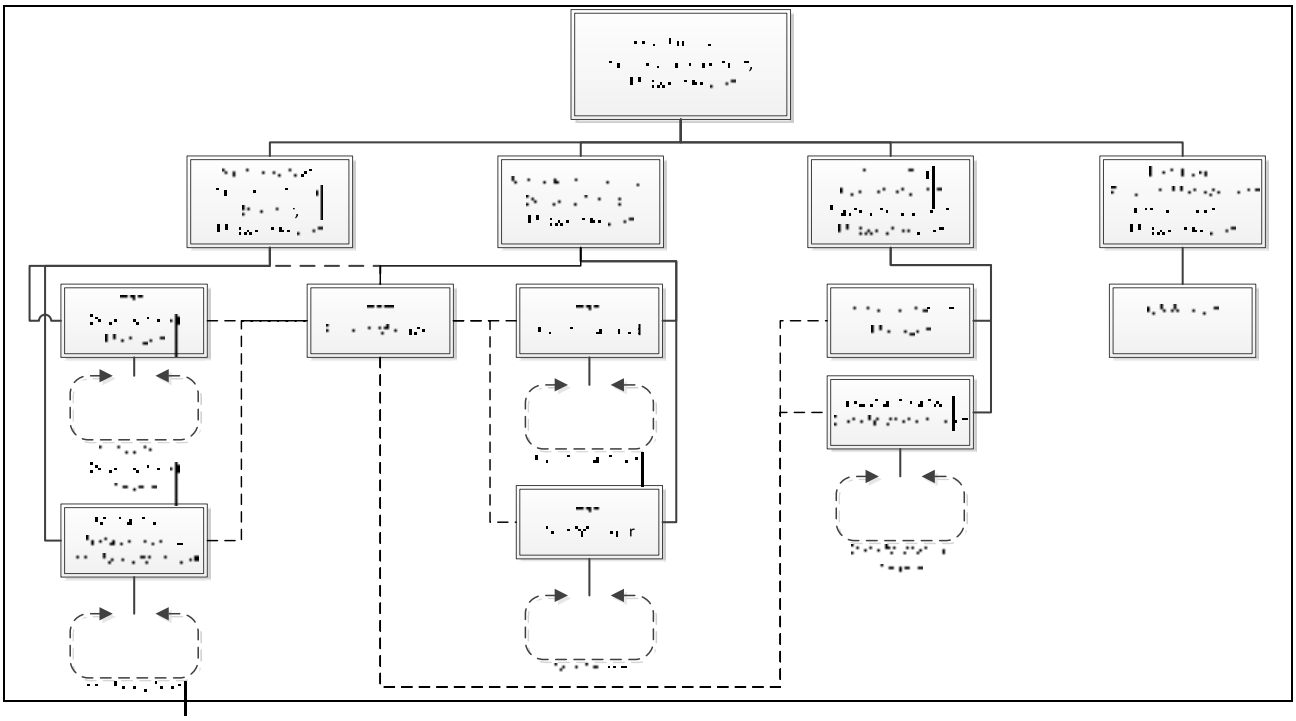

Figure 49. CNSI's Cloud Enablement and Migration Project Organization Chart

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Section 2: Project Management, Methodology, Tools, and Technical Approach

This section presents our project management and technical approaches, methodology, tools, and phased work plan for accomplishing all tasks required for the CHAMPS Cloud Enablement and Migration Project. This section describes the scope of activities to be addressed throughout the project, from the initiation phase to the final implementation, and the techniques and methodologies the CHAMPS Cloud Enablement and Migration Project Team will use. The goal of this section is to demonstrate that CNSI understands how to enable CHAMPS to operate as a multi-tenant cloud-enabled application and to establish the framework that may be leveraged to offer the solution to multiple states.

Each of the following subsections will contain a high-level description of the four phases we will use throughout the project. For each phase, the major activities and anticipated deliverables are presented. This is followed by a high-level description of the major milestones and approximate timelines.

2.1 Project Management Approach

The project's successful implementation relies on the framework and environment provided by project and quality management. **Figure 50** shows CNSI's project and quality management framework and how the related activities interact with other project tasks.

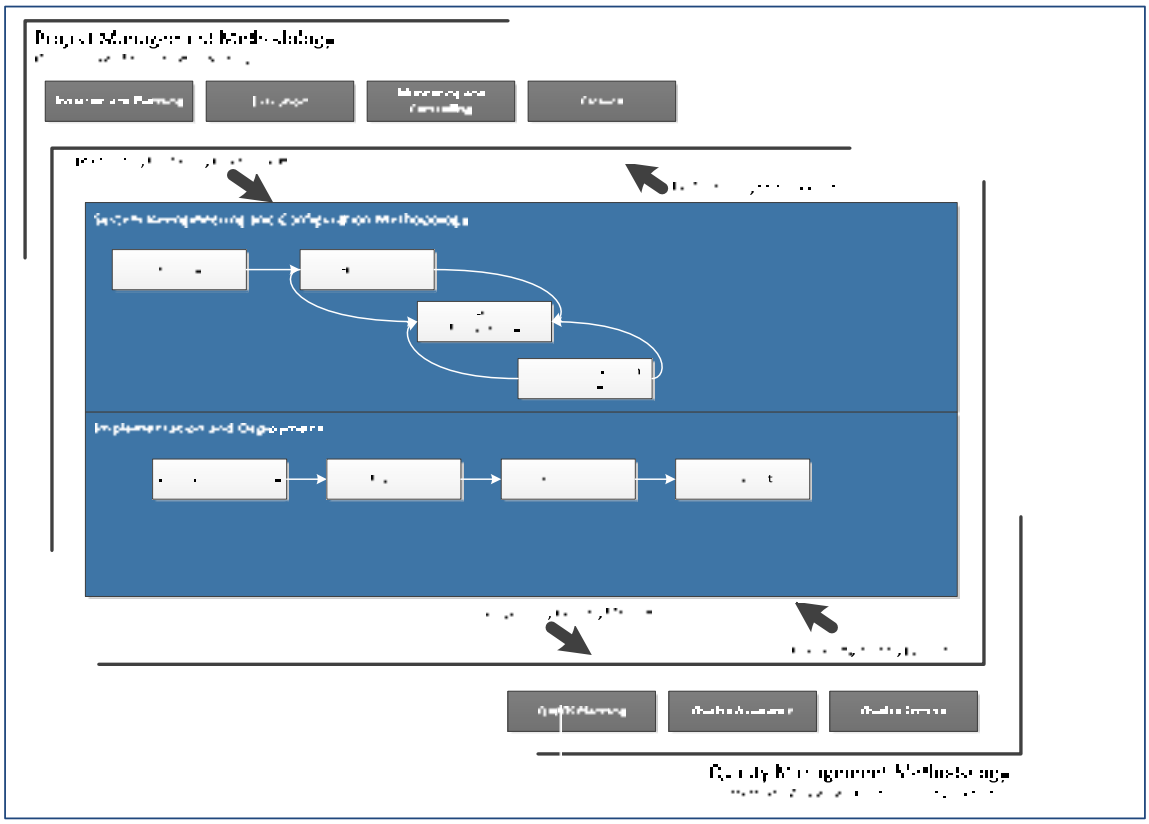

Figure 50. CNSI's Project Management and Quality Management Framework

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Although all projects are unique, they share common components and processes. The generally accepted process groups defined by the Project Management Body of Knowledge (PMBOK), as incorporated into the CNSI project management process, are:

- **Initiating:** This process group defines the project objectives and grants authority to proceed. For CNSI, the initiating processes are largely incorporated into the proposal development process, during which required partners are identified. The request for proposal (RFP) or Statement of Work acts as a project charter and the proposal itself is the preliminary scope statement.
- **Planning:** This process group refines the project objectives and scope and plans the tasks, activities, and steps necessary to meet the project's objectives. The planning processes start during proposal development and proceed following contract award while CNSI works with the MDCH establish and baseline the project management plan (PMP). The PMP is modified and updated as necessary over the course of the project and is the culmination of the planning processes for scope definition and management, time (scheduling), staffing (human resources), communications, and risk management.
- **Executing:** This process group puts the project's plans into motion. This is where the bulk of the work for the project is performed.
- **Monitoring and Controlling:** This process group measures the performance of the project's executing activities and reports these performance results to project managers and stakeholders. Output is used to refine, improve, and/or change project management (including plans and schedules) as necessary to meet the project's objectives.
- **Closing:** This process group documents the formal acceptance and approval of the project's product and brings all aspects of the project to a close.

CNSI is confident in its capability to skillfully apply its proven methodology and project framework to successfully complete the CHAMPS Cloud Enablement and Migration Project. CNSI continually improves its project management processes using lessons learned from previous projects and through the proficiency and continuous education of its program and project managers, senior technical and engineering staff, and senior and corporate management. This ensures a number of advantages:

- The project management philosophy is firmly entrenched within the entire project team, including CNSI, MDCH, and DTMB.
- Project management is a core competency.
- The project staff is focused on successfully implementing the project.
- Project management, quality management, and cost management processes are fully integrated and their infrastructure is in place.
- Effective project status reporting is established throughout the project life cycle.
- Project and software development methodologies are well documented.
- Project staff is provided comprehensive training.
- Project information is communicated continuously to the right people at the right time.

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- The project is continuously monitored against performance.
- Excellence in quality and delivery are built in.
- Deliverable review and approval processes are in place.

2.2 Project Methodology

CNSI's holistic approach for this project will use its proven methodology as the overarching framework and bring an experienced team of program managers, SMEs, technical experts, and change management resources to support this effort.

The project methodology is a framework that facilitates the integration of CNSI's extensive system experience, which is rooted in application implementations, methodologies, and delivery tools. This framework allows CNSI to deliver services to its clients consistently across its footprint and gather continued enhancements for its supporting methodology, thereby providing continued value for its clients.

In April 2014, CNSI's Health and Human Services organization unit was appraised at CMMI Maturity Level 3 for the processes applicable to software development projects. This project will employ the same integrated methodology that combines its best delivery assets. The methodology:

- Provides a scalable, integrated collection of assets.
- Provides a consistent level of detail and presentation.
- Supports tailoring to scale, which provides a unique, but consistent, cost-effective delivery approach for the State.

CNSI's methodology provides a consistent and flexible approach to address the following:

- The **Manage** work approach provides a single, consistent approach to managing CNSI's engagements. Within the Manage Approach is the Quality Management sub-work activity, which verifies that deliverables and processes meet requirements. The Quality Management activity also supports continuous process improvement for the State, as well as the methodology.
- The **Life Cycle** work approach addresses unique expertise while providing overall integration across the full CHAMPS Cloud Enablement and Migration Project life cycle.

CNSI's methodology has the flexibility to be adapted to meet the State's unique requirements while confirming that its experienced staff members follow its established practices. Independent from the project team, CNSI's Program Management Office will conduct internal audits of CNSI process compliance to ensure that the team is executing CNSI's standard processes and to incorporate process improvement findings even during the life-cycle of the project.

While no two engagements are the same, the State expects CNSI to deliver in a consistent, systematic approach. In undertaking this project, CNSI will employ its CMMI Maturity Level 3 appraised iVision360 system development life cycle (SDLC) methodology tailored for the CHAMPS Cloud Enablement and Migration Project. Coupled with iVision360, this approach provides the structure for integrating CNSI's capabilities while allowing individual project teams the flexibility to use client-

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mandated tools. The right assembly of technologies, techniques, and deliverable processes requires the specific experience and expertise found with CNSI's staff.

Investing time to create an effective plan with clear objectives is integral to effective project execution. CNSI's methodology provides a structured approach to the planning process. While this may appear to require more initial effort than desirable, experience has shown that following these processes reduces the likelihood of planning mistakes and results in lower risk and a more cost-effective and rapid delivery.

CNSI's methodology incorporates a consistent approach for identifying, tracking, and measuring the value derived from ongoing projects. CNSI's experience developing and delivering various client projects are incorporated into the project strategy and planning activities. CNSI's CMMI Maturity Level 3 appraised iVision360 system development life cycle (SDLC) methodology has been tailored for the CHAMPS Cloud Enablement and Migration Project. This standardized approach is a unique blend of the waterfall methodology and iterative agile development. CNSI's CMMI Maturity Level 3 appraised iVision360 system development life cycle (SDLC) methodology has been tailored for the CHAMPS Cloud Enablement and Migration Project. This standardized approach is a unique blend of the waterfall methodology and iterative agile development. This offers the following benefits:

- **User is at the Center:** CNSI's primary motivation in developing iVision360 is to put the user at the center of the project life cycle. Software projects succeed or fail largely from the software engineer's understanding of the customer's business rules, requirements, and needs. The more insight the developing organization has, the greater the quality and likelihood of success for the project. Successful projects have high interaction with end users and place the user at the center of the development life cycle. Every phase and task of iVision360 focuses on interaction and collaboration with the user community. CNSI does this by implementing agile techniques and building working software in an iterative fashion with user validation at periodic intervals.
- **Common Goals:** Users actively participate in design configuration sessions with an integrated team of software engineers, analysts, and test engineers. This method avoids the pitfalls of waterfall development and test methods which leave, for example, test case refinement and execution until the completion of development. It also provides the team with a sense of purpose, a goal, and the drive to accomplish the end objective: software that meets the requirements.
- **Early and Often Testing:** iVision360 provides an opportunity to test early and often so formal system test phases and subsequent test phases are more likely to meet schedule expectations with a lower error-discovery rate.

The collaborative, and somewhat "free-form," nature of iterative, agile development is balanced with the structure and baseline management features of the waterfall methodology. By introducing the baseline management features of waterfall, CNSI minimizes the risk of scope creep that is sometimes associated with iterative development. Moreover, implementing and integrating with our project management processes will provide integrated change, issue, and risk management processes. **Table 21** describes the key benefits of each of the industry-standard methodologies that are blended into iVision360.

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Table 21. SDLC Methodology Comparison

Methodology	Key Benefits Blended into iVision360
Waterfall	Baseline approval of requirements Structured documents and customer approvals Formalized testing
Iterative/Agile	Frequent customer interaction Decomposing work into small meaningful features that are presented in working software Frequent course corrections Sense of real progress Early and frequent testing
Extreme Programming	Teams formed between developing organization and customer Sense of common vision and goal

The iVision360 methodology uses a phased process to organize tasks associated with building, configuring, and testing software. These phases represent major bodies of work that must be accomplished to move systematically through the project life cycle. **Table 22** describes the phases of iVision360.

Table 22. iVision360 Phases and Artifacts

Supporting Task	Major Activities	Artifacts
Configuration Management	Support change management Perform configuration identification, control, and status reporting Provide baseline management	Configuration Management Plan Configuration Status Reports Release Notes
Data Model Support	Develop scripts to maintain standard data in the system's databases Develop scripts to maintain the data structure for the system's databases	Data Modification Scripts Schema Modification Scripts Logical and Physical Data Model Data Dictionary
System and Data Administration	Maintain servers and configuration Establish and maintain connectivity between sites Manage database configurations Lead performance improvement initiatives	Performance Testing Plan Performance Test Results System Configuration Information Database Configuration Information

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The customized version of iVision360 adapted for the purposed of this project is presented in Section 2.4.1.

2.3 Project Management Tools

Tools, when properly applied within the methodology framework, will reduce the time to complete a project by providing predefined processes, templates, documents, and training materials. More importantly, use of the appropriate tools will help reduce risk and increase efficiency.

CNSI will continue to use the tools already proven effective during the previous undertakings to reduce the time to complete the project and mitigate risk.

Table 23 depicts the tools CNSI will utilize on the project.

Table 23. CNSI Project Tools

Tool	Purpose
Microsoft Visio	Develop use case diagrams, technical architecture diagrams, and support process flows
Microsoft Office	Develop project deliverables as well as presentations and spreadsheet artifacts needed to support deliverables
As-One	Repository for deliverables, presentations, and artifacts
Microsoft Project	Develop a detailed project schedule

While Microsoft Visio, Microsoft Office, and Microsoft Project are industry-standard tools, the following subsections provide additional information about As-One and CNSI's requirements traceability method.

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2.3.1 As-One

Believing that continuous collaboration and information-sharing are key factors to successful project execution, CNSI will use As-One, its web-based enterprise program management solution. **Figure 51** illustrates how As-One is designed to support team collaboration, knowledge management, and process improvement. As-One will provide a convenient, secure, repository for all program data and will give the State oversight personnel direct visibility into project work products, event calendar, and overall performance.

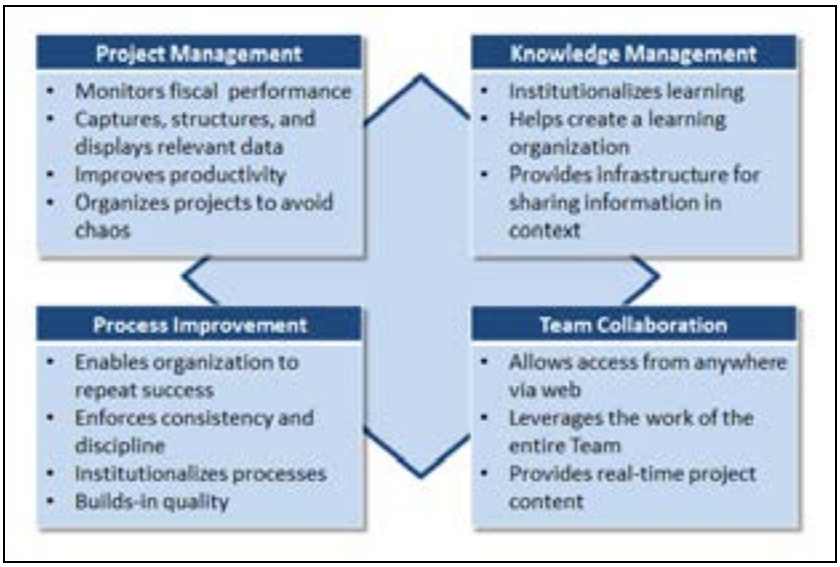

Figure 51. As-One Collaboration and Improvement

As-One is an "out-of-the-box" solution that supports CNSI's program management philosophy: experienced people, managed processes, and enabling technology.

As-One will allow the State's users to share real-time data specific to the user's authority. With As-One, permission to view or download documents can be controlled at the organization, team, and/or individual levels. As-One features collaborative calendaring , a comprehensive risk register, issue and action item management functions, iterative development planning and monitoring features, and project change control log. The As-One project repository will allow all members of the team to access relevant information and deliverables 24 X 7 using standard internet browsers such as Internet Explorer, Chrome, and Mozilla Firefox. MDCH and CNSI use As-One as their program management portal. Training will be provided for team members new to the program.

2.3.2 Requirements Traceability

CNSI will update the existing requirements traceability using its requirements traceability spreadsheet template with both use cases and test cases. The requirements traceability matrix will be loaded with the relevant Medicaid Information Technology Architecture (MITA) 3.0 business processes along with their mapping to CHAMPS use cases.

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2.4 Technical and Phased Approach Work Plan

CNSI has created an initial work plan and timeline for the CHAMPS Cloud Enablement and Migration Project. This work plan describes the expected activities for the proposed phases. This information is presented in **Figure 52** below. A detailed description of the activities within each phase is presented in

2.4.2 Phase Approach Work Plan.

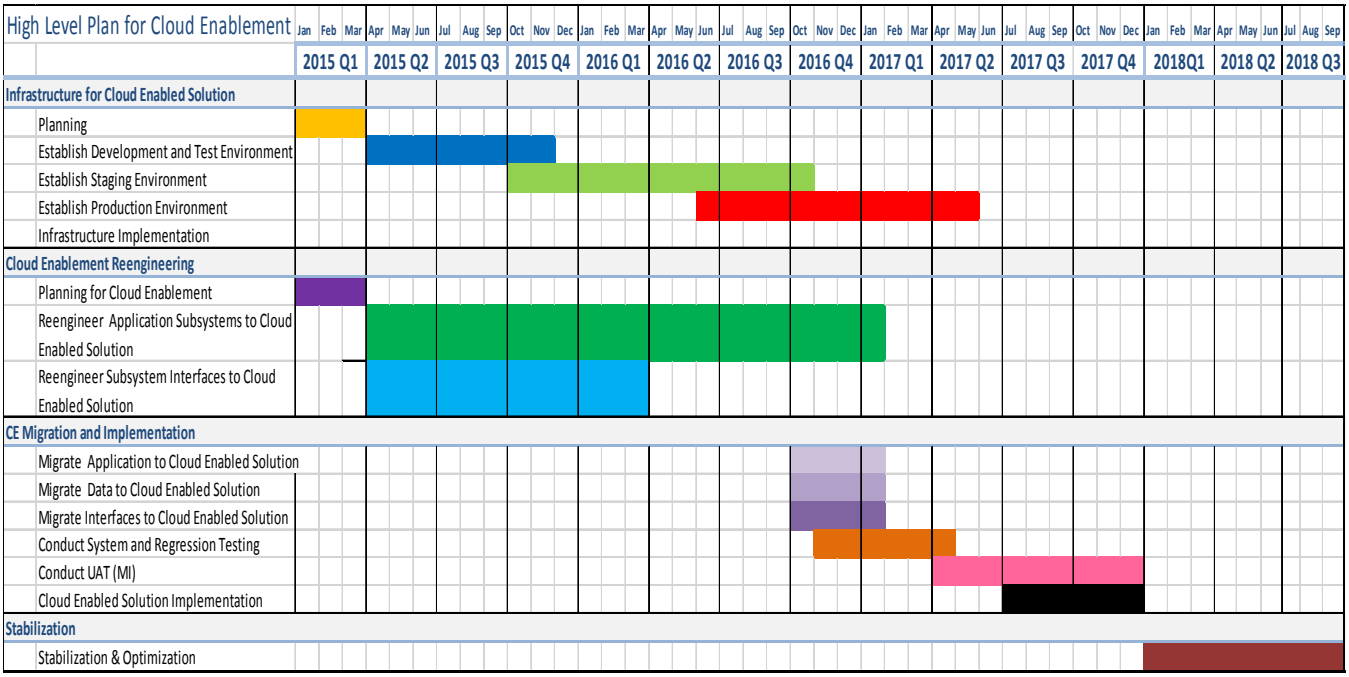

Figure 52. Initial Project Work Plan

CNSI structured this work plan to address the overall relationships of the numerous phases and activities required to complete the project. It effectively uses the professional resources required to accomplish these activities and produce high-quality products in a cost-conscious manner. To ensure effective use of project resources, request for enhancements to existing CHAMPS functionality will be managed through the project change control process where the impact on project scope, timeline and budget are determined. The effort for approved requests will be decremented from the 30,000 hours allocated to the Cloud Enablement and Migration Implementation.

Furthermore the scope of CHAMPS Cloud Enablement and Migration Project will include the implementation of functionalities described in the "*Impact Scope Decision Matrix _GAP 02_13_2014*", presented in Appendix A.

The CHAMPS Cloud Enablement and Migration Project will establish the foundation to support a multi-tenant MMIS solution based on the following key architecture principles:

- Resource Sharing: One code base will be deployed to support multiple tenants on a shared infrastructure platform.
- Scalability: The resources deployed as part of the project will have the ability to gracefully scale to the growing number of transactions and users.

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- Maintainability: The solution will be comprised of a single code base to support centralized management of enhancements and system corrections.
- Customization: The applications deployed will be flexible and accommodate tenant-specific configuration of business and data rules.
- Usability: The user interface will be configurable through tenant-specific customization allowing for different tenants to have unique branding.

2.4.1 iVision360 Iterative Configuration, Testing, and Documentation Approach

In this section, CNSI provides an outline of its CMMI level 3 assessed iVision360 SDLC. The SDLC is a full-featured methodology that includes standard design and development processes. For the CHAMPS Cloud Enablement and Migration Project, requirements validation, design and most development activities are not necessary. CNSI's SDLC processes have been adapted to address the specific needs of this Cloud Enablement and Migration effort. CNSI will produce deliverables for each phase of the project.

CNSI will engage in iterative analysis and design with the customer in order to begin iterative reengineering. CNSI will provide an opportunity for the customer to review design documents prior to the start of system-configuration activity. At the end of all iterations for a phase, an overall document will also be produced for final delivery and acceptance to the customer prior to the start of UAT.

The iterative/agile portion of the iVision360 methodology is visible in Phase II for the CHAMPS Cloud Enablement and Migration Project. During this phase, technical design specifications for impacted functions and user stories are constructed in parallel by the software engineers and SMEs. As the impacted function's design is being completed, the team-lead plans the iterations required to complete configuration.

The configuration work is planned based on a two-week iteration schedule. Software engineers build internal design documentation prior to, and during, the two-week iterations. The first day of each iteration is reserved for startup activities, including finalizing the iteration's internal design documentation. The software engineer meets with the Data Modeling Team on the first day of the iteration and conducts a walkthrough of any required data model changes. The Data Modeling Team makes the required changes to the database schema and approves the physical model for coding.

Configuration begins once the internal design and pre-configuration work is completed for the iteration. The software engineer writes internal iteration test scripts in parallel to actual working code and updates screens and other system functions to fit the physical mode. The software engineer executes the iteration test scripts as they complete sections of configuration or code. The software engineer builds the code, tests incrementally, and coordinates and communicates with the team through daily stand-up meetings regarding any issues holding up the configuration work.

This approach ensures that the software engineers are not working in silos. It avoids the traditional approach of throwing design documentation "over the fence" to software engineers to begin coding, only to later discover that major rework is required halfway through the configuration process.

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Software engineers then test the code against the internal auto-unit-code and manual internal iteration test scripts. As they reach the end of the iteration, they run the code against the functional scripts developed by the Test Team. Discrepancies are identified and corrected. The software engineer retests to ensure all discrepancies are corrected and closed before the iteration ends. The software engineer then conducts a peer review of the code of a given function on the last day of the iteration. The software engineer then updates the code based on the review. When software engineer iteration testing and software code reviews are successfully completed for the iteration, the code is then promoted to the integration test stream. The code is released to the Test Team for system testing when the coding and software engineer iteration testing is completed for all user stories for a given function.

During initial development iterations, the Test Team develops system test cases based on the current CHAMPS solution specifications. During system testing, the Test Team executes system test cases to validate system results against the current production functionality.

For the CHAMPS Cloud Enablement and Migration Project, CNSI plans to engage the test and development teams early on to build the regression test suite for the critical functions. This will speed up testing and improve the overall quality of implementation. CNSI understands the importance and sensitivity of the CHAMPS Cloud Enablement and Migration Project and the need to ensure it aligns with the environment that is already in production. During system testing, regression tests will be performed to demonstrate that the solution continues to function and meets the current specifications after the migration to the cloud-enabled solution.

As soon as regression testing is completed for a function, CNSI will deliver the code to the UAT environment. CNSI plans to engage the customer as early as possible and well before the beginning of the planned UAT phase. This ensures that enough time is allowed for thorough UAT, which will also reduce the risk of schedule slippage for UAT completion. CNSI will deploy system- and regression-tested functions to the UAT environment as they are completed.

As presented in our initial work plan and timeline (**Figure 52**), UAT will have a nine-month duration. Any delay in the completion of UAT will significantly impact the implementation date. CNSI will work with MDCH to support all UAT activities.

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Figure 53 presents a graphical overview of the iVision360 methodology processes applicable to the CHAMPS Cloud Enablement and Migration project.

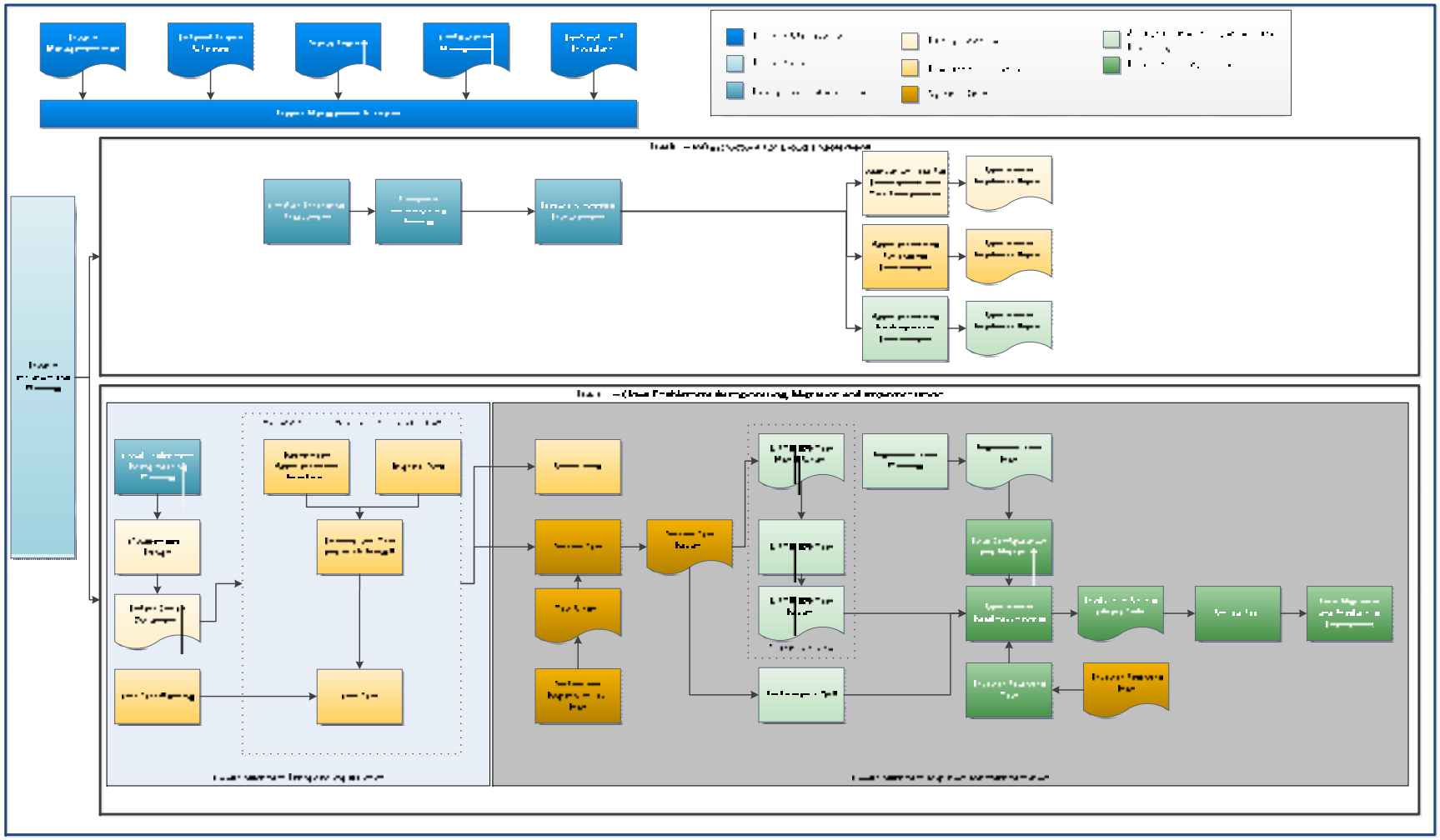

Figure 53. iVision360 Process Diagram

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2.4.2 Phase Approach Work Plan

CNSI proposes a four-phased approach to the implementation and rollout of the CHAMPS Cloud Enablement and Migration Implementation Project.

The four phases are as follows:

- **Phase I:** Planning and Analysis
- **Phase II:** System Reengineering and System Testing
- **Phase III:** User Acceptance Testing, Migration and Implementation
- **Phase IV:** Stabilization & Optimization

Figure 54 provides a high-level overview of the project phases with major activities and anticipated deliverables. Note that the overall timeline presented in **Figure 52** shows a 45-month total duration. The phases shown in **Figure 54** will overlap to accomplish the total work needed in the 45-month duration.

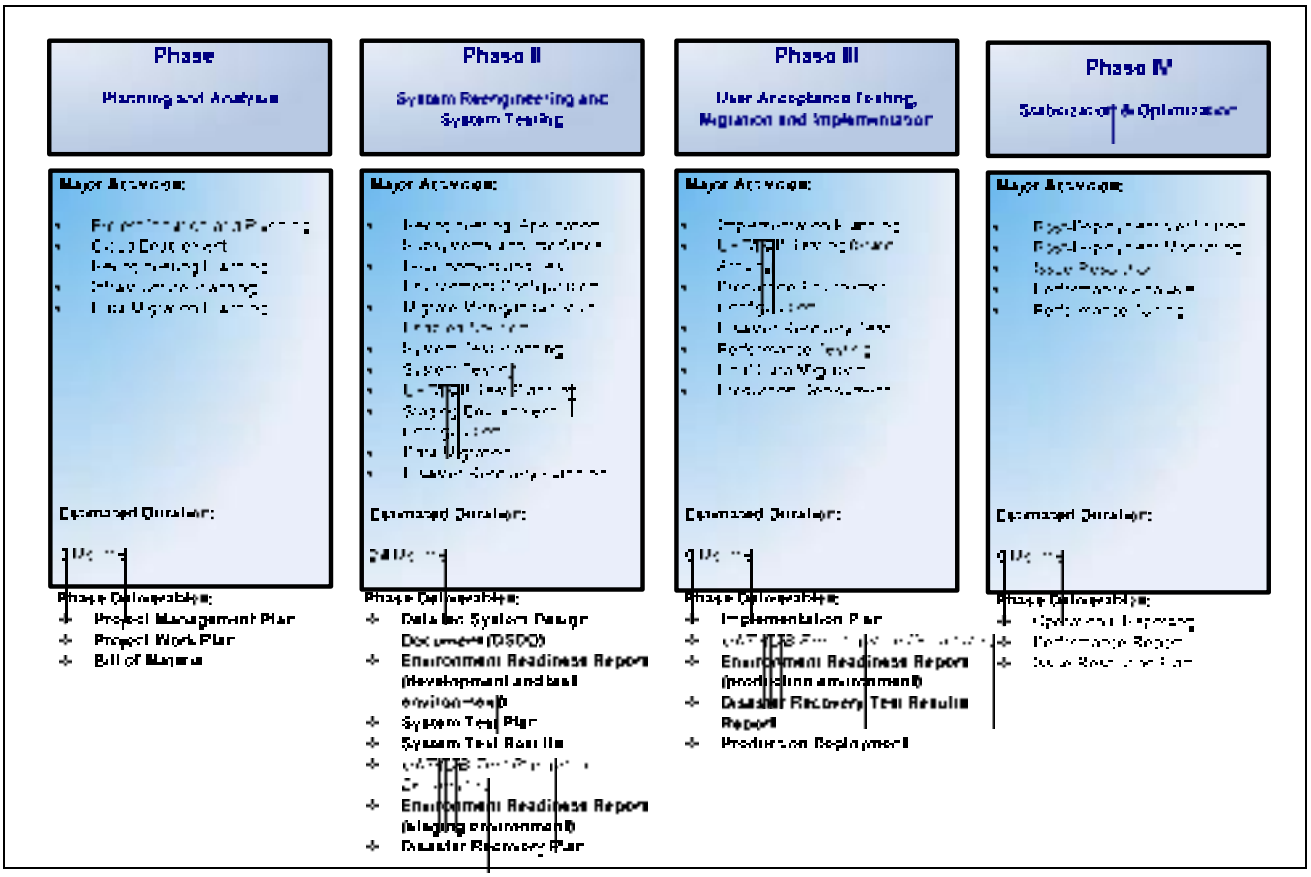

Figure 54. High-Level Project Phases and Activities

As presented in the initial work plan (**Figure 52**), the tight implementation schedule will result in an overlap between all the phases. This will allow configuration and testing activities to begin as early as possible.

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With every project, there are critical milestones to be met and work products and deliverables that must be developed and produced in order to provide the inputs necessary to perform the next activity. **Table 24** elaborates on the activities of the proposed 36-month implementation plan, 9-month Stabilization & Optimization, along with the expected deliverables. In Table 4, bold text in the deliverables sections indicate formal deliverables; italicized text indicates State acceptance tasks and deliverables.

Table 24. High-Level Activities and Milestones by Phase

Activities	Description	Phases
Project Initiation and Planning	This will establish the project team structure and communication processes with the different stakeholders. In addition, the Project Management Plan and Work Plans are developed.	Phase I
Cloud Enablement Reengineering Planning	CNSI reviews the existing design and identifies the technical components that will be configurable in the multi-tenant solution and plans for the necessary reengineering activities.	Phase I
Infrastructure Planning	CNSI will review the infrastructure requirements for the cloud-enabled solution and develop the bill of material to support execution of the enablement project.	Phase I
Phase I Deliverables: • **Project Management Plan** • **Project Work Plan** • **Bill of Material**		
Reengineering Application Subsystems and Interfaces	CNSI documents the design specifications for the configurable technical components of the multi-tenant solution and configures the application and interfaces to the cloud-enabled model. Once complete, the configured solution is delivered to the Test Team for System Testing.	Phase II
Development and Test Environment Configuration	CNSI works with DTMB to deploy and configure the infrastructure environments to support development and testing.	Phase II
Migrate Michigan to Cloud Enabled Solution	By subsystem and using an agile, iterative approach, migrate Michigan functionality to the cloud-enabled platform and conduct related peer reviews and unit testing concluding with release of the code for system testing.	Phase II
System Test Planning	Test plans and related test case and test data are created for the System Test phase.	Phase II
System Testing	CNSI will conduct System Testing. At the conclusion of the System Test phase, CNSI will prepare a complete report of test results.	Phase II
UAT/B2B Test Planning (State Activity)	*State staff review approved DSDDs and develop test plans, test cases, and test data to support UAT and B2B testing of the cloud-enabled system.*	Phase II

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Staging Environment Configuration	CNSI works with DTMB to deploy and configure the infrastructure for the staging environment.	Phase II
Data Migration	CNSI migrates existing databases to the cloud-enabled platform.	Phase II
Disaster Recovery Planning	CNSI will create the plan for disaster recovery of the could-enabled solution.	Phase II
Phase II Deliverables: • **Detailed System Design Document (DSDD)** • **Environment Readiness Report (Development and Test Environment)** • **System Test Plan** • **System Test Results** • ***UAT Test Plan (State deliverable)*** • **Environment Readiness Report (Staging Environment)** • **Disaster Recovery Plan**		
Implementation Planning	CSNI will develop the plan for deployment to production, which will include detail implementation checklists, the final implementation calendar, and related artifacts. This is a joint activity that includes input from DTMB and other State stakeholder.	Phase III
UAT/B2B Testing (State Activity)	*The State team will conduct UAT and B2B Testing. At the conclusion of the UAT/B2B phase, the State team will prepare a complete report of test results.*	*Phase III*
Production Environment Configuration	CNSI works with DTMB to deploy and configure the infrastructure for the production environment.	Phase III
Disaster Recovery Test	CNSI conducts disaster recovery test to verify documented process and procedures documented in the Disaster Recovery Plan and provide a detailed report of the test results.	Phase III
Performance Testing	CNSI conducts performance testing to verify compliance with existing performance metrics.	Phase III
Final Data Migration	CNSI performs final migration of data to production databases.	Phase III
Production Deployment	Implementation of the cloud-enabled solution with all current functions operational in production.	Phase III
Phase III Deliverables: • **Implementation Plan** • **UAT Test Results (State Deliverable)**		

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• **Environment Readiness Report (Production Environment)** • **Disaster Recovery Test Results Report** • **Production Environment** • **Production Deployment**		
Post-Deployment Verification	Perform a sanity check of all system functions after code deployment to ensure all features function as designed.	Phase IV
Post-Deployment Monitoring	Overall monitoring of CHAMPS system health and performance after code deployment.	Phase IV
Issue Resolution	Identification of and plan-of-action to resolve issues should they arise after code deployment.	Phase IV
Performance Analysis	Measure and analyze post-deployment performance of the CHAMPS system in comparison to pre-deployment system performance.	Phase IV
Performance Tuning	Adjust system queries, database tables, and interfaces as needed to improve system processing and throughput.	Phase IV
Phase IV Deliverables • **Operational Reporting** • **Performance Report** • **Issue Resolution Plan**		

Phase I – Planning and Analysis

Activity 1 – Project Initiation and Planning

Project Initiation focuses on the creation of the project plan by project management. The project plan defines the project's purpose and goals and sets the timeframe and timeline of when goals are expected to be met. Project planning activities will be coordinated with MDCH and DTMB.

During Project Planning, CNSI, MDCH, and DTMB, management will establish working relationships and identify the staff members required to support the initiative. Once the team members are identified, they will familiarize themselves with the project scope and objectives.

CNSI will prepare the project work plan and any customizations necessary for the project management plan, which will include standards and guidelines for the various teams to work with each other.

The Deliverables Management section of the project management plan will define all formal deliverables for the project along with the organizational units involved in preparing, reviewing, and approving the project deliverables.

Milestones associated with this activity include:

- Team members are identified and committed to the effort.

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- Project Management Plan is delivered.
- Project Work Plan is delivered.

Activity 2 – Cloud Enablement Reengineering Planning

During this activity, CNSI will start with reviewing the existing design of the system and identifying the technical components that be modified to support the multi-tenant cloud-enabled solution. Once this inventory is identified, CNSI will then identifying specific reengineering standards for each technical component and defining the configuration activities required to transition from the current technology to the final could-enabled solution. The plan will also address activities to migrate existing data.

The milestone for this activity is the creation of CNSI internal iteration plan that accounts for the required reengineering activities.

Activity 3 – Infrastructure Planning

Infrastructure Planning consists of CNSI working collaboratively with DTMB team members to confirm the infrastructure requirements for the cloud-enabled solution. CNSI will leverage the infrastructure analysis completed during the pre-project planning as the starting point for this effort, and upon the review and agreement of the requisite elements of the solution with DTMB, CNSI with the cooperation of DTMB will complete the architecture assessment and finalize the bill of material (BOM). The BOM will define the recommended hardware and software procurements for the project. Once approved, the BOM baseline is created for the project from which CNSI will procure hardware and DTMB will procure software licenses.

The milestones for this activity include:

- The Bill of Material is delivered.
- The enterprise assessment (EA) documentation is submitted.

Activity 4 – Data Migration Planning

Data migration is a critical activity for the CHAMOS Could Enablement Project. Data migration is the process of replicating the data from the CHAMPS legacy database to the new cloud-enabled environments. Conversion planning includes identifying the specific methods and procedures for cloning the database in the exiting databased and moving that to the new infrastructure.

The milestone for this activity is the creation of CNSI internal data migration checklist that accounts for the required migration activities.

Phase II – System Reengineering and System and Regression Testing

Activity 1 – Reengineer Application Subsystems and Interfaces

During this activity, CNSI will document the specific technical elements that will be configurable within the multi-tenant solution. This documentation will provide the foundation for working with future states because it will define those elements of the solution that will be flexible and revised to be tenant specific in branding and presentation. Once these configurable items are documented, CNSI will reengineer the

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applications and interfaces to support this multi-tenant model. In addition, CNSI will define and configure the necessary scripts to migrate the existing data to the could-enabled solution.

The milestone associated with this activity include is the delivery of the DSDD.

Activity 2 – Development and Test Environment Configuration

During this activity, CNSI and DTMB work together to configure the infrastructure resources allocated to the environments for development and test. These environments must be provisioned with sufficient hardware, related software licenses, capacity, and connectivity for State and CNSI staff. The new environments will need to be initialized with CHAMPS software, database schemas, and test data.

The milestones for this activity include:

- A fully provisioned and connected development and test environment.
- Operational Readiness Report (development and test environment).

Activity 3 – Migrate Michigan to Cloud Enabled Solution

During this activity, CNSI system engineers construct the cloud-enabled platform pursuant to the approved DSDD. To accomplish this, CNSI will leverage the existing technical toolsets and standards which include bi-weekly iterations for development, peer review and unit test activities. As development iterations are completed, the newly configured software is promoted to testing. Any anomalies revealed through the testing process are corrected and redeployed to the test environment for validation. The iterative development- test process is repeated until all existing Michigan functionality has been delivered to testing.

The milestone for this this activity is delivery of Michigan CHAMPS functionality into the cloud-enabled platform for System Testing.

Activity 4 – System Test Planning

During this activity, CNSI will collaborate with MDCH and DTMB to produce detailed test plans and schedules for each phase of testing, including unit, system, and UAT/B2B testing. CNSI will develop unit and system test cases and data to support system testing of the cloud-enabled solution.

Milestones for this activity include:

- System and Regression Test Plan is delivered.
- UAT/B2B Test Plan is completed (State activity).

Activity 5 – System Testing

CNSI will conduct system and regression testing during this activity. This involves executing the system and regression portions of the System and Regression Test Plan documented in Activity 2. In addition, CNSI will correct any anomalies uncovered during the execution of the testing, and recording the results. At the conclusion of the system and regression testing, CNSI will prepare a complete report of the test results.

The milestones for this activity are:

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- Delivery of the System Test Results Report.
- System tested software promoted to UAT/B2B test environment.

Activity 6 – UAT/B2B Test Planning

Planning for UAT and business to business (B2B) testing is the key state activity that positions MDCH to test the software deployed on the new infrastructure. The transition to the CHAMPS Cloud-enabled platform represents a major change. Fully exercising the system through user acceptance testing provides the State with confidence that the software is performing as described in the approved design.

The B2B plan is an extension of UAT into the State's business partner community. The B2B plan will define how the State plans to engage the business community for testing the cloud-enabled solution prior to deployment Rather than the detailed UAT plan which generally exercises all aspects of the new system, the B2B plan is more targeted to the functions the business community uses, such as different methods of claims submission and prior authorization submission and approval.

The major milestone for this activity is completion of the UAT and B2B Test Plans.

Activity 7 – Staging Environment Configuration

During this activity, CNSI and DTMB work together to configure the infrastructure resources allocated to the environments for the staging environment. This environment must be provisioned with sufficient hardware, related software licenses, capacity, and connectivity for State and CNSI staff. The new environment will need to be initialized with CHAMPS software, database schemas, and test data.

The milestones for this activity include:

- A fully provisioned and connected staging environment.
- Operational Readiness Report (staging environment).

Activity 8 – Data Migration

During this activity, CNSI data migration engineers will create a clone of the existing production database and configure the replication between the existing and the new databases. Once this is complete, the data migration engineers will incrementally sync the data between the existing and cloud-enabled databases. After each sync process is completed, a smoke test will be completed to verify the data. Any anomalies will be investigated and corrected.

The milestones for this activity are:

- Completion of clone production database snapshot.
- Configuration of replication on new infrastructure.
- Synced and verified data sets.

Activity 9 – Disaster Recovery Planning

During this activity, CNSI will collaborate with MDCH and DTMB to document the disaster and recovery processes and procedures to include with the Disaster Recovery Plan for the cloud-enabled

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CHAMPS environment and solution. This includes defining the activities necessary to fail over to the back-up location in the event to of a disaster declaration, including the data and application recovery timelines, contact and communication processes, and step by step recovery procedures. When complete, the Disaster Recovery Plan will be the baseline for the multi-tenant solution.

The milestone associated with this activity is the Disaster Recovery Plan is delivered.

Phase III – User Acceptance Testing and Implementation

Activity 1 – Implementation Planning

During this activity, CNSI, MDCH, and DTMB will plan for the implementation of the CHAMPS cloud-enabled solution. CNSI will conduct implementation planning meetings to ensure all necessary activities are captured and assigned. Through the meetings, an implementation calendar and checklist will be developed. The results of the planning meetings will be documented in the implementation plan, which will include the detailed checklist of activities necessary leading up to final deployment. .

Milestones associated with this activity include:

- Key participants for implementation planning are identified and assigned.
- Implementation planning and review meetings are completed.
- Implementation Plan is delivered (including the calendar and checklist).

Activity 2 – UAT/B2B Testing (State Activity)

CNSI recognizes that UAT and B2B testing is owned by the customer. However, it is an integral part of the system life cycle. Through UAT, MDCH will validate and verify that the CHAMPS cloud solution works as the same as the current system. During this activity, testing is conducted with migrated data. Successful completion of UAT and B2B testing is a critical component of the entrance criteria for the production deployment.

CNSI will support MDCH and DTMB in conducting formal UAT and B2B testing. CNSI's activities to support UAT testing include running back end interfaces, processing HIPAA transaction files, testing with interface partners and analyzing and correcting any defects reported. During this activity, data migration and interfaces will also be verified and validated. B2B testing with interface partners will be completed. Any anomalies uncovered in this activity will be corrected and the related conversion activity will be re-executed.

The milestone associated with this test is State acknowledgement of successful test completion. The State may optionally prepare and deliver a UAT results report to their management.

Activity 3 – Production Environment Configuration

During this activity, CNSI and DTMB work together to configure the infrastructure resources allocated to the environments for the production environment. This environment must be provisioned with sufficient hardware, related software licenses, capacity, and connectivity for State and CNSI staff. The new environment will need to be initialized with CHAMPS software, database schemas, and test data.

The milestones for this activity include:

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- A fully provisioned and connected production environment.
- Operational Readiness Report (production environment).

Activity 4 – Disaster Recovery Testing

During this activity MDCH, DTMB, and CNSI work together to execute the Disaster Recovery Plan delivered in **Activity 4 – Data Migration Planning**. The outcome and results of this test will be documented, and any system configuration anomalies are corrected.

The milestone for this activity is completion of the Disaster Recovery Test Results Report.

Activity 5 – Performance Testing

During this activity, CNSI test engineers will conduct performance testing in conjunction with UAT of the new CHAMPS cloud-enabled solution to ensure current performance metrics are maintained within the new environments. Any identified performance bottlenecks will be corrected and retested during this testing activity to ensure all performance service levels are achieved. At the conclusion of the performance testing, CNSI will prepare a complete report of the test results.

The milestone for this activity is completion of the Performance Testing.

Activity 6– Final Data Migration

During this activity, CNSI data migration engineers execute the data migration to the production environment. Once the database migration is complete, a smoke test is completed to verify the data sets.

The major milestone for this activity is fully-synced data sets in the production environment.

Activity 7 – Production Deployment

The production deployment will be conducted upon completion of the activities described in the Implementation Plan. The deployment will be a joint effort between CNSI and State resources and will be led by CNSI. This activity includes final preparation of the production environment, deployment of code packages and migration of data to the production environment.

Milestones associated with this activity include:

- Final migration of the application, data, and interfaces is completed.
- All pre-implementation tasks and events are completed.
- State approval to implement is received.
- The production installation is verified.
- The production installation is released to user community.

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Phase IV – Stabilization and Optimization

Activity 1 – Post-Deployment Verification

This activity involves verifying the correct installation and operation for all system components. During this activity, CNSI performs a sanity check of all system functions after code deployment, to ensure all features function as designed.

Purpose:

- Verify Screen Operation
- Verify Interfaces Operation
- Verify Database-to-Database (DB2DB) Jobs Operation
- Verify Data Warehouse Extract Operation
- Verify all Production Job Schedules:
  - Interface Schedules
  - DB2DB Job Schedules
  - Data Warehouse Extract Schedules

Activity 2 – Post-Deployment Monitoring

This activity involves monitoring the system in the months after the application upgrade has gone live.

Purpose:

- Monitor System Performance Metrics:
  - Application Screen Performance
  - Database Performance
  - Application Queues Performance
  - Interface Performance
  - DB2DB Job Performance
  - Data Warehouse Extract Performance
  - Reports Performance

Activity 3 – Issue Resolution

This activity involves evaluating issues reported in the 90-day period. Issues will be logged and processed according to the CHAMPS operations incident management, application support, change management, and release management processes. Issues that require system changes will be planned for software releases based on priority and will be assigned to CHAMPS operations releases in accordance with the approved schedule.

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Purpose:

- Incident Management:
  - OTRS Ticket Entry
  - OTRS Ticket Triage
  - OTRS Ticket Analysis
  - OTRS Ticket Disposition Determination (Defect, Enhancement, Request for Change (RFC), or Closure)
- Application Support:
  - Iterative Development
  - System Testing
  - RFC Creation and Testing
- Change Management:
  - CQ Entry
  - CQ Analysis
  - CQ Planning:
    - Change Log Estimation and Approval
    - Code Promotion
    - RFC Deployment
- Release Management:
  - Release Planning
  - Release Assignment
  - Release Deployment

Activity 4 – Performance Analysis

This activity is the process for analyzing the performance of CHAMPS after the **Error! Reference source not found.** changes have gone live. Various operational reports and monitoring tools will be used to assess the performance of the system and identify opportunities for improvement.

Purpose:

- Operational Reports:
  - Identify any processes performing below benchmarks.
- Monitoring Tools:
  - Identify any servers with metrics outside normal operating ranges.

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- Identify any slow running queries.
- Identify heavily used web pages.
- Identify heavily used transactions.

Activity 5 – Performance Tuning

After all processes, servers, and queries where performance issues are identified, the Application Support and Infrastructure Teams will construct a remediation plan. The remediation plan will identify the changes to be made, the timeline for the changes, and the deployment plan either through software release, RFC, or maintenance outage in the case of server changes.

Purpose:

- Application Support:
  - Perform process tuning in the development environment.
  - Plan software changes for software releases per the CHAMPS operations release schedule.
  - Tuning changes are released and deployed according to the CHAMPS operations change management and release management processes.
  - If the Application Support Team requires infrastructure changes, they will request the changes through the CHAMPS operations RFC process.
- Infrastructure Support: Perform server tuning in lower environments.

Deploy configuration changes to production during monthly planned maintenance outages. Emergency maintenance outages may be requested if performance issues are severe and business-impact is high. In that case, the emergency outage will be planned based on CHAMPS service-level agreements in order to minimize business impacts.

CNSI will support this effort with the following deliverables:

- Operational Reports
- Performance Reports
- Issue Resolution Plan

Section 3: General Assumptions

CNSI has identified and provided the following general assumptions in regards to the CHAMPS Cloud Enablement and Migration Implementation Project:

29. MDCH and DTMB will provide access to, and time commitment from, subject matter experts who understand their programs and systems.
30. DTMB will procure the software licenses required for the cloud-enabled solution pursuant to the approved BOM and Project Work Plan.

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31. Remediation of MICAM, SSO, FileNet and DEG is the responsibility of DTMB and will be completed pursuant to the approved Project Work Plan. Any delays will be evaluated through the project's change management process.
32. The CHAMPS cloud-enabled solution will be comprised of the CHAMPS subsystems and interfaces.
33. DTMB will complete the installation of the hardware and configure the firewall security settings pursuant to the approved Project Work Plan. Any delays will be evaluated through the project's change management process.
34. The State will plan and execute UAT pursuant to the approved Project Work Plan. Any delays will be evaluated through the project's change management process.

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Section 4: Proposed Project Cost

This section of our proposal presents our fixed price overall labor cost and hardware estimates for completing the CHAMPS Cloud Enablement and Migration Project. The cost was derived based on the expected effort required as presented in our initial work plan, composed of the four phases depicted in Figure 54. The total fixed price labor cost for the CHAMPS Cloud Enablement and Migration Project is $ 31,740,000.

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Appendix A: Impact Scope Decision Matrix

The *Impact Scope Decision Matrix _GAP 02_13_2014* is listed in the table below. This matrix describes the gaps MDCH has adopted as core CHAMPS functionality. These gaps will be implemented as a part of CHAMPS cloud enablement project.

GAP Title	GAP	Comments	Adds Value for Future States?	Potential Michigan Value	Approach/Assumptions/Constraints	Recommended Approach	Recommended Deployment Phase
Provider Expansion	Atypical providers need to have same functionality as providers with NPIs (e.g. enrollment process, claims)	Transportation and waiver providers 70% of their providers. It impacts all parts of the system not just PE.	Yes	Yes	PE enrollment process would need significant changes. Claims processing and PA impact is unknown unless the claim submission format and rules can be analyzed. Michigan may also be able to utilize these features.	Major enhancement which would need to be scoped and costed. Should mandate use of 5010 837 for claims with use of standard code sets.	Provide Enrollment for PE Changes Cloud Enablement for remaining changes
Champs Workflow	Automated workflow process that is fully integrated across CHAMPS and across business processes functionality	Two areas: Pre-Approval Hospitals and Pre-Approval Provider Enrollment	Yes	Yes	CHAMPS already has workflow in many places where it has been designed in. There is a potential for added workflow in the areas of PE and PA processing. Michigan PE team is co-located but Illinois PE enrollment is decentralized. Targeted workflow in certain areas may have benefits for both states and future states. We would not recommend a full blown workflow overhaul for CHAMPS.	Targeted enhancements for workflow to be identified as part of Fit Gap in PE and PA. We don't envision a fully configurable, rules-based workflow system.	Cloud Enablement

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HIPAA Transaction Authorization	Restrict Billing Agent access at the transaction type level per provider (e.g. billing agent "A" can only submit 837I for billing provider "X" and 837P for billing provider "Y".)		Yes	Yes	This capability exists in the data model. We believe this may be configurable.	Configurability would need to be determined as part of Fit Gap sessions in PE.	Cloud Enablement
Data Warehouse Extract	Additional CHAMPS data (e.g. prior approvals) needs to be sent to DW and all updates need to be daily (e.g. claims data)	Intending to use MI DW Model / possible extending the fields to DW	Yes	Yes	PA extract to DW already planned for Michigan. Extract schedules are configurable.	Changes to extract format beyond the Michigan DW extract format would be considered changes.	Cloud Enablement
Co-Pay Tracking	Federal requirement to track co-pays (e.g. office visits, prescriptions, hospitals) by individual and family (co-pay maximum)	IL System does not do this today. Patient Pay per Family	Yes	Yes	This does not currently exist as a requirement in Michigan	Major enhancement which would need to be scoped and costed	After Cloud Enablement
Suspending Claims	Suspend claims for providers under Administrative Action prior to adjudication until Administrative Action is resolved.	Stop Payment or Stop claims indicator at the provider level.	Yes	No	We recommend that claims should be loaded and adjudicated with rules for stopping the claim at the appropriate point.	We recommend that claims should be loaded and adjudicated with rules for stopping the claim at the	Cloud Enablement

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	Once resolved, claims will be rejected or released for adjudication.					appropriate point. This could be driven by a business status or indicator at the provider level. Our assumption is that loading and adjudication will still happen but the claim will not continue past adjudication until the claim is released.	
IL specific claims data on HIPAA transactions	Extract IL specific data submitted in 'notes' field on claims(e.g. transportation pick up time) and retain in discreet fields.	25 data fields approx.	No	No	Notes fields can be extracted for data warehouse. It is not recommended to use this for processing as there already fields in the transaction for processing.	Needs confirmation during fit/gap phase	Cloud Enablement
Pharmacy claims	Pharmacy claims need to be in CHAMPS for business processes (e.g. co-pays tracking, duplicate checking)	Does not happen in IL System today. Pharmacy Benefit Manager (software as a service)	Yes	No	New functionality which would have to be designed from the ground up. Scope is limited to processing and paying of NCPDP claims. Assuming PBM continues to responsible for eligibility verification. Rebates and utilization reporting would naturally become part of CHAMPS.	Major enhancement which would need to be scoped and costed	After Cloud Enablement

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Pharmacy claims	Pharmacy claims need to be part of the pending payment process being added to CHAMPS	CHAMPS Core system does not contain/process Pharmacy claims/data. MI Pharmacy and CHAMPS does not communicate today - Outside process with the use of the Data Warehouse.	Yes	No	New functionality which would have to be designed from the ground up. Scope is limited to processing and paying of NCPDP claims. Assuming PBM continues to responsible for eligibility verification. Rebates and utilization reporting would naturally become part of CHAMPS.	Major enhancement which would need to be scoped and costed	After Cloud Enablement
X12 Raw Data	Associate Transaction Control Number (TCN) with X12 raw data or expand on-line viewing in CHAMPS to six (6) months.	3 months for better performance - TCN not on x12 raw data	Yes	Yes	Raw data is available in CHAMPS for 3 months and after that in Filenet but is not currently searchable by TCN.	Recommend to add functionality to search by TCN	Cloud Enablement
DRG/Grouper Version	Utilize IL DRG/Grouper Version	IL APR DRG 30 Version - 3M Vendor. May be able to mitigate if both MI and IL are on the same DRG/Grouper.	Yes	Yes	MI could continue to use HSS and IL could use 3M Grouper. Some changes will be needed for screens, edit rules, and interfaces.	Recommend to add functionality to interface with 3M Grouper	Cloud Enablement

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Pre-payment external review	Route claims for pre-payment review by external entity and process response.	Stop Payment or Stop claims indicator at the provider level.	No	No	MI uses MPRO and ClaimsSure to accomplish this currently	Recommend IL to adopt similar processes as Michigan for pre-authorization and pre-payment improper billing check.	Cloud Enablement
Proprietary reason codes	Assign proprietary reason codes for edits and provide online access for providers to view		Yes	Yes	MI has a pending enhancement to communicate full edit descriptions to augment reason/remark codes. CORE operating rules are also enhancing the reason and remark codes.	Recommend analyzing and realigning reason and remark codes for both states in concert with CORE operating rules. This does not include changes to Paper RA	Cloud Enablement
Payment pending process	Payment pending process to allow control of sending the invoices for payment		No	No	New functionality to support a specific Illinois business process	Major enhancement which would need to be scoped and costed	Cloud Enablement
Prompt payment	System calculation and invoicing of prompt pay penalties per Illinois statutes		No	No	New functionality to support a specific Illinois business process	Major enhancement which would need to be scoped and costed	Cloud Enablement

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Daily payment schedules	Generate payment schedule on daily rather than weekly basis	Provide volumes - Providers, Beneficiary, claims etc.	Yes	No	We believe this can be accomplished through configuration of interface, db2db jobs, and OFIN jobs. We may need to look at performance constraints for running payments during business hours.	Needs confirmation during fit/gap phase	Cloud Enablement
SSO	Verify an individual's identity before establishing user access to the system	ntrust - IL MI Future enhancements - state enterprise solution	Yes	Yes	CHAMPS uses Michigan's SSO. Identify management features are in consideration for the SSO replacement system called MICAM (Projected to be available in 2015)	Implement this in CHAMPS if/when it becomes available in MICAMS	After Cloud Enablement
Claims Auditing Functionality	Prevent claims from being changed during audit	Prevent claims from being changed during audit - post payment	Yes	Yes	Need to add indicators and edit rules	Enhancement to be scoped during fit/gap phase	Cloud Enablement
Audit Tracking	Add indicators to claims to track audit information (e.g. audit date, audit entity)		Yes	Yes	Need to add indicators and edit rules	Enhancement to be scoped during fit/gap phase	Cloud Enablement

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CHAMPS – SIGMA Implementation
Statement of Work

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May 29, 2015

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Section 1: Introduction

The Michigan Department of Health & Human Services (MDHHS) is a recognized leader in advancing technology to support the business of Medicaid. Examples of MDHHS's leadership include the implementation of the Community Health Automated Medicaid Processing System (CHAMPS), a state-of-the-art Medicaid management information system (MMIS) certified by the Centers for Medicare & Medicaid Services (CMS) and the Electronic Health Record (EHR) Medicaid Incentive Payment Program (eMIPP) system developed and implemented as the first of its kind in the nation.

Michigan's Department of Treasury is upgrading the existing payment system, MAIN (Michigan Administrative Information Network) to SIGMA (Statewide Integrated Governmental Management Application). The SIGMA implementation is bringing the flexibility to support the automation of budgeting changes, revision of the existing structure of the State's chart of accounts (COA), and a more secure way to exchange data between CHAMPS and the treasury system.

In order to support the SIGMA implementation for Department of Treasury, the CHAMPS system must be modified and enhanced. This **CHAMPS – SIGMA Implementation** project statement of work addresses the foundational work necessary to incorporate the required changes into the CHAMPS solution.

Once completed, the solution will provide the following functions:

- Support revision of the account code structures to align with SIGMA.
- Implement improved security for all interface exchanges between CHAMPS and SIGMA.
- Allow the bulk upload of the account code rules.
- Support SIGMA Vendor IDs throughout CHAMPS.
- Support changes to/from all systems interfacing with CHAMPS that use the Vendor ID and account codes including the Bridges system, ASAP (Adult Services Authorized Payments system) and MiCARs (Michigan Cashiering and Receivable System).

With the support of the CNSI's CMMI Maturity Level 3 appraised software development processes, this project is expected to require 16 months to implement.

1.1 Regulatory and Business Drivers for Change

Continuing its leadership in advancing technology to support the treasury system, Department of Treasury has decided to upgrade the existing payment system to SIGMA. This necessitates modifying all the agency payment processing systems that are interfacing with the existing treasury payment system.

CHAMPS processes over $12 billion Medicaid payments every year and reconcile these payments with MAIN. The upgrade to the Treasury payment system will impact the CHAMPS system in the chart of account setup, account code rule setup, claims processing, managed care payment generation process, financial processing, interface processing and reports.

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1.2 CNSI Capabilities

In partnership with the State of Michigan, CNSI performed the initial implementation of CHAMPS beginning in 2005. CNSI deployed CHAMPS in 2009 and supported the State in achieving CMS certification of the MMIS in 2011. CNSI has continued to work with the State to provide innovative, technically sophisticated software solutions to support the State's business needs and to remain compliant with all defined federal requirements. In addition, CNSI has worked collaboratively with the State of Michigan to implement innovative solutions to support the Medicaid program, including mobile platforms for consumer engagement and provider site visit verification, integration with federal systems for Medicaid incentive payments and Medicaid expansion.

Similar to SIGMA, CNSI is also working in close collaboration with the State's enterprise ICD-10 remediation project. ICD-10 remediation has required coordination with other enterprise project participants to achieve the State's overall enterprise goals. CNSI has repeatedly demonstrated its ability to provide rapid response to the State's needs including the Health Insurance Portability and Accountability Act (HIPAA) 5010 electronic data interchange standard, the International Classification of Diseases Revision 10 (ICD-10), Affordable Care Act modifications, and CORE modifications. Through these and other efforts, CHAMPS has continued to maintain pace with the rapidly changing Medicaid environment and is complaint with all current federal regulations.

CNSI's approach to conducting this project is based on extensive knowledge of CHAMPS design, implementation, and operation since the system became operational. As system software engineers and integrators, CNSI aligns clients' business processes and information systems to allow them to access the right information at the right time, enabling the achievement of their desired business results and creating enterprise value. CNSI has extensive technological experience in the industry combined with flexible tools and methodologies to deliver quality results on time and within budget. CNSI completes jobs for clients by delivering on commitments with speed and purpose in accordance with the client's specifications and expectations.

For the **CHAMPS – SIGMA Implementation** project, CNSI will use business, technical, and operational knowledge of the MDHHS Medicaid program, CHAMPS system capabilities, and coordination with the State's current financial system to develop the changes required to support the remediation of CHAMPS to support SIGMA.

CNSI brings an experienced team of Medicaid and CHAMPS subject matter experts (SMEs), technical and architectural experts, and project management expertise to support this endeavor in the method CNSI has used in previous collaborative efforts for MDHHS. CNSI's experience working with MDHHS has led to incorporating the following factors in developing this statement of work:

- **CNSI's capability to conduct complex analysis of Medicaid system requirements**

  CHAMPS is a multifunctional MMIS-certified information system compliant with all federal and State mandates that integrates all Medicaid activities into one complete system. CNSI is positioned to take advantage of its extensive knowledge of CHAMPS and its interfaces with the State's treasury system accumulated during the CHAMPS implementation, HIPAA 5010

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migration, ICD-10 assessment project, ICD-10 remediation project, to strategically apply it to the **CHAMPS – SIGMA Implementation** project.

- **CNSI's capability to identify and resolve major issues associated with CHAMPS**

  The prompt identification of major issues are an essential component to a project of this scope and are particularly important in the reengineering analysis work needed in a project of this nature. CNSI's extensive knowledge of MDHHS's current application architecture, infrastructure, and operations will allow it to quickly identify major issues affecting implementation activity. By devoting careful attention to identifying and resolving issues, CNSI will ensure the successful implementation of the **CHAMPS – SIGMA Implementation** project.

- **CNSI's sensitivity to MDHHS needs and constraints**

  CNSI is uniquely qualified to remain sensitive to the States' needs during remediation of CHAMPS to support SIGMA. Because of its multi-year history of collaboration with MDHHS and understanding of CHAMPS, CNSI can provide business and technical expertise in remediating CHAMPS to synchronize with the SIGMA enterprise project. CNSI understands that MDHHS and DTMB staff members are involved in multiple implementation efforts in addition to their regular production workload. It is critical to the success of the project that state staff members are involved at the right time and in the right context.

- **CNSI's technical leadership to support MDHHS's vision**

  CNSI has shown technical leadership from the beginning with the implementation of CHAMPS. Through CNSI's collaboration with the equally forward-thinking MDHHS leadership, the partnership has achieved milestones that moved the Medicaid business to a modern state. The partnership continued to drive innovation through the implementation of eMIPP, HealthBeat, ClaimSure, Provider Site Visit Pro, Document Management Portal, TPL integration, Provider Credentialing Service, and myHealthButton. CNSI is positioned to repeat the success of these implementations and support the State in achieving the goals of its enterprise SIGMA project.

- **CNSI's proven Capability Maturity Model Integration (CMMI) Level 3-appraised project processes for software development**

  In April of 2014, CNSI's Health and Human Services Organization Unit was appraised at Maturity Level 3 under Version 1.3 of the CMMI Development Model. The appraisal process for the organization unit included assessment of a project from the Midwest Region in order to reach this milestone. For this initiative, the CNSI Midwest Region will continue to use CMMI-appraised processes to deliver the solution described in this statement of work.

1.3 Proposed Project Organization

CNSI believes this statement of work represents the best possible combination of architecture, technology, support, and experience to complete this project. The proposed team members are each

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highly qualified within their respective disciplines. The underlying values held by each member of this team include:

- They share the same belief when undertaking a project—**the customer comes first**.
- They value the contribution that each member brings to successfully implement the project.
- They are committed to understanding and incorporating the State's requirements.
- They have a collective understanding of the advanced technologies, business needs, and operational issues necessary to execute the project successfully.
- They possess the knowledge and skills necessary to employ CNSI's Capability Maturity Model Integration (CMMI) Level 3-appraised processes to effectively implement the project.

CNSI's primary objective is the successful implementation and completion of the project. We are confident in our team's ability to achieve that goal. Our team is fully dedicated to the **CHAMPS – SIGMA Implementation** project.

The project's success depends on the full and active participation of the MDHHS, DTMB, and CNSI's designated staff members from the initial planning to final implementation.

Figure 49 shows the CNSI organization structure supporting the **CHAMPS – SIGMA Implementation** project.

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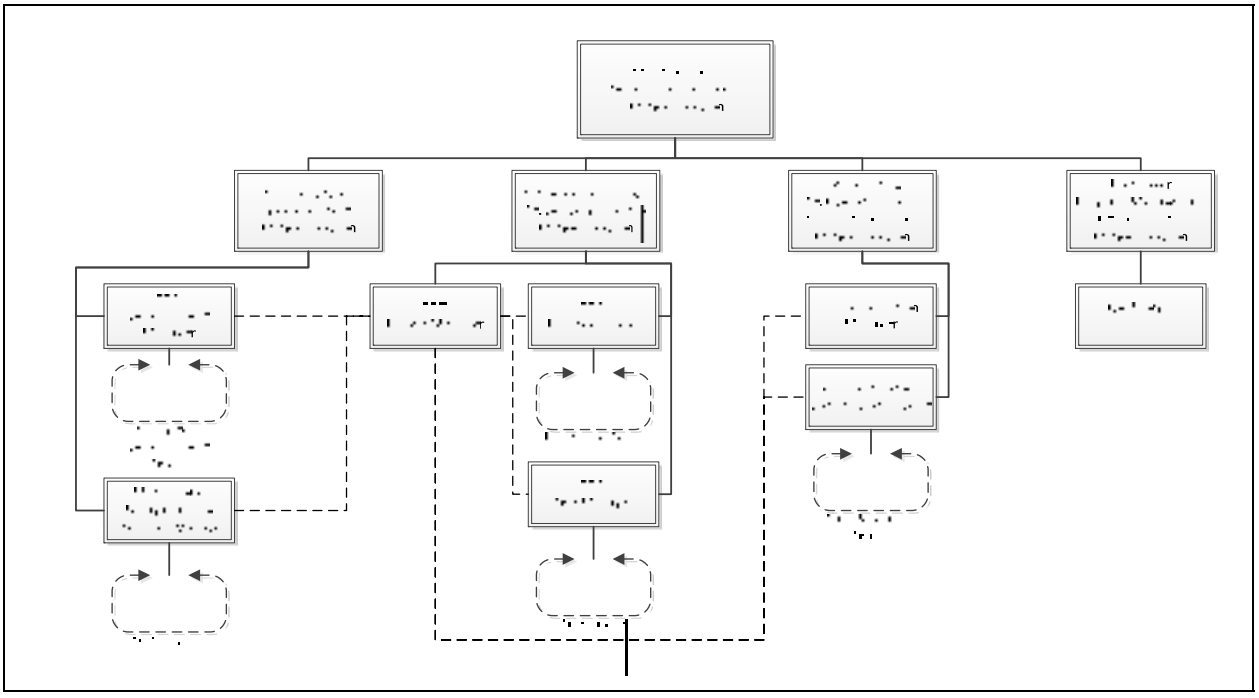

Figure 55. CHAMPS – SIGMA Implementation Project Organization Chart

Section 2: Project Management Methodology and Tools

This section presents CNSI's project management, technical approaches, methodology, tools, and staged work plan for accomplishing all tasks required for the **CHAMPS – SIGMA Implementation** project. This section describes the scope of activities to be addressed throughout the project, from initiation to final implementation, and the techniques and methodologies the **CHAMPS – SIGMA Implementation** project team will use.

2.1 Project Management Approach

Although all projects are unique, they share common components and processes. The generally accepted process groups defined by the Project Management Body of Knowledge (PMBOK), as incorporated into the CNSI project management process, are:

- **Initiating:** This process group defines the project objectives and grants authority to proceed. For CNSI, the initiating processes are largely incorporated into the proposal development process,

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during which required partners are identified. This statement of work acts as a project charter and preliminary scope statement.

- **Planning:** This process group refines the project objectives and scope and plans the tasks, activities, and steps necessary to meet the project's objectives. The planning processes start during proposal development and proceed following contract award while CNSI works with MDHHS to establish and baseline the project management plan (PMP). The PMP is modified and updated as necessary over the course of the project and is the culmination of the planning processes for scope definition and management, time (scheduling), staffing (human resources), communications, and risk management.
- **Executing:** This process group puts the project's plans into motion. This is where the bulk of the work for the project is performed.
- **Monitoring and Controlling:** This process group measures the performance of the project's executing activities and reports these performance results to project managers and stakeholders. Output is used to refine, improve, or change project management (including plans and schedules) as necessary to meet the project's objectives.
- **Closing:** This process group documents the formal acceptance and approval of the project's product and brings all aspects of the project to a close.

CNSI is able to provide consistent project outcomes as a result of integrating its set of repeatable, Midwest iVision360 delivery framework practices, within the project management process groups above. **Figure 56** shows how CNSI's project and quality management activities interact with other project activities.

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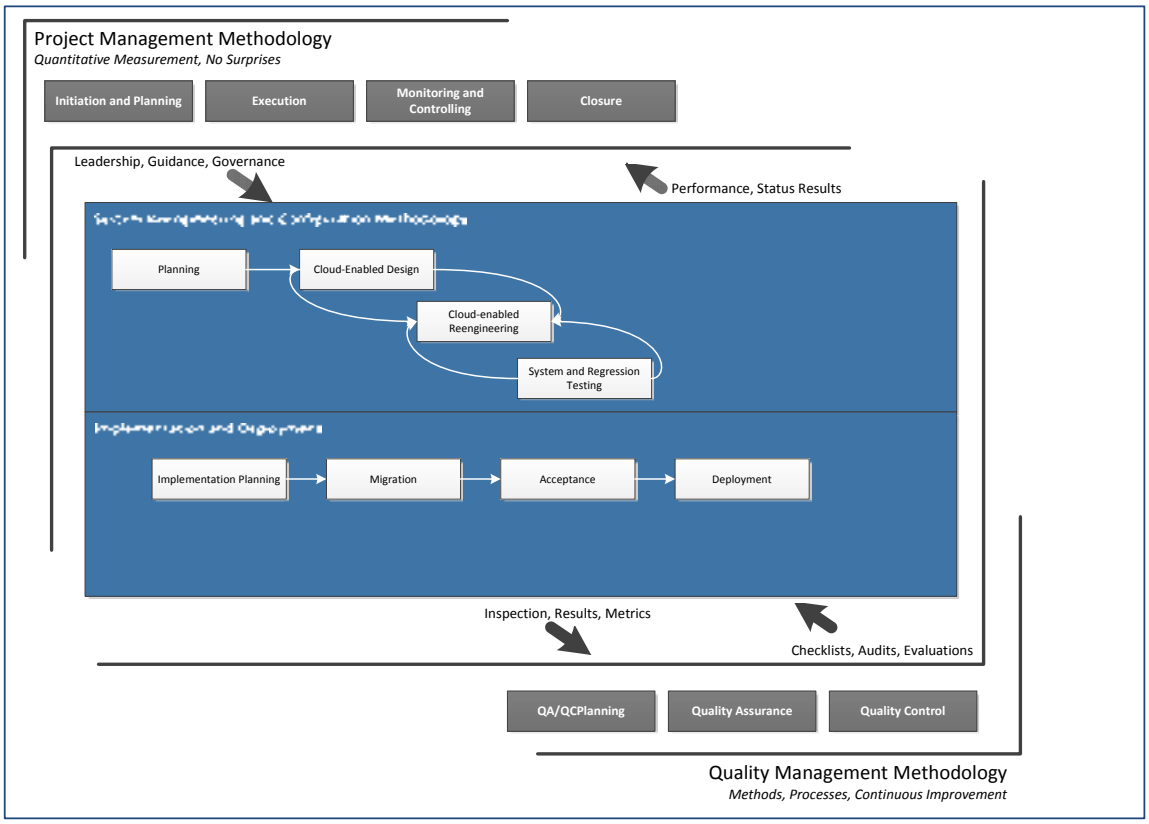

Figure 56. Project Management and Quality Management Activity Integration

CNSI is confident in its capability to apply this proven framework to successfully complete the **CHAMPS – SIGMA Implementation** project. Applying the same framework repeatedly, project after project, ensures a number of advantages for all stakeholders:

- The project management philosophy is firmly entrenched within the entire project team, including CNSI, MDHHS, and DTMB.
- Project management is supported as a core competency.
- The project staff is focused on successfully implementing the project.
- Project management, quality management, and cost management processes are fully integrated and their infrastructure is in place.
- Effective project status reporting is established based on project life cycle.
- Project and software development methodologies are well documented.
- Project staff is provided comprehensive training.
- Project information is communicated continuously to the right people at the right time.
- The project is continuously monitored against performance.
- Excellence in quality and delivery are built in.

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- Deliverable review and approval processes are in place.

2.2 Project Methodology

CNSI's integrated approach for this project will use its proven Midwest Region iVision360 delivery framework for the organizing structure, combined with an experienced team of program and project managers, SMEs, technical experts, and change management resources, to support this effort.

Using industry-standard project management methods facilitates the integration of CNSI's extensive system experience with application implementations, methodologies, and delivery tools. While no two engagements are the same, the State expects CNSI to deliver in a consistent, systematic fashion. CNSI will achieve this objective by using the CMMI Maturity Level 3-appraised Midwest iVision360 delivery framework tailored for the **CHAMPS – SIGMA Implementation** project as required. Using this framework will provide the structure for integrating CNSI's capabilities while allowing individual project teams the flexibility to adapt to meet the State's unique requirements and use client-mandated tools. Key benefits provided by the framework include:

- Provides a scalable, integrated collection of assets.
- Provides a consistent level of detail and presentation.
- Supports tailoring to scale, which provides a unique, but consistent, cost-effective delivery approach for the State.
- Uses established common work practices and expectations across project team members.

Investing time to create an effective plan with clear objectives is integral to successful project execution. CNSI's delivery framework provides a structured approach to the planning and execution. While this may appear to require more initial effort than desirable, experience has shown that following these processes reduces the likelihood of mistakes and results in lower risk and faster, more cost-effective delivery.

This standardized approach is a unique blend of the waterfall methodology and iterative, agile development. The advantages of this blend include:

- **User is at the Center:** CNSI's primary motivation for employing the Midwest iVision360 delivery framework is to put the user at the center of the project lifecycle. The success of a software project is largely dependent on whether the software engineer understands the customer's business rules, requirements and needs. The more insight the developing organization has, the greater the quality and likelihood of success for the project. Successful projects have high interaction with end users and place the user at the center of the development life cycle. Every phase and task of the Midwest iVision360 delivery framework focuses on interaction and collaboration with the user community. CNSI does this by implementing agile techniques and building working software in an iterative fashion with user validation at periodic intervals.
- **Common Goals:** Users actively participate in requirements definition and design sessions with an integrated team of software engineers, analysts, and test engineers. This method avoids the pitfalls of waterfall development and test methods which leave, for example, test case refinement and execution until the completion of development. It also provides the team with a sense of

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purpose, a goal, and the drive to accomplish the end objective: software that meets the requirements.

- **Early and Often Testing:** The Midwest iVision360 delivery framework provides an opportunity to test early and often so formal system test phases and subsequent test phases are more likely to meet schedule expectations with a lower error-discovery rate.

The collaborative, and somewhat "free-form," nature of iterative, agile development is balanced with the structure and baseline management features of the waterfall stage methodology. By introducing the baseline management features of waterfall, CNSI minimizes the risk of scope creep that is sometimes associated with iterative development. Moreover, our project management processes provide integrated change, issue, and risk management processes. **Table 21** describes the key benefits of each of the industry-standard models that are blended into the Midwest iVision360 delivery framework.

Table 25. SDLC Model Comparison

SDLC Model	Key Benefits Blended into Midwest iVision360
Waterfall	Baseline approval of requirements Structured documents and customer approvals Formalized testing
Iterative/Agile	Frequent customer interaction Decomposing work into small meaningful features that are presented in working software Frequent course corrections Sense of real progress Early and frequent testing
Extreme Programming	Teams formed between developing organization and customer Sense of common vision and goal

The standard Midwest iVision360 delivery framework employs a seven-phased process to organize activities and tasks associated with identifying requirements, designing, developing, and testing software. These phases contain major work packages that must be accomplished to move systematically through the project lifecycle. The phases roll up into three logical stages within this statement of work. The three-stage roll-up provides an easily understandable, top-down structure that facilitates grouping of activities with similar resource requirements and closely related deliverables. **Figure 57**below shows the relationship between the three-stage roll-up and the seven phases of Midwest iVision360 delivery framework.

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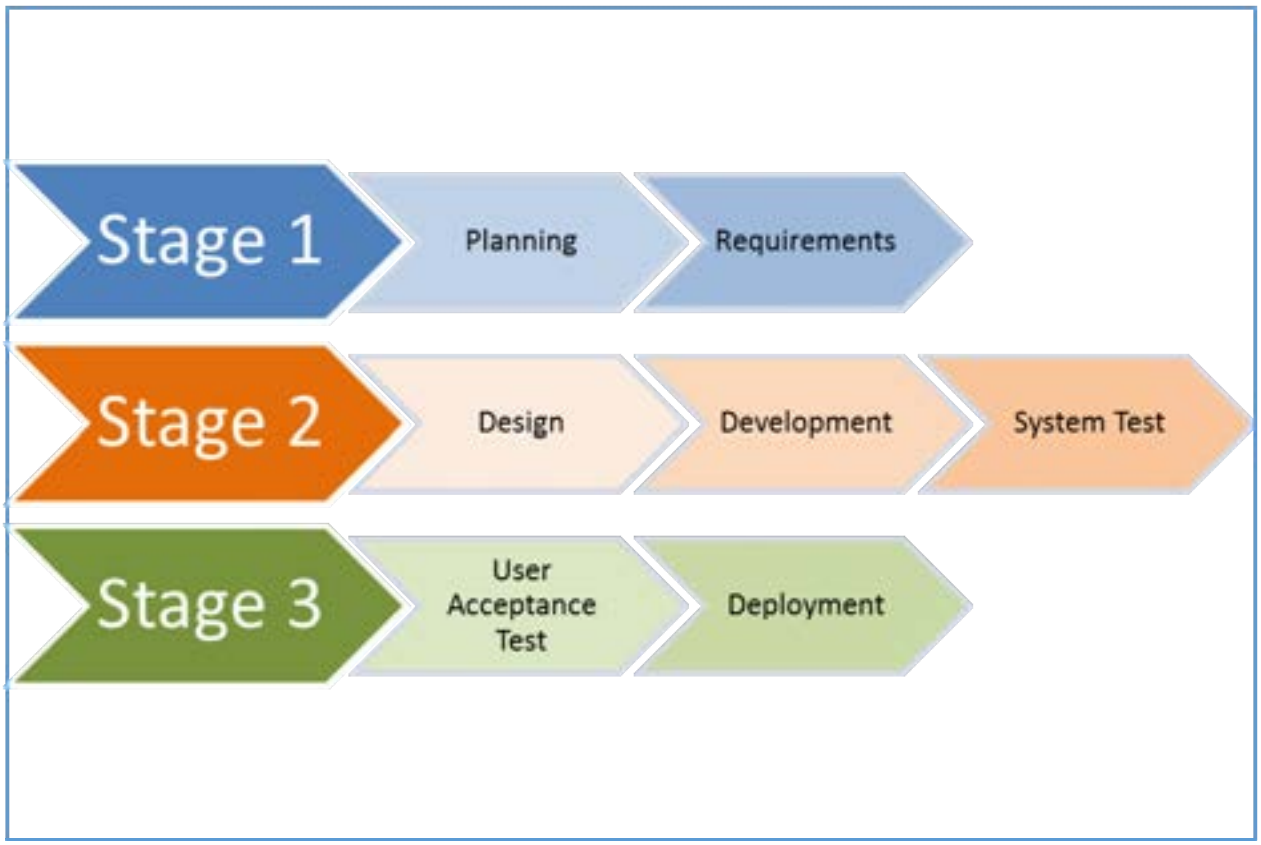

Figure 57. Midwest iVision360 Delivery Framework Stage and Phase Relationships

Based on the unique requirements of the **CHAMPS – SIGMA Implementation**, CNSI will tailor its seven-phase Midwest iVision360 delivery framework to the specific needs of this initiative. Major activities and deliverables proposed for each stage in this statement of work can be found in *Section 3: Solution Overview* below.

Independent from the project team, CNSI's Program Management Office will conduct internal audits of CNSI process compliance to ensure the team is executing CNSI's standard processes and to incorporate process-improvement findings during the lifecycle of the project.

2.3 Project Management Tools

Tools, when properly applied within the delivery framework, reduce the time to complete a project by providing predefined support processes, templates, documents, and training materials. More importantly, using appropriate tools reduces risk and increases efficiency.

CNSI will continue to use the tools already proven effective during the previous undertakings to reduce the time to complete the project and mitigate risk.

Table 23 depicts the tools CNSI will utilize on the project.

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Table 26. CNSI Project Tools

Tool	Purpose
Microsoft Office	Develop project deliverables as well as presentations and spreadsheet artifacts needed to support deliverables
Microsoft Project	Develop a detailed project schedule
Microsoft Visio	Develop use case diagrams, technical architecture diagrams, and support process flows
As-One	Repository for deliverables, presentations, and artifacts

While Microsoft Visio, Microsoft Office, and Microsoft Project are industry-standard tools, the following subsection provide additional information about As-One.

2.3.1 As-One

As-One provides a convenient, secure repository for all program data and will give the State oversight personnel direct visibility into project work products, event calendar, and overall performance. The features of As-One are summarized in **Figure 51.**

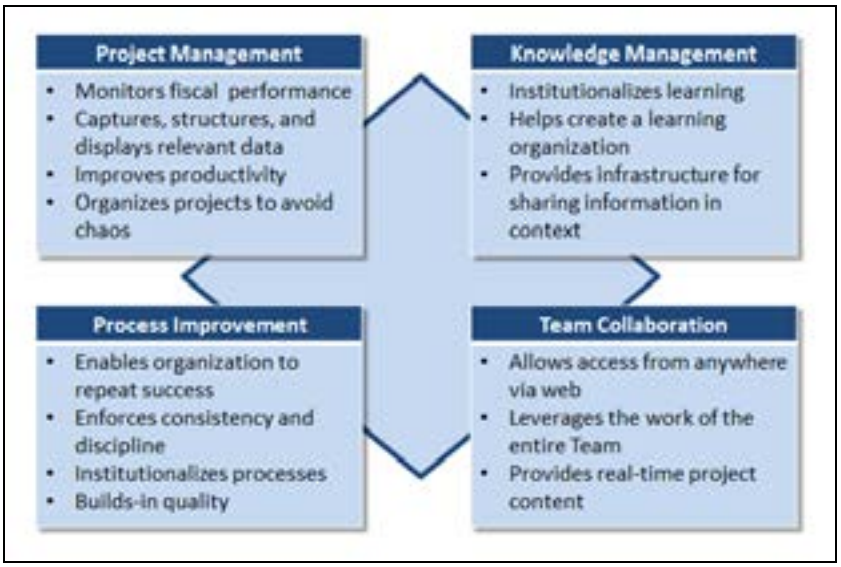

Figure 58. As-One Collaboration and Improvement

The As-One project repository will allow all members of the team to access relevant information and deliverables 24/7 using standard internet browsers such as Internet Explorer, Google Chrome, and Mozilla Firefox. MDHHS and CNSI use As-One as their program management portal. Training will be provided for team members new to the program.

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Section 3: Solution Overview

This section summarizes CNSI's proposed **CHAMPS – SIGMA Implementation** project, including functional and technical overviews, the proposed project timeline, and the project stages for meeting the objectives of the **CHAMPS – SIGMA Implementation** project. Full business and technical requirements will be elicited and documented as a part of the first phase of the project.

3.1 Functional Overview

At a high level, CHAMPS will be modified to provide the following capabilities to MDHHS:

- Support the SIGMA account code structure shown below.

New COA Structure (CHAMPS)
Department (formerly Agency)
Unit (formerly Index)
Accounting Template (formerly Program Cost Account (PCA))
Departmental Object (formerly Agency Object)
Federal Report Code (FRC) (no change)

- Accept vendor and payment file extracts from SIGMA. In addition, Treasury Collections are expected to offset in SIGMA. It may be necessary to extract additional data from transactions that are offset in SIGMA.
- Incorporate the Vendor ID changes that will occur in SIGMA and accept the SIGMA Vendor ID in the vendor registration file from SIGMA.
- Include changed and additional information that is deemed appropriate and available from SIGMA into the 835 file.
- The system will incorporate changes to/from all interfaces, including Bridges, ASAP and MiCARs due to SIGMA.
- Allow the user to upload account code rules into CHAMPS including bulk upload.
- Send the FRC code along with the new chart of accounts to SIGMA.

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- Develop CHAMPS reports to analyze budget projections for payments.
- Support daily interfaces to accept the accounting details and fund authorization details from SIGMA.
- Remediate screens to display the new chart of accounts in all CHAMPS subsystems.
- Implement all the new reports required and modify all the existing reports.
- Implement new logic to process the claims adjustments and managed care recoupments.

3.2 Technical Overview

CNSI will modify CHAMPS by:

- Increasing the Accounting Template length to 20 characters.
- Using SIGMA templates for all the outbound interfaces from CHAMPS to SIGMA.
- Using extensible markup language (XML) to send interface files to SIGMA and accept character separated values (CSV) interface files from SIGMA.
- Using either a web service call or receive a daily file from SIGMA to validate:
    - Account codes in CHAMPS are active in SIGMA.
    - Vendors in CHAMPS are active in SIGMA.
    - Funding authorization is available in SIGMA for the CHAMPS account codes.
- Sending the FRC to the SIGMA description field for all transactions separated by the "|" delimiter.
- Implementing SIGMA Template ID validation in CHAMPS to avoid entering new ACA rules for an invalid SIGMA Template ID.

3.3 Solution Delivery Plan

In this section, CNSI presents the proposed timeline, technical approach, and staged delivery approach for the **CHAMPS – SIGMA Implementation** project.

A detailed description of the activities and deliverables within each stage is presented in *Section 2.4.2 Phase Approach Work* **Plan**.

CNSI structured this work plan to address the overall relationship and sequence of the work required to complete the project. It effectively uses the professional resources required to successfully complete the work and produce high-quality products in a cost-conscious manner.

The following subsections further describe how CNSI intends to accomplish the goals of the work plan by employing its Midwest iVision360 delivery framework in the proposed approach for the **CHAMPS – SIGMA Implementation** project.

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3.3.1 High-Level Timeline

CNSI has created a summary timeline and work plan for the **CHAMPS – SIGMA Implementation** project. The timeline is shown in **Figure 59** below. The timeline shows the approximate duration of each stage and phase of the work for the **CHAMPS – SIGMA Implementation** project.

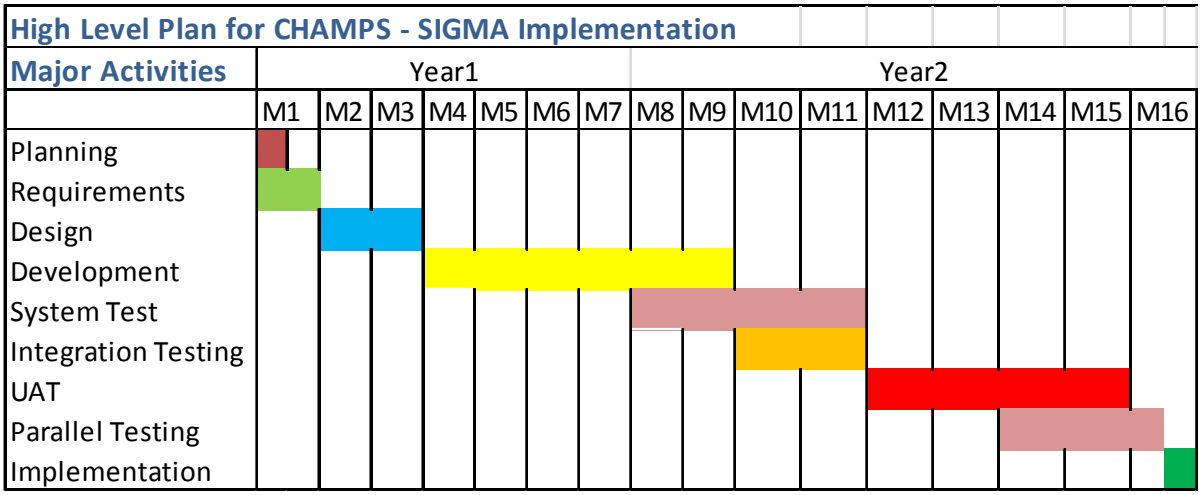

Figure 59. Initial Project Timeline

This timeline was developed based on the estimated effort of the work necessary to accomplish the proposed technical and functional solutions.

The proposed timeline was developed with the goal of optimizing the effective use of the professional resources required to accomplish this scope of work and produce high-quality products in a cost-conscious manner.

3.3.2 Midwest iVision360 Delivery Processes

In this section, CNSI provides an outline of its CMMI Maturity Level 3-appraised Midwest iVision360 delivery framework, which includes a full system development lifecycle (SDLC) model supporting the delivery of the technical solution. CNSI's SDLC processes have been adapted to address the specific needs of the **CHAMPS – SIGMA Implementation** project. CNSI will produce deliverables for each phase of the project.

CNSI will engage in requirements analysis and design with the customer in order to begin iterative development. CNSI will provide an opportunity for the customer to review design documents prior to the start of system development activity.

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Iterative, agile development under the Midwest iVision360 delivery framework is visible in Stage II for the **CHAMPS – SIGMA Implementation** project. During this stage, technical design specifications for new or impacted functions and user stories are constructed in parallel by the software engineers and SMEs. As the impacted function's design is completed, the team lead plans the iterations required to complete development.

Development work is planned based on a two-week iteration schedule. Software engineers build internal design documentation prior to, and during, the two-week iterations. The first day of each iteration is reserved for startup activities, including finalizing the iteration's internal design documentation. The software engineer meets with the Data Modeling Team on the first day of the iteration and conducts a walkthrough of any required data model changes. The Data Modeling Team makes the required changes to the database schema and approves the physical model for coding.

Development begins once the internal design and pre-development work is completed for the iteration. The software engineer writes internal iteration test scripts in parallel to actual working code and updates screens and other system functions to fit the physical mode. The software engineer executes the iteration test scripts as they complete sections of code. The software engineer builds the code, tests incrementally, and coordinates and communicates with the team through daily stand-up meetings regarding any issues holding up the development work.

Software engineers then test the code against the internal auto-unit code and manual internal iteration test scripts. As they reach the end of the iteration, they run the code against the functional scripts developed by the Test Team. Discrepancies are identified and corrected. The software engineer retests to ensure all discrepancies are corrected and closed before the iteration ends. The software engineer then conducts a peer review of the code of a given function on the last day of the iteration. The software engineer then updates the code based on the review. When software engineer iteration testing and software code reviews are successfully completed for the iteration, the code is then promoted to the integration test stream. The code is released to the Test Team for system testing when the coding and software engineer iteration testing is completed for all user stories for a given function.

During initial development iterations, the Test Team develops system test cases based on the current CHAMPS solution specifications. During system testing, the Test Team executes system test cases to validate system results against the current production functionality.

For the **CHAMPS – SIGMA Implementation** project, CNSI plans to engage the test and development teams early on to build the regression test suite for the critical functions. This will speed up testing and improve the overall quality of implementation. CNSI understands the importance and sensitivity of the **CHAMPS – SIGMA Implementation** project and the need to ensure it aligns with the environment that is already in production. During system testing, regression tests will be performed to demonstrate that the solution continues to function as expected.

As soon as regression testing is completed for a function, CNSI will deliver the code to the UAT environment. CNSI plans to engage the customer as early as possible and well before the beginning of the

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planned UAT phase. This ensures that enough time is allowed for thorough UAT, which will also reduce the risk of schedule slippage for UAT completion. CNSI will deploy system- and regression-tested functions to the UAT environment as they are completed.

As presented in our initial timeline (**Figure 59** above), UAT will have a four month duration. Any delay in the completion of UAT will significantly impact the implementation date. CNSI will work with MDHHS to support all UAT activities.

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Figure 53 presents a graphical overview of the Midwest iVision360 delivery framework processes applicable to the **CHAMPS – SIGMA Implementation** project.

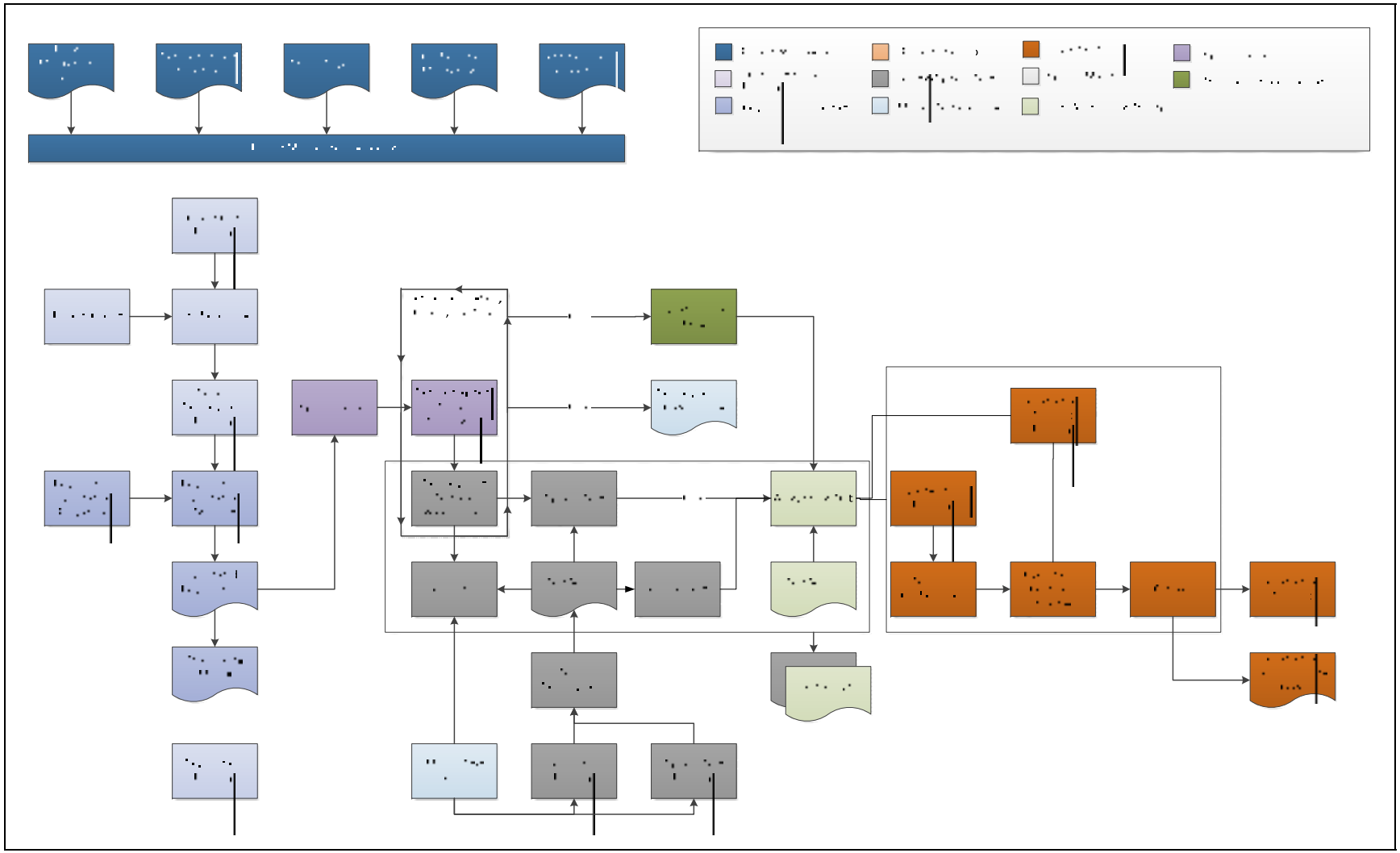

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Figure 60. Midwest iVision360 Process Diagram

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3.3.3 Staged Delivery Summary

CNSI proposes a staged delivery of **CHAMPS – SIGMA Implementation** which incorporates the seven phases of CNSI's CMMI Maturity Level 3-appraised Midwest iVision360 delivery framework. This top-down approach provides an easily understandable grouping of activities with similar resource requirements and related groupings of deliverables along with three major milestones following each stage to facilitate monitor and control of the initiative.

Figure 61 below summarizes the staged delivery using the seven phases of the Midwest iVision360 delivery framework.

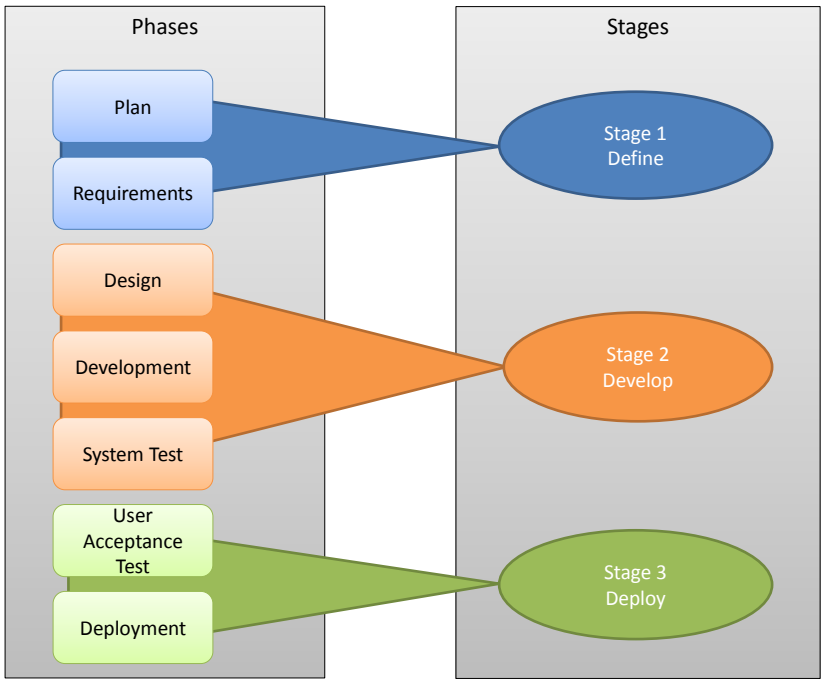

Figure 61. Midwest iVision360 Delivery Framework Phases and Stages

Figure 54 provides a high-level overview of the project stages with major activities and anticipated deliverables. Note that the overall timeline presented in Figure 59 shows a 16-month total duration. The stages shown in Figure 54 will overlap to accomplish the total work needed in the 16-month duration.

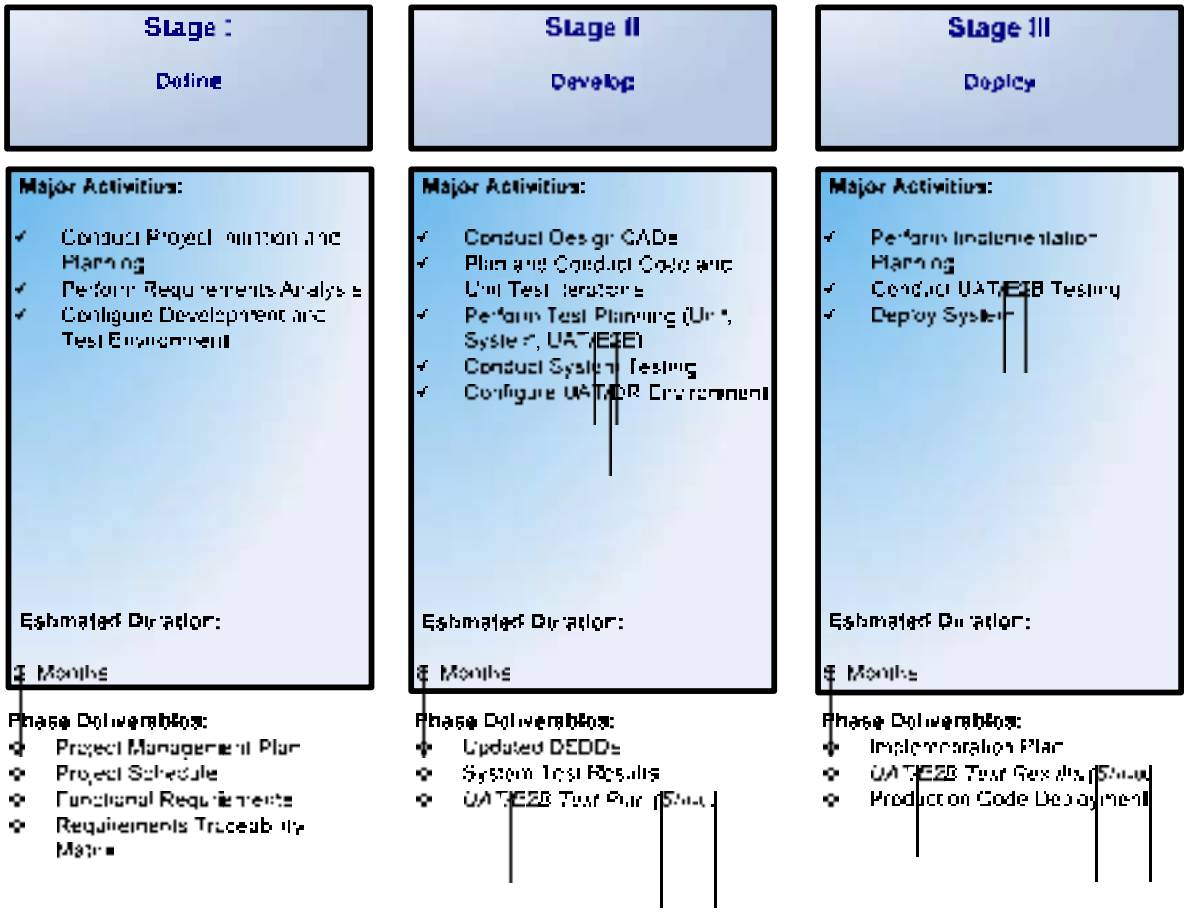

Figure 62. High-Level Project Stages and Activities

With every project, there are critical milestones to be met and work products and deliverables that must be developed and produced in order to provide the inputs necessary to perform the next activity. **Table 27** elaborates on the activities of the proposed 16-month implementation plan, along with the expected deliverables. In **Table 27**, bold text in the deliverables sections indicate formal deliverables; italicized text indicates State acceptance tasks and deliverables.

Table 27. High-Level Activities and Milestones by Stage

Major Activity	Description	Stage
Project Initiation	Establish the project team structure, key stakeholders, and operating guidelines for team activity throughout the course of the project.	Stage I
Project Planning	Develop PMP, schedule, and metrics.	Stage I
Requirements Analysis	Conduct collaborative application development (CAD) sessions to elicit and validate requirements for the **CHAMPS – SIGMA Implementation** project.	Stage I

Major Activity	Description	Stage
Stage I Deliverables • **Project Management Plan** • **Project Work Plan** • **Requirements Specification Document**		
Design Analysis	Conduct CAD sessions to document detailed system design changes for the **CHAMPS – SIGMA Implementation** project.	Stage II
Test Planning	Conduct detailed test planning for each phase of testing.	Stage II
Software Development	Develop and unit test software required to support the detailed functional design including: • Screens • Functionality (driven by use cases) • Data Models • Reports • Interfaces	Stage II
System Testing	Internal CNSI testing of developed functionality at the component, subsystem, and system level.	Stage II
Stage II Deliverables • **As-Built DSDD** • Test Plan • **System Test Results** • *User Acceptance Test Plan*		
Implementation Planning	Coordinate production installation of the system changes.	Stage III
UAT Support	MDHHS testing of all system changes using formal UAT test scripts.	Stage III
Parallel Testing	Conduct parallel testing to validate account coding and COA changes.	Stage III
Production Deployment	CNSI and the State of Michigan deploy the modifications in the MDHHS production CHAMPS environment.	Stage III

Major Activity	Description	Stage
Stage III Deliverables • **Deploy Code to Production**	• *UAT Results*	

3.3.3.1 Stage 1 – Initiation and Requirements

Activity 1: Project Initiation

During this activity, CNSI will collaborate with the State of Michigan to identify the key business and technical team members who will participate in the **CHAMPS – SIGMA Implementation** project. CNSI will conduct the formal project kickoff and deliver orientation for the project effort.

The major milestones associated with this activity are:

- Participating team members from the State of Michigan are identified.
- Project kickoff meeting is conducted and project kickoff is completed.

Activity 2 - Project Planning

During this activity, CNSI will develop the PMP. The PMP outlines the standards and procedures for risk, issue, and action item management; project governance plan to coordinate activities between the CNSI project team and the State of Michigan; communications plan; deliverable management plan; project work breakdown structure (WBS); and the baseline schedule.

Milestones associated with this activity are:

- PMP is delivered.
- Project work plan is delivered.

Activity 3 – Requirements Analysis

The goals of the **CHAMPS – SIGMA Implementation** project have been defined at a high-level within this statement of work. During this activity, CNSI will host CAD sessions to elicit and validate detailed functional and technical requirements. The CAD sessions will include the State of Michigan and CNSI functional and technical SMEs. CNSI will compare the validated requirements with current CHAMPS functionality and technical architecture to determine the impact of the new requirements across all CHAMPS subsystems, including system aspects such as:

- New and modified screens.
- Functionality (use cases).
- Data models.
- Reports.

- Interfaces.

This will result in a requirements specification document which provides a clear, concise, and final definition of each requirement. The approved requirements will be used during the design and development activities in Stage II.

The major milestones associated with this activity are:

- Functional requirements specification document is delivered.
- Approved requirements have been loaded into the requirements repository.

3.3.3.2 Stage II – Design, Coding, and System Testing

Activity 1 – Design Analysis

During this activity, CNSI will host CAD sessions to produce detailed design artifacts. Sessions will be organized and scheduled per requirements for the affected CHAMPS subsystem and the solution's technical architecture. CAD sessions will include State of Michigan and CNSI functional and technical SMEs. Using the existing CHAMPS design and the requirements specification document as a starting point, session participants will identify and document required design changes including system aspects such as:

- Screens.
- Functionality (use cases).
- Data models.
- Reports.
- Interfaces.

This will result in final, revised design artifacts, including use cases and data models, which will be the basis for the development of changes to system functions. CNSI will submit the completed design artifacts to the appropriate State of Michigan decision-maker shortly after the completion of a CAD session. The State of Michigan decision-maker will formally approve the design artifacts via signature on an approval form, similar to the existing CHAMPS enhancement approval process. This approval indicates that design is final and development can begin.

The major milestone associated with this activity is:

- Delivery of the as-built DSDD.

Activity 2 – Test Planning

During this activity, CNSI collaborates with the State of Michigan to determine the required set of tests to be executed. CNSI prepares test scenarios and scripts for each phase of internal testing, including system testing and regression testing. The system test scenarios and scripts are prepared by the CNSI Test Lead. The State of Michigan prepares the UAT test plan and related test scenarios and script during this activity time frame.

Milestones associated with this activity include:

- System test plan is completed.
- System test scenarios and scripts are completed.
- *UAT preparation is completed (State).*

Activity 3 – Software Development

At the beginning of this activity, the development iteration plan is prepared. During this activity, CNSI codes the software changes required to support the updated detailed functional and technical design. Development is performed through a series of bi-weekly development iterations as previously described. Development includes the coding changes as defined in the as-built DSDDs for CHAMPS, including system aspects, such as:

- Screens.
- Functionality (use cases).
- Data models.
- Reports.
- Interfaces.

At the conclusion of each development iteration, the developed code is delivered to the CNSI Test Team. The major milestone associated with this activity is the completion of all development iterations.

Activity 4 – System Testing

During this activity, CNSI tests the developed functionality at the component, subsystem, and system levels in accordance with the test plan. Test results are compiled and at the conclusion of system testing, CNSI performs end-to-end (E2E) regression testing. At the conclusion of this activity, the test manager conducts a test readiness review meeting to ensure all entry criteria for the UAT phase are met.

Milestones associated with this activity include:

- System test results report is delivered.
- Code is deployed to UAT environment.
- UAT begins.

3.3.3.3 Stage III – UAT and Production Deployment

Activity 1 – Implementation Planning

During this activity, CNSI collaborates with the State to coordinate the timing of the production installation of the system changes. The **CHAMPS – SIGMA Implementation** project will be incorporated into the regular CHAMPS operational release implementation schedule. Implementation planning activities will focus on targeting the operational release that will include this initiative and integrating the new features into the release. During this activity, CNSI will review operational support projections for post-deployment support and prepare an operational support forecast report documenting any changes expected post-deployment.

Milestones associated with this activity include:

- Identification of the operational releases where the software will be deployed.
- Development of the implementation plan.
- Preparation of the operational support forecast report.

Activity 2 – UAT Support

During this activity, CNSI provides support to MDHHS staff who will conduct UAT using formal, State-developed test scripts. UAT testing will be aligned with the selected operational releases where the code will be deployed. Defects identified are monitored and corrected throughout UAT.

The major milestones associated with this activity include:

- *UAT test results report (State deliverable).*
- Final defect correction report.
- State approval to deploy the software.

Activity 3 – Parallel Test

During this activity CNSI works with the MDHHS team to identify a set of transactions for execution of parallel testing. Parallel testing is conducted and results are verified.

The major milestone associated with this activity is the successful completion of the parallel test.

Activity 4 – Production Deployment

During this activity, CNSI and the State of Michigan collaborate to execute the implementation plan. The finalized code will be merged into the selected regular operational release. CNSI deploys the release to the production environment where it is available for use by MDHHS staff.

The major milestones associated with this activity include:

- Code is deployed to production.
- Production support begins.

Section 4: General Assumptions and Constraints

CNSI has identified and provided the following general assumptions in regards to the **CHAMPS – SIGMA Implementation** project:

1. Chart of Account elements will change with SIGMA implementation.

Old COA Structure (CHAMPS)	New COA Structure (CHAMPS)
Agency	Department
Index	Unit
PCA	Accounting Template
Agency Object	Departmental Object
FRC	FRC

2. The MAIN PCA and SIGMA Template ID will be a one to one mapping.
3. DHHS Team will provide the MAIN PCA – SIGMA Template ID mapping between the current COA and the new COA by 8/31/2015.
4. SIGMA team will provide the XML and XSD documents by 8/31/2015.
5. All the interfaces will be finalized and the design document approvals will be completed by 09/30/2015.
6. There must be one to one mapping between SIGMA generated Vendor ID. Tax ID/SSN and Vendor Type will be considered for uniqueness.
7. The current 1050.02 interface or its equivalent in the SIGMA project will include the SIGMA Vendor ID.
8. CHAMPS will use FTS (Data Exchange Gateway - DEG) via SFTP to exchange the interface files between SIGMA and CHAMPS.
9. Journal Vouchers will be sent to SIGMA using CA9 template. This will be a new interface from CHAMPS to SIGMA.
10. All the payments (Fee for Service and Managed Care) will be combined into one interface using GAX9R template.
11. The payment information including the payment status will be received in one single interface from SIGMA every day. The payment mode (warrent or electronic funds transfer (EFT)) is also sent to CHAMPS.
12. Warrant cancellation will be initiated from SIGMA and the status will be sent to CHAMPS in the daily Payment Information interface.
13. The reissue of the warrants will be initiated in CHAMPS.
14. MDHHS data warehouse will be ready to accept the data feed changes from CHAMPS in accordance with project timelines.
15. SIGMA integration environment will be ready within the timeline published on May 1 2015.
16. During the integration and UAT testing CHAMPS expects all the interface files to be processed multiple times within a business day.
17. The SIGMA issue response time during integration and UAT phase will be less than 24 hours.
18. All the interface schedules will be finalized by end of the design sessions.
19. A designated point of contact will be given by SIGMA team to resolve any technical issues.

20. A new set of CHAMPS environments will be created to support this initiative and additional SAN space is required.
21. Test MAIN will be available for CHAMPS to do parallel testing until go live.
22. MiCARs will provide the new web service details by end of the design phase.
23. A new daily interface to receive fund authorization information from SIGMA will be implemented.
24. Any changes to the SIGMA final template will impact the design and project schedule dates.
25. The existing pay cycle calendar will not change.
26. SIGMA team will perform the B2B testing necessary to confirm CORE compliance.
27. CHAMPS will not send National Provider ID (NPI) information to SIGMA.
28. CHAMPS will not send billing provider information to SIGMA.
29. SIGMA will use the vendor addresses from CHAMPS to process the payments.
30. The new chart of account segment Department Revenue will have the impact in CHAMPS – Financial Subsystem for Cash Receipts and Withholds.
31. CHAMPS will be testing all the inbound and outbound interfaces with SIGMA during the Integration testing phase.
32. CHAMPS will be performing end to end testing during the UAT phase.
33. SIGMA interface error handling details will be documented and approved by 8/31/2015.
34. The following interface schedules will be used for SIGMA interfaces.

Interface Name	Type	System	Schedule	Comments
Receive MAIN 7202 Extract File From DMB	Inbound	MAIN	Receive the file between 8:00 PM and 12 AM everyday.	
Receive W9 Indicator from DMB	Inbound	MAIN	Receive the file between 8:00 PM and 12 AM everyday.	
Send Vendor Address Extract File To DMB	Outbound	MAIN	Send the file at 6 PM everyday.	
Send Weekly Payroll to DMB for Batch Agency 395	Outbound	MAIN	Monday or Friday at 12 AM based on Pay Cycle Calendar Note: The hard cutoff time is 2 PM	SIGMA should provide hard cutoff time
Send Weekly Payroll to DMB for Batch Agency 385	Outbound	MAIN	Monday or Friday at 12 AM based on Pay Cycle Calendar Note: The hard cutoff time is 2 PM	SIGMA should provide hard cutoff time
Receive Warrant Information From DMB	Inbound	MAIN	Tuesday through Saturday at 2 AM	
Receive PCA Crosswalk from DCH	Inbound	MAIN	Monday at 7 AM	Potential change in schedule.
Send RPS Data to DCH	Inbound	MiCARs	Weekdays between 3 AM and 6 AM	
Receive RPS Data from DCH	Outbound	MiCARs	Weekdays at 6 PM	

CNSI has identified the following constraint for the **CHAMPS – SIGMA Implementation** project:

1. CHAMPS remediation for SIGMA must coincide with the broader implementation of the SIGMA enterprise project. Any delays in the enterprise project will, by definition, affect CNSI efforts. The required implementation date is October 1, 2016.

Section 5: Proposed Project Cost

This section of our proposal presents our fixed-price, overall labor cost estimates for completing the **CHAMPS – SIGMA Implementation** project. The cost was derived based on the expected effort required as presented in our initial work plan, composed of the three stages depicted in Figure 54. The total fixed-price labor cost for the **CHAMPS – SIGMA Implementation** Project is $4,800,000.

Form No. DTMB-3521 (Rev. 4/2012)
AUTHORITY: Act 431 of 1984
COMPLETION: Required
PENALTY: Contract change will not be executed unless form is filed

STATE OF MICHIGAN
DEPARTMENT OF TECHNOLOGY, MANAGEMENT AND BUDGET
PROCUREMENT
P.O. BOX 30026, LANSING, MI 48909
OR
530 W. ALLEGAN, LANSING, MI 48933

CHANGE NOTICE NO. 21
to
CONTRACT NO. 07186200168
between
THE STATE OF MICHIGAN
and

NAME & ADDRESS OF CONTRACTOR:	PRIMARY CONTACT	EMAIL
Client Network Services, Inc. (CNSI) 2277 Research Boulevard Rockville, MD 20850	John H. Cousins III	jee@cns-inc.com
	TELEPHONE	CONTRACTOR #, MAIL CODE
	(301) 634-4600	

STATE CONTACTS	AGENCY	NAME	PHONE	EMAIL
CONTRACT COMPLIANCE INSPECTOR:	DTMB	John Spitzley	(517) 335-6612	spitzleyj1@michigan.gov
BUYER:	DTMB	Steve Motz	(517) 241-3215	motzs@michigan.gov

CONTRACT SUMMARY:

DESCRIPTION: **Medicaid Services Administration**

INITIAL EFFECTIVE DATE	INITIAL EXPIRATION DATE	INITIAL OPTIONS INCLUDED	CURRENT EXPIRATION DATE
March 14, 2006	September 30, 2011	Two One-Year	September 30, 2018
PAYMENT TERMS	F.O.B	SHIPPED	SHIPPED FROM
N/A	N/A	N/A	N/A

ALTERNATE PAYMENT OPTIONS:			AVAILABLE TO MiDEAL PARTICIPANTS	
☐ P-card	☐ Direct Voucher (DV)	☐ Other	☐ YES	☒ NO

MINIMUM DELIVERY REQUIREMENTS:

N/A

DESCRIPTION OF CHANGE NOTICE:

OPTION EXERCISED:	EFFECTIVE DATE OF CHANGE:	EXPIRATION DATE:
☒ NO ☐ YES		September 30, 2018

This change notice reflects the vendor's address change.

Effective immediately this contract is hereby INCREASED to provide funding for various Community Health Administrative Management Payment System (CHAMPS) initiatives not to exceed $23,975,200.00:

1. *ICO 10 Go-live Extension - $3,300,000*
2. *Healthy Kids Dental - $3,000,000*
3. *Healthy Michigan Future Releases for 2015 - $5,000,000*
4. *Illinois MMIS Planning - $2,500,000*
5. *SIGMA - $4,800,000*
6. *MI-way Consumer Directory -1,800,000*

7. *Cloud Hardware - $3,575,200*

Total Change Notice is $23,975,200.

HIPAA BUSINESS ASSOCIATE AGREEMENT ADDENDUM

This Business Associate Agreement Addendum ("Addendum") is made a part of the contract ("Contract") between the Michigan Department of Community Health ("Covered Entity"), and Client Network Services, Inc. ("Business Associate").

The Business Associate performs certain services for the Covered Entity under the Contract that requires the exchange of information including protected health information under the Health Insurance Portability and Accountability Act of 1996 ("HIPAA"), as amended by the American Recovery and Reinvestment Act of 2009 (Pub.L. No. 111-5). The Michigan Department of Community Health is a hybrid covered entity under HIPAA and the parties to the Contract are entering into this Addendum to establish the responsibilities of both parties regarding HIPAA-covered information and have the underlying Contract comply with HIPAA.

RECITALS

A. Under the terms of the Contract, the Covered Entity wishes to disclose certain information to the Business Associate, some of which may constitute Protected Health Information ("PHI"). In consideration of the receipt of PHI, the Business Associate agrees to protect the privacy and security of the information as set forth in this Addendum.

B. The Covered Entity and the Business Associate intend to protect the privacy and provide for the security of PHI disclosed to the Business Associate under the Contract in compliance with HIPAA and the HIPAA Rules.

C. The HIPAA Rules require the Covered Entity to enter into a contract containing specific requirements with the Business Associate before the Covered Entity may disclose PHI to the Business Associate.

1. Definitions.

a. The following terms used in this Agreement have the same meaning as those terms in the HIPAA Rules: Breach; Data Aggregation; Designated Record Set; Disclosure; Health Care Obligations; Individual; Minimum Necessary; Notice of Privacy Practices; Protected Health Information; Required by Law; Secretary; Security Incident; Security Measures, Subcontractor; Unsecured Protected Health Information, and Use.

b. "Business Associate" has the same meaning as the term "business associate" at 45 CFR 160.103 and regarding this Addendum means Client Network Services, Inc.

c. "Covered Entity" has the same meaning as the term "covered entity" at 45 CFR 160.103 and regarding this Addendum means the Michigan Department of Community Health.

d. "HIPAA Rules" means the Privacy, Security, Breach Notification, and Enforcement Rules at 45 CFR Part 160 and Part 164.

e. "Agreement" means both the Contract and this Addendum.

f. "Contract" means the underlying written agreement or purchase order between the parties for the goods or services to which this Addendum is added.

2. Obligations of Business Associate.

The Business Associate agrees to

a. use and disclose PHI only as permitted or required by this Addendum or as required by law.

b. implement and use appropriate safeguards, and comply with Subpart C of 45 CFR 164 regarding electronic protected health information, to prevent use or disclosure of PHI other than as provided in this Addendum. Business Associate must maintain, and provide a copy to the Covered Entity within 10 days of a request from the Covered Entity, a comprehensive written information privacy and security program that includes security measures that reasonably and appropriately protect the confidentiality, integrity, and availability of PHI relative to the size and complexity of the Business Associate's operations and the nature and the scope of its activities.

c. report to the Covered Entity within 24 hours of any use or disclosure of PHI not provided for by this Addendum of which it becomes aware, including breaches of Unsecured Protected Health Information as required by 45 CFR 164.410, and any Security Incident of which it becomes aware. If the Business Associate is responsible for any unauthorized use or disclosure of PHI, it must promptly act as required by applicable federal and State laws and regulations. Covered Entity and the Business Associate will cooperate in investigating whether a breach has occurred, to decide how to provide breach notifications to individuals, the federal Health and Human Services' Office for Civil Rights, and potentially the media.

d. The parties agree that the following satisfies any notices necessary by Business Associate to the Covered Entity of the ongoing existence and occurrence of an Unsuccessful Security Incidents (defined below) for which no additional notice will be required, except as provided below. Unsuccessful Security Incidents consists of activity such as pings and other broadcast attacks on Business Associate's firewall, port scans, unsuccessful log-on attempts, denial of service and any combination of the above or any equivalent events, so long as no Unsuccessful Security Incident results in unauthorized access, use, disclosure, modification, or destruction of electronic PHI or interference with information system operations related to the electronic PHI. Business Associate will maintain a log or similar documentation of Unsuccessful Security Incidents for at least six years and will provide a copy of such logs or other documentation to Covered Entity at least quarterly. Successful Security Incidents will be reported to Covered Entity as specified in subparagraph c above.

e. ensure, according to 45 CFR 164.502(e)(1)(ii) and 164.308(b)(2), if applicable, that any subcontractors that create, receive, maintain, or transmit PHI on behalf of the Business

Associate agree to the same restrictions, conditions, and requirements that apply to the Business Associate regarding such information. Each subcontractor must sign an agreement with the Business Associate containing substantially the same provisions as this Addendum and further identifying the Covered Entity as a third party beneficiary of the agreement with the subcontractor. Business Associate must implement and maintain sanctions against subcontractors that violate such restrictions and conditions and must mitigate the effects of any such violation.

f. make available PHI in a Designated Record Set to the Covered Entity within 10 days of a request from the Covered Entity to satisfy the Covered Entity's obligations under 45 CFR 164.524.

g. within ten days of a request from the Covered Entity, amend PHI in a Designated Record Set under 45 CFR § 164.526. If any individual requests an amendment of PHI directly from the Business Associate or its agents or subcontractors, the Business Associate must notify the Covered Entity in writing within ten days of the request, and then, in that case, only the Covered Entity may either grant or deny the request.

h. maintain, and within ten days of a request from the Covered Entity make available the information required to enable the Covered Entity to fulfill its obligations under 45 CFR § 164.528. Business Associate is not required to provide an accounting to the Covered Entity of disclosures : (i) to carry out treatment, payment or health care operations, as set forth in 45 CFR § 164.506; (ii) to individuals of PHI about them as set forth in 45 CFR § 164.502; (iii) under an authorization as provided in 45 CFR § 164.508; (iv) to persons involved in the individual's care or other notification purposes as set forth in 45 CFR § 164.510; (v) for national security or intelligence purposes as set forth in 45 CFR § 164.512(k)(2); or (vi) to correctional institutions or law enforcement officials as set forth in 45 CFR § 164.512(k)(5); (vii) as part of a limited data set according to 45 CFR 164.514(e); or (viii) that occurred before the compliance date for the Covered Entity. Business Associate agrees to implement a process that allows for an accounting to be collected and maintained by the Business Associate and its agents or subcontractors for at least six years before the request, but not before the compliance date of the Privacy Rule. At a minimum, such information must include: (i) the date of disclosure; (ii) the name of the entity or person who received PHI and, if known, the address of the entity or person; (iii) a brief description of PHI disclosed; and (iv) a brief statement of purpose of the disclosure that reasonably informs the individual of the basis for the disclosure, or a copy of the individual's authorization, or a copy of the written request for disclosure. If the request for an accounting is delivered directly to the Business Associate or its agents or subcontractors, the Business Associate must forward it within ten days of the receipt of the request to the Covered Entity in writing.

i. to the extent the Business Associate is to carry out one or more of the Covered Entity's obligations under Subpart E of 45 CFR Part 164, comply with the requirements of Subpart E that apply to the Covered Entity when performing those obligations.

j. make its internal practices, books, and records relating to the Business Associate's use and disclosure of PHI available to the Secretary for purposes of determining compliance with

the HIPAA Rules. Business Associate must concurrently provide to the Covered Entity a copy of any PHI that the Business Associate provides to the Secretary.

k. retain all PHI throughout the term of the Agreement and for a period of six years from the date of creation or the date when it last was in effect, whichever is later, or as required by law. This obligation survives the termination of the Agreement.

l. implement policies and procedures for the final disposition of electronic PHI and the hardware and equipment on which it is stored, including but not limited to, the removal of PHI before re-use.

m. within ten business days after a written request by the Covered Entity, the Business Associate and its agents or subcontractors must allow the Covered Entity to conduct a reasonable inspection of the facilities, systems, books, records, agreements, policies and procedures relating to the use or disclosure of PHI under this Addendum for the purpose of determining whether the Business Associate has complied with this Addendum; provided, however, that: (i) the Business Associate and the Covered Entity must mutually agree in advance upon the scope, timing and location of such an inspection and such inspection must not materially interfere with the conduct of Business Associate's business; (ii) the Covered Entity must protect the confidentiality of all confidential and proprietary information of the Business Associate to which the Covered Entity has access during the course of such inspection; and (iii) the Covered Entity or the Business Associate must execute a nondisclosure agreement, if requested by the other party. The fact that the Covered Entity inspects, or fails to inspect, or has the right to inspect, the Business Associate's facilities, systems, books, records, agreements, policies and procedures does not relieve the Business Associate of its responsibility to comply with this Addendum. The Covered Entity's (i) failure to detect or (ii) detection, but failure to notify the Business Associate or require the Business Associate's remediation of any unsatisfactory practices, does not constitute acceptance of such practice or a waiver of the Covered Entity's enforcement rights under this Addendum.

3. Permitted Uses and Disclosures by the Business Associate.

a. Business Associate may use or disclose PHI:

(i) for the proper management and administration of the Business Associate or to carry out the legal responsibilities of the Business Associate; provided, however, either (A) the disclosures are required by law, or (B) the Business Associate obtains reasonable assurances from the person to whom the information is disclosed that the information will remain confidential and used or further disclosed only as required by law or for the purposes for which it was disclosed to the person, and the person notifies the Business Associate of any instances of which it is aware in which the confidentiality of the information has been breached;

(ii) as required by law;

(iii) for Data Aggregation services relating to the health care operations of the Covered Entity;

(iv) to de-identify, consistent with 45 CFR 164.514(a) – (c), PHI it receives from the Covered Entity. If the Business Associates de-identifies the PHI it receives from the Covered

Entity, the Business Associate may use the de-identified information for any purpose not prohibited by the HIPAA Rules; and

(v) for any other purpose listed here: carrying out the Business Associate's duties under the Contract.

b. Business Associate agrees to make uses and disclosures and requests for PHI consistent with the Covered Entity's minimum necessary policies and procedures.

c. Business Associate may not use or disclose PHI in a manner that would violate Subpart E of 45 CFR Part 164 if done by the Covered Entity except for the specific uses and disclosures described above in 3(a)(i) and (iii).

4. Covered Entity's Obligations

Covered entity agrees to

a. use its Security Measures to reasonably and appropriately maintain and ensure the confidentiality, integrity, and availability of PHI transmitted to the Business Associate under the Agreement until the PHI is received by the Business Associate.

b. provide the Business Associate with a copy of its Notice of Privacy Practices and must notify the Business Associate of any limitations in the Notice of Privacy Practices of the Covered Entity under 45 CFR 164.520 to the extent that such limitation may affect the Business Associate's use or disclosure of PHI.

c. notify the Business Associate of any changes in, or revocation of, the permission by an individual to use or disclose the individual's PHI to the extent that such changes may affect the Business Associate's use or disclosure of PHI.

d. notify the Business Associate of any restriction on the use or disclosure of PHI that the Covered Entity has agreed to or is required to abide by under 45 CFR 164.522 to the extent that such restriction may affect the Business Associate's use or disclosure of PHI.

5. Term. This Addendum must continue in effect as to each Contract to which it applies until such Contract is terminated or is replaced with a new contract between the parties containing provisions meeting the requirements of the HIPAA Rules, whichever first occurs.

6. Termination.

a. Material Breach. In addition to any other provisions in the Contract regarding breach, a breach by the Business Associate of any provision of this Addendum, as determined by the Covered Entity, constitutes a material breach of the Addendum and is grounds for termination of the Contract by the Covered Entity under the provisions of the Contract covering termination for cause. If the Contract contains no express provisions regarding termination for cause, the following apply to termination for breach of this Addendum, subject to 6.b.:

(i) Default. If the Business Associate refuses or fails to timely perform any of the provisions of this Addendum, the Covered Entity may notify the Business Associate in writing of

the non-performance, and if not corrected within thirty days, the Covered Entity may immediately terminate the Contract. Business Associate must continue performance of the Contract to the extent it is not terminated.

(ii) Associate's Duties. Notwithstanding termination of the Contract, and subject to any directions from the Covered Entity, the Business Associate must timely, reasonably and necessarily act to protect and preserve property in the possession of the Business Associate in which the Covered Entity has an interest.

(iii) Compensation. Payment for completed performance delivered and accepted by the Covered Entity must be at the Contract price.

(iv) Erroneous Termination for Default. If the Covered Entity terminates the Contract under Section 6(a) and after such termination it is determined, for any reason, that the Business Associate was not in default, or that the Business Associate's action/inaction was excusable, such termination will be treated as a termination for convenience, and the rights and obligations of the parties will be the same as if the Contract had been terminated for convenience.

b. Reasonable Steps to Cure Breach. If the Covered Entity knows of a pattern of activity or practice of the Business Associate that constitutes a material breach or violation of the Business Associate's obligations under the provisions of this Addendum or another arrangement and does not terminate this Contract under Section 6(a), then the Covered Entity must notify the Business Associate of the pattern of activity or practice. The Business Associate must then take reasonable steps to cure such breach or end such violation, as applicable. If the Business Associate's efforts to cure such breach or end such violation are unsuccessful, the Covered Entity must either (i) terminate this Agreement, if feasible or (ii) if termination of this Agreement is not feasible, the Covered Entity must report the Business Associate's breach or violation to the Secretary of the Department of Health and Human Services.

c. Effect of Termination. After termination of this Agreement for any reason, the Business Associate, with respect to PHI it received from the Covered Entity, or created, maintained, or received by the Business Associate on behalf of the Covered Entity, must:

(i) retain only that PHI which is necessary for the Business Associate to continue its proper management and administration or to carry out its legal responsibilities;

(ii) return to the Covered Entity (or, if agreed to by the Covered Entity in writing, destroy) the remaining PHI that the Business Associate still maintains in any form;

(iii) continue to use appropriate safeguards and comply with Subpart C of 45 CFR Part 164 with respect to electronic protected health information to prevent use or disclosure of the PHI, other than as provided for in this Section, for as long as the Business Associate retains the PHI;

(iv) not use or disclose the PHI retained by the Business Associate other than for the purposes for which such PHI was retained and subject to the same conditions set out at Section 3(a)(1) which applied before termination; and

(v) return to the Covered Entity (or, if agreed to by the Covered Entity in writing, destroy) the PHI retained by the Business Associate when it is no longer needed by the Business Associate for its proper management and administration or to carry out its legal responsibilities.

7. No Waiver of Immunity. The parties do not intend to waive any of the immunities, rights, benefits, protection, or other provisions of the Michigan Governmental Immunity Act, MCL 691.1401, *et seq.*, the Federal Tort Claims Act, 28 U.S.C. 2671 *et seq.*, or the common law.

8. Data Ownership. The Business Associate has no ownership rights in the PHI. The covered entity retains all ownership rights of the PHI.

9. Disclaimer. The Covered Entity makes no warranty or representation that compliance by the Business Associate with this Addendum, HIPAA or the HIPAA Rules will be adequate or satisfactory for the Business Associate's own purposes. Business Associate is solely responsible for all decisions made by the Business Associate regarding the safeguarding of PHI.

10. Certification. If the Covered Entity determines an examination is necessary to comply with the Covered Entity's legal obligations under HIPAA relating to certification of its security practices, the Covered Entity or its authorized agents or contractors, may, at the Covered Entity's expense, examine the Business Associate's facilities, systems, procedures and records as may be necessary for such agents or contractors to certify to the Covered Entity the extent to which the Business Associate's security safeguards comply with HIPAA, the HIPAA Rules or this Addendum. Activities carried out under this paragraph will be carried out consistent with paragraph 2.m.

11. Amendment.

a. The parties acknowledge that state and federal laws relating to data security and privacy are rapidly evolving and that amendment of this Addendum may be required to provide for procedures to ensure compliance with such developments. The parties specifically agree to take such action as is necessary to implement the standards and requirements of HIPAA and the HIPAA Rules. Upon the request of either party, the other party agrees to promptly enter into negotiations concerning the terms of an amendment to this Addendum embodying written assurances consistent with the standards and requirements of HIPAA and the HIPAA Rules. Either party may terminate the Agreement upon thirty days written notice if (i) the Business Associate does not promptly enter into negotiations to amend this Agreement when requested by the Covered Entity under this Section or (ii) the Business Associate does not enter into an amendment to this Agreement providing assurances regarding the safeguarding of PHI that the Covered Entity, in its sole discretion, deems sufficient to satisfy the standards and requirements of HIPAA and the HIPAA Rules.

12. Assistance in Litigation or Administrative Proceedings. Business Associate must make itself, and any subcontractors, employees or agents assisting Business Associate in the performance of its obligations under this Agreement, available to Covered Entity, at no cost to Covered Entity, to testify as witnesses, or otherwise, if someone commences litigation or administrative proceedings against the Covered Entity, its directors, officers or employees, departments, agencies, or divisions based upon a claimed violation of HIPAA or the HIPAA Rules relating to the Business Associate's or its subcontractors use or disclosure of PHI under this Agreement, except where the Business Associate or its subcontractor, employee or agent is a named adverse party.

13. No Third Party Beneficiaries. Nothing express or implied in this Addendum is intended to confer any rights, remedies, obligations or liabilities upon any person other than the Covered Entity, the Business Associate and their respective successors or assigns.

14. Effect on Contract. Except as specifically required to implement the purposes of this Addendum, or to the extent inconsistent with this Addendum, all other terms of the Contract must remain in force and effect. The parties expressly acknowledge and agree that sufficient mutual consideration exists to make this Addendum legally binding in accordance with its terms. Business Associate and the Covered Entity expressly waive any claim or defense that this Addendum is not part of the Contract.

15. Interpretation and Order of Precedence. This Addendum is incorporated into and becomes part of the Contract. Together, this Addendum and each separate Contract constitute the "Agreement" of the parties with respect to their Business Associate relationship under HIPAA and the HIPAA Rules. The provisions of this Addendum must prevail over any provisions in the Contract that may conflict or appear inconsistent with any provision in this Addendum. This Addendum and the Contract must be interpreted as broadly as necessary to implement and comply with HIPAA and the HIPAA Rules. The parties agree that any ambiguity in this Addendum must be resolved in favor of a meaning that complies and is consistent with HIPAA and the HIPAA Rules. This Addendum supersedes and replaces any previous separately executed HIPAA addendum between the parties. If this Addendum conflicts with the mandatory provisions of the HIPAA Rules, then the HIPAA Rules control. Where the provisions of this Addendum differ from those mandated by the HIPAA Rules, but are nonetheless permitted by the HIPAA Rules, the provisions of this Addendum control.

16. Effective Date. This Addendum is effective upon receipt of the last approval necessary and the affixing of the last signature required.

17. Survival of Certain Contract Terms. Notwithstanding anything in this Addendum to the contrary, the Business Associate's obligations under Section 6(d) and record retention laws ("Effect of Termination") and Section 13 ("No Third Party Beneficiaries") survive termination of this Addendum and are enforceable by the Covered Entity if the Business Associate fails to perform or comply with this Addendum.

18. Representatives and Notice.

a. Representatives. For the purpose of this Addendum, the individuals identified in the Contract must be the representatives of the respective parties. If no representatives are identified in the Contract, the individuals listed below are designated as the parties' respective representatives for purposes of this Addendum. Either party may from time to time designate in writing new or substitute representatives.

b. Notices. All required notices must be in writing and must be hand delivered or given by certified or registered mail to the representatives at the addresses set forth below.

Covered Entity Representative:

Form No. DTMB-3521 (Rev. 4/2012)
AUTHORITY: Act 431 of 1984
COMPLETION: Required
PENALTY: Contract change will not be executed unless form is filed

STATE OF MICHIGAN
DEPARTMENT OF TECHNOLOGY, MANAGEMENT AND BUDGET
PROCUREMENT
P.O. BOX 30026, LANSING, MI 48909
OR
530 W. ALLEGAN, LANSING, MI 48933

CHANGE NOTICE NO. 20
to
CONTRACT NO. 071B6200168
between
THE STATE OF MICHIGAN
and

NAME & ADDRESS OF CONTRACTOR:	PRIMARY CONTACT	EMAIL
Client Network Services, Inc. (CNSI) 702 King Farm Boulevard, 2nd Floor Rockville, MD 20850	John H. Cousins III	jee@cns-inc.com
	TELEPHONE	CONTRACTOR #, MAIL CODE
	(301) 634-4600	

STATE CONTACTS	AGENCY	NAME	PHONE	EMAIL
CONTRACT COMPLIANCE INSPECTOR:	DTMB	John Spitzley	(517) 335-6612	spitzleyj1@michigan.gov
BUYER:	DTMB	Steve Motz	(517) 241-3215	motzs@michigan.gov

CONTRACT SUMMARY:

DESCRIPTION: **Medicaid Services Administration**

INITIAL EFFECTIVE DATE	INITIAL EXPIRATION DATE	INITIAL OPTIONS INCLUDED	CURRENT EXPIRATION DATE
March 14, 2006	September 30, 2011	Two One-Year	September 30, 2018
PAYMENT TERMS	F.O.B	SHIPPED	SHIPPED FROM
N/A	N/A	N/A	N/A
ALTERNATE PAYMENT OPTIONS:			AVAILABLE TO MiDEAL PARTICIPANTS
☐ P-card ☐ Direct Voucher (DV) ☐ Other			☐ YES ☒ NO
MINIMUM DELIVERY REQUIREMENTS:			
N/A			

DESCRIPTION OF CHANGE NOTICE:

OPTION EXERCISED:	EFFECTIVE DATE OF CHANGE:	EXPIRATION DATE:
☒ NO ☐ YES	November 12, 2013	September 30, 2018

The following Community Health Administrative Management Payment System (CHAMPS) initiatives have been approved by the Michigan Department of Community Health and their Statements of Work are incorporated into this contract: 1) Provider credentialing for NCPDP, University Provider Screening and Network Providers, 2) Healthcare Claims Attachment Phase II Planning (EDI Claims attachment), 3) Unique Health Plan ID (Planning), 4) Hospital/LTC – Cost Settlement (Planning), 5) New Coverage Add and Change Interface, 6) CHAMPS Operational Data Store (ODS) and 7) Member Portal.

All other terms, conditions, pricing and specifications remain unchanged.

Per Administrative Board Approval on March 25, 2014.

VALUE/COST OF CHANGE NOTICE:	$ 0.00

ESTIMATED AGGREGATE CONTRACT VALUE:	$ 381,392,904.00

CHANGE NOTICE NO.20 to CONTRACT NO. 071B6200168

FOR THE CONTRACTOR:	**FOR THE STATE:**
Client Network Services, Inc. (CNSI)	
Firm Name	Signature
	Kim Stephen, Director of the Bureau of Budget and Purchasing
Authorized Agent Signature	Name/Title
	Micigan Department of Community Health
Authorized Agent (Print or Type)	Enter Name of Agency
Date	Date

Provider Credentialing for NCPDP, University Providers, and Network Providers Statement of Work

Prepared For:

State of Michigan
Department of Community Health
400 South Pine Street
Lansing, Michigan 48909

Prepared By:

CNSI
6465 Millennium Drive, Suite 150
Lansing, MI 48917

CNSI
WWW.CNS-INC.COM

June 17, 2013

This document contains proprietary information intended to be provided to key management staff of the State of Michigan. It should not be released to third parties or used for other purposes without the express written consent of CNSI.

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Section 1: Introduction

CNSI is pleased to present this statement of work to enhance the Community Health Automated Medicaid Processing System (CHAMPS) to support the integration of licensure of hospital facilities, university-based facilities, nursing facilities, university providers, network providers, and pharmacy providers. CNSI proposes to complete the Provider Credentialing Project under a fixed-cost agreement.

1.1 Regulatory and Business Drivers for Change

Since CHAMPS' inception, its provider enrollment functions have been regularly upgraded to keep pace with such federal mandates as the Affordable Care Act (ACA) and the Committee on Operating Rules for Information Exchange® (CORE®). Most recently, CHAMPS has been upgraded to include real-time and batch integration with the national credentialing service, Lexis-Nexis.

Lexis-Nexis has proven to be very helpful in reducing the manual effort required to validate provider credentials submitted during enrollment. Integration with Lexis-Nexis provides the capability to rescreen enrolled providers in batch to ensure the ongoing validity of the credentials and, consequently, the provider's ongoing eligibility to render services to Michigan Medicaid beneficiaries.

The State of Michigan would like to augment CHAMPS to enhance existing workflows and business processes by integrating screening and validation of the licensure for hospital facilities, university-based facilities, nursing facilities, and pharmacies. These providers currently provide the relevant credentials during enrollment. Screening and validation are presently done through manual processes. This includes the National Counsel for Prescription Drug Programs (NCPDP) number assigned to pharmacies through the NCPDP and other organization-specific credential identifiers. The proposed enhancements will address following goals:

- Conduct real-time screening service during pre-enrollment for all credential types.
- Perform batch processing for monthly, periodic monitoring of license expirations and revocations.
- Send data to the data warehouse for reporting purposes.
- Generate reports for State staff business operations support.

The expected outcome of this project is to improve Michigan Medicaid provider data integrity through the implementation of expanded credential screening processes.

1.2 CNSI Capabilities

CNSI's approach to enhance CHAMPS to support the Provider Credentialing Project is based on its ongoing partnership with the Michigan Department of Community Health (MDCH) and the Department of Technology, Management & Budget (DTMB) and its extensive knowledge of CHAMPS design, implementation, and operation. As system developers and integrators, CNSI aligns its clients' business processes and information systems to provide access to the right information at the right time, enabling the achievement of their desired business results and creating enterprise value. CNSI will employ its extensive technological experience in the industry and incorporate its flexible tools and methodologies to

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deliver quality results on time and within budget. CNSI completes jobs for clients by delivering on commitments with speed and purpose in accordance with the client's specifications and expectations.

CNSI will build upon its extensive knowledge gained from designing, developing, implementing, and operating CHAMPS for the State, as well as previous CHAMPS efforts, including the HIPAA 5010 compliance implementation, and the ongoing International Classification of Diseases, Tenth Edition (ICD-10), transition and remediation. CNSI's project team is composed of Medicaid subject matter experts (SMEs), who have the technical, business, and project management expertise to support this endeavor. The SMEs will collaborate with the State's business and technical personnel to develop a flexible and innovative solution to implementing provider credentialing services for the additional credential types and integrating them with CHAMPS.

CNSI's experience working on prior Medicaid health information technology (IT) initiatives has led to incorporating the following factors in developing this statement of work:

- **CNSI's in-depth, subject-matter expertise in provider credentialing**

  Starting with Michigan's early provider implementation, CNSI and the State have collaborated to ensure that the CHAMPS system remains on the forefront of modernization. The early provider implementation took Michigan from a highly manual, paper-based system to a paperless, provider self-service environment. The collaboration continued with the addition of Managed Care network provider enrollments, unique enrollment for providers applying for enhanced Medicaid incentive payments for the use of electronic health records, and home help providers. Most recently, the collaboration allowed CHAMPS to accommodate new ACA-related provider requirements and the implementation of the Lexis-Nexis credentialing services for core provider identifiers.

- **CNSI's capability to conduct complex analysis of Medicaid system requirements**

  CNSI's project teams have a wealth of experience with multiple Medicaid programs, which allows them to efficiently conduct the data-gathering and analysis activities for this initiative. Architects and SMEs who have worked with CHAMPS on a variety of Medicaid health IT initiatives are among the team members involved in this effort.

- **CNSI's sensitivity to the State of Michigan's needs and constraints**

  CNSI is uniquely qualified to remain sensitive to the State's needs and constraints in defining the project's approach. The team will employ an orderly, structured, professional approach that is sufficiently flexible to respond to changes in requirements that evolve from additional understanding. Overall, CNSI has practical "hands-on" experience of what does and does not work.

1.3 Proposed Project Organization

CNSI believes this statement of work represents the best possible combination of architecture, technology, support, and experience to complete this project. The proposed team members are each the best possible candidates of their respective disciplines. The underlying logic behind identifying each member of this group is that:

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- They share the same philosophical approach for undertaking this project – **the customer comes first**.
- They understand the values that each member brings to successfully implementing the project.
- They are committed to understanding and incorporating the State's requirements.
- They understand the necessary advanced technologies, business needs, and operational issues.

CNSI's primary objective is the successful implementation and completion of the project. Its team is fully dedicated to the Provider Credentialing Project and is confident in its ability to achieve that goal.

However, an effective project management plan cannot work with participation only by CNSI. As the customer, the State is the most important member of the project team. The customer must be actively engaged in the process at all levels. Implementation is only as good as the partnership established and maintained between all involved parties.

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Section 2: Project Management, Methodology, Tools, and Technical Approach

This section presents CNSI's project management and technical approaches, methodology, tools, and phased work plan for accomplishing all activities required for the Provider Credentialing Project implementation. This section describes the scope of activities to be addressed throughout the project, from the initiation phase to final implementation, as well as the techniques and methodologies CNSI's project team will use.

The following subsections will contain a high-level description of CNSI's four-phased approach for this project. For each phase, the major activities and anticipated deliverables are presented, followed by a high-level description of the major milestones and approximate timelines.

2.1 Project Management Approach

The project's successful implementation relies on the framework and environment provided by project and quality management. Figure 1 shows CNSI's project and quality management framework and how the related activities interact with project tasks.

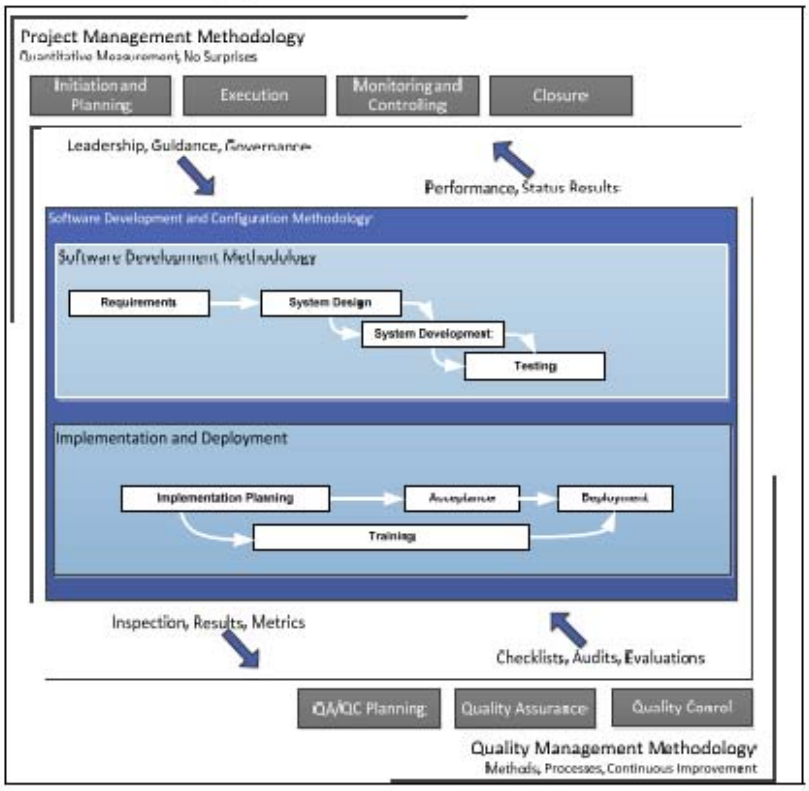

Figure 1. CNSI's Project Management and Quality Management Framework

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Although all projects are unique, they share common components and processes. The generally accepted process groups defined by the *Project Management Body of Knowledge* (*PMBOK*), as incorporated into the CNSI project management process, are:

- **Initiating:** This process group defines the project objectives and grants authority to proceed. For CNSI, the initiating processes are largely incorporated into the proposal development process, during which required partners are identified.
- **Planning:** This process group refines the project objectives and scope and plans the tasks, activities, and steps necessary to meet the project's objectives. The planning processes start during proposal development and proceed following contract award while CNSI works with the customer to establish and baseline the project management plan. The project management plan is modified and updated as necessary over the course of the project. It is the culmination of the planning processes for scope definition and management, time (scheduling), staffing (human resources), communications, and risk management.
- **Executing:** This process group puts the project's plans into motion. This is where the bulk of the work for the project is performed.
- **Monitoring and Controlling:** This process group measures the performance of the project's executing activities and reports these performance results to project managers and stakeholders. Output is used to refine, improve, and/or change project management (including plans and schedules) as necessary to meet the project's objectives.
- **Closing:** This process group documents the formal acceptance and approval of the project's product and brings all aspects of the project to a close.

CNSI is confident it has the correct methodology and project framework in place to successfully implement the Provider Credentialing Project modifications. CNSI continually improves its project management processes using lessons learned from previous projects and through the proficiency and continuous education of its program and project managers, senior technical and engineering staff, and senior and corporate management. This ensures a number of advantages:

- The project management philosophy is firmly entrenched within the entire project team, including MDCH and CNSI.
- Project management is a core competency.
- The project staff is focused on successfully implementing the project.
- Project management, quality management, and cost management processes are fully integrated and their infrastructure is in place.
- Effective project status reporting is established throughout the project life cycle.
- Project and software development methodologies are well documented.
- Project information is communicated continuously to the right people at the right time.
- The project is continuously monitored against performance.
- Excellence in quality and delivery are built-in.

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- Deliverable review and approval processes are in place.

Through developing the project management plan, CNSI expects to collaborate with the MDCH project management team to further customize CNSI's project management system to successfully complete the implementation.

2.2 Project Methodology

CNSI's holistic approach for this project will use its proven methodology as the overarching framework and bring an experienced team of program managers, SMEs, technical experts, and change management resources to support this effort.

The project methodology is a framework that facilitates the integration of CNSI's extensive system experience, which is rooted in application implementations, methodologies, and delivery tools. This framework allows CNSI to deliver services to its clients consistently across its footprint and gather continued enhancements for its supporting methodology, thereby providing continued value for its clients.

CNSI's methodology is an integrated methodology that combines its best delivery assets. The methodology:

- Provides a scalable, integrated collection of assets.
- Provides a consistent level of detail and presentation.
- Supports tailoring to scale, which provides a unique, but consistent, cost-effective delivery approach.

CNSI's methodology approach consists of the following:

- The **Manage** work approach provides a single, consistent approach to managing CNSI's engagements. Within the Manage Approach is the Quality Management activity, which verifies that deliverables and processes meet requirements. The Quality Management activity also supports continuous process improvement, as well as the methodology.
- The **Life Cycle** work approach addresses unique expertise while providing overall integration across the full implementation life cycle.

CNSI's methodology has the flexibility to be adapted to meet MDCH's unique requirements while confirming that its experienced staff members follow established practices.

While no two engagements are the same, MDCH expects CNSI to deliver in a consistent, systematic approach. The proposed project methodology incorporates CNSI's staff's delivery experience into a single, integrated approach. It provides the structure for integrating CNSI's capabilities while allowing individual project teams the flexibility to use client-mandated tools. The right assembly of technologies, techniques, and deliverable processes requires the specific experience and expertise found in CNSI's staff.

Investing time to create an effective plan with clear objectives is integral to effective project execution. CNSI's methodology provides a structured approach to the planning process. While this may appear to require more initial effort than desired, experience has shown that following these processes reduces the likelihood of planning mistakes and results in lower risk and a more cost-effective, rapid delivery.

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CNSI's methodology incorporates a consistent approach for identifying, tracking, and measuring the value derived from ongoing projects. CNSI's experience developing and delivering various client projects is incorporated into the project strategy and planning activities.

In undertaking this project, CNSI will employ its iVision360 system development life cycle (SDLC) methodology tailored for the Provider Credentialing Project:

- **User is at the Center:** CNSI's primary motivation in developing iVision360 is to put the user at the center of the project life cycle. Successful projects have high interaction with end users and place the user at the center of the project. Every phase and activity of iVision360 focuses on interaction and collaboration with the user community. CNSI does this by implementing agile techniques and building working software in an iterative fashion with user validation at periodic intervals.
- **Common Goals:** Users actively participate in configuration sessions with an integrated team of developers, analysts, and testers. This method avoids the pitfalls of waterfall methods. iVision360 provides the team with a sense of purpose, a goal, and the drive to accomplish the end objective: software that meets the requirements.
- **Early and Often Testing:** iVision360 provides an opportunity to test early and often so formal system test phases and subsequent test phases are more likely to meet schedule expectations with a lower error-discovery rate.

By introducing the baseline management features of waterfall, CNSI minimizes the risk of scope creep that is sometimes associated with iterative methods. Moreover, implementing and integrating with project management processes will provide integrated change, issue, and risk management. Table 1 describes the key benefits of each of the industry-standard methodologies that are blended into iVision360.

Table 1. SDLC Methodology Comparison

Methodology	Key Benefits Blended into iVision360
Waterfall	Baseline approval of requirements Structured documents and customer approvals Formalized testing
Iterative/Agile	Frequent customer interaction Decomposing work into small meaningful features that are presented in working software Frequent course corrections Sense of real progress Early and frequent testing
Extreme Programming	Teams formed between developing organization and customer Sense of common vision and goal

iVision360 has been adapted for the purposes of this project. The customized version is presented in *Section 2.5.1 iVision360 Iterative Design, Testing, and Documentation Approach*.

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2.3 Project Management Tools

Tools, when properly applied within the methodology framework, will reduce the time to complete a project by providing predefined processes, templates, documents, and training materials. More importantly, use of the appropriate tools will help reduce risk and increase efficiency.

CNSI will continue to use the tools already proven effective during the previous undertakings to reduce the time to complete the project and mitigate risk. Table 2 lists the tools CNSI will utilize for the project.

Table 2. CNSI Project Tools

Tool	Purpose
ReqTrace®	CNSI's requirements database used during design and test phases
Microsoft Visio	Develop use case diagrams, technical architecture diagrams, and support process flows
Microsoft Office	Develop project deliverables as well as presentations and spreadsheet artifacts needed to support deliverables
As-One	Repository for deliverables, presentations, and artifacts

Microsoft Visio and Microsoft Office are industry-standard tools. The following subsections provide additional information about ReqTrace and As-One.

2.3.1 ReqTrace

CNSI will use its ReqTrace web application for requirements analysis and validation.

During project initiation and requirements planning, ReqTrace will be loaded with the functional, technical, and support requirements. ReqTrace is CNSI's requirements management tool of choice being used in Medicaid management information system (MMIS) projects. ReqTrace provides the ability to trace requirements to use cases, related test cases, and results. The application can store requirements-related attributes, including revisions, notes, and comments.

CNSI began using ReqTrace during the implementation of CHAMPS. The requirements validation processes used on the project, as well as the use of ReqTrace, resulted in the requirements validation phase being completed ahead of schedule.

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2.3.2 As-One

Believing that continuous collaboration and information-sharing are key factors to successful project execution, CNSI will use As-One, its web-based enterprise program management solution. Figure 2 illustrates how As-One is designed to support team collaboration, knowledge management, and process improvement. As-One will provide a convenient repository for all program data and will give MDCH oversight personnel direct visibility into project performance.

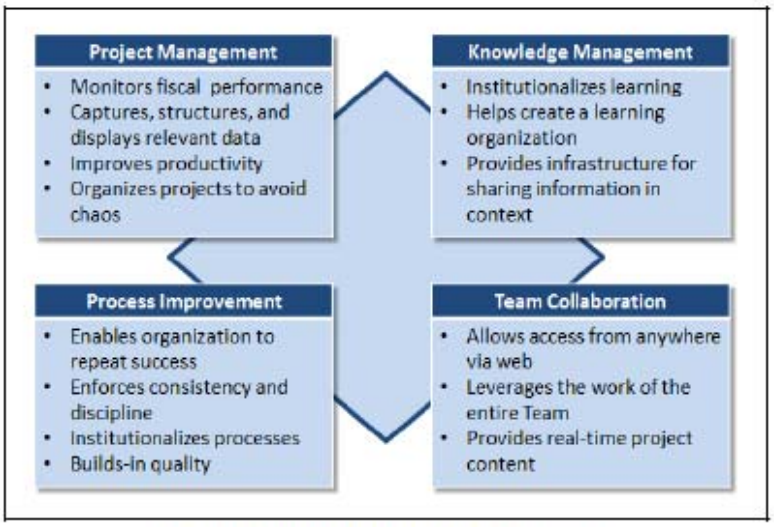

Figure 2. As-One Collaboration and Improvement

As-One is an "out-of-the-box" solution that supports CNSI's program management philosophy: experienced people, managed processes, and enabling technology.

As-One will allow CNSI users to share real-time data specific to the user's authority and association and is accessed via a standard web browser. CNSI's previous and ongoing projects with MDCH and DTMB use As-One. Training will be provided for team members new to the program.

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2.4 Solution

This section will review CNSI's proposed Provider Credentialing Project, including technical and functional overviews.

2.4.1 Technical Overview

CHAMPS currently provides credential verification services through integration with Lexis-Nexis. Verification involves matching both the credential to be verified and the demographic information about the provider, including name, address, and other factors relevant to that credential. Credentials can be verified for both a national- and state-level credentials. The national provider identifier (NPI) is an example of a national-level identifier and the Michigan state-issued medical license is an example of a state-level identifier. Credential verification is accomplished in either real-time or periodic batch mode.

Credentialing requirements are contained in the provider permissions matrix. This matrix will require modification to support the newly identified credential types and to link them to the provider types and specialties where they will be required. Real-time services are invoked automatically through the Provider Enrollment Business Process Wizard when an applicant enters a credential requiring verification, such as the NPI. Real-time services can be invoked on-demand by the MDCH Provider Enrollment staff member assigned to review the application. Submitted credentials are also automatically verified in real-time one last time when the enrollment application is approved. After the provider has successfully enrolled in CHAMPS, real-time services may be invoked again if a new credential is added to the provider's record or if the effective dates for an existing credential are changed. For any discrepancy found in real-time processing, CHAMPS displays the appropriate error and action messaging to the user.

Periodic batch re-screening is also performed through integration between CHAMPS and Lexis-Nexis. All credentials that originally required verification are periodically reviewed to identify conditions, such as revocation and changes to the effective date span for the credential. CHAMPS produces reports that allow the State to follow-up and resolve any reported discrepancies.

The Provider Credentialing Project will expand the types of credentials verified to include the NCPDP number and other credentials, such as those issued to hospitals and university facilities. In addition to incorporating new credential types into the Lexis-Nexis validation process, the effort will require modification of the provider permission matrix and changes to the RuleIT® rules engine to expand the business rules necessary to correctly enroll providers with the new types of credentials.

Work will be required of CNSI's vendor, Lexis-Nexis, to incorporate any newly required credentials into the services they provide to CHAMPS.

The list of credentials to be included in this project will be defined in the requirements elicitation and validation activities. Beyond expanding the types of credentials verified through Lexis-Nexis, changes to CHAMPS may include screen and database changes to capture credentials not currently stored in the system.

Credentials already stored in CHAMPS, such as the NCPDP number, will require one-time batch validation to identify any pre-existing anomalies for manual resolution. This one-time process will be performed on implementation to ensure all current credentials are captured for revalidation.

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2.4.2 Functionality

This project will expand existing real-time and batch credential verification to include verification of the NCPDP number, and additional identifiers to be recognized through requirements elicitation and verification.

2.5 Technical and Phased Approach Work Plan

CNSI has created an initial work plan and timeline for the Provider Credentialing Project. This work plan describes the expected major activities for the proposed project phases. This information is presented in Figure 3 below. A detailed description of the major activities within each phase is presented in *Section 2.5.2 Phased Approach Work Plan.*

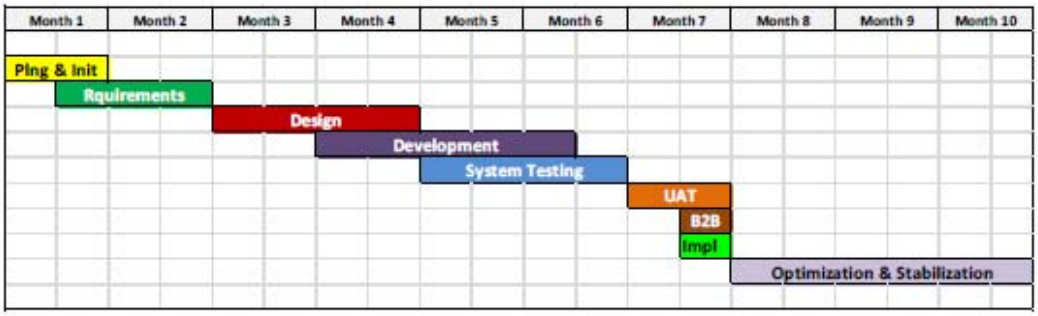

Figure 3. Initial Project Work Plan

CNSI structured this work plan to address the overall relationships of the phases and activities required to complete the project. It effectively uses the professional resources required to accomplish these phases and produce high-quality products in a cost-conscious manner.

The following subsections further describe how CNSI intends to accomplish the goals of this work plan by employing its iVision360 methodology.

2.5.1 iVision360 Iterative Design, Testing, and Documentation Approach

In this section, CNSI provides an outline of its iVision360 SDLC. The SDLC is a full-featured methodology that includes standard design and development processes. CNSI's SDLC processes have been adapted to address the specific needs of the project. This project will be divided into four phases and will be incorporated into a standard operational release.

CNSI will engage in iterative requirements analysis and design with the State at the beginning of each release. The State will be able to review requirements analysis and design documents as soon as a logical set of iterations are completed. CNSI expects initial State signoff upon acceptance of the iteration's document scope. This will help reduce the time required for document review and approval. Narrowing the document scope will assist the State in performing a thorough review. Once iterations are completed for a release, an overall document will be produced for a final delivery and acceptance to State.

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The iterative/agile development and testing portion of the iVision360 methodology is visible in each release of design and coding. During this phase, technical design specifications for impacted functions and user stories are constructed in parallel by developers and SMEs. As the impacted function's design is completed, the Team Lead will plan the related development iterations.

Developers will build internal design documentation prior to, and during, the iterations. The beginning of each iteration is reserved for startup activities, including finalizing the internal design documentation. The developer meets with the data modeling team on the first day of an iteration to conduct a walkthrough of any required data model changes. The data modeling team makes the required changes to the database schema and approves the physical model for coding. Developers also develop iteration test cases (for the tasks that may not be tested with automatic internal iteration test code), which are required to test each story completely.

Coding begins when the internal design and pre-coding work is completed for the iteration. The developer will write internal iteration test scripts in parallel to actual working code and update screens and other system functions to fit the physical mode. The developer will execute the iteration test scripts as they complete sections of code. The codes will be built and tested incrementally. The developer will coordinate daily stand-up meetings and communicate any development issues.

This development approach ensures developers do not work in silos. It also avoids the traditional approach of throwing design documentation "over the fence" to developers to begin coding, only to discover later that major rework is required halfway through the development process.

Developers eventually test the code against internal auto-unit-code and manual internal iteration test scripts. As they reach the end of the iteration, they will run the code against functional scripts developed by the test team. Discrepancies are identified and corrected, and the developer retests to ensure all discrepancies are corrected and closed before the iteration ends. The developer will conduct a peer review of the impacted function's code on the last day of the iteration and then update the code based on the review. When developer iteration testing and software code reviews are successfully completed for the iteration, the code will be promoted to the integration test stream. The code will be released to the test team for system testing when coding and developer iteration testing is completed for all of an impacted functions user stories.

During initial development iterations, the test team will develop system test cases based on requirements specification. During system testing, the test team will execute system test cases to validate system results against requirements.

CNSI plans to engage the test and development teams early on to build the regression test suite for critical functions. This will help to speed up testing and improve overall quality of implementation. During system testing, if required, regression tests will be performed on impacted functions based on changes to a previously tested baseline. The intent of regression testing is to demonstrate that CHAMPS continues to meet all approved requirements after changes have been introduced to a previously tested baseline.

For the Provider Credentialing Project, CNSI will integrate the new features through the standard CHAMPS operational release process. As soon as system testing is completed for an activity, CNSI will deliver the code to the UAT environment for the targeted release. This effort will incorporate a standard four-week UAT with an overlapping two-week B2B period.

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Figure 4 presents a graphical overview of the processes that are part of the iVision360 methodology.

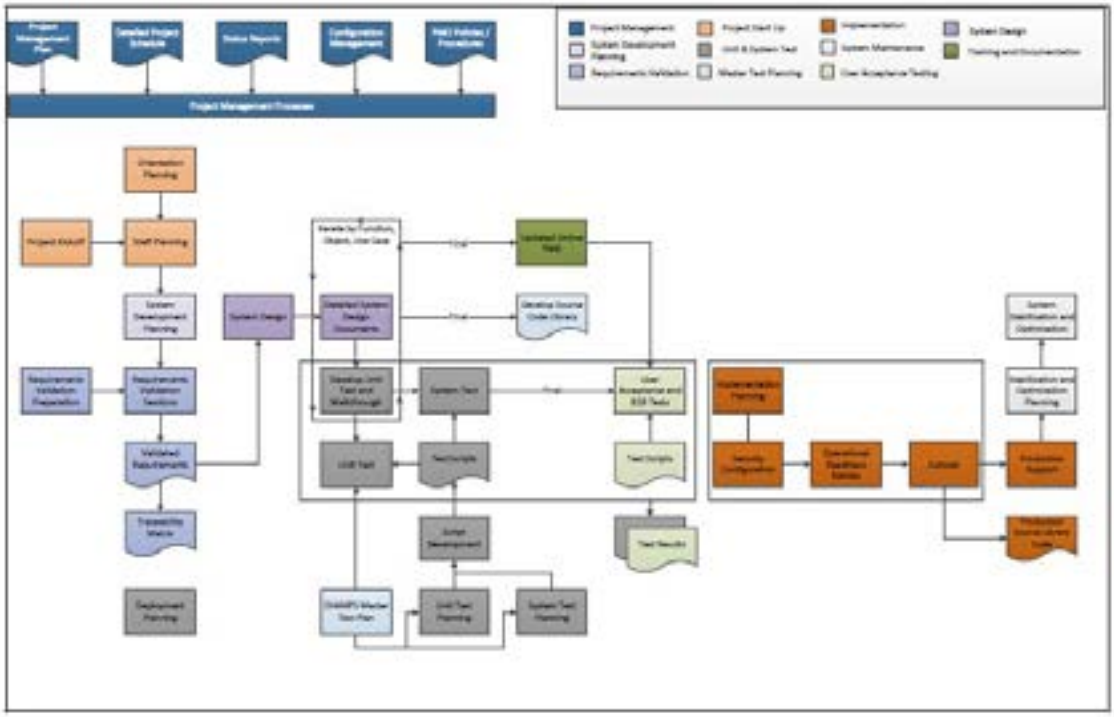

Figure 4. iVision360 Process Diagram

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2.5.2 Phased Approach Work Plan

CNSI proposes an overlapping, four-phased approach to the Provider Credentialing Project, consisting of design, development, implementation, stabilization, and optimization activities.

The four phases are:

- **Phase I:** Initiation and Requirements
- **Phase II:** Design, Coding, and System Testing
- **Phase III:** UAT and Production Deployment
- **Phase IV:** Stabilization and Optimization

Figure 5 provides a high-level overview of the four phases, their major activities, and expected timelines.

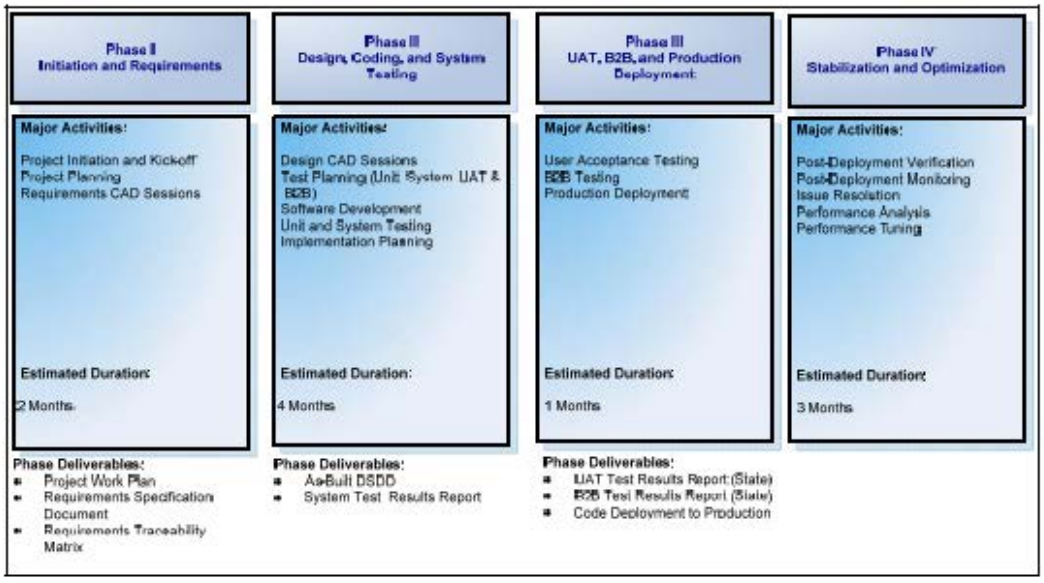

Figure 5. High-Level Project Phases and Activities

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With every project, there are critical milestones to be met and work products and deliverables that must be developed and produced in order to provide the inputs necessary to perform the next phase. Table 3 elaborates on the key high-level milestones of the proposed implementation plan, along with the expected deliverables.

Table 3. High-Level Activities and Milestones by Phase

Major Activity	Description	Phase
Project Initiation	Establish the project team structure, key stakeholders, and operating guidelines for team activity throughout the course of the project.	Phase I
Project Planning	Establish project plans and schedules.	Phase I
Requirements Collaborative Application Development (CAD) Sessions	Conduct CAD sessions to elicit and validate requirements for the Provider Enrollment subsystem and changes to the interfaces with Lexis-Nexis.	Phase I
Phase I Deliverables • **Project Work Plan** • **Requirements Specification Document** • **Requirements Traceability Matrix**		
Design CAD Sessions	Conduct CAD sessions to document detailed system design changes for Provider Enrollment.	Phase II
Test Planning	Conduct detailed test planning for each phase of testing: unit, system, UAT, and B2B.	Phase II
Software Development	Software changes required to support the detailed functional design including: • Screens • Functionality (driven by use cases) • Data Models • Reports • Letters • Interfaces	Phase II
Unit and System Testing	Internal CNSI testing of developed functionality at the component, subsystem, and system level, including end-to-end (E2E) regression testing.	Phase II
Implementation Planning	Coordinate production installation of the system changes.	Phase II

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Major Activity	Description	Phase
Phase II Deliverables • **As-Built Detailed System Design Document (DSDD)** • **System Test Results**		
UAT	MDCH testing of all system changes using formal UAT test scripts.	Phase III
B2B	Selected providers test new functionality in accordance with the B2B Test Plan.	Phase III
Production Deployment	CNSI and the State deploy the modifications in the MDCH production CHAMPS environment.	Phase III
Phase III Deliverables • **UAT Results Report (State Deliverable)** • **B2B Test Results Report (State Deliverable)** • **Code Deployment to Production**		
Post-Deployment Verification	Perform a sanity check of all system functions after code deployment to ensure all features function as designed.	Phase IV
Post-Deployment Monitoring	Overall monitoring of CHAMPS system health and performance after code deployment.	Phase IV
Issue Resolution	Identification of and plan-of-action to resolve issues should they arise after code deployment.	Phase IV
Performance Analysis	Measure and analyze post-deployment performance of the CHAMPS system in comparison to pre-deployment system performance.	Phase IV
Performance Tuning	Adjust system queries, database tables, and interfaces as needed to improve system processing and throughput.	Phase IV

2.5.2.1 Phase I – Initiation and Requirements

Activity 1: Project Initiation

During this activity, CNSI will collaborate with the State to identify the key business and technical team members who will participate in the Provider Credentialing Project. CNSI will conduct the formal project kickoff and provide orientation for the project effort.

The major milestones associated with this activity are:

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- Participating team members from the State are identified.
- Project kickoff meeting is conducted and project kickoff is completed.

Activity 2 - Project Planning

During this activity, CNSI will develop the project schedule to track and monitor the progress of the Member Portal project. The project schedule outlines the list of all the activities that are needed by CNSI to fulfill the needs of the Member Portal project. CNSI will also take the responsibility of integrating DCH and DTMB tasks in the project schedule to make sure all the dependencies are identified and tracked accordingly. Once the integrated schedule is reviewed and approved by all the relevant stakeholders, it is baselined.

The milestone associated with this activity includes:

- Integrated Project Schedule.

Activity 3 – Requirements CAD Sessions

The goals of the Provider Credentialing Project have been defined at a high-level within this statement of work. During this activity, CNSI will host CAD sessions to elicit and validate functional and technical requirements. The CAD sessions will include the State and CNSI functional and technical SMEs. CNSI will compare the validated requirements with current CHAMPS functionality and technical architecture to determine the impact of the new requirements across all CHAMPS subsystems, including system aspects, such as:

- New and modified screens.
- Functionality (use cases).
- Data models.
- Reports.
- Letters.
- Interfaces.

During these sessions, CNSI and the State will collaborate to determine which credentials, in addition to the NCPDP number, will be included. This will result in a requirements specification document which will provide a clear, concise, and final definition of each requirement. The finalized requirements will be used during the design and development activities in Phase II.

The major milestones associated with this activity are:

- Functional requirements specification document is delivered.
- Approved requirements have been loaded into ReqTrace.

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2.5.2.2 Phase II – Design, Coding, and System Testing

Activity 1 – Design CAD Sessions

During this activity, CNSI will host CAD sessions to produce detailed design artifacts. Sessions will be organized and scheduled per requirements for the affected CHAMPS subsystem and the solution's technical architecture. CAD sessions will include State and CNSI functional and technical SMEs. Using the existing CHAMPS design and the requirements specification document as a starting point, session participants will identify and document required design changes including system aspects such as:

- Screens
- Functionality (use cases)
- Data Models
- Reports
- Letters
- Interfaces

This will result in final, revised design artifacts, including use cases and data models, which will be the basis for the development of changes to system functions. During this activity, the specific changes needed in the provider permission matrix will be identified. CNSI will submit the completed design artifacts to the appropriate State decision-maker shortly after the completion of the CAD session. The State decision-maker will formally approve the design artifacts via signature on an approval form, similar to the existing CHAMPS enhancement approval process. This approval indicates that design is final and development can begin. CNSI will submit a final, as-built DSDD for MDCH approval upon completion of all design sessions.

The major milestone associated with this activity is the delivery of the as-built DSDDs.

Activity 2 - Development

During this activity, CNSI codes the software changes required to support the updated detailed functional and technical design. Development is performed through a series of bi-weekly development iterations, as previously described. Development includes the coding changes as defined in the as-built DSDDs for CHAMPS, including system aspects, such as:

- Screens
- Functionality (use cases)
- Data Models
- Reports
- Letters
- Interfaces

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During this activity, CNSI will also apply the modifications to the provider permission matrix and load it into the development environment. At the conclusion of each development iteration, the code will be delivered to the CNSI Test Team.

The major milestone associated with this activity is that all development iterations are completed.

Activity 3 – Test Planning

During this activity, CNSI collaborates with the State to prepare test scenarios and scripts for each phase of testing, including system testing and UAT. The system test scenarios and scripts are prepared by the CNSI Test Lead. UAT and B2B test scenarios and scripts are prepared by the State. For the Provider Credentialing Project, there is significant interaction with Lexis-Nexis and new types of providers will be going through enrollment using the newly added credentials. Testing with Lexis-Nexis is expected to occur throughout all phases of testing. Testing with providers will be deferred to the B2B test period.

Milestones associated with this activity include:

- System test preparation is completed
- UAT preparation is completed (State).
- B2B preparation is completed (State)

Activity 4 – Implementation Planning

During this activity, CNSI collaborates with the State, the State's data warehouse vendor, and Lexis-Nexis to coordinate the timing of the production installation of the system changes. The Provider Credentialing Project will be incorporated into the regular CHAMPS release operational release implementation schedule. Implementation planning activities will focus on targeting the operational release that will include this initiative and integrating the new features into the release.

The major milestone associated with this activity is identification of the operational releases where the software will be deployed.

Activity 5 – Unit/System Testing

During this activity, CNSI tests the developed functionality at the component, subsystem, and system level, including E2E regression testing. System testing will be aligned with the selected operational releases where the code will be deployed. Testing for this project will focus on ensuring that the provider permission matrix is functioning as designed and that Lexis-Nexis is correctly validating the newly added credentials.

Milestones associated with this activity include:

- System test results report is delivered.
- Code is deployed to UAT environment.
- UAT begins.

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2.4.2.3 Phase III – UAT and Production Deployment

Activity 1 – User Acceptance Testing (UAT)

During this activity, CNSI provides support to MDCH staff who will conduct UAT using State-developed test scenarios and scripts. UAT testing will be aligned with the selected operational releases where the code will be deployed. As with system testing, UAT for this project will focus on ensuring that the provider permission matrix is functioning as designed and that Lexis-Nexis is correctly validating the newly added credentials.

The major milestone associated with this activity is that the State publishes the UAT Results Report.

Activity 2 –Business-to-Business Testing (B2B)

During this activity, CNSI deploys the code to the B2B environment and provides support to the State in conducting external B2B testing. A small number of providers having the new types of credentials will exercise the end-user interface for enrollment and maintenance request functions.The selected providers will have new types of credentials to test the functionality developed through the Provider Credentialing Project. B2B testing will be aligned with the selected operational releases where the code will be deployed.

The major milestone associated with this activity is that the State publishes the B2B Test Results Report.

Activity 3 – Production Deployment

During this activity, CNSI and the State, its data warehouse vendor, and Lexis-Nexis collaborate to execute the implementation plan. The finalized code will be merged into the selected regular operational release. CNSI deploys the release to the production environment where it is available for use by MDCH.

The major milestones associated with this activity include:

- Code is deployed to production.
- Stabilization and optimization begins.

2.4.2.4 Phase IV – Stabilization and Optimization

Activity 1 – Post-Deployment Verification

This activity involves verifying the correct installation and operation for all system components. During this activity, CNSI performs a sanity check of all system functions after code deployment, to ensure all features function as designed.

Purpose:

- Verify Screen Operation
- Verify Interfaces Operation
- Verify Database-to-Database (DB2DB) Jobs Operation
- Verify Data Warehouse Extract Operation

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- Verify all Production Job Schedules:
  - Interface Schedules
  - DB2DB Job Schedules
  - Data Warehouse Extract Schedules

Activity 2 – Post-Deployment Monitoring

This activity involves monitoring the system in the months after the application upgrade has gone live.

Purpose:

- Monitor System Performance Metrics:
  - Application Screen Performance
  - Database Performance
  - Application Queues Performance
  - Interface Performance
  - DB2DB Job Performance
  - Data Warehouse Extract Performance
  - Reports Performance

Activity 3 – Issue Resolution

This activity involves evaluating issues reported in the 90-day period. Issues will be logged and processed according to the CHAMPS operations incident management, application support, change management, and release management processes. Issues that require system changes will be planned for software releases based on priority and will be assigned to CHAMPS operations releases in accordance with the approved schedule.

Purpose:

- Incident Management:
  - OTRS Ticket Entry
  - OTRS Ticket Triage
  - OTRS Ticket Analysis
  - OTRS Ticket Disposition Determination (Defect, Enhancement, Request for Change (RFC), or Closure)
- Application Support:
  - Iterative Development
  - System Testing
  - RFC Creation and Testing

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- Change Management:
  - CQ Entry
  - CQ Analysis
  - CQ Planning:
    - Change Log Estimation and Approval
    - Code Promotion
    - RFC Deployment
- Release Management:
  - Release Planning
  - Release Assignment
  - Release Deployment

Activity 4 – Performance Analysis

This activity is the process for analyzing the performance of CHAMPS after the Provider Credentialing Project changes have gone live. Various operational reports and monitoring tools will be used to assess the performance of the system and identify opportunities for improvement.

Purpose:

- Operational Reports:
  - Identify any processes performing below benchmarks.
- Monitoring Tools:
  - Identify any servers with metrics outside normal operating ranges.
  - Identify any slow running queries.
  - Identify heavily used web pages.
  - Identify heavily used transactions.

Activity 5 – Performance Tuning

After all processes, servers, and queries where performance issues are identified, the Application Support and Infrastructure Teams will construct a remediation plan. The remediation plan will identify the changes to be made, the timeline for the changes, and the deployment plan either through software release, RFC, or maintenance outage in the case of server changes.

Purpose:

- Application Support:
  - Perform process tuning in the development environment.
  - Plan software changes for software releases per the CHAMPS operations release schedule.

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  - Tuning changes are released and deployed according to the CHAMPS operations change management and release management processes.
  - If the Application Support Team requires infrastructure changes, they will request the changes through the CHAMPS operations RFC process.
- Infrastructure Support: Perform server tuning in lower environments.

Deploy configuration changes to production during monthly planned maintenance outages. Emergency maintenance outages may be requested if performance issues are severe and business-impact is high. In that case, the emergency outage will be planned based on CHAMPS service-level agreements in order to minimize business impacts.

CNSI will support this effort with the following deliverables:

- Operational Reports
- Performance Reports
- Issue Resolution Plan

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Section 3: General Assumptions

This statement of work is presented based on the following assumptions:

1. The credentials to be verified through this endeavor are limited to those credentials available through Lexis-Nexis to which the State does not already subscribe. NCPDP number is an example of this type of a credential present in Lexis-Nexus at this time. If credentials outside of Lexis-Nexis purview are required, a change order will be required to fund the necessary Lexis-Nexis development.
2. The Optum Data Warehouse organization is responsible for making changes to the State's data warehouse to accept any new data elements resulting from the Provider Credentialing Project.
3. The solution developed for the Provider Credentialing Project will meet all applicable State technical and security standards.
4. The solution developed for the Provider Credentialing Project will not require any update to the CHAMPS operations or disaster recovery documentation.
5. The solution developed for the Provider Credentialing Project will not require new hardware or changes to the State's infrastructure.

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Section 4: Pricing

This section presents CNSI's fixed-price, overall labor cost for completing the Provider Credentialing Project. The cost was derived based on the expected effort required, as presented in our initial work plan, composed of the four phases depicted in Figure 5. The total fixed-price labor cost for the Provider Credentialing Project is $3,000,000. Additional estimated Lexis-Nexis licensing cost is estimated at $520,000. Twelve months of ongoing screening is estimated at $60,000. The total estimated cost including 12 months of screening is $3,580,000.

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CHAMPS Operational Data Store Project Statement of Work

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June 5, 2013

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Section 1: Introduction

CNSI is pleased to present this statement of work to implement the Community Health Automated Medicaid Processing System (CHAMPS) Operational Data Store (ODS) for the State of Michigan Department of Community Health (MDCH). CNSI proposes to complete the CHAMPS ODS Project under a fixed-cost agreement.

1.1 Regulatory and Business Drivers for Change

Currently, the State of Michigan has a robust solution that supports effective online processing with CHAMPS and historical and trend reporting from the Data Warehouse. While this has been and continues to be a successful solution, there have been recent challenges in creating and supporting operational reports using real-time data. The CHAMPS system priority is transaction processing, so ad-hoc reporting by users is limited to prevent degradation of system performance. The Data Warehouse, on the other hand, has the full capability for user ad-hoc reporting, but it does not have real-time data within the framework. The source data files are received and loaded on a weekly schedule. Therefore, there is a need to review options that will support ad-hoc reporting using near real-time data.

Having more current access to this data will address two different challenges for the State. The first is the integration of more historical and cross-functional analytic processes into the front-line processes, providing more timely and relevant date for its membership. The second is timely interactions and transactions into back-end analytics so that CHAMPS' operational strategy can be measured and fine-tuned at an ever increasing pace. In order to provide the real-time data that will address these challenges, CNSI will explore the incorporation of an ODS into its existing data management architecture.

1.1.1 The Difference Between our ODS and Data Warehouse

By definition, a data warehouse contains data collected from various sources when the source systems are offline or not in peak-use. Therefore, the data is updated on a routine schedule (such as weekly). However, an ODS is online and updated frequently (such as hourly) and typically supports real-time reporting modules or applications. In most cases, the ODS is used for transactional data, especially when there are multiple data sources that must be brought together for real-time reporting purposes.

Most of the data used in current operations is housed in an ODS before it is transferred into a data warehouse for long-term storage, reporting, and archiving. To ensure accurate and reliable data in an ODS, and subsequently into a data warehouse, the data can be scrubbed, resolved for redundancy, and checked for compliance with the corresponding business rules. An ODS supports integrating disparate data from multiple sources so that business operations, analysis, and reporting can be carried out while business operations are occurring.

ODSs are normally designed for relatively simple queries on small amounts of data, such as finding the status of a group of members' claims, rather than complex queries on large amounts of data typical of a data warehouse. An ODS is similar to short-term memory in that it stores only very recent information. Comparatively, a data warehouse is comparable to long-term memory in that it stores relatively permanent information.

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The CHAMPS ODS implementation for the State will focus on claims. Claims data from multiple sources will be updated several times per day into the ODS; however, the actual frequency of data loads will be defined during the course of the project. By having this data, users will have the ability to perform ad-hoc reporting using near real-time data. For example, claims data that resides in CHAMPS' Claims and Encounters subsystem, ClaimsSure, or eMIPP can be combined together to create reports, as needed. The ODS will be a separate database from the CHAMPS transactional database which will eliminate any performance impacts on CHAMPS processing and allow for fast processing of queries and reports. Extract, transform, and load (ETL) processes will be used to move the data frequently from the transactional database to the ODS.

1.2 CNSI Capabilities

CNSI's approach to enhance CHAMPS to support the CHAMPS ODS Project is based on its ongoing partnership with MDCH and the Department of Technology, Management & Budget (DTMB) and its extensive knowledge of CHAMPS design, implementation, and operation. As system developers and integrators, CNSI aligns its clients' business processes and information systems to provide access to the right information at the right time, enabling the achievement of their desired business results and creating enterprise value. CNSI will employ its extensive technological experience in the industry and incorporate its flexible tools and methodologies to deliver quality results on time and within budget. CNSI completes jobs for clients by delivering on commitments with speed and purpose in accordance with the client's specifications and expectations. CNSI is a recognized leader in championing creative ideas and thinking beyond normal parameters and is passionate about continuous innovation and process-improvement. CNSI works with the latest technologies and remains vendor- and technology-agnostic, providing clients with the right solutions at the best values.

CNSI will build upon its extensive knowledge gained from designing, developing, implementing, and operating CHAMPS for the State, as well as previous CHAMPS efforts, including the HIPAA 5010 compliance implementation, and the ongoing International Classification of Diseases, Tenth Edition (ICD-10), transition and remediation. In implementing the ODS and integrating it with CHAMPS, CNSI will continue to collaborate with the State's business and technical personnel and provide an experienced team of Medicaid subject matter experts (SMEs) who have the technical, business, and project management expertise to support this endeavor.

CNSI's experience working on prior Medicaid health information technology (IT) initiatives has led to incorporating the following factors in developing this statement of work:

- **CNSI's understanding of transactional system operations and data warehouse reporting**

  CNSI operates Medicaid systems and has developed data warehouses for multiple states, which provides CNSI with a thorough understanding of the challenges of real-time reporting from both of these solutions. CNSI will apply its understanding to design and develop an efficient and effective ODS to meet the State's real-time reporting requirements.

- **CNSI's capability to conduct complex analysis of Medicaid system requirements**

  CNSI's project teams have a wealth of experience with multiple Medicaid programs, which allows them to efficiently conduct the data-gathering and analysis activities for this initiative.

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Architects and SMEs who have worked with CHAMPS for a variety of Medicaid health IT initiatives are among the team members involved in this effort.

- **CNSI's sensitivity to the State of Michigan's needs and constraints**

  CNSI is uniquely qualified to remain sensitive to the State's needs and constraints in defining the project's approach. The team will employ an orderly, structured, professional approach that is sufficiently flexible to respond to changes in requirements that evolve from additional understanding. Overall, CNSI has practical "hands-on" experience of what does and does not work.

1.3 Proposed Project Organization

CNSI believes this statement of work represents the best possible combination of architecture, technology, support, and experience to complete this project. The proposed team members are each the best possible candidates of their respective disciplines. The underlying logic behind identifying each member of this group is that:

- They share the same philosophical approach for undertaking this project – **the customer comes first.**
- They understand the values that each member brings to successfully implementing the project.
- They are committed to understanding and incorporating the State's requirements.
- They understand the necessary advanced technologies, business needs, and operational issues.

CNSI's primary objective is the successful implementation and completion of the project. Its team is fully dedicated to the CHAMPS ODS Project and is confident in its ability to achieve that goal.

However, an effective project management plan cannot work with participation only by CNSI. As the customer, the State is the most important member of the project team. The customer must be actively engaged in the process at all levels. Implementation is only as good as the partnership established and maintained between all involved parties.

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Section 2: Project Management, Methodology, Tools, and Technical Approach

This section presents CNSI's project management and technical approaches, methodology, tools, and phased work plan for accomplishing all activities required for the CHAMPS ODS Project. This section describes the scope of activities to be addressed throughout the project, from the initiation phase to final implementation, as well as the techniques and methodologies CNSI's project team will use.

Each of the following subsections will contain a high-level description of the four-phase approach for this project. For each phase, the major activities and anticipated deliverables are presented, followed by a high-level description of the major milestones and approximate timelines.

2.1 Project Management Approach

The project's successful implementation relies on the framework and environment provided by project and quality management. Figure 1shows CNSI's project and quality management framework and how the related activities interact with project tasks.

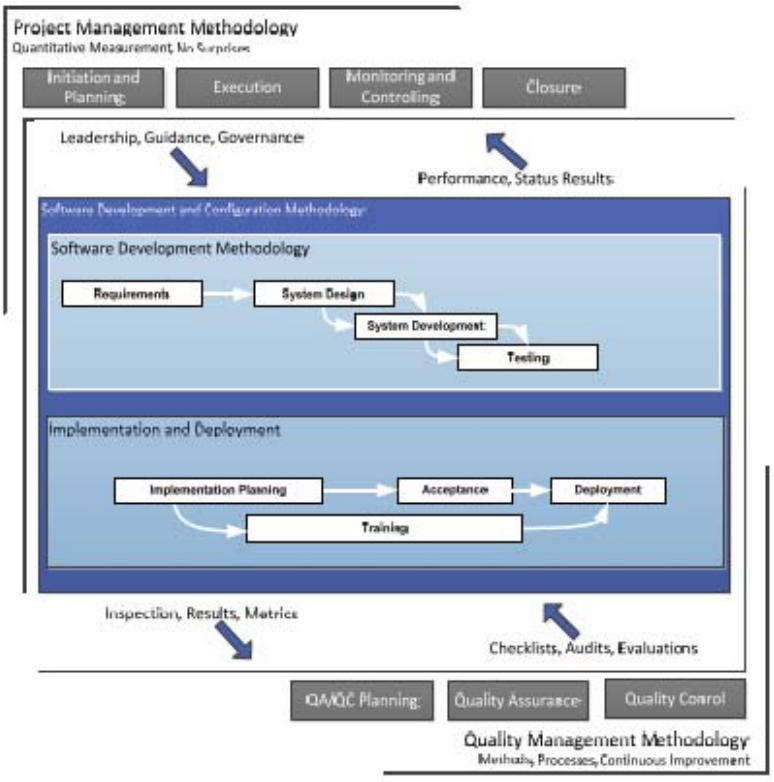

Figure 1. CNSI's Project Management and Quality Management Framework

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Although all projects are unique, they share common components and processes. The generally accepted process groups defined by the *Project Management Body of Knowledge* (*PMBOK*), as incorporated into the CNSI project management process, are:

- **Initiating:** This process group defines the project objectives and grants authority to proceed. For CNSI, the initiating processes are largely incorporated into the proposal development process, during which required partners are identified.
- **Planning:** This process group refines the project objectives and scope and plans the tasks, activities, and steps necessary to meet the project's objectives. The planning processes start during proposal development and proceed following contract award while CNSI works with the customer to establish and baseline the project management plan. The project management plan is modified and updated as necessary over the course of the project. It is the culmination of the planning processes for scope definition and management, time (scheduling), staffing (human resources), communications, and risk management.
- **Executing:** This process group puts the project's plans into motion. This is where the bulk of the work for the project is performed.
- **Monitoring and Controlling:** This process group measures the performance of the project's executing activities and reports these performance results to project managers and stakeholders. Output is used to refine, improve, and/or change project management (including plans and schedules) as necessary to meet the project's objectives.
- **Closing:** This process group documents the formal acceptance and approval of the project's product and brings all aspects of the project to a close.

CNSI is confident it has the correct methodology and project framework in place to successfully implement the CHAMPS ODS Project. CNSI continually improves its project management processes using lessons learned from previous projects and through the proficiency and continuous education of its program and project managers, senior technical and engineering staff, and senior and corporate management. This ensures a number of advantages:

- The project management philosophy is firmly entrenched within the entire project team, including MDCH and CNSI.
- Project management is a core competency.
- The project staff is focused on successfully implementing the project.
- Project management, quality management, and cost management processes are fully integrated and their infrastructure is in place.
- Effective project status reporting is established throughout the project life cycle.
- Project and software development methodologies are well documented.
- Project information is communicated continuously to the right people at the right time.
- The project is continuously monitored against performance.
- Excellence in quality and delivery are built in.

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- Deliverable review and approval processes are in place.

Through developing the project management plan, CNSI expects to collaborate with the MDCH project management team to further customize CNSI's project management system to successfully complete the project.

2.2 Project Methodology

CNSI's holistic approach for this project will use its proven methodology as the overarching framework and bring an experienced team of program managers, SMEs, technical experts (both inside and outside the company), and change management resources to support this effort.

The project methodology is a framework that facilitates the integration of CNSI's extensive system experience, which is rooted in application implementations, methodologies, and delivery tools. This framework allows CNSI to deliver services to its clients consistently across its footprint and gather continued enhancements for its supporting methodology, thereby providing continued value for its clients.

CNSI's methodology is an integrated methodology that combines its best delivery assets. The methodology:

- Provides a scalable, integrated collection of assets.
- Provides a consistent level of detail and presentation.
- Supports tailoring to scale, which provides a unique, but consistent cost-effective delivery approach.

CNSI's methodology approach consists of the following:

- The **Manage** work approach provides a single, consistent approach to managing CNSI's engagements. Within the Manage Approach is the Quality Management activity, which verifies that deliverables and processes meet requirements. The Quality Management activity also supports continuous process improvement, as well as the methodology.
- The **Life Cycle** work approach addresses unique expertise while providing overall integration across the full implementation life cycle.

CNSI's methodology has the flexibility to be adapted to meet MDCH's unique requirements while confirming that its experienced staff members follow established practices.

While no two engagements are the same, MDCH expects CNSI to deliver in a consistent, systematic approach. The proposed project methodology incorporates CNSI's staff's delivery experience into a single, integrated approach. It provides the structure for integrating CNSI's capabilities while allowing individual project teams the flexibility to use client-mandated tools. The right assembly of technologies, techniques, and deliverable processes requires the specific experience and expertise found in CNSI's staff.

Investing time to create an effective plan with clear objectives is integral to effective project execution. CNSI's methodology provides a structured approach to the planning process. While this may appear to require more initial effort than desired, experience has shown that following these processes reduces the likelihood of planning mistakes and results in lower risk and a more cost-effective, rapid delivery.

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CNSI's methodology incorporates a consistent approach for identifying, tracking, and measuring the value derived from ongoing projects. CNSI's experience developing and delivering various client projects is incorporated into the project strategy and planning activities.

In undertaking this project, CNSI will employ its iVision360 system development life cycle (SDLC) methodology tailored for the CHAMPS ODS Project:

- **User is at the Center:** CNSI's primary motivation in developing iVision360 is to put the user at the center of the project life cycle. Successful projects have high interaction with end users and place the user at the center of the project. Every phase and activity of iVision360 focuses on interaction and collaboration with the user community. CNSI does this by implementing agile techniques and building working software in an iterative fashion with user validation at periodic intervals.
- **Common Goals:** Users actively participate in configuration sessions with an integrated team of developers, analysts, and testers. This method avoids the pitfalls of waterfall methods. iVision360 provides the team with a sense of purpose, a goal, and the drive to accomplish the end objective: software that meets the requirements.
- **Early and Often Testing:** iVision360 provides an opportunity to test early and often so formal system test phases and subsequent test phases are more likely to meet schedule expectations with a lower error-discovery rate.

By introducing the baseline management features of waterfall, CNSI minimizes the risk of scope creep that is sometimes associated with iterative methods. Moreover, implementing and integrating with project management processes will provide integrated change, issue, and risk management. Table 1 describes the key benefits of each of the industry-standard methodologies that are blended into iVision360.

Table 1. SDLC Methodology Comparison

Methodology	Key Benefits Blended into iVision360
Waterfall	Baseline approval of requirements Structured documents and customer approvals Formalized testing
Iterative/Agile	Frequent customer interaction Decomposing work into small meaningful features that are presented in working software Frequent course corrections Sense of real progress Early and frequent testing
Extreme Programming	Teams formed between developing organization and customer Sense of common vision and goal

iVision360 has been adapted for the purposes of this project. The customized version is presented in *Section 2.5.1 iVision360 Iterative Design, Testing, and Documentation Approach*.

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2.3 Project Management Tools

Tools, when properly applied within the methodology framework, will reduce the time to complete a project by providing predefined processes, templates, documents, and training materials. More importantly, use of the appropriate tools will help reduce risk and increase efficiency.

CNSI will continue to use the tools already proven effective during the previous undertakings to reduce the time to complete the project and mitigate risk. Table 2 lists the tools CNSI will utilize for the project.

Table 2. CNSI Project Tools

Tool	Purpose
ReqTrace®	CNSI's requirements database used during design and test phases
Microsoft Visio	Develop use case diagrams, technical architecture diagrams, and support process flows
Microsoft Office	Develop project deliverables as well as presentations and spreadsheet artifacts needed to support deliverables
As-One	Repository for deliverables, presentations, and artifacts

Microsoft Visio and Microsoft Office are industry-standard tools. The following subsections provide additional information about ReqTrace and As-One.

2.3.1 ReqTrace

CNSI will use its ReqTrace web application for requirements analysis and validation.

During project initiation and requirements planning, ReqTrace will be loaded with the functional, technical, and support requirements. ReqTrace is CNSI's requirements management tool of choice being used in Medicaid management information system (MMIS) projects. ReqTrace provides the ability to trace requirements to use cases, related test cases, and results. The application can store requirements-related attributes, including revisions, notes, and comments.

CNSI began using ReqTrace during the implementation of CHAMPS. The requirements validation processes used on the project, as well as the use of ReqTrace, resulted in the requirements validation phase being completed ahead of schedule.

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2.3.2 As-One

Believing that continuous collaboration and information-sharing are key factors to successful project execution, CNSI will use As-One, its web-based enterprise program management solution. Figure 2 illustrates how As-One is designed to support team collaboration, knowledge management, and process improvement. As-One will provide a convenient repository for all program data and will give MDCH oversight personnel direct visibility into project performance.

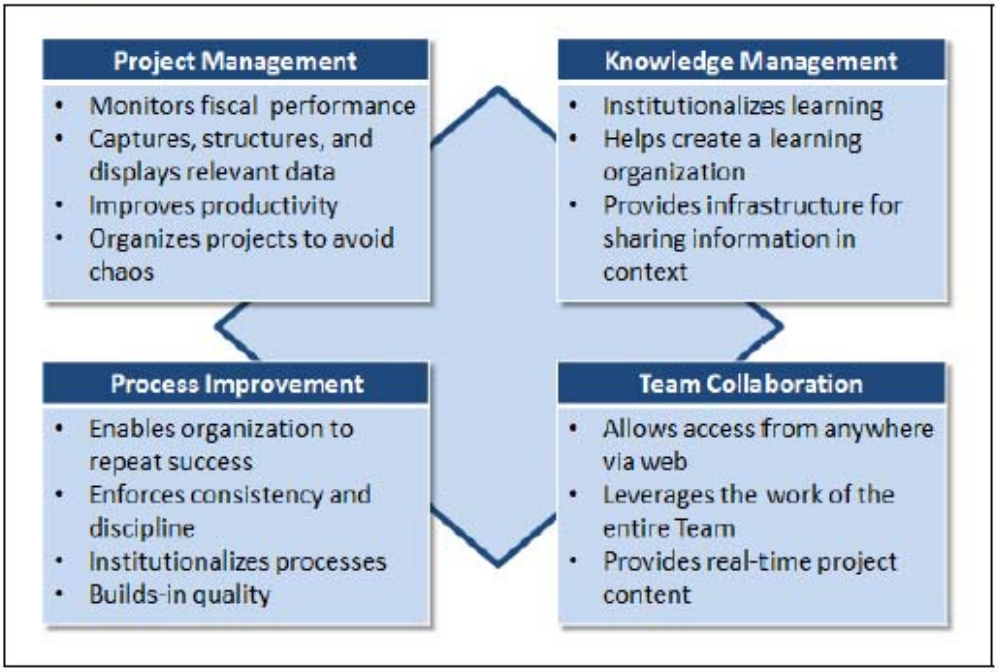

Figure 2. As-One Collaboration and Improvement

As-One is an "out-of-the-box" solution that supports CNSI's program management philosophy: experienced people, managed processes, and enabling technology.

As-One will allow CNSI users to share real-time data specific to the user's authority and association and is accessed via a standard web browser. CNSI's previous and ongoing projects with MDCH and DTMB use As-One. Training will be provided for team members new to the program.

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2.4 Solution

This section will review at a high level the technical and functional overviews of the CHAMPS ODS Project. Full business and technical requirements will be elicited and documented as a part of the first phase of the project.

2.4.1 Technical Overview

Through the CHAMPS ODS Project, CNSI will determine what an appropriate ODS solution would consist of. This decision-making process would require MDCH business analysts and the data management teams to assess business processes that must be executed to complete transactions or operational reporting requests. The initial focus will be on claim-related functions. These assessments are truly effective when utilizing an approach that includes business process management (BPM).

An ODS is generally defined as a set of logically related data structures within a database. The data within an ODS is integrated, volatile, and at a non-historical, granular level designed to address a set of operational functions for a specific business purpose. The ODS must also be based on the organization's enterprise standards for data management. On the initial candidate set of business functions (claims), the focus will be on data dependencies with close attention to any issues or pain points where inefficiencies and ineffectiveness are highlighted.

The capabilities of timely and functional data (refer to *Section 1.1 Regulatory and Business Drivers for Change*) will be delivered through CHAMPS and consistent with current frameworks.

2.4.2 Functionality

At a high level, CHAMPS will be modified to provide the following capabilities to MDCH.

Subject-Oriented

The ODS will contain specific data that is unique to a set of required business functions. As a result, the data will represent specific subject areas.

Integrated

Data in the ODS will be sourced from various MDCH applications. The source data will be taken through a set of ETL operations that includes cleansing and transformative processes. These processes will be based on rules that have been created through business requirements for data quality and standardization.

Current (Non-Historical)

The data in the ODS will have near–date (timing to be determined during the project) and the current status of the data will be provided from the sourcing applications.

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Detail

ODS data will be primarily used to support MDCH operational business functions. This means there will be a specific level of granularity based on business requirements that dictate the level of detail ODS data will have.

2.5 Technical and Phased Approach Work Plan

CNSI has created an initial work plan and timeline for the CHAMPS ODS Project. This work plan describes the expected activities for the proposed phases and major activities. The CHAMPS ODS is expected to be tested and released in multiple production releases. The overall timeline is presented in Figure 3 below. A detailed description of the major activities within each phase is presented in *Section 2.5.2 Phased Approach Work Plan.*

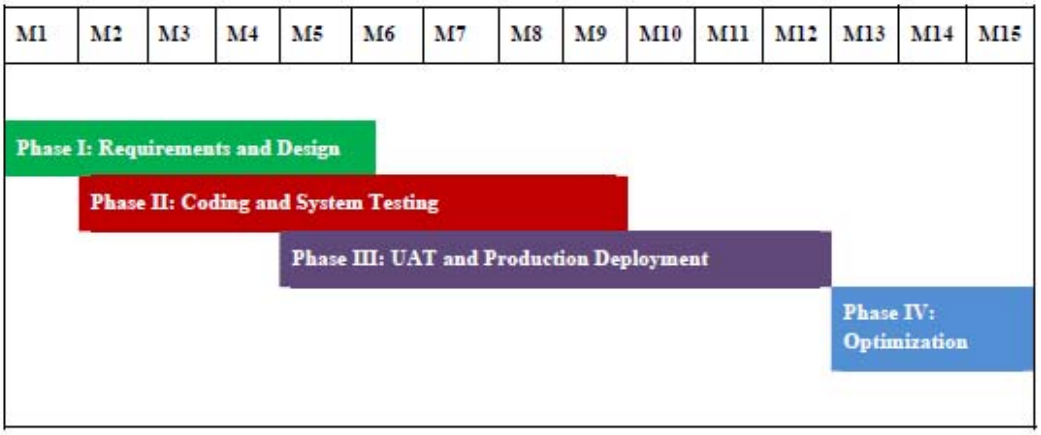

Figure 3. Initial Project Work Plan

CNSI structured this work plan to address the overall relationships of the phases and activities required to complete the project. It effectively uses the professional resources required to accomplish these phases and produce high-quality products in a cost-conscious manner.

The following subsections further describe how CNSI intends to accomplish the goals of the work plan by employing its iVision360 methodology in the proposed approach for the CHAMPS ODS Project.

2.5.1 iVision360 Iterative Design, Testing, and Documentation Approach

In this section, CNSI provides an outline of its iVision360 SDLC. The SDLC is a full-featured methodology that includes standard design and development processes. CNSI's SDLC processes have been adapted to address the specific needs of the project. This project will be divided into four phases.

CNSI will engage in iterative requirements analysis and design with the State at the beginning of each release. The State will be able to review requirements analysis and design documents as soon as a logical set of iterations are completed. CNSI expects initial State signoff upon acceptance of the iteration's

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document scope. This will help reduce the time required for document review and approval. The documents reviewed at any time will have a smaller scope to help the State perform a thorough review. At the end of all iterations for a release, an overall document will be produced for a final delivery and acceptance to State.

The iterative/agile development and testing portion of the iVision360 methodology is visible in each release of design and coding. During this phase, technical design specifications for impacted functions and user stories are constructed in parallel by developers and the SMEs. As the impacted function's design is completed, the team lead will plan the related development iterations.

Developers will build internal design documentation prior to, and during, the iterations. The beginning of each iteration is reserved for startup activities, including finalizing the internal design documentation. The developer meets with the data modeling team on Day 1 of an iteration to conduct a walkthrough of any required data model changes. The data modeling team makes the required changes to the database schema and approves the physical model for coding. Developers also develop iteration test cases (for the tasks that may not be tested with automatic internal iteration test code), which are required to test each story completely.

Coding begins when the internal design and pre-coding work is completed for the iteration. The developer will write internal iteration test scripts in parallel to actual working code and update screens and other system functions to fit the physical mode. The developer will execute the iteration test scripts as they complete sections of code. The codes will be built and tested incrementally. The developer will coordinate daily stand-up meetings and communicate any development issues.

This development approach ensures developers do not work in silos. It also avoids the traditional approach of throwing design documentation "over the fence" to developers to begin coding, only to discover later that major rework is required halfway through the development process.

Developers eventually test the code against internal auto-unit-code and manual internal iteration test scripts. As they reach the end of the iteration, they will run the code against functional scripts developed by the test team. Discrepancies are identified and corrected, and the developer retests to ensure all discrepancies are corrected and closed before the iteration ends. The developer will conduct a peer review of the impacted function's code on the last day of the iteration and then update the code based on the review. When developer iteration testing and software code reviews are successfully completed for the iteration, the code will be promoted to the integration test stream. The code will be released to the test team for system testing when coding and developer iteration testing is completed for all of an impacted functions user stories.

During initial development iterations, the test team will develop system test cases based on requirements specification. During system testing, the test team will execute system test cases to validate system results against requirements.

CNSI plans to engage the test and development teams early on to build the regression test suite for critical functions. This will help to speed up testing and improve overall quality of implementation. During system testing, if required, regression tests will be performed on impacted functions based on changes to a previously tested baseline. The intent of regression testing is to demonstrate that the CHAMPS system continues to meet all approved requirements after changes have been introduced to a previously tested baseline.

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As soon as system testing is completed for an activity, CNSI will deliver the code to the user-acceptance test (UAT) environment. CNSI plans to engage the State as early as possible and well before the beginning of the planned UAT phase. This will ensure enough time is allowed for thorough UAT and reduce the risk of schedule slippage for UAT completion.

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Figure 4 presents a graphical overview of the processes that are part of the iVision360 methodology.

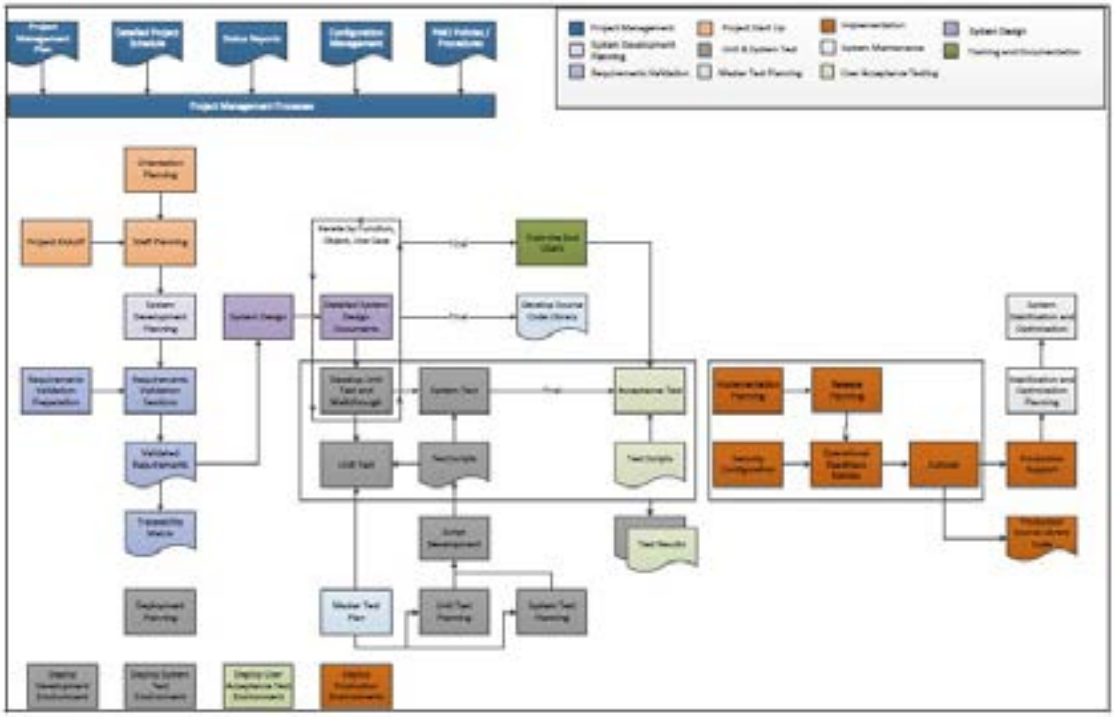

Figure 4. iVision360 Process Diagram

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2.5.2 Phased Approach Work Plan

CNSI proposes an over-lapping, four-phased approach to the implementation and rollout of the CHAMPS ODS Project. The four phases will be overlapped in order to accelerate the completion and approval of tasks. The four phases are as follows:

- **Phase I:** Requirements Validation and Design
- **Phase II:** Coding and System Testing
- **Phase III:** UAT and Production Deployment
- **Phase IV:** Stabilization and Optimization

Figure 5 provides a high-level overview of the project phases with major activities and anticipated deliverables:

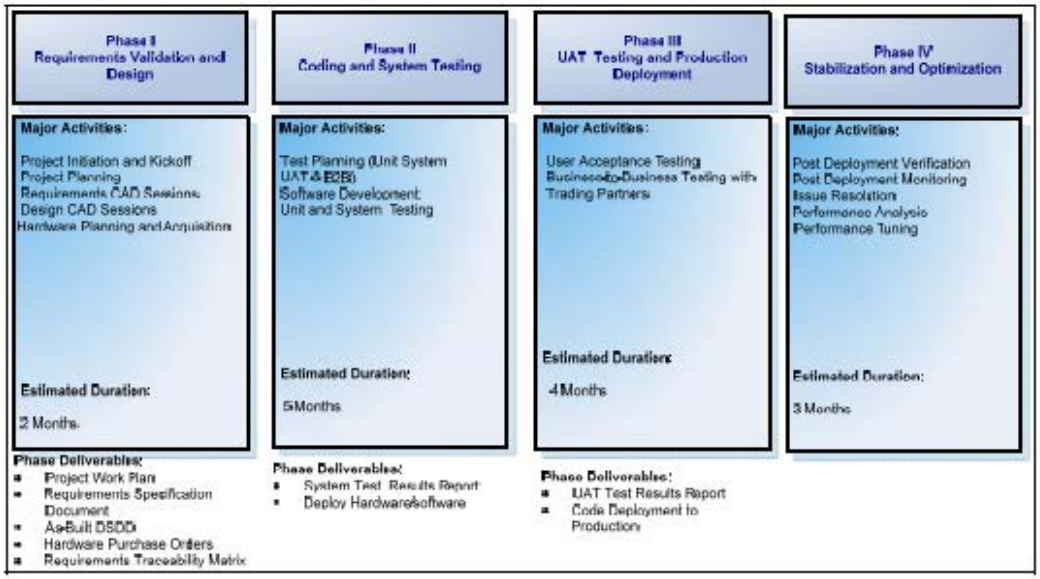

Figure 5. High-Level Project Phases and Activities

With every project, there are critical milestones to be met and work products and deliverables that must be developed and produced in order to provide the inputs necessary to perform the next phase. Table 3 elaborates on the key high-level milestones of the proposed implementation plan, along with the expected deliverables.

In Table 3, we summarize the high-level activities to be completed as a part of this engagement. In this table, we also provide the deliverable to be produced in each phase of the effort. **Formal deliverables** are shown in **bold** text.

Table 3. High-Level Activities by Phase

Key Activity	Description	Phase

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Key Activity	Description	Phase
Project Initiation and Kickoff	Establish the project team structure, key stakeholders, and operating guidelines for team activity throughout the course of the project.	Phase I
Project Planning	Establish project plans and schedules.	Phase I
Requirements CAD Sessions	Conduct CAD sessions to validate the ODS requirements and requirements across all subsystems.	Phase I
Design CAD Sessions	Conduct CAD sessions to document detailed ODS design and system design changes for all affected subsystems.	Phase I
Hardware Planning	Identify the hardware and software required to support the ODS database.	Phase 1
Phase I Deliverables **Project Work Plan (Schedule)** **Requirements Specification Document** **Requirements Traceability Matrix** **As-Built DSDD**		
Development	Hardware/Software changes required to support the detailed functional design including: • Interfaces • Functionality (driven by use cases) • Data Models • Reports • Database	Phase II
Test Planning	Produce detailed test plans and schedules for each phase of testing: unit, system, and UAT.	Phase II
Unit/System Testing	Internal CNSI testing of developed functionality at the component, subsystem, and system level, including end-to-end (E2E) regression testing.	Phase II

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Key Activity	Description	Phase
Phase II Deliverables **System Test Results**		
Implementation Planning	Coordinate with the operations team to align the production installation of the system changes with the scheduled operational releases.	Phase III
User Acceptance Testing	MDCH testing of all system changes using formal UAT test scripts.	Phase III
Phase III Deliverables **UAT Test Results (State)** **Code Deployment to Production**		
Post-Deployment Verification	Perform a sanity check of all system functions after code deployment to ensure all features function as designed.	Phase IV
Post-Deployment Monitoring	Overall monitoring of CHAMPS system health and performance after code deployment.	Phase IV
Issue Resolution	Identification and plan-of-action to resolve issues should they arise after code deployment.	Phase IV
Performance Analysis	Measure and analyze post-deployment performance of the CHAMPS and ODS systems in comparison to pre-deployment system performance and estimates.	Phase IV
Performance Tuning	Adjust system queries, database tables and interfaces as needed to improve system processing and throughput.	Phase IV

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2.4.2.1 Phase I – Requirements Validation and Design

Activity 1 - Project Initiation

During this activity, CNSI will conduct the formal project kickoff and deliver team training and orientation. The major milestone associated with this activity is the project kickoff meeting.

Activity 2 - Project Planning

During this activity, CNSI will develop the project schedule to track and monitor the progress of the Member Portal project. The project schedule outlines the list of all the activities that are needed by CNSI to fulfill the needs of the Member Portal project. CNSI will also take the responsibility of integrating DCH and DTMB tasks in the project schedule to make sure all the dependencies are identified and tracked accordingly. Once the integrated schedule is reviewed and approved by all the relevant stakeholders, it is baselined.

The milestone associated with this activity includes:

- Integrated Project Schedule

Activity 3 – Requirements CAD Sessions

During this activity, CNSI will host CAD sessions to validate functional requirements. Sessions will be organized and scheduled per CHAMPS subsystem and/or MITA business area. The CAD sessions will include MDCH and CNSI functional and technical SMEs. Using the *MDCH ODS High-Level Business Requirements Document* and the assumptions defined in this statement of work as a starting point, session participants will confirm the meaning of each functional requirement.

CNSI will compare the finalized requirements with current CHAMPS functionality to determine the impact of the new requirements across all CHAMPS subsystems, including system aspects such as:

- Databases
- Interfaces
- Functionality (use cases)
- Data Models
- Reports

CNSI will use the results of the impact assessment to plan and conduct design activities.

This will result in a final requirements specification document, which provides a clear, concise, and final definition of each functional requirement.

The major milestone associated with this activity is the delivery of the functional requirements specification document.

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Activity 4 – Hardware Planning

During this activity, CNSI will collaborate with the State to identify the required hardware and software for the ODS. Once the requirements are finalized, an evaluation will be completed to identify the existing hardware and software to determine that meets the ODS requirements.

The milestone associated with this activity is identification of the hardware and software meeting the ODS requirements.

Activity 5 – Design CAD Sessions

During this activity, CNSI will host CAD sessions to produce detailed functional design artifacts. Sessions will be organized and scheduled per CHAMPS subsystem and/or MITA business area. The CAD sessions will include MDCH and CNSI functional and technical SMEs. Using the existing CHAMPS design and the requirements specification document as a starting point, session participants will identify and document the ODS and required design changes across all CHAMPS subsystems, including system aspects such as:

- Databases
- Interfaces
- Functionality (use cases)
- Data Models
- Reports

This will result in final revised design artifacts, such as use cases and data models, which will be the basis for the development of changes to system functions. CNSI will submit the completed design artifacts to the appropriate MDCH functional team lead shortly after the completion of a CAD session. The MDCH team lead will provide formal approval of the design artifacts via signature on an approval form, similar to the existing CHAMPS enhancement approval process. This approval indicates that design is final and development can begin. CNSI will submit a final DSDD for MDCH approval upon completion of all Phase I design sessions.

The major milestone associated with this activity is the delivery of the as-built DSDD.

2.4.2.2 Phase II – Coding and System Testing

Activity 1 - Development

During this activity, CNSI codes the software changes required to support the updated detailed functional design. Development includes the coding changes as defined in the DSDD for all CHAMPS subsystems, including system aspects such as:

- Database
- Interfaces
- Functionality (use cases)
- Data Models

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- Reports

Development is performed in bi-weekly iterations. The major milestones associated with this activity include the completion of all development iterations.

Activity 2 – Test Planning

During this activity, CNSI collaborates with MDCH to produce detailed test plans and schedules for each phase of testing, including system testing and UAT.

Milestones associated with this activity include:

- System Test Plan is delivered
- UAT Test Plan is delivered

Activity 3 – Implementation Planning

During this activity, CNSI collaborates with MDCH to coordinate implementation planning with the operational releases. It is expected that the implementation will align with multiple scheduled operational releases.

The major milestone associated with this activity is the delivery of the alignment of implementation with the operational release schedule.

Activity 4 – Unit/System Testing

During this activity, CNSI tests the developed functionality at the component, subsystem, and system levels, including E2E regression testing. In addition, the ODS team will coordinate system testing over multiple releases as part of the operational release process.

Milestones associated with this activity include:

- System Test Results Report is delivered
- Code is deployed to UAT environment
- UAT begins

2.4.2.3 Phase III – UAT, Testing and Production Deployment

Activity 1 – UAT

During this activity, CNSI deploys the final code to the UAT environment and provides support to MDCH staff who conducts UAT using formal test scripts. UAT will be coordinated with the testing for multiple operational releases.

The major milestone associated with this activity is that the UAT test results report is published by the State.

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2.4.2.4 Phase IV – Stabilization and Optimization

Activity 1 – Post-Deployment Verification

This activity involves verifying the correct installation and operation for all system components. During this activity, CNSI performs a sanity check of all system functions after code deployment to ensure all features function as designed.

Purpose:

- Verify Queues Operation
- Verify Interfaces Operation
- Verify Data Warehouse Extract Operation
- Verify ODS Extract Operation
- Verify all Production Job Schedules:
  - Interface Schedules
  - Data Warehouse Extract Schedules
  - ODS Extract Schedules
  - Queue Schedules

Activity 2 – Post-Deployment Monitoring

This activity involves monitoring the system in the months after the application upgrade has gone live.

Purpose:

- Monitor Key Operational Metrics:
  - Claims Payment Rates
  - Encounter Acceptance Rates
  - Prompt Pay Rates
  - Claims Payment Amounts
  - Pay Cycle Statistics
- Monitor Program Specific Metrics for programs impacted by the ODS requirements
- Monitor System Performance Metrics:
  - Database Performance
  - Application Queues Performance
  - Interface Performance
  - Reports Performance

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Activity 3 – Issue Resolution

This activity involves evaluating issues reported in the 90-day period. Issues will be logged and processed according to the CHAMPS Operations Incident Management, Application Support, Change Management, and Release Management processes. Issues that require system changes will be planned for software releases based on priority and will be assigned to CHAMPS Operations releases in accordance with the approved schedule.

Purpose:

- Incident Management:
  - OTRS(Open-source Ticket request System) Ticket Entry
  - OTRS Ticket Triage
  - OTRS Ticket Analysis
  - OTRS Ticket Disposition Determination (Defect, Enhancement, RFC(Request For Change), or Closure)
- Application Support:
  - Iterative Development
  - System Testing
  - RFC Creation and Testing
- Change Management:
  - CQ(Clear Quest) Entry
  - CQ Analysis
  - CQ Planning
    - Change Log Estimation and Approval
    - Code Promotion
    - RFC Deployment
- Release Management:
  - Release Planning
  - Release Assignment
  - Release Deployment

Activity 4 – Performance Analysis

This activity is the process for analyzing the performance of CHAMPS after the ODS processing changes have gone live. Various operational reports and monitoring tools will be used to assess the performance of the system and identify opportunities for improvement.

Purpose:

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- Operational Reports:
  - Identify any processes performing below benchmarks.
- Monitoring Tools:
  - Identify any servers with metrics outside normal operating ranges.
  - Identify any slow running queries.
  - Identify heavily used web pages.
  - Identify heavily used transactions.

Activity 5 – Performance Tuning

After all processes, servers, and queries where performance issues are identified, the application support and infrastructure teams will construct a remediation plan. The remediation plan will identify the changes to be made, the timeline for the changes, and the deployment plan either through software release, RFC, or maintenance outage in the case of server changes.

Purpose:

- Application Support:
  - Perform process tuning in development environment.
  - Plan software changes for software releases per the CHAMPS operations release schedule.
  - Tuning changes are released and deployed according to the CHAMPS operations change management and release management processes.
  - If the application support teams require infrastructure changes, they will request the changes through the CHAMPS operations RFC process.
- Infrastructure Support:
  - Perform server tuning in lower environments.

Deploy configuration changes to Production during monthly planned maintenance outages. Emergency maintenance outages may be requested if performance issues are severe and business impact is high. In that case, the emergency outage will be planned based on CHAMPS service-level agreements in order to minimize business impacts.

CNSI will support this effort with the following deliverables:

- Operational Reports
- Performance Report
- Issue Resolution Plan

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Section 3: General Assumptions

This statement of work is presented based on the following assumptions:

Project Assumptions

1. All required participants, including MDCH, and DTMB staff and other affected departments, are available and will participate in meetings and CAD sessions, as needed.
2. All systems, including all affected systems that interface with CHAMPS, will be ready to support testing as defined by the project work plan.
3. The functional business requirements currently defined as the ODS requirements will be used as the basis for the requirements validation activity. Should these requirements prove to be incomplete or inaccurate, change management may be necessary to extend or modify the timeline for this effort.
4. The implementation of the ODS will align with the agreed operational release calendar.
5. The solution developed for the CHAMPS ODS Project will meet all applicable State technical and security standards.
6. The solution for the ODS Project will require updates to the CHAMPS operations or disaster recovery documentation.
7. The solution developed for the ODS Project will require new hardware and changes to the State's infrastructure.

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Section 4: Pricing

This section presents CNSI's fixed-price, overall labor cost for completing the CHAMPS ODS Project. The cost was derived based on the expected effort required, as presented in our initial work plan, composed of the 4 phases depicted Figure 5. The total fixed-price labor cost for the CHAMPS ODS Project is $ 1,100,700.00.

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Impact Assessment for Unique Health Plan Identifier; HIPAA EDI Claims Attachments; and Hospital and Long Term Care Cost Settlements Statement of Work

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Section 1: Introduction

CNSI is pleased to provide the statement of work for planning and impact assessment for critical federal and state initiatives including the Unique Health Plan Identifier; HIPAA EDI Claims Attachments; and Hospital and Long Term Care Cost Settlements. CNSI proposes to complete the impact assessment work for all three initiatives under a fixed-cost agreement. The impact assessment work for all three initiatives is expected to require six months to complete.

These initiatives are expected to either impact the Community Health Automated Medicaid Processing System (CHAMPS) through direct enhancement of the system or , in the case of Hospital and Long Term Care Cost Settlement, through functionality developed to integrate seamlessly with CHAMPS. The scope of work described in this statement of work will high level impact assessment reports for each endeavor along with corresponding detailed cost estimates. The impact assessment reports and cost estimates will position the State to move forward with appropriations to support the necessary remediation and system development efforts for each of the three initiatives.

1.1 Regulatory and Business Drivers for Change

The three initiatives have distinct, unrelated, unique regulatory and business drivers. In this section we will discuss each initiative on its own terms.

Unique Health Plan Identifier

The **unique health plan identifier** is similar to the National Provider Identifier (NPI) in that it will provide a single number to identify each health plan or other organizational entity at the national level. The regulations regarding the unique health plan identifier are described in 45 CFR 162. In summary, effective November 7, 2016 entities engaged in the electronic exchange of health care information using Health Insurance Portability Accountability Act (HIPAA) electronic data interchange (EDI) transactions are required to use a ten- digit, unique, identifier assigned by the Centers for Medicare & Medicaid Support (CMS) Health Insurance Oversight System (HIOS). The new unique health plan id must be captured and applied for HIPAA transaction exchange and other business functions performed in CHAMPS. Health Plans and other entities must complete the application process for their unique health plan identifiers by November 5, 2015 for large plans and November 6, 2015 for small plans.

As a national federal directive, this will affect MDCH directly in that it will need to obtain one or more unique health plans identifiers to be used when exchanging electronic data with other organizations. In addition, the unique health plan identifiers assigned to MDCH's data exchange partners will need to be captured, validated, and used when processing inbound transactions and when preparing outbound transactions. This part of the project will provide the high-level impact assessment necessary to scope the remediation effort within CHAMPS and its internal and external interfaces.

Claims Attachments

The Administrative Simplification provisions under the Affordable Care Act of 2010 include the provisions for the EDI transactions expected to be used to support the request and receipt of **claims attachments.** The claims attachment request (HIPAA 275) and response (HIPAA 277) transactions are being mandated for use effective January 1, 2016. These transactions will enable the exchange of

additional documentation to support claims submitted electronically. Since the introduction of the HIPAA EDI transaction sets, the ability to send and receive attachments has been an impediment to timely adjudication of claims. With the introduction of these two transactions, payers including the State expect to see a substantial reduction in the manual effort required to process paper attachments mailed or faxed to the State. It will no longer be necessary to image the paper materials and manually link them to the appropriate claim. Many types of claims require attachments and must be suspended until the attachments have been received. In developing the regulations, the standards work group identified Clinical Notes, Rehabilitation Services, Ambulance, Emergency Department, Lab Results and Medications as the types of attachments considered a priority to introduce efficiency into the related adjudication processes. This is consistent with many of the CHAMPS edits that' suspend until supporting documentation is received.

It is clear that the CHAMPS system will need to be modified to accept and transmit the required transactions on the compliance date. In addition, it may be possible to replace some of the edits that require automatic suspension and manual release (when the attachments arrive) with a different type of logic that leverages the new transactions. This part of the project will provide a high level impact assessment necessary to scope the remediation effort within CHAMPS and its internal and external interfaces.

Hospital and Long Term Care Cost Settlements

At present, MDCH uses a set of independently developed systems supporting **hospital and long term care cost settlements.** Collectively, these systems are referred to as the Card File system. However, there are actually two separate systems – one for hospital settlements and a second for long term care facilities, At present, these systems act as intermediaries between the hospital or long term care organization and MDCH's claims payment processes to ensure steady, predictable payments to these organizations. In brief, these organizations are typically placed on Medicaid Interim Payment (MIP) programs. This allows the claim activity they generate to fully adjudicate without generating payment based on the actual amount of claims. Predictive modeling is used to determine the average payment to be made based on prior historical claims data drawn from the data warehouse. The Card File systems generate gross adjustment requests to CHAMPS based on the average expected payments. Periodically, claims are drawn down and reconciled to the actual payments made based on cost reports filed by these institutions. Again, CHAMPS gross adjustments are used to adjust previously made payments on a periodic basis.

MDCH would like to consolidate this process and reduce the costs associated with the maintenance of separate systems to support settlements. CHAMPS has direct access to the underlying claims data and can be extended to include the cost settlements processes for both hospitals and long term care organizations. This part of the project will provide a high level impact assessment necessary to scope the development effort related internal and external interfaces.

1.2 CNSI Capabilities

CNSI's ongoing partnership with MDCH and the Department of Technology, Management & Budget (DTMB) has produced multiple successful projects supporting the State's compliance efforts and strategic deployment of new technology solutions. We have successfully remediated CHAMPS to support HIPAA

5010, the Affordable Care Act, CAQH CORE Phase 1. We are in the process of supporting the State in achieving CHAMPS full compliance with the International Classification of Diseases Revision 10 (ICD-10). We have provided unique solutions to the State to address compliance electronic health care records Medicaid Incentive Payment Program (eMIPP), supporting the State's ICD-10 program with a set of tools to assist with analysis and deployment of policy (ICD-10 Toolkit), and to aid the State in identifying claims with anomalies prior to rather than post-payment (ClaimSure). We've partnered with the State to introduce other innovations such as MyHealthButton, HealthBeat, and the Lexis-Nexis Provider Credentialing System. CNSI developed the core CHAMPS system, stood by the State through multiple major and minor enhancements, CMS certification, and in their new partnership with Illinois. CNSI is uniquely qualified to evaluate the impact of these major initiatives on the CHAMPS system.

CNSI's experience working on prior Medicaid health information technology (IT) initiatives has led to incorporating the following factors in developing this statement of work:

- **CNSI's ability to manage complex regulatory compliance efforts**

  The CHAMPS system has been successfully upgraded and remediated to achieve compliance with every major federal and State initiative introduced since its initial implementation in 2009. We met the date for implementation of HIPAA 5010, ACA, CAQH CORE Phase I, and the MIPP program – both its first year and subsequent years since the initial go live. We will bring this same level of expertise and adherence to regulatory go-live dates to the efforts for the unique health plan identifier and the claims attachments efforts.

- **CNSI's ability to introduce technical innovation to the State's Medicaid operation**

  CNSI introduced mobile technology and direct consumer engagement to the Medicaid program through the myHealthButton pilot project that introduced consumer engagement mobile phone applications to support better beneficiary health outcomes. CNSI also introduced the innovative HealthBeat application that monitors CHAMPS activity and displays it graphically 24 hours a day, 7 days a week. We are partnering with the State to develop a unique, iPAD-driven application to support compliance with new high-risk provider site visit examination. CNSI will bring this same level of innovation and creativity to evaluating options for the hospital and long term care facility cost settlement system replacement.

- **CNSI's sensitivity to the State of Michigan's needs and constraints**

  CNSI is uniquely qualified to remain sensitive to the State's needs and constraints in defining the project's approach. The team will employ an orderly, structured, professional approach that is sufficiently flexible to respond to changes in requirements that evolve from additional understanding. Overall, CNSI has practical "hands-on" experience of what does and does not work.

1.3 Proposed Project Organization

CNSI believes that this statement of work represents the best possible combination of architecture, technology, support, and experience to complete this project. The proposed team members are each the

best possible candidates of their respective disciplines. The underlying logic behind identifying each member of this group is that:

- They share the same philosophical approach for undertaking this project – **the customer comes first.**
- They understand the values that each member brings to successfully implementing the project.
- They are committed to understanding and incorporating the State of Michigan's requirements.
- They understand the necessary advanced technologies, business needs, and operational issues.

CNSI's primary objective is the successful implementation and completion of the project. It is confident in its team's ability to achieve that goal. CNSI has assembled a team with the best combination of business, technical, operational, and project implementation experience, and expertise. CNSI is fully dedicated to the impact assessment for unique health plan identifier; HIPAA EDI claims attachments; and hospital and long term care cost settlements project.

However, the State of Michigan is the most important members of the project team. An effective project management plan cannot work with participation only by CNSI. The customer must be actively engaged in the process at all levels.

Implementation is only as good as the partnership established and maintained between all involved parties. This includes, first and foremost, the State of Michigan's project team.

The project's success depends on the full and active participation of the State of Michigan's designated staff members from the initial planning activities through the publication of the final high-level impact assessments.

Section 2: Project Management, Methodology, Tools, and Technical Approach

This section presents CNSI's project management and technical approaches, methodology, tools, and phased work plan for accomplishing all tasks required for the Impact Assessment for Unique Health Plan Identifier; HIPAA EDI Claims Attachments; and Hospital and Long Term Care Cost Settlements project. This section describes the scope of activities to be addressed throughout the project, from the initiation phase to the publication of the completed high-level impact analyses document, and the techniques and methodologies the project team will use.

The goal of this section is to demonstrate that CNSI understands the activities and tasks necessary to produce the high level impact and cost information the State will need to proceed with further remediation and development activities.

For this project, CNSI will use a three-phase approach to the work for each of the three planning initiatives. Each of the following subsections will contain a high-level description of the 3 phases CNSI will use throughout the project. For each phase, the major activities and anticipated deliverables are presented. This is followed by a high-level description of the major milestones and approximate timelines.

2.1 Project Management Approach

The project's successful implementation relies on the framework and environment provided by project and quality management. Figure 1 shows CNSI's project and quality management framework and how the related activities interact with other project tasks.

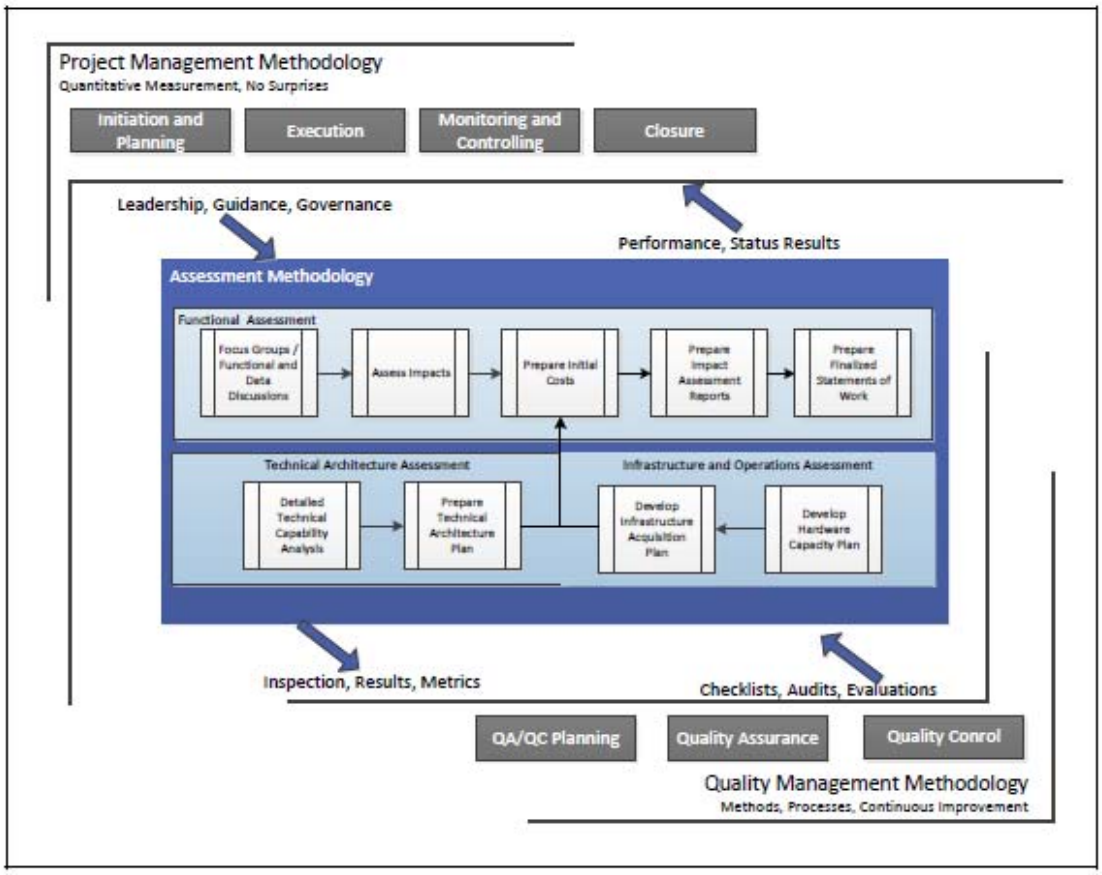

Figure 1. Project Management and Quality Management Framework

While the underlying subject matter for each of the three initiatives is different, they share a common approach. All three are focused on producing an impact assessment describing the potential impact of each initiative on the State's Medicaid enterprise.

CNSI is confident it has the correct methodology and project framework in place to successfully complete the Impact Assessment for Unique Health Plan Identifier; HIPAA EDI Claims Attachments; and Hospital and Long Term Care Cost Settlements project. CNSI continually improves its project management processes using lessons learned from previous projects and through the proficiency and continuous

education of its program and project managers, senior technical and engineering staff, and senior and corporate management. This ensures a number of advantages:

- The project management philosophy is firmly entrenched within the entire project team, including CNSI and State of Michigan.
- Project management is a core competency.
- Project management, quality management, and cost management processes are fully integrated and their infrastructure is in place.
- Effective project status reporting is established throughout the project life cycle.
- Project methodologies are well documented.
- Project information is communicated continuously to the right people at the right time.
- The project is continuously monitored against performance.
- Excellence in quality and delivery are built in.
- Deliverable review and approval processes are in place.

Through developing the project management plan, CNSI expects to collaborate with the State of Michigan project management team to further customize CNSI's project management system to successfully complete the project.

2.2 Project Methodology

For all three initiatives included in this statement of work, a common approach will be used. CNSI begins with planning for the effort. Figure 2 shows the high level work breakdown structure for the impact assessment effort illustrating CNSI's methodology. Planning will include identifying the key subject matter experts from the State of Michigan and from CNSI and developing the work breakdown structure for each initiative. The project schedule will then be developed using PMI standard methods and will incorporate staff availability. Each initiative will be managed as a separate effort under a single project schedule.

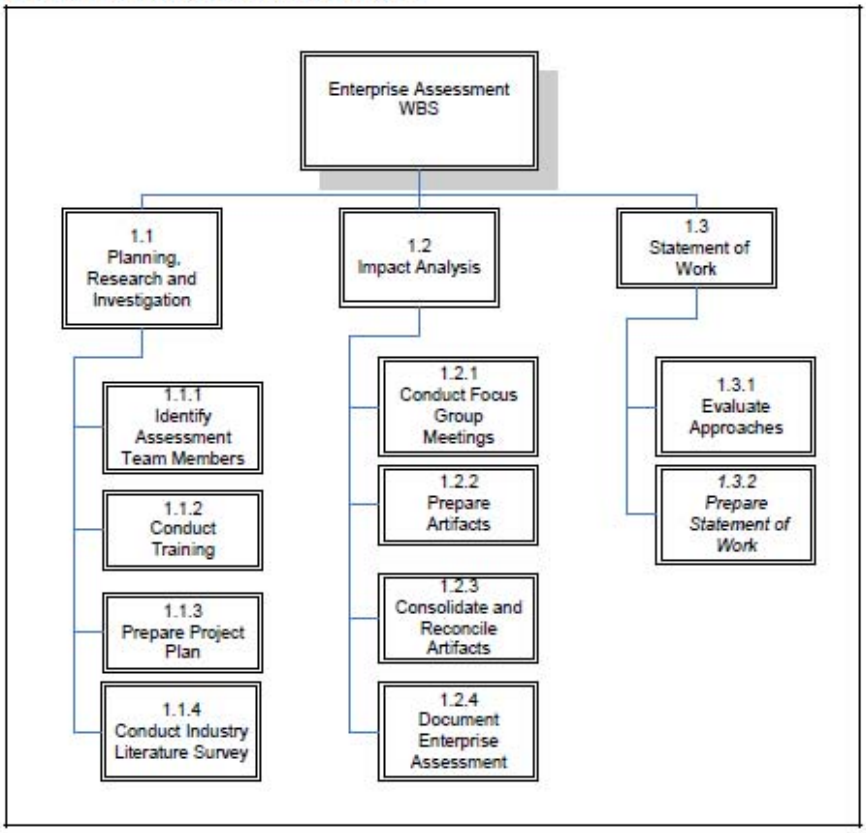

Figure 2. Project Methodology

CNSI has successfully applied this methodology in previous efforts with State of Michigan including the initial assessment work for ICD-10.

2.3 Technical and Phased Approach Work Plan

CNSI has created an initial work plan and timeline for the Impact Assessment for Unique Health Plan Identifier; HIPAA EDI Claims Attachments; and Hospital and Long Term Care Cost Settlements. This work plan describes the expected activities for the proposed phases. Each of the three initiatives will be managed as a separate effort using the same general timeline. A detailed description of the activities within each phase is presented in 2.3.1 Phased Approach Work Plan.

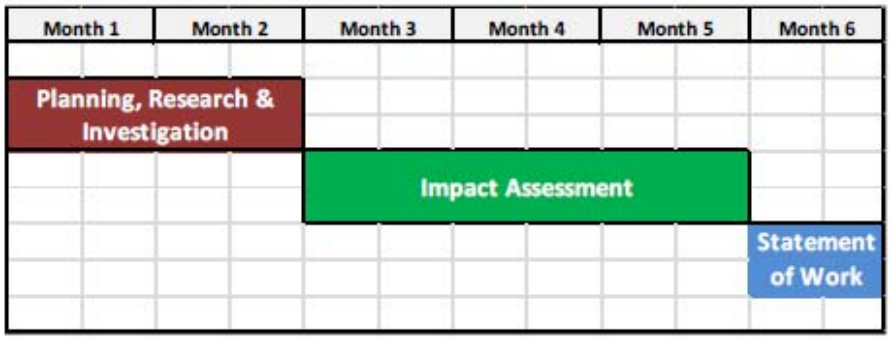

Figure 3. Initial Project Timeline

CNSI structured this work plan to address the overall relationships of the numerous phases and activities required to complete the project. It effectively uses the professional resources required to accomplish these phases and produce high-quality products in a cost-conscious manner.

The following subsections further describe how CNSI intends to accomplish the goals of the work plan by employing its methodology in the proposed approach for the Impact Assessment for Unique Health Plan Identifier; HIPAA EDI Claims Attachments; and Hospital and Long Term Care Cost Settlements project.

2.3.1 Phased Approach Work Plan

CNSI proposes a 3-phased approach to the Impact Assessment for Unique Health Plan Identifier; HIPAA EDI Claims Attachments; and Hospital and Long Term Care Cost Settlements project. For each initiative within the project, a common approach and timeline will be used. However, other than the project schedule, each initiative will produce its own unique set of deliverables. The three phases are as follows:

- **Phase I:** Planning, Research and Investigation
- **Phase II:** Impact Analysis
- **Phase III:** Statement of Work

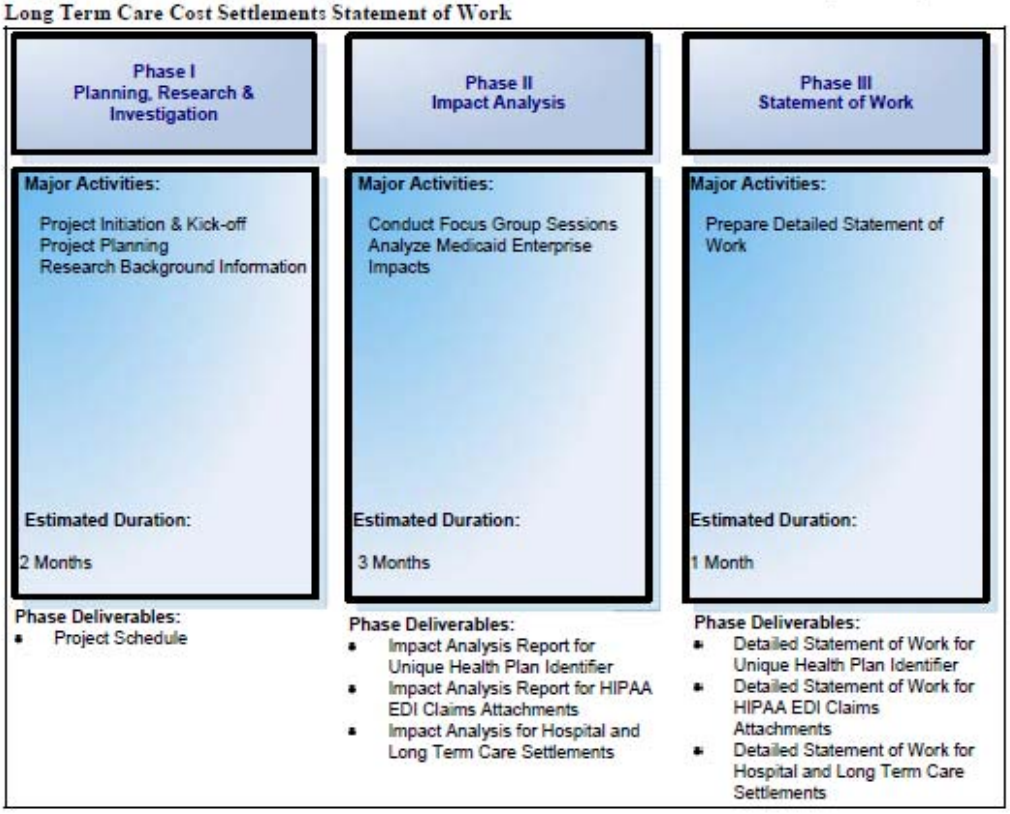

Figure 4. High-Level Project Phases and Activities

With every project, there are critical milestones to be met and work products and deliverables that must be developed and produced in order to provide the inputs necessary to perform the next phase. Table 1 elaborates on the key high-level activities of the proposed 6-month implementation plan, along with the expected deliverables.

Table 1. High-Level Activities and Milestones by Phase

Activity	Description	Phase
Project Initiation and Kick-Off	Establish the project team structure, key stakeholders, and operating guidelines for team activity throughout the course of the project.	Phase I
Project Planning	Establish initial project schedule for each initiative.	Phase I

Research Background Information	Conduct review of publically available and enterprise information regarding each initiative.	Phase I
Phase I Deliverable • **Integrated project schedule for all three initiatives**		
Conduct Focus Group Sessions.	For each initiative conduct focus groups to review industry information and identify potential enterprise impacts	Phase II
Analyze Medicaid Enterprise Impacts	For each initiative, review all material and information gathered during the focus groups and prepare formal impact assessment reports.	Phase II
Phase II Deliverables: • **Impact Analysis Report for Unique Health Plan Identifier** • **Impact Analysis Report for HIPAA EDI Claims Attachments** • **Impact Analysis for Hospital and Long Term Care Settlements**		
Prepare Detailed Statement of Work	For each initiative, using the information gathered and presented in the impact assessments reports and produce individual statements of work for State approval.	Phase III
Phase III Deliverables: • **Detailed Statement of Work for Unique Health Plan Identifier** • **Detailed Statement of Work for HIPAA EDI Claims Attachments** • **Detailed Statement of Work for Hospital and Long Term Care Settlements**		

[For each phase, elaborate in the following style, creating as many headings as necessary for each.]

Phase I – Planning, Research and Investigation

This phase includes the activities necessary to establish key project structures, staffing and schedule.

Activity 1 – Project Initiation and Kick-Off

This activity includes formal initiation of the project and identification, orientation, and training of the project teams assigned to each initiative. For these initiatives, training will focus on the areas to be researched. During this activity the project organization structure and management teams are established.

The major milestones of this activity are:

- State and CNSI staff identified and committed to each initiative.

- Initial kick-off meeting is held
- Team member training is conducted

Activity 2 – Project Planning

This activity is focused on developing the project infrastructure including detailed schedule preparation and development of templates for data collection. The detailed schedule for each initiate will be developed and will include integrated activities for both State and CNSI staff members.

The major milestones of this activity are:

- Consolidated, integrated schedule is published
- Artifact templates are developed for data collection activities

Activity 3 – Research Background Activity

For each of the three initiatives the project teams will research and collect sources of internal and external information relevant to the initiative's subject matter.

The major milestones of this activity are:

- Industry and internal data sources are identified and categorized
- Artifact templates are initialized and assigned by source

Phase II – Impact Analysis

This phase produces an initial impact assessment report for each initiative.

Activity 1 – Conduct Focus Group Sessions

Based on the sources collected in Activity 3 of Phase I, CNSI will facilitate focus group sessions to capture enterprise impacts to applications, technical architecture, infrastructure, business operations, and system operations.

The major milestones of this activity are:

- Completion of focus groups for Unique Health Plan Identifier
- Completion of focus groups for HIPAA EDI Claims Attachments
- Completion of focus groups for Hospital and Long Term Care Settlements

Activity 2 – Analyze Medicaid Enterprise Impacts

Using the information collected through research activities and subsequent focus group discussions, CNSI will develop initial impact assessment reports for each initiative. These reports will outline business and technical considerations and identified areas of impact on the State's Medicaid enterprise and recommend solutions.

The major milestones of this activity are:

- Completion of impact assessment report for Unique Health Plan Identifier

- Completion of impact assessment report for HIPAA EDI Claims Attachments
- Completion of impact assessment report for Hospital and Long Term Care Settlements

Phase III– Statement of Work

This phase focuses on preparation of detailed statements of work for each initiative.

Activity 1 – Prepare Detailed Statement of Work

In this activity, CNSI will develop a detailed statement of work for each initiative based on the recommendations presented in the impact assessment reports.

The major milestones of this activity are:

- Completion of statement of work for Unique Health Plan Identifier
- Completion of statement of work for HIPAA EDI Claims Attachments
- Completion of statement of work for Hospital and Long Term Care Settlements

Section 3: General Assumptions

CNSI has identified and provided the following general assumptions in regards to the Impact Assessment for Unique Health Plan Identifier; HIPAA EDI Claims Attachments; and Hospital and Long Term Care Cost Settlements project:

1. The State will make appropriate staff and contractor subject matter experts available to participate in research, focus group, and recommendation development activities.
2. No significant changes in the regulatory environment will occur during the course of the research and investigation activities for Unique Health Plan Identifier and HIPAA EDI Claims Attachments.

Section 4: Pricing

This section presents CNSI's fixed-price, overall labor cost for completing the **Error! Reference source not found.** Project. The cost was derived based on the expected effort required, as presented in our initial work plan, composed of the three phases depicted in **Error! Reference source not found.**4. The total fixed-price labor cost for the **Error! Reference source not found.** Project is $900,000.

Consumer Engagement Project Statement of Work

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Section 1: Introduction

CNSI is pleased to present this statement of work (SOW) for implementing Consumer Engagement solution which will provide the Michigan Medicaid members secure access to member health information with the goal of engaging and empowering them to manage their health.

The Consumer Engagement project will involve design, development, and implementation of a Member Portal application:

Member Portal: A member-centric online web portal for Michigan Medicaid members ensuring secure access to their health information allowing them to engage and manage their overall health.

The project will also involve integration and deployment of a Member Portal application with other member-centric CNSI products including:

myHealthButton: CNSI's Medicaid mobile product, which allows members to access their critical health information instantly and securely from anywhere through their mobile devices.

Electronic Fusion Repository Management (eFRM): CNSI's Electronic Fusion Repository management product which integrates member's administrative information with clinical information thereby providing critical insights and actionable intelligence regarding their health.

CNSI proposes to complete the Consumer Engagement Project under a fixed-cost agreement.

1.1 Regulatory and Business Drivers for Change

The implementation of the Consumer Engagement project facilitates the Michigan Department of Community Health (MDCH) and Gov. Rick Snyder's goal of a "Healthier Michigan" and related initiatives such as the "Michigan 4X4 Plan". Michigan has one of the highest obesity rates in the nation, which includes 32 percent of adults and 17 percent of youth. Obesity directly impacts a person's overall health and is the root cause of many chronic illnesses, such as type 2 diabetes and heart disease. As a result, the State of Michigan can be impacted by a huge financial burden. The Consumer Engagement project will enable Michigan achieve MDCH's "Michigan 4x4 Plan", by empowering the members to have access to their critical information and by allowing them to actively engage in managing their health through the Consumer Engagement solutions such as the Member Portal and myHealthButton mobile application, proposed to be implemented through this project.

In addition, the project will also enable the State of Michigan to align with the important trend towards "consumerism" in the healthcare space. The consumer-centric approach not only will help improve health outcomes of Michigan Medicaid population, but also has the potential to bring down healthcare costs- by empowering members and encouraging them to follow a healthier lifestyle.

Consumer-driven reforms encourage individuals to actively engage in managing their own health and in the health care market. In both private and public spheres, such reforms are becoming more common throughout the US. This relatively new trend towards "consumerism" is spawned by an overall shift in the way we, as a nation, think about health care. The new "consumer model" engages individuals in health care decision-making by shifting greater financial responsibility to consumers, increasing transparency in price and encouraging competition. It is thought that well-informed consumers who bear greater financial

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responsibility for their health care decisions will act as natural regulators of cost and increase overall satisfaction with the system.

CNSI's continued focus and research in 'healthcare consumerism' has resulted with pioneering products and solutions in the consumer engagement space, which will be leveraged for this project for maximizing the results for the State of Michigan.

1.2 CNSI Capabilities

CNSI's approach to enhance Community Health Automated Medicaid Processing System (CHAMPS) to support the Consumer Engagement project effort is based on its ongoing partnership with MDCH and the Department of Technology Management & Budget (DTMB) and its extensive knowledge of CHAMPS design, implementation, and operation. As system developers and integrators, CNSI aligns its clients' business processes and information systems to provide access to the right information at the right time, enabling the achievement of their desired business results and creating enterprise value. CNSI will employ its extensive technological experience in the industry and incorporate its flexible tools and methodologies to deliver quality results on time and within budget. CNSI completes jobs for clients by delivering on commitments with speed and purpose in accordance with the client's specifications and expectations.

CNSI will build upon its extensive knowledge gained from designing, developing, implementing, and operating CHAMPS for the State with ongoing projects like CHAMPS Medicaid Compliance Project that provides a framework for comprehensive medical benefits and health care reform, and makes quality health care affordable and accessible for all Michigan citizens up to 133% of the federal poverty level (FPL), as well as previous CHAMPS efforts, including the HIPAA 5010 compliance implementation, and the ongoing International Classification of Diseases, Tenth Edition (ICD-10), transition and remediation. CNSI's experienced team of Medicaid subject matter experts (SMEs), who have the technical, business, and project management expertise to support this endeavor, will collaborate with the State's business and technical personnel to develop a flexible and innovative solution.

CNSI's experience working on prior Medicaid health information technology (IT) initiatives has led to incorporating the following factors in developing this SOW:

- **CNSI's ability to introduce technical innovation to the State's Medicaid operation**

  CNSI has introduced mobile technology and direct consumer engagement to the Medicaid program through the myHealthButton pilot project that introduced consumer engagement mobile phone applications to support better beneficiary health outcomes. CNSI has also introduced the innovative HealthBeat application that monitors CHAMPS activity and displays it graphically 24 hours a day, 7 days a week. Examples of HealthBeat metrics include claim and encounter auto-adjudication rates, and number of benefit inquiries processed per hour throughout the day. The collaboration between MDCH and CNSI continues to lead the nation in modernizing State Medicaid technology.

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- **CNSI's capability to conduct complex analysis of Medicaid system requirements**

  CNSI's project teams have a wealth of experience with multiple Medicaid programs, which allow them to efficiently conduct the data-gathering and analysis activities for this initiative. Architects and SMEs who have worked with CHAMPS for a variety of Medicaid health IT initiatives are among the team members involved in this effort.

- **CNSI's sensitivity to the State of Michigan's needs and constraints**

  CNSI is uniquely qualified to remain sensitive to the State's needs and constraints in defining the project's approach. The team will employ an orderly, structured, professional approach that is sufficiently flexible to respond to changes in requirements that evolve from additional understanding. Overall, CNSI has "hands-on" experience of what does and does not work.

1.3 Proposed Project Organization

CNSI believes this SOW represents the best possible combination of architecture, technology, support, and experience to complete this project. The proposed team members are the best possible candidates of the respective disciplines. The underlying logic behind identifying each member of this group is that:

- They share the same philosophical approach for undertaking this project – **the customer comes first**.
- They understand the values that each member brings to successfully implementing the project.
- They are committed to understanding and incorporating the State's requirements.
- They understand the necessary advanced technologies, business needs, and operational issues.

CNSI's primary objective is the successful implementation and completion of the project. CNSI's team is fully dedicated to the Consumer Engagement project and is confident in its ability to achieve that goal.

However, an effective project management plan cannot work with CNSI's participation alone. As the customer, the State is the most important member of the project team. The customer must be actively engaged in the process at all levels. Implementation is only as good as partnership established and maintained between all involved parties.

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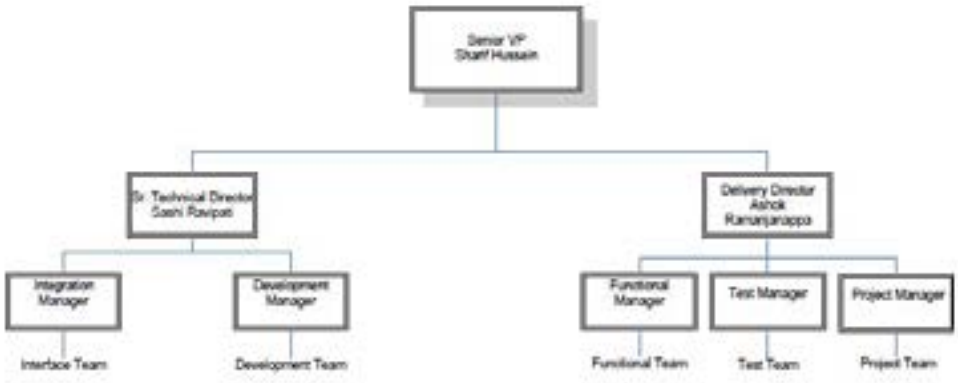

Figure 1: CNSI's Proven Customer-centric Project Organization

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Section 2: Project Management, Methodology, Tools, and Technical Approach

This section presents CNSI's project management and technical approaches, methodology, tools, and phased work plan for accomplishing all activities required for the Consumer Engagement Project implementation. This section describes the scope of activities to be addressed throughout the project, from the initiation phase to final implementation, as well as the techniques and methodologies CNSI's project team will use.

Each of the following subsections will contain a high-level description of the 3-phase approach for this project. For each phase, the major activities and anticipated deliverables are presented, followed by a high-level description of the major milestones and approximate timelines.

2.1 Project Management Approach

The project's successful implementation relies on the framework and environment provided by project and quality management. Figure 2 shows CNSI's project and quality management framework and how the related activities interact with project tasks.

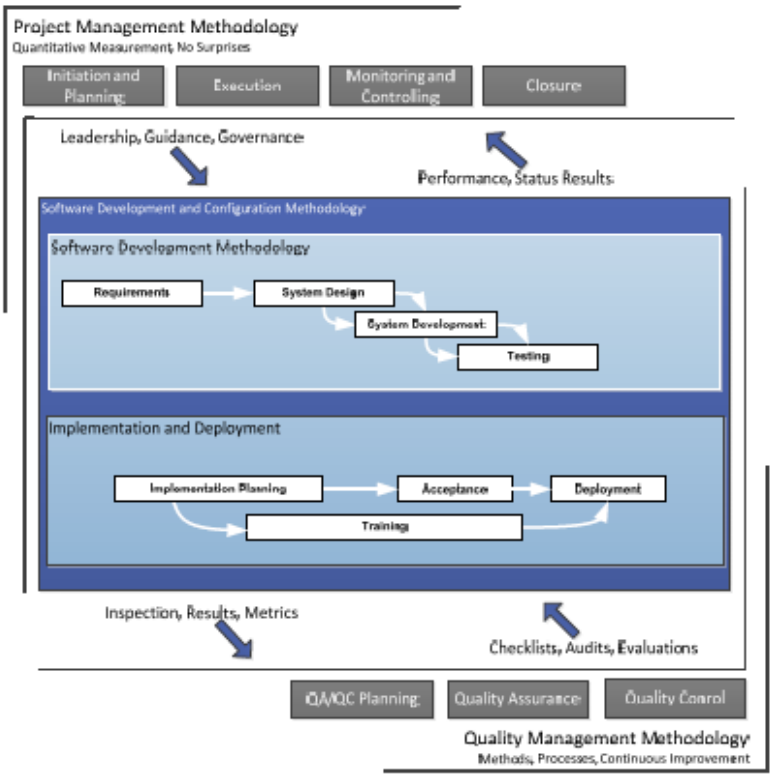

Figure 2: CNSI's Project Management and Quality Management Framework

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Although all projects are unique, they share common components and processes. The generally accepted process groups defined by the *Project Management Body of Knowledge* (*PMBOK*), as incorporated into the CNSI project management process are:

- **Initiating**: This process group defines the project objectives and grants authority to proceed. For CNSI, the initiating processes are largely incorporated into the proposal development process, during which required partners are identified.
- **Planning:** This process group refines the project objectives and scope, and plans the tasks, activities and steps required to meet the project's objectives. The planning processes start with the proposal development phase and proceed to follow the contract award, while CNSI works with the customer to establish and baseline the project management plan. The project management plan is modified and updated as required over the course of the project. It is the culmination of the planning processes for scope definition and management, time (scheduling), staffing (human resources), communications, and risk management.
- **Executing:** This process group puts the project's plans into motion. This is where the bulk of the work for the project is performed.
- **Monitoring and Controlling:** This process group measures the performance of the project's execution activities and reports these performance results to the project managers and stakeholders. Output is used to refine, improve, and/or change project management (including plans and schedules) as necessary to meet the project's objectives.
- **Closing:** This process group documents the formal acceptance and approval of the project's product and brings all aspects of the project to a close.

CNSI is confident it has the correct methodology and project framework in place to successfully implement the Consumer Engagement Project modifications. CNSI continually improves its project management processes using lessons learned from previous projects and through the proficiency and continuous education of its program and project managers, senior technical and engineering staff, and senior and corporate management. This ensures many advantages. Some of them are listed below.

- The project management philosophy is firmly entrenched within the entire project team, including MDCH and CNSI.
- Project management is a core competency.
- The project staff is focused on successfully implementing the project.
- Project management, quality management, and cost management processes are fully integrated and their infrastructure is in place.
- Effective project status reporting is established throughout the project life cycle.
- Project and software development methodologies are well documented.
- Project information is communicated continuously to the right people at the right time.
- The project is continuously monitored against performance.
- Excellence in quality and delivery is built in.

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- Deliverable review and approval processes are in place.

By developing the project management plan, CNSI expects to collaborate with the MDCH project management team to further customize CNSI's project management system to successfully complete the project.

2.2 Project Methodology

CNSI's holistic approach for this project will use its proven methodology as the overarching framework and bring an experienced team of program managers, SMEs, technical experts, and change management resources to support this effort.

The project methodology is a framework that facilitates the integration of CNSI's extensive system experience, which is rooted in application implementations, methodologies, and delivery tools. This framework allows CNSI to deliver services to its clients consistently across its footprint and gather continued enhancements for its supporting methodology, thereby providing continued value for its clients.

CNSI's methodology is an integrated methodology that combines its best delivery assets. The methodology:

- Provides a scalable, integrated collection of assets.
- Provides a consistent level of detail and presentation.
- Supports tailoring to scale, which provides a unique, but consistent cost-effective delivery approach.

CNSI's methodology approach consists of the following:

- The **Manage** work approach provides a single, consistent approach to managing CNSI's engagements. Within the Manage Approach is the Quality Management activity, which verifies that deliverables and processes meet requirements. The Quality Management activity also supports continuous process improvement, as well as the methodology.
- The **Life Cycle** work approach addresses unique expertise while providing overall integration across the full implementation life cycle.

CNSI's methodology has the flexibility to be adapted to meet MDCH's unique requirements while confirming that its experienced staff members follow established practices.

While no two engagements are the same, MDCH expects CNSI to deliver in a consistent, systematic approach. The proposed project methodology incorporates CNSI's staff's delivery experience into a single, integrated approach. It provides the structure for integrating CNSI's capabilities while allowing individual project teams the flexibility to use client-mandated tools. The right assembly of technologies, techniques, and deliverable processes requires the specific experience and expertise found in CNSI's staff.

Investing time to create an effective plan with clear objectives is integral for effective project execution. CNSI's methodology provides a structured approach to the planning process. While this may require more initial effort than desired, experience has shown that following these processes reduces the likelihood of planning mistakes and results in lower risk and a more cost-effective, rapid delivery.

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CNSI's methodology incorporates a consistent approach for identifying, tracking, and measuring the value derived from ongoing projects. CNSI's experience developing and delivering various client projects is incorporated into the project strategy and planning activities.

In undertaking this project, CNSI will employ its iVision360 system development life cycle (SDLC) methodology for the Consumer Engagement Project, which has been tailored with emphasis on the following principles:

- **User is at the Center:** CNSI's primary motivation in developing iVision360 is to put the user at the center of the project life cycle. Successful projects have high interaction with end users and place the user at the center of the project. Every phase and activity of iVision360 focuses on interaction and collaboration with the user community. CNSI does this by implementing agile techniques and building working software in an iterative fashion with user validation at periodic intervals.
- **Common Goals:** Users actively participate in configuration sessions with an integrated team of developers, analysts, and testers. This method avoids the pitfalls of waterfall methods. iVision360 provides the team with a sense of purpose, goal, and drive to accomplish the end objective: *software that meets the requirements*.
- **Early and Often Testing:** iVision360 provides an opportunity to test early and often so formal system test phases and subsequent test phases are more likely to meet schedule expectations with a lower error-discovery rate.

By introducing the baseline management features of waterfall, CNSI minimizes the risk of scope creep that is sometimes associated with iterative methods. Moreover, implementing project management processes will provide integrated change, issue, and risk management. Table 1 describes the key benefits of each of the industry-standard methodologies that are blended into iVision360.

Table 1. SDLC Methodology Comparison

Methodology	Key Benefits Blended into iVision360
Waterfall	Baseline approval of requirements Structured documents and customer approvals Formalized testing
Iterative/Agile	Frequent customer interaction Decomposing work into small meaningful features that are presented in working software Frequent course corrections Sense of real progress Early and frequent testing
Extreme Programming	Teams formed between developing organization and customer Sense of common vision and goal

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iVision360 has been adapted for the purposes of this project. CNSI's iVision 360 methodology tailored specifically for the Consumer Engagement project is presented in *Section 2.5.1 iVision360 Iterative Design, Testing, and Documentation Approach*.

2.3 Project Management Tools

Tools, when properly applied within the methodology framework, will reduce the time to complete a project by providing predefined processes, templates, documents, and training materials. More importantly, use of the appropriate tools will help reduce risk and increase efficiency.

CNSI will continue to use the tools already proven effective during the previous undertakings to reduce the time to complete the project and mitigate risk. Table 2 lists the tools CNSI will utilize for the project.

Table 2. CNSI Project Tools

Tool	Purpose
Microsoft Visio	Develop use case diagrams, technical architecture diagrams, and support process flows
Microsoft Office	Develop project deliverables as well as presentations and spreadsheet artifacts needed to support deliverables
As-One	Repository for deliverables, presentations, and artifacts

Microsoft Visio and Microsoft Office are industry-standard tools. The following subsections provide additional information As-One.

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2.3.1 As-One

Believing that continuous collaboration and information-sharing are key factors to successful project execution, CNSI will use As-One, its web-based enterprise program management solution. Figure 3 illustrates how As-One is designed to support team collaboration, knowledge management, and process improvement. As-One will provide a convenient repository for all program data and will give MDCH oversight personnel direct visibility into project performance.

Figure 3: As-One Collaboration and Improvement

As-One is an out-of-the-box solution that supports CNSI's program management philosophy: *experienced people, managed processes, and enabling technology*.

As-One will allow CNSI users to share real-time data specific to the user's authority and association. As-One is accessed through a standard web browser. CNSI's previous and ongoing projects with the State of Michigan use As-One. Training will be provided the team members who are new to the program.

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2.4 Solution

Over the last two years CNSI has been engaged with DCH in creating awareness and emphasizing the importance of Consumer Engagement in the new era of Heath Care. Over the past year, in coordination with DCH, CNSI has implemented myHealthButton, a pilot program to gauge the interest by the consumers in having their information at their fingertip utilizing the mobile medium. This program – myHealthButton --, the first of its kind mobile application for Medicaid members in the nation is a step closer towards the start of engaging the consumer and providing the transparency and support in administrating the proper healthcare.

To capitalize on the momentum created during the pilot program and advance the consumer engagement vision further, CNSI and the State of Michigan agreed to implement the comprehensive Consumer Engagement solution by introducing and implementing the Member Portal which will further the commitment to the Michigan Medicaid members and empower them to manage their own health. This is very important in achieving the three point aim of Better Health, Better Care and Lower Cost.

CNSI's Consumer Engagement Solution comprises of the following:

- Member Portal application, a multi-layered online web application, providing real-time health information to Michigan Medicaid members. Refer 2.4.1 for the technical overview and application architecture.
- Integration with the following CNSI's products:
    - **myHealthButton:** Standards-based, service-oriented integration of Member Portal with myHealthbutton mobile application to support mobile enablement of critical member services over mobile devices.
    - **eFRM:** Standards-based, service-oriented integration of Member Portal with eFRM to leverage fusion datasets comprising of members' administrative and clinical information.

Business, technical, and integration requirements will be elicited and documented as a part of the requirements phase of the project.

The following figure provides the conceptual view of CNSI's Consumer Engagement solution:

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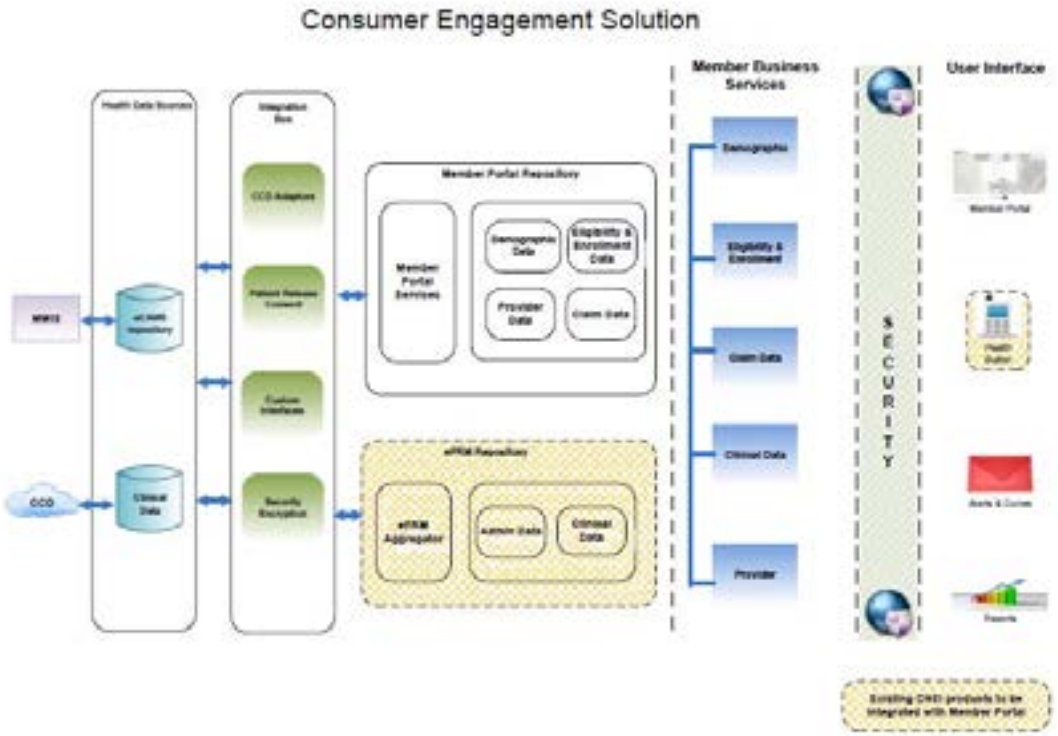

Figure 4: Consumer Engagement Conceptual View

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2.4.1 Technical Overview

Member Portal is a member-centric online application, where Medicaid members will have secure access to their health information. Through this online portal application, members will be able to view information such as demographics, health care providers, benefits and eligibility, health insurance, claims and much more as listed in Section 2.4.2. The application will be built based on Industry standard usability principles in order to support a superior user experience to the members.

Technically, Member Portal web application will follow the Model-View-Controller (MVC) multi-layered architecture. There will be a well-defined separation of architecture layers and a component-based development that will make it easier to reconfigure and update business logic flow.

The table below summarizes the technologies used in the different architecture layers of the Member Portal application.

Authentication

Member authentication for accessing Member Portal and myHealthButton will use a common registration process and implemented based on a secure authentication, which can be reviewed and approved by the state at the requirements validation and design phase.

Integration

Member Portal integration with eFRM, myHealthButton and eCAMS will be based on standards-based, web services interface with support for secure transactions for information exchange. Web services security implementation will allow for secure information exchange between legitimate applications and/or users.

2.4.2 Functionality

The following section addresses the functional capabilities of the Member Portal application and its integration with myHealthbutton and eFRM.

Medicaid members will have the ability to view their health information through the Member Portal secured access, which will require members to go through a secure authentication process. The public access of the portal will allow access to functionalities such as Provider Search, Contact Us, FAQ and Online Help without anyone signing on to the application. The section 2.4.2.1 summarizes the public access functionalities and the section 2.4.2.2 summarizes the secured access functionalities of the Member Portal application.

Table 3: 2.4.2.1 Member Portal – Public Access Functionalities

Functional Group	Feature ID	Feature Description	Release ID*
Registration	MP-01	• Ability to register as a new user (member) by creating username and password.	R1

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Log In	MP-02	• Ability to login to the application with valid credentials (username / password) created during registration and access the secured area with Medicaid Member's data. • Ability to link to privacy policy from the login page	**R1**
Provider Search	MP -03	• Ability to view and search for providers with multiple criteria • Ability to start an email and send details of the provider via email. • Ability to map driving directions and bus route to a provider from any location (location in the profile, current location or any other location) • Ability to compare and view provider ratings from third party sites.	**R1**
System Messages	MP -04	• Ability to display General system maintenance messages.	**R2**

Table 4: 2.4.2.2 Secured Access Portal Functionalities

Functional Group	Feature ID	Feature Description	Release ID*
Demographics	MP -05	• Ability to view and access personal information maintained within MMIS and view the information of all members associated with the profile	**R1**
Claims	MP -06	• Ability to provide members with on-line and real-time view of the pending and history claim data for services rendered by providers. • Ability to quickly search the member claims history information by date of service, claim number and provider name.	**R1**
Provider Search	MP -07	• Ability to search for Providers based on multiple criteria. • Ability to record any appointments with a provider and send email alerts and view the appointment calendar at any time. • Ability to maintain a list of favorite providers to quickly access the provider information from the dashboard.	**R1**
Insurances	MP -08	• Ability to provide members with on-line view of the current Insurance details on file.	**R2**

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		• Ability to add, remove or change any other insurance coverage. • Ability to view and print health card image.	
Eligibility and Benefits	MP -09	• Ability to provide members with view only capability of current eligibility and benefit plan information.	**R2**
Prior Authorization	MP -10	• Ability to provide members with on-line and real-time view of the current and historical service authorizations data. • Ability to quickly search the member authorization history information by authorization request date, authorization number, service type, authorization tracking number and provider name.	**R2**
User Messages	MP-11	• Ability to provide user specific messages within the restricted, secure area of the Member Portal, such as the dashboard .It will be specific to the member or members of the account on view.	**R2**
Admin Console	MP-12	• Ability to setup general system maintenance messages and user maintenance messages for a period. • Ability to monitor active sessions and lock/unlock user accounts.	**R2**
Other Features	MP-13	In addition to the features available in the unsecured site, members will have additional features listed below: • Ability to complete an online survey through the portal. • Ability to complete health risk assessment survey to track current health behaviors and health measures. • Ability to view member communications such as letters/calls through the portal. • Ability to record free text notes/comments in every section for e.g. Provider, claims, and service authorization and eligibility. • Ability to sign up for mailing lists through the portal. • Ability to interactively chat between members and operational staff through a dashboard from anywhere within the restricted, secure area of the Member Portal site. • Ability to provide useful tools, such as help, and FAQ information related to the Medicaid program. Hover-over help for key required fields within the site.	**R2**

*Member portal releases:

Table 5: Member Portal Releases

Releases	Description	MI Release Reference	Release Schedule

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R1	Member Portal – Release 1	R8-4.12	Please refer Figure 4 – Project Work Plan below.
R2	Member Portal – Release 2	R9-5.1	
R3	Member Portal – Release 3	R9-5.2	

2.4.2.3 Member Portal and myHealthButton Integration and Deployment

CNSI's myHealthButton mobile Medicaid application enables beneficiaries to securely access personal heath information and Medicaid benefits. This section addresses the integration and deployment of Member Portal with myHealthButton. Integration efforts will be split across two releases as described in the following table:

Table 6: 2.4.2.3 Member Portal and myHealthButton Integration and Deployment

Integration Requirement	Release ID	Description
Integration Requirements & Design	R1	• Analysis and design of integration between Member Portal and myHealthButton. • Design of member services (as web services) to facilitate information exchange between member portal and myHealthButton. • Integration specifications and design document for the identified interfaces.
Integration & Deployment	R2	• Development of required interfaces. • Integration and Deployment of the member services. • Implementation of business components to access centralized data.

2.4.2.4 Member Portal, eFRM Integration, and Deployment

CNSI's eFRM product provides fusion of members' health information comprising of administrative and clinical information (To be referred as the 'Fusion dataset'). This fusion data set can be made available for both members such as providing timely health alerts and actionable insights and also laying a foundation for advanced analytics for consumption by other stakeholders such as providers and State staff, in the long run.

This section addresses the integration and deployment of Member Portal and eFRM.

Table 7: 2.4.2.4 Member Portal and eFRM Integration and Deployment

Integration Requirement	Release ID	Description

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Integration Requirements & Design	R3	• Analysis and design of integration between Member Portal and eFRM. • Design of member services (as web services) to facilitate information exchange between member portal and eFRM. • Integration specifications and design document for the identified interfaces.

Member-Specific Clinical Information	R3	• Ability to integrate Member Portal with eFRM data store and display member specific clinical information such as: Problems, allergies, medications, immunization records, encounters, plans, lab results and procedures.
		• Ability to provide a summarized view of the clinical and administrative data of a member.
		• Ability to display 4 key healthy measures of Michigan 4x4 health and wellness plan member health statistics such as
		  ◦ Blood pressure
		  ◦ BMI
		  ◦ Cholesterol
		  ◦ Blood sugar

Member Specific Fusion Information	R3	• Ability to integrate with eFRM fusion data which provides transformation and normalization of information utilizing health care industry standards HL7 and CCD and other data-exchange formats like XML. • Ability to provide a summarized view of Clinical and administrative data • Report measures which are relevant for member's consumption.
Integration & Deployment	R3	• Implementation of business components to integrate with Electronic Fusion Repository.

2.5 Technical and Phased Approach Work Plan

CNSI has created an initial work plan and timeline for the Consumer Engagement Project. This work plan describes the expected activities for the proposed phases, and major activities. This information is presented in **Error! Reference source not found.**6 below. A detailed description of the major activities within each phase is presented in *Section 2.5.2 Phased Approach Work Plan*.

CNSI has structured this work plan to address the overall relationships of the phases and activities required to complete the project. It effectively uses the professional resources required to accomplish these phases and produce high-quality products in a cost-conscious manner.

Based on this, the actual schedule is provided in the work plan given below. Work plan for each of the three releases planned for rolling out Consumer Engagement solution is provided in the following image:

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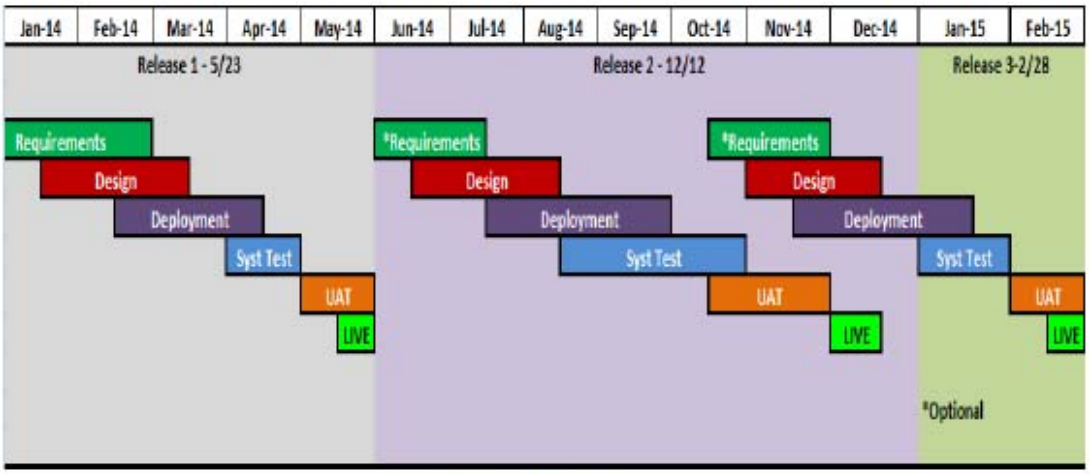

Figure 5: Project Work Plan

The following subsections further describe how CNSI intends to accomplish the goals of the work plan by employing its iVision360 methodology in the proposed approach for the Consumer Engagement Project.

2.5.1 iVision360 Iterative Design, Testing, and Documentation Approach

In this section, CNSI provides an outline of its iVision360 SDLC. The SDLC is a full-featured methodology that includes standard design and development processes. CNSI's SDLC processes have been adapted to address the specific needs of the project. This project will be divided into three phases and will be incorporated into a standard operational release for production deployment.

CNSI will engage in iterative requirements analysis and design with the State at the beginning of each release. The State will be able to review requirements analysis and design documents as soon as a logical set of iterations is completed. CNSI expects initial State signoff upon acceptance of the iteration's document scope. This will help reduce the time required for document review and approval. The documents reviewed at any time will have a smaller scope to help the State perform a thorough review. At the end of all iterations for a release, an overall document will be produced for a final delivery and acceptance to State.

The iterative/agile development and testing portion of the iVision360 methodology is visible in each release of design and coding. During this phase, technical design specifications for impacted functions and user stories are constructed in parallel by developers and SMEs. As the impacted function's design is completed, the team lead will plan the related development iterations.

Developers will build internal design documentation prior to, and during the iterations. The beginning of each iteration is reserved for startup activities, including finalizing the internal design documentation. The developer meets with the data modeling team on the first day of an iteration to conduct a walkthrough of any required data model changes. The data modeling team makes the required changes to the database schema and approves the physical model for coding. Developers also develop iteration test cases (for the

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tasks that may not be tested with automatic internal iteration test code), which are required to test each story completely.

Coding begins when the internal design and pre-coding work is completed for the iteration. The developer will write internal iteration test scripts in parallel with actual working code and update screens and other system functions to fit the physical mode. The developer will execute the iteration test scripts as the developer completes sections of code. The codes will be built and tested incrementally. The developer will coordinate daily stand-up meetings and communicate any development issues.

This development approach ensures developers do not work in silos. It also avoids the traditional approach of throwing design documentation "over the fence" to developers to begin coding, only to discover later that major rework is required halfway through the development process.

Developers eventually test the code against internal auto-unit-code and manual internal iteration test scripts. As they reach the end of the iteration, they will run the code against functional scripts developed by the test team. Discrepancies are identified and corrected, and the developer retests to ensure all discrepancies are corrected and closed before the iteration ends. The developer will conduct a peer review of the impacted function's code on the last day of the iteration and then update the code based on the review. When the iteration testing and software code reviews by the developer are successfully completed for the iteration, the code will be promoted to the integration test stream. The code will be released to the test team for system testing when coding and developer unit testing is completed for all the impacted user stories.

During initial development iterations, the test team will develop system test cases based on requirements specification. During system testing, the test team will execute system test cases to validate system results against requirements.

CNSI plans to engage the test and development teams early on to build the regression test suite for critical functions. This will help to speed up testing and improve overall quality of implementation. During system testing, if required, regression tests will be performed on impacted functions based on changes to a previously tested baseline. The intent of regression testing is to demonstrate that the application continues to meet all approved requirements after changes have been introduced to a previously tested baseline.

For the Consumer Engagement Project, CNSI will integrate the new features through the standard operational release process. As soon as system testing is completed for an activity, CNSI will deliver the code to the (User Acceptance Test) UAT environment for the targeted release. A standard four-week UAT period will be used for this effort.

Figure 6 presents a graphical overview of the processes that are part of the iVision360 methodology.

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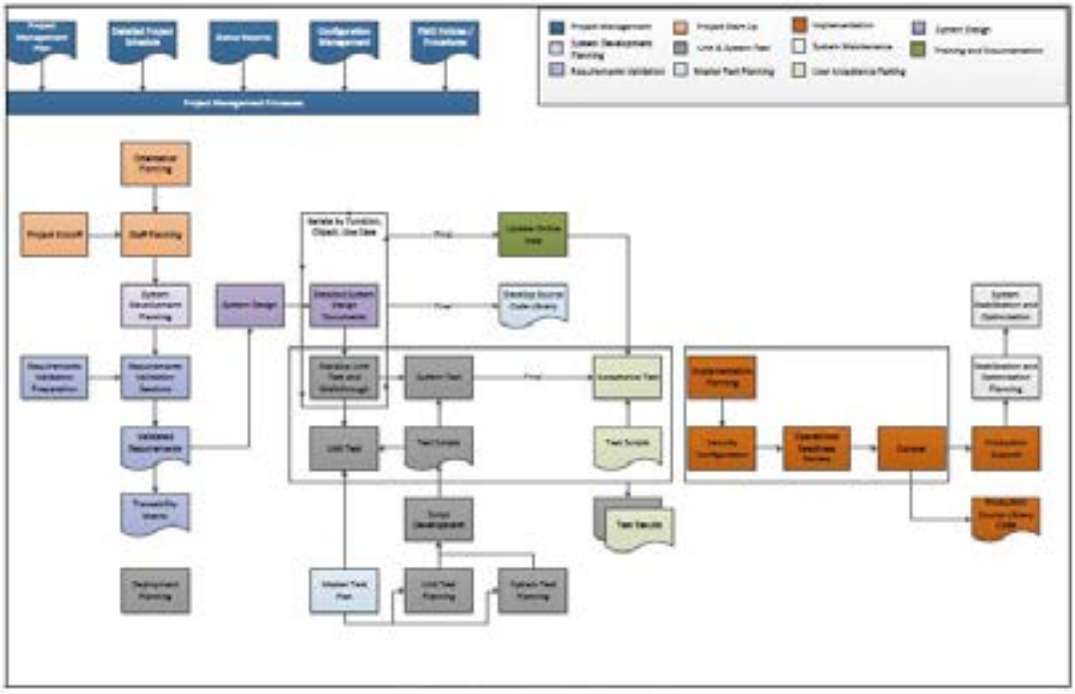

Figure 4: iVision360 Process Diagram

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2.5.2 Phased Approach Work Plan

CNSI proposes an overlapping, three phase approach to the Consumer Engagement Project consisting of requirements elicitation and validation, design, development, and implementation. The three phases are:

- **Phase I:** Initiation and Requirements
- **Phase II:** Design, Coding and System Testing
- **Phase III:** UAT and Production Deployment

Figure 7 provides a high-level overview of the three phases, their major activities, and expected timelines.

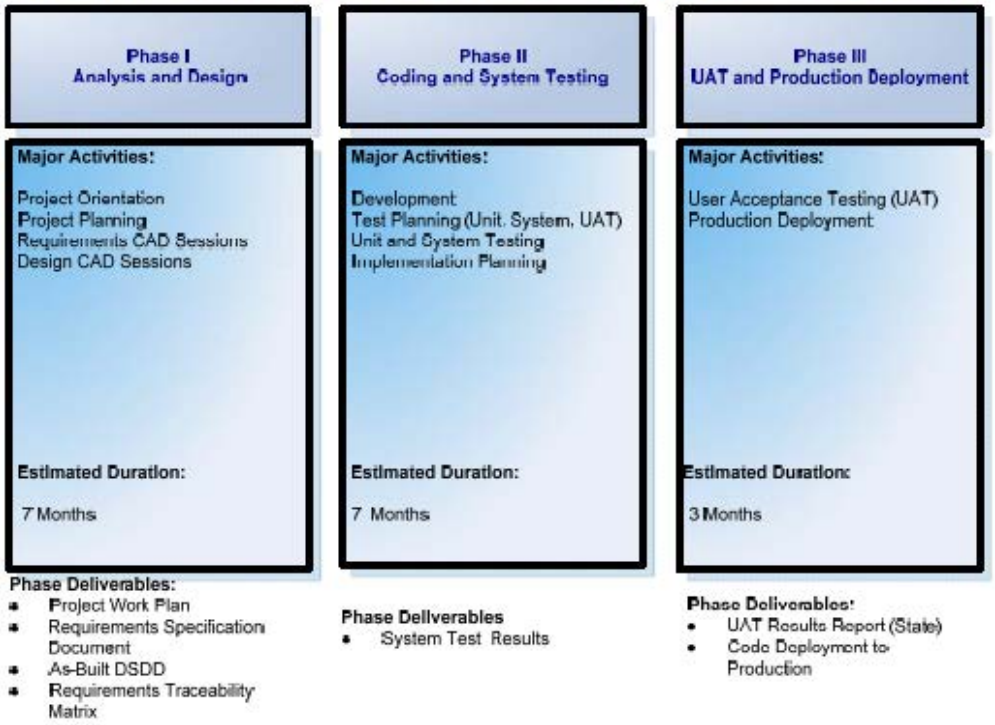

Figure 7: High-Level Project Phases and Activities

With every project, there are critical milestones to be met. Work products and deliverables must be developed and produced in order to provide the inputs necessary to perform the next phase. Table 8 elaborates on the key high-level milestones of the proposed implementation plan, along with the expected deliverables.

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Table 8. High-Level Activities and Milestones by Phase

Major Activity	Description	Phase
Project Orientation	Establish the project team structure, key stakeholders, and operating guidelines for team activity throughout the course of the project.	Phase I
Project Planning	Establish project plans and schedules.	Phase I
Requirements CAD Sessions	Conduct CAD sessions to elicit and validate requirements for creating the application and technical architecture.	Phase I
Phase I Deliverables • **Project Work Plan** • **Requirements Specification Document** • **As-Built DSDD** • **Requirements Traceability Matrix**		
Design CAD Sessions	Conduct CAD sessions to document detailed system design changes for Member Portal architecture.	Phase I
Test Planning	Conduct detailed test planning for each phase of testing: Unit, System and UAT.	Phase II
Software Development	Software changes required to support the detailed functional design including: • Screens • Functionality (driven by use cases) • Data Models • Reports • Interfaces	Phase II
Unit and System Testing	Internal CNSI testing of developed functionality at the component, subsystem, and system level, including end-to-end (E2E) regression testing.	Phase II
Implementation Planning	Coordinate production installation of the system changes.	Phase II
Phase II Deliverables • **System Test Results**		

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Major Activity	Description	Phase
UAT	MDCH testing of all system changes using formal UAT test scripts and devices to be deployed for site visits.	Phase III
Production Deployment	CNSI and the State of Michigan deploy the modifications in the MDCH production CHAMPS environment.	Phase III
Phase III Deliverables • **UAT Results Report (State Deliverable)** • **Code Deployment to Production**		

2.5.2.1 Phase 1 – Initiation and Requirements

Activity 1: Project Initiation

During this activity, CNSI will collaborate with the State of Michigan to identify the key business, and technical team members who will participate in the Consumer Engagement Project. CNSI will conduct the formal project kickoff and deliver orientation for the project effort.

The major milestones associated with this activity are:

- Identifying the participants from the State of Michigan
- Conducting and completing the project kickoff meeting

Activity 2: Project Planning

During this activity, CNSI will develop the project schedule to track and monitor the progress of the Member Portal project. The project schedule outlines the list of all the activities that are needed by CNSI to fulfill the needs of the Member Portal project. CNSI will also take the responsibility of integrating DCH and DTMB tasks in the project schedule to make sure all the dependencies are identified and tracked accordingly. Once the integrated schedule is reviewed and approved by all the relevant stakeholders, it is baselined.

The milestone associated with this activity includes:

- Integrated Project Schedule

Activity 3: Requirements CAD Sessions

The goals of the Consumer Engagement Project have been defined at a high-level within this SOW. During this activity, CNSI will host CAD sessions to elicit and validate detailed functional and technical requirements. The CAD sessions will include the functional and technical SMEs of the State of Michigan and CNSI.

This will result in creating a requirements specification document which provides a clear, concise, and final definition of each requirement necessary to complete the Consumer Engagement Project. The approved requirements will be used during the design and development activities in Phase II.

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The major milestones associated with this activity are:

- Delivering the functional requirements specification document.

Activity 4 – Design CAD Sessions

During this activity, CNSI will host CAD sessions to produce detailed design artifacts. Sessions will be organized and scheduled as per requirements and the solution's technical architecture. CAD sessions will include functional and technical SMEs of the State of Michigan and CNSI.

This will result in final design artifact, including use cases and data models, which will be the basis for the development of changes to system functions. CNSI will submit the completed design artifacts to the appropriate State of Michigan decision-maker shortly after the completion of a CAD session. The State of Michigan decision-maker will formally approve the design artifacts through signature on an approval form, similar to the existing CHAMPS enhancement approval process. This approval indicates that the design is final and development can begin. CNSI will submit a final, as-built DSDD for MDCH approval upon completion of all design sessions.

The major milestone associated with this activity includes:

- Delivery of the as-built DSDD

2.5.2.2 Phase II – Coding, and System Testing

Activity 2 - Development

During this activity, CNSI codes the software changes required to support the updated detailed functional and technical design. Development is performed through a series of bi-weekly development iterations as previously described. Development includes the coding requirements as defined in the as-built DSDDs for Member Portal, including system aspects, such as:

- Rendering Member portal on tablet devices
- Screens
- Functionality (use cases)
- Data Models
- Reports
- Interfaces
- Integration components

Finally, in each development iteration, the developed code is delivered to the CNSI Test Team. The major milestone associated with this activity is the completion of all development iterations.

Activity 3 – Test Planning

During this activity, CNSI collaborates with the State of Michigan to prepare test scenarios and scripts for each phase of testing, including system testing and UAT. The system test scenarios and scripts are

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prepared by the CNSI Test Lead. The UAT test scenarios and scripts are prepared by the State of Michigan. For the Consumer Engagement Project, there is no interaction with any external business partners. Therefore, business-to-business (B2B) testing will not be required.

Milestones associated with this activity include:

- Completing the system test preparation
- Completing the UAT preparation (State)

Activity 4 – Implementation Planning

During this activity, CNSI collaborates with the State and other stakeholders to coordinate the timing of the deployment of each phase of the system changes. Consumer Engagement Project will be incorporated into the regular operational release implementation schedule. Implementation planning activities will focus on targeting the operational release that will include this initiative and integrating the new features into the release.

The major milestone associated with this activity is identification of the operational releases where the software will be deployed.

Activity 5 – Unit/System Testing

During this activity, CNSI tests the developed functionality at the component, subsystem, and system level, including E2E regression testing. System testing will be aligned with the selected operational releases where the code will be deployed. Milestones associated with this activity include:

- System test results report is delivered
- Code is deployed in the UAT environment
- UAT begins

2.4.2.3 Phase III – UAT and Production Deployment

Activity 1 – User Acceptance Testing (UAT)

During this activity, CNSI provides support to MDCH staff who will conduct UAT using formal, State-developed test scripts. UAT testing will be aligned with the selected operational releases where the code will be deployed. The major milestone associated with this activity is the publishing of the UAT Results Report by the State.

Activity 2 – Production Deployment

During this activity, CNSI collaborates with the State of Michigan and its data warehouse vendor to execute the implementation plan. The finalized code will be merged into the selected regular operational release. CNSI deploys the release in the production environment where it is available for use by the MDCH site visit inspection teams.

The major milestone associated with this activity is::

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- Deploying the code in the production environment

Section 3: General Assumptions

This SOW is presented based on the following assumptions:

1. The solution only covers the design and implementation of the Member Portal application. It is assumed that through this project Member Portal application will only be integrated with CNSI's existing products myHealthButton and eFRM.
2. The ability to realize the full functional capabilities of eFRM is contingent on the availability of clinical information in CCD format and other dependent datasets.

Section 4: Pricing

This section presents CNSI's fixed-price, overall labor cost for completing the Please refer Figure 4 – Project Work Plan below. Project. The cost was derived based on the expected effort required, as presented in our initial work plan, composed of the three phases depicted in **Error! Reference source not found.**8. The total fixed-price labor cost for the Please refer Figure 4 – Project Work Plan below. Project is $4,000,000.

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Section 5: Appendices

5.1 Appendix A: eFRM

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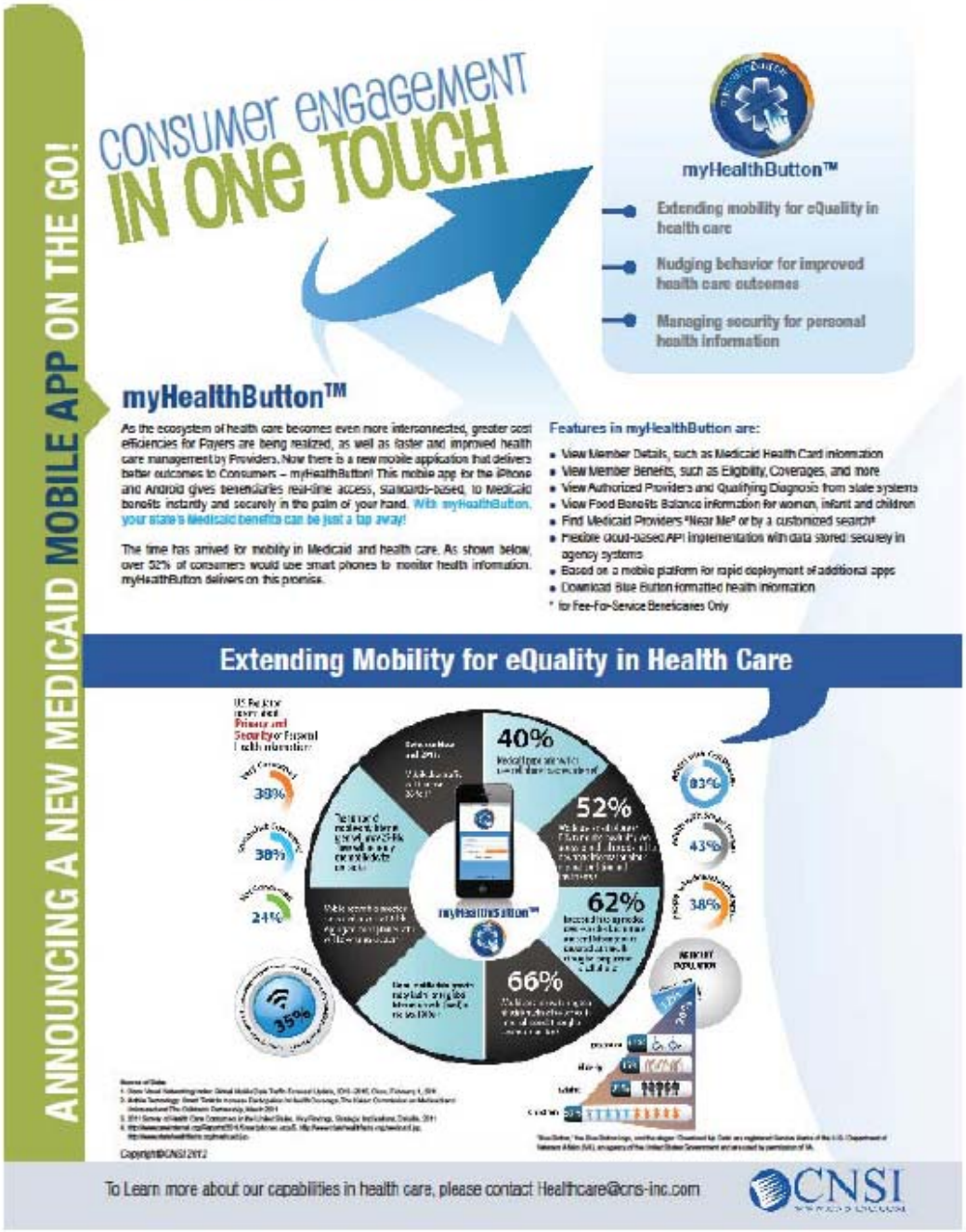
5.2 Appendix B: myHealthButton



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Section 5: Glossary

Acronyms List:

Acronyms	Descriptions
eFRM	Electronic Fusion Repository Management
CCD	Continuity of Care Document
EHR	Electronic Health Record
SSL	Secured Socket Layer
SOW	Statement of Work
MDCH	Michigan Department of Community Health
MVC	Model-View-Controller
DSDD	Detailed System Design Document
DTMB	Department of Technology Management & Budget
UAT	User Acceptance Testing

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New Third Party Liability Coverage Add Change Interface (TPL PA593 Initiative) Project Statement of Work

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January 31, 2014

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Section 1: Introduction

CNSI is pleased to present this statement of work to enhance the Community Health Automated Medicaid Processing System (CHAMPS) to support the new third party liability coverage add change interface (TPL PA593 Initiative) project for the Michigan Department of Community Health (MDCH). CNSI proposes to complete the new third party liability coverage add change interface project under a fixed-cost agreement.

The new third party liability coverage add change interface project will replace CHAMPS present interface with the Third Party Electronic Data (TED) system incorporating new requirement for Michigan's Public Act 593[1], the federal Affordable Care Act and extend the interface to include additional data elements to support requirements imposed by the Affordable Care Act and other evolutionary changes to MDCH's business. It will also establish a new real-time interface to allow the TED system to send updates for beneficiary coverage directly to CHAMPS as soon as they are detected.

1.1 Regulatory and Business Drivers for Change

Currently, CHAMPS sends a roster of Medicaid beneficiaries to Health Insurance Payers for comparison to their roster of insured individuals. The Health Insurance Payers respond with a list of those Medicaid beneficiaries who also have commercial insurance coverage from the Payer.

Public Act 593 requires Health Insurance Payers to provide Michigan with a roster file containing coverage information for every member that had active coverage in the last three years. CHAMPS does not currently compare this roster to the Medicaid beneficiaries on file nor does it record any reported TPL coverage for matched beneficiaries. The TED system has been designated as the inbound receipt point for information from other carriers. This statement of work addresses receipt of data from Michigan Blue Cross Blue Shield which is the State's largest commercial carrier.

In addition to the new requirements imposed by Public Act 593, MDCH has recently requested that we also add the ability for the TED system to transmit new and changed TPL coverage records directly to CHAMPS in a real-time mode using the same web service which Siebel CRM uses to send TPL updates to CHAMPS.

Together, these two changes to CHAMPS will improve the data available to the system when processing claims and reduce the need to recover payments made by Michigan Medicaid where beneficiaries have active third party coverage.

1.2 CNSI Capabilities

CNSI's approach to enhance CHAMPS to support the new third party liability coverage add change interface project effort is based on its ongoing partnership with MDCH and the Department of Technology, Management & Budget (DTMB) and its extensive knowledge of CHAMPS design, implementation, and operation. As system developers and integrators, CNSI aligns its clients' business processes and information systems to provide access to the right information at the right time, enabling the achievement of their desired business results and creating enterprise value. CNSI will employ its

[1] (Act No, 593; Public Acts of 2012 2013)

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extensive technological experience in the industry and incorporate its flexible tools and methodologies to deliver quality results on time and within budget. CNSI completes jobs for clients by delivering on commitments with speed and purpose in accordance with the client's specifications and expectations.

CNSI will build upon its extensive knowledge gained from designing, developing, implementing, and operating CHAMPS for the State, as well as previous CHAMPS efforts, including the HIPAA 5010 compliance implementation, and the ongoing International Classification of Diseases, Tenth Edition (ICD-10), transition and remediation. CNSI's experienced team of Medicaid subject matter experts (SMEs), who have the technical, business, and project management expertise to support this endeavor, will collaborate with the State's business and technical personnel, including the contractor supporting the TED system, to develop a flexible and innovative solution.

CNSI's experience working on prior Medicaid health information technology (IT) initiatives has led to incorporating the following factors in developing this statement of work:

- **CNSI's capability to conduct complex analysis of Medicaid system requirements**

  CNSI's project teams have a wealth of experience with multiple Medicaid programs, which allows them to efficiently conduct the data-gathering and analysis activities for this initiative. Architects and SMEs who have worked with CHAMPS for a variety of Medicaid health IT initiatives are among the team members involved in this effort.

- **CNSI's sensitivity to the State of Michigan's needs and constraints**

  CNSI is uniquely qualified to remain sensitive to the State's needs and constraints in defining the project's approach. The team will employ an orderly, structured, professional approach that is sufficiently flexible to respond to changes in requirements that evolve from additional understanding. Overall, CNSI has practical "hands-on" experience of what does and does not work.

1.3 Proposed Project Organization

CNSI believes this statement of work represents the best possible combination of architecture, technology, support, and experience to complete this project. The proposed team members are each the best possible candidates of their respective disciplines. The underlying logic behind identifying each member of this group is that:

- They share the same philosophical approach for undertaking this project – **the customer comes first**.
- They understand the values that each member brings to successfully implementing the project.
- They are committed to understanding and incorporating the State's requirements.
- They understand the necessary advanced technologies, business needs, and operational issues.

CNSI's primary objective is the successful implementation and completion of the project. Its team is fully dedicated to the new third party liability coverage add change interface project and is confident in its ability to achieve that goal.

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However, an effective project management plan cannot work with participation only by CNSI. As the customer, the State is the most important member of the project team. The customer must be actively engaged in the process at all levels. Implementation is only as good as the partnership established and maintained between all involved parties.

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Section 2: Project Management, Methodology, Tools, and Technical Approach

This section presents CNSI's project management and technical approaches, methodology, tools, and phased work plan for accomplishing all activities required for the New Third Party Liability Coverage Add Change Interface (TPL PA593 Initiative) Project project implementation. This section describes the scope of activities to be addressed throughout the project, from the initiation phase to final implementation, as well as the techniques and methodologies CNSI's project team will use.

Each of the following subsections will contain a high-level description of the 3-phase approach for this project. For each phase, the major activities and anticipated deliverables are presented, followed by a high-level description of the major milestones and approximate timelines.

2.1 Project Management Approach

The project's successful implementation relies on the framework and environment provided by project and quality management. Figure 1 shows CNSI's project and quality management framework and how the related activities interact with project tasks.

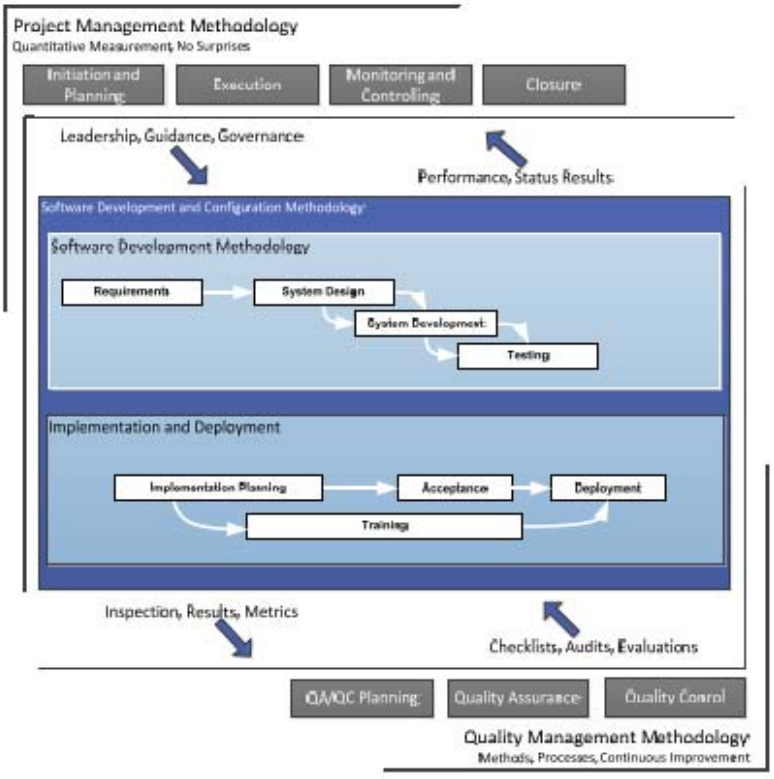

Figure 1. CNSI's Project Management and Quality Management Framework

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Although all projects are unique, they share common components and processes. The generally accepted process groups defined by the *Project Management Body of Knowledge* (*PMBOK*), as incorporated into the CNSI project management process, are:

- **Initiating:** This process group defines the project objectives and grants authority to proceed. For CNSI, the initiating processes are largely incorporated into the proposal development process, during which required partners are identified.
- **Planning:** This process group refines the project objectives and scope and plans the tasks, activities, and steps necessary to meet the project's objectives. The planning processes start during proposal development and proceed following contract award while CNSI works with the customer to establish and baseline the project management plan. The project management plan is modified and updated as necessary over the course of the project. It is the culmination of the planning processes for scope definition and management, time (scheduling), staffing (human resources), communications, and risk management.
- **Executing:** This process group puts the project's plans into motion. This is where the bulk of the work for the project is performed.
- **Monitoring and Controlling:** This process group measures the performance of the project's executing activities and reports these performance results to project managers and stakeholders. Output is used to refine, improve, and/or change project management (including plans and schedules) as necessary to meet the project's objectives.
- **Closing:** This process group documents the formal acceptance and approval of the project's product and brings all aspects of the project to a close.

CNSI is confident it has the correct methodology and project framework in place to successfully implement the new third party liability coverage add change interface project modifications. CNSI continually improves its project management processes using lessons learned from previous projects and through the proficiency and continuous education of its program and project managers, senior technical and engineering staff, and senior and corporate management. This ensures a number of advantages:

- The project management philosophy is firmly entrenched within the entire project team, including MDCH and CNSI.
- Project management is a core competency.
- The project staff is focused on successfully implementing the project.
- Project management, quality management, and cost management processes are fully integrated and their infrastructure is in place.
- Effective project status reporting is established throughout the project life cycle.
- Project and software development methodologies are well documented.
- Project information is communicated continuously to the right people at the right time.
- The project is continuously monitored against performance.
- Excellence in quality and delivery are built in.

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- Deliverable review and approval processes are in place.

Through developing the project management plan, CNSI expects to collaborate with the MDCH project management team to further customize CNSI's project management system to successfully complete the project.

2.2 Project Methodology

CNSI's holistic approach for this project will use its proven methodology as the overarching framework and bring an experienced team of program managers, SMEs, technical experts, and change management resources to support this effort.

The project methodology is a framework that facilitates the integration of CNSI's extensive system experience, which is rooted in application implementations, methodologies, and delivery tools. This framework allows CNSI to deliver services to its clients consistently across its footprint and gather continued enhancements for its supporting methodology, thereby providing continued value for its clients.

CNSI's methodology is an integrated methodology that combines its best delivery assets. The methodology:

- Provides a scalable, integrated collection of assets.
- Provides a consistent level of detail and presentation.
- Supports tailoring to scale, which provides a unique, but consistent cost-effective delivery approach.

CNSI's methodology approach consists of the following:

- The **Manage** work approach provides a single, consistent approach to managing CNSI's engagements. Within the Manage Approach is the Quality Management activity, which verifies that deliverables and processes meet requirements. The Quality Management activity also supports continuous process improvement, as well as the methodology.
- The **Life Cycle** work approach addresses unique expertise while providing overall integration across the full implementation life cycle.

CNSI's methodology has the flexibility to be adapted to meet MDCH's unique requirements while confirming that its experienced staff members follow established practices.

While no two engagements are the same, MDCH expects CNSI to deliver in a consistent, systematic approach. The proposed project methodology incorporates CNSI's staff's delivery experience into a single, integrated approach. It provides the structure for integrating CNSI's capabilities while allowing individual project teams the flexibility to use client-mandated tools. The right assembly of technologies, techniques, and deliverable processes requires the specific experience and expertise found in CNSI's staff.

Investing time to create an effective plan with clear objectives is integral to effective project execution. CNSI's methodology provides a structured approach to the planning process. While this may appear to require more initial effort than desired, experience has shown that following these processes reduces the likelihood of planning mistakes and results in lower risk and a more cost-effective, rapid delivery.

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CNSI's methodology incorporates a consistent approach for identifying, tracking, and measuring the value derived from ongoing projects. CNSI's experience developing and delivering various client projects is incorporated into the project strategy and planning activities.

In undertaking this project, CNSI will employ its iVision360 system development life cycle (SDLC) methodology tailored for the new third party liability coverage add change interface project.

- **User is at the Center:** CNSI's primary motivation in developing iVision360 is to put the user at the center of the project life cycle. Successful projects have high interaction with end users and place the user at the center of the project. Every phase and activity of iVision360 focuses on interaction and collaboration with the user community. CNSI does this by implementing agile techniques and building working software in an iterative fashion with user validation at periodic intervals.
- **Common Goals:** Users actively participate in configuration sessions with an integrated team of developers, analysts, and testers. This method avoids the pitfalls of waterfall methods. iVision360 provides the team with a sense of purpose, a goal, and the drive to accomplish the end objective: software that meets the requirements.
- **Early and Often Testing:** iVision360 provides an opportunity to test early and often so formal system test phases and subsequent test phases are more likely to meet schedule expectations with a lower error-discovery rate.

By introducing the baseline management features of waterfall, CNSI minimizes the risk of scope creep that is sometimes associated with iterative methods. Moreover, implementing and integrating with project management processes will provide integrated change, issue, and risk management. Table 1 describes the key benefits of each of the industry-standard methodologies that are blended into iVision360.

Table 1. SDLC Methodology Comparison

Methodology	Key Benefits Blended into iVision360
Waterfall	Baseline approval of requirements Structured documents and customer approvals Formalized testing
Iterative/Agile	Frequent customer interaction Decomposing work into small meaningful features that are presented in working software Frequent course corrections Sense of real progress Early and frequent testing
Extreme Programming	Teams formed between developing organization and customer Sense of common vision and goal

iVision360 has been adapted for the purposes of this project. The customized version is presented in *Section 2.5.1 iVision360 Iterative Design, Testing, and Documentation Approach*.

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2.3 Project Management Tools

Tools, when properly applied within the methodology framework, will reduce the time to complete a project by providing predefined processes, templates, documents, and training materials. More importantly, use of the appropriate tools will help reduce risk and increase efficiency.

CNSI will continue to use the tools already proven effective during the previous undertakings to reduce the time to complete the project and mitigate risk. Table 2 lists the tools CNSI will utilize for the project.

Table 2. CNSI Project Tools

Tool	Purpose
ReqTrace®	CNSI's requirements database used during design and test phases
Microsoft Visio	Develop use case diagrams, technical architecture diagrams, and support process flows
Microsoft Office	Develop project deliverables as well as presentations and spreadsheet artifacts needed to support deliverables
As-One	Repository for deliverables, presentations, and artifacts

Microsoft Visio and Microsoft Office are industry-standard tools. The following subsections provide additional information about ReqTrace and As-One.

2.3.1 ReqTrace

CNSI will use its ReqTrace web application for requirements analysis and validation.

During project initiation and requirements planning, ReqTrace will be loaded with the functional, technical, and support requirements. ReqTrace is CNSI's requirements management tool of choice being used in MMIS projects. ReqTrace provides the ability to trace requirements to use cases, related test cases, and results. The application can store requirements-related attributes, including revisions, notes, and comments.

CNSI began using ReqTrace during the implementation of CHAMPS. The requirements validation processes used on the project, as well as the use of ReqTrace, resulted in the requirements validation phase being completed ahead of schedule.

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2.3.2 As-One

Believing that continuous collaboration and information-sharing are key factors to successful project execution, CNSI will use As-One, its web-based enterprise program management solution. Figure 2 illustrates how As-One is designed to support team collaboration, knowledge management, and process improvement. As-One will provide a convenient repository for all program data and will give MDCH oversight personnel direct visibility into project performance.

Figure 2. As-One Collaboration and Improvement

As-One is an "out-of-the-box" solution that supports CNSI's program management philosophy: experienced people, managed processes, and enabling technology.

As-One will allow CNSI users to share real-time data specific to the user's authority and association and is accessed via a standard web browser. CNSI's previous and ongoing projects with the State of Michigan use As-One. Training will be provided for team members new to the program.

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2.4 Solution

This section will review CNSI's proposed new third party liability coverage add change interface project including technical and functional overviews. Business and technical requirements will be elicited and documented as a part of the first phase of the project.

2.4.1 Technical Overview

The new third party liability coverage add change interface project is expected to use existing technical channels. No new technical, architectural, or infrastructure requirements are anticipated. For the batch interface with TED, this project will replace an existing interface with an enhanced version of that same interface. Preexisting web service functionality between the Customer Relationship Management (CRM) subsystem and CHAMPS performs a very similar function as is needed for the real-time interface between TED and CHAMPS. CNSI will reuse and modify this existing web service to accomplish the necessary data exchange.

2.4.2 Functionality

CHAMPS will be modified to provide the following capabilities to MDCH:

- Accept a revised format of the inbound Blue Cross Blue Shield (BCBS) TPL coverage batch interface in the PA 593 file format.
- Consume TPL policy data provided by the TED system via real-time web service.
- Use matching criteria to identify beneficiaries received on the BCBS interface to apply updates to the beneficiary records in the CHAMPS TPL subsystem.
- Provide certain TPL match and update control reports as defined during design.
- Update selected screens in CHAMPS subsystems to accommodate new data elements.

Phase I is focused on the revisions to the batch interface with TED. Phase II is focused on the implementation of the web service and reporting.

2.5 Technical and Phased Approach Work Plan

CNSI has created an initial work plan and timeline for the new third party liability coverage add change interface project. This work plan describes the expected activities for the proposed phases and major activities. This information is presented in Figure 3 below. This project will be implemented over two releases coinciding with CHAMPS production releases 4.12 and 5.1. A detailed description of the major activities for this project is presented in *Section 2.5.2 Phased Approach Work Plan*.

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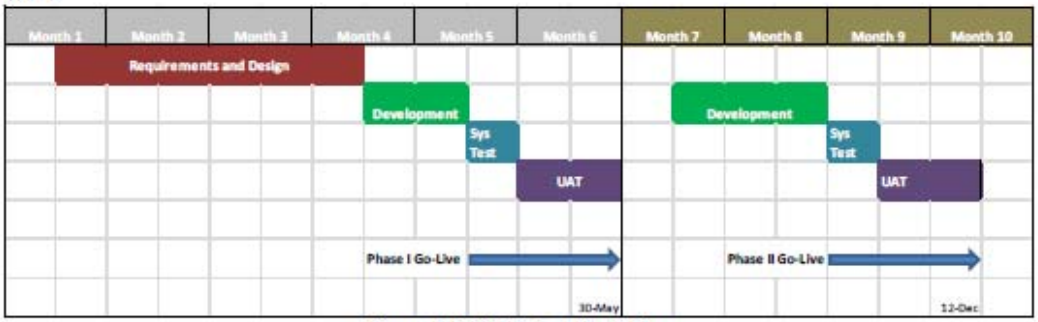

Figure 3. Initial Project Work Plan

CNSI structured this work plan to address the overall relationships of the phases and activities required to complete the project. It effectively uses the professional resources required to accomplish these phases and produce high-quality products in a cost-conscious manner.

The following subsections further describe how CNSI intends to accomplish the goals of the work plan by employing its iVision360 methodology in the proposed approach for the new third party liability coverage add change interface project.

2.5.1 iVision360 Iterative Design, Testing, and Documentation Approach

In this section, CNSI provides an outline of its iVision360 SDLC. The SDLC is a full-featured methodology that includes standard design and development processes. CNSI is currently undergoing CMMI certification which includes our SDLC. CNSI's SDLC processes have been adapted to address the specific needs of the project. This project will be divided into 3 phases and will be incorporated into a standard operational release for production deployment.

CNSI will engage in iterative requirements analysis and design with State at the beginning of each release. The State will be able to review requirements analysis and design documents as soon as a logical set of iterations are completed. CNSI expects initial State signoff upon acceptance of the iteration's document scope. This will help reduce the time required for document review and approval. The documents reviewed at any time will have a smaller scope to help the State perform a thorough review. At the end of all iterations for a release, an overall document will be produced for a final delivery and acceptance to State.

The iterative/agile development and testing portion of the iVision360 methodology is visible in each release of design and coding. During this phase, technical design specifications for impacted functions and user stories are constructed in parallel by developers and the SMEs. As the impacted function's design is completed, the team lead will plan the related development iterations.

Developers will build internal design documentation prior to, and during, the iterations. The beginning of each iteration is reserved for startup activities, including finalizing the internal design documentation. The developer meets with the data modeling team on Day 1 of an iteration to conduct a walkthrough of any required data model changes. The data modeling team makes the required changes to the database schema and approves the physical model for coding. Developers also develop iteration test cases (for the tasks

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that may not be tested with automatic internal iteration test code), which are required to test each story completely.

Coding begins when the internal design and pre-coding work is completed for the iteration. The developer will write internal iteration test scripts in parallel to actual working code and update screens and other system functions to fit the physical mode. The developer will execute the iteration test scripts as they complete sections of code. The codes will be built and tested incrementally. The developer will coordinate daily stand-up meetings and communicate any development issues.

This development approach ensures developers do not work in silos. It also avoids the traditional approach of throwing design documentation "over the fence" to developers to begin coding, only to discover later that major rework is required halfway through the development process.

Developers eventually test the code against internal auto-unit-code and manual internal iteration test scripts. As they reach the end of the iteration, they will run the code against functional scripts developed by the test team. Discrepancies are identified and corrected, and the developer retests to ensure all discrepancies are corrected and closed before the iteration ends. The developer will conduct a peer review of the impacted function's code on the last day of the iteration and then update the code based on the review. When developer iteration testing and software code reviews are successfully completed for the iteration, the code will be promoted to the integration test stream. The code will be released to the test team for system testing when coding and developer iteration testing is completed for all of an impacted functions user stories.

During initial development iterations, the test team will develop system test cases based on requirements specification. During system testing, the test team will execute system test cases to validate system results against requirements.

CNSI plans to engage the test and development teams early on to build the regression test suite for critical functions. This will help to speed up testing and improve overall quality of implementation. During system testing, if required, regression tests will be performed on impacted functions based on changes to a previously tested baseline. The intent of regression testing is to demonstrate that the CHAMPS system continues to meet all approved requirements after changes have been introduced to a previously tested baseline.

For the new third party liability coverage add change interface project. CNSI will integrate the new features through the standard CHAMPS operational release process. As soon as system testing is completed for an activity, CNSI will deliver the code to the UAT environment for the targeted release. A standard four-week UAT period will be used for this effort.

Figure 4 presents a graphical overview of the processes that are part of the iVision360 methodology.

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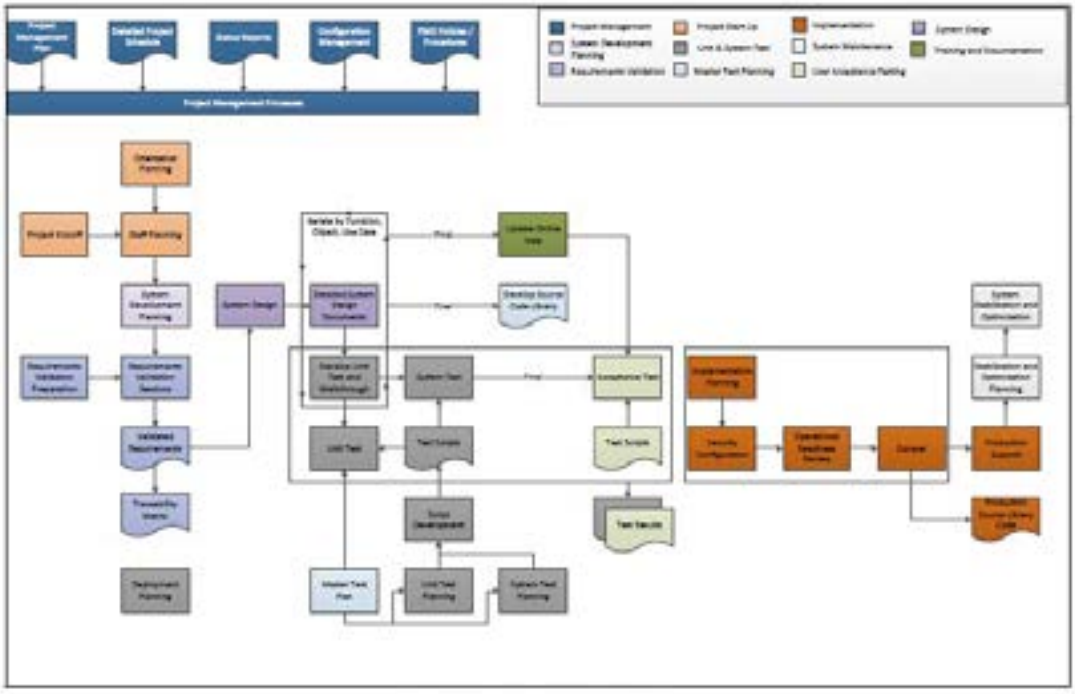

Figure 4. iVision360 Process Diagram

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2.5.2 Phased Approach Work Plan

CNSI proposes an overlapping, three-phase approach to the new third party liability coverage add change interface project consisting of requirements elicitation and validation, design, development, and implementation.

The three phases are:

- **Phase I:** Initiation, Requirements and Design
- **Phase II:** Design, Coding and System Testing
- **Phase III:** UAT and Production Deployment

Figure 5 provides a high-level overview of the three phases, their major activities, and expected timelines.

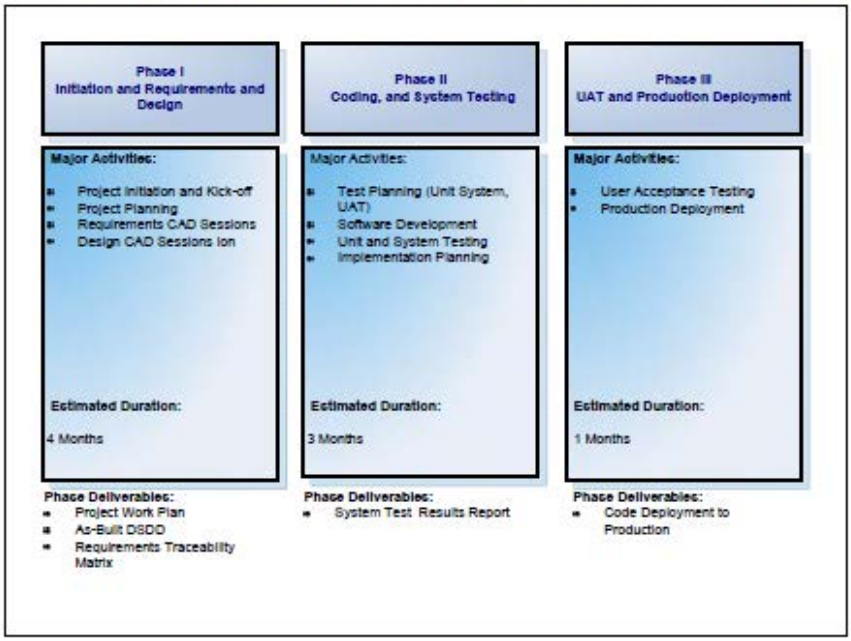

Figure 5. High-Level Project Phases and Activities

With every project, there are critical milestones to be met and work products and deliverables that must be developed and produced in order to provide the inputs necessary to perform the next phase. Table 3 elaborates on the key high-level milestones of the proposed implementation plan, along with the expected deliverables.

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Table 3. High-Level Activities and Milestones by Phase

Major Activity	Description	Phase
Project Initiation	Establish the project team structure, key stakeholders, and operating guidelines for team activity throughout the course of the project.	Phase I
Project Planning	Establish project schedules.	Phase I
Requirements CAD Sessions	Conduct CAD sessions to elicit and validate requirements for the affected CHAMPS subsystems.	Phase I
Design CAD Sessions	Conduct CAD sessions to document detailed system design changes for the affected CHAMPS subsystems	Phase I
Phase I Deliverables • **Project Work Plan** • **As-Built DSDDs** • **Requirements Traceability Matrix**		
Test Planning	Conduct detailed test planning for each phase of testing: Unit, System and UAT.	Phase II
Software Development	Software changes required to support the detailed functional design including: • Screens • Functionality (driven by use cases) • Data Models • Reports • Interfaces	Phase II
Unit and System Testing	Internal CNSI testing of developed functionality at the component, subsystem, and system level, including end-to-end (E2E) regression testing.	Phase II
Implementation Planning	Coordinate production installation of the system changes.	Phase II
Phase II Deliverables • **System Test Results**		
UAT	MDCH testing of all system changes using formal UAT test scripts.	Phase III

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Major Activity	Description	Phase
Production Deployment	CNSI and the State of Michigan deploy the modifications in the MDCH production CHAMPS environment.	Phase III
Phase III Deliverables • **Code Deployment to Production**		

2.5.2.1 Phase 1 – Initiation and Requirements

Activity 1: Project Initiation

During this activity, CNSI will collaborate with the State of Michigan to identify the key business and technical team members who will participate in the New Third Party Liability Coverage Add Change Interface (TPL PA593 Initiative) ProjectProject. CNSI will conduct the formal project kickoff and deliver orientation for the project effort.

The major milestones associated with this activity are:

- Participating team members from the State of Michigan are identified
- Project kickoff meeting is conducted and project kickoff is completed

Activity 2 - Project Planning

During this activity, CNSI will develop the project schedule to track and monitor the progress of the Member Portal project. The project schedule outlines the list of all the activities that are needed by CNSI to fulfill the needs of the Member Portal project. CNSI will also take the responsibility of integrating DCH and DTMB tasks in the project schedule to make sure all the dependencies are identified and tracked accordingly. Once the integrated schedule is reviewed and approved by all the relevant stakeholders, it is baselined.

The milestone associated with this activity includes:

- Integrated Project Schedule.

Activity 3 – Requirements CAD Sessions

The goals of the new third party liability coverage add change interface Project have been defined at a high-level within this statement of work. During this activity, CNSI will host CAD sessions to elicit and validate detailed functional and technical requirements. The CAD sessions will include the State of Michigan and CNSI functional and technical SMEs. CNSI will compare the validated requirements with current CHAMPS functionality and technical architecture to determine the impact of the new requirements across all CHAMPS subsystems, including system aspects such as:

- New and modified screens
- Functionality (use cases)
- Data models

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- Reports
- Interfaces

This will result in a requirements specification document which provides a clear, concise, and final definition of each requirement necessary to support the requirements of this project. The approved requirements will be used during the design and development activities.

The major milestones associated with this activity are:

- Functional requirements specification document is delivered.
- Approved requirements have been loaded into ReqTrace.

Activity 4 – Design CAD Sessions

During this activity, CNSI will host CAD sessions to produce detailed design artifacts. Sessions will be organized and scheduled per requirements for the affected CHAMPS subsystem and the solution's technical architecture. CAD sessions will include State of Michigan and CNSI functional and technical SMEs. Using the existing CHAMPS design and the requirements specification document as a starting point, session participants will identify and document required design changes including system aspects such as:

- Screens
- Functionality (use cases)
- Data Models
- Reports
- Interfaces

This will result in final, revised design artifacts, including use cases and data models, which will be the basis for the development of changes to system functions. CNSI will submit the completed design artifacts to the appropriate State of Michigan decision-maker shortly after the completion of a CAD session. The State of Michigan decision-maker will formally approve the design artifacts via signature on an approval form, similar to the existing CHAMPS enhancement approval process. This approval indicates that design is final and development can begin. CNSI will submit a final, as-built DSDD for MDCH approval upon completion of all design sessions.

The major milestone associated with this activity is delivery of the as-built DSDD.

2.5.2.2 Phase II – Design, Coding, and System Testing

Activity 1 - Development

During this activity, CNSI codes the software changes required to support the updated detailed functional and technical design. Development is performed through a series of bi-weekly development iterations as previously described. Development includes the coding changes as defined in the as-built DSDDs for CHAMPS, including system aspects, such as:

- Screens

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- Functionality (use cases)
- Data Models
- Reports
- Interfaces

As the conclusion of each development iteration, the developed code is delivered to the CNSI Test Team. The major milestone associated with this activity is the completion of all development iterations.

Activity 3 – Test Planning

During this activity, CNSI collaborates with the State of Michigan to prepare test scenarios and scripts for each phase of testing, including system testing and UAT. The system test scenarios and scripts are prepared by the CNSI Test Lead. UAT test scenarios and scripts are prepared by the State of Michigan. Test planning will include test scenarios to test the interaction between TED and CHAMPS.

Milestones associated with this activity include:

- System test preparation is completed

Activity 4 – Implementation Planning

During this activity, CNSI collaborates with the State and its data warehouse vendor to coordinate the timing of the production installation of the system changes. The new third party liability coverage add change interface project will be incorporated into the regular CHAMPS operational release implementation schedule for releases 4.12 and 5.1. Implementation planning activities will focus on targeting the operational release that will include this initiative and integrating the new features into the release.

The major milestones associated with this activity are documented in the CHAMPS release schedule for each of the identified releases.

Activity 5 – Unit/System Testing

During this activity, CNSI tests the developed functionality at the component, subsystem, and system level, including E2E regression testing. System testing will be aligned with the selected operational releases where the code will be deployed.

Milestones associated with this activity include:

- System test results report is delivered
- Code is deployed to UAT environment
- UAT begins

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2.4.2.3 Phase III – UAT and Production Deployment

Activity 1 – User Acceptance Testing (UAT)

During this activity, CNSI provides support to MDCH staff who will conduct UAT using formal, State-developed test scripts. UAT testing will be aligned with the selected operational releases where the code will be deployed.

The major milestones associated with this activity are completion of UAT for the two identified releases.

Activity 2 – Production Deployment

During this activity, CNSI and the State of Michigan collaborate to execute the implementation plan. The finalized code will be merged into the selected regular operational release. CNSI deploys the release to the production environment where it is available for use by the MDCH.

The major milestones associated with this activity include:

- Code is deployed to production

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Section 3: General Assumptions

This statement of work is presented based on the following assumptions:

1. The State's vendor for the TED system has provided a set of requirements. CNSI assumes there will be no major changes to these requirements based during design, development and implementation.
2. The solution developed for new third party liability coverage add change interface project will meet all applicable State of Michigan technical and security standards.
3. The solution developed for new third party liability coverage add change interface project will not require any update to the CHAMPS operations or disaster recovery documentation.
4. The solution developed for new third party liability coverage add change interface project will not require new hardware or any changes to the State's infrastructure.

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Section 4: Pricing

This section presents CNSI's fixed-price, overall labor cost for completing the new third party liability coverage add change interface project. The cost was derived based on the expected effort required, as presented in our initial work plan, composed of the three phases depicted in Figure 5. The total fixed-price labor cost for the new third party liability coverage add change interface project is $300,000.

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Form No. DTMB-3521 (Rev. 4/2012)
AUTHORITY: Act 431 of 1984
COMPLETION: Required
PENALTY: Contract change will not be executed unless form is filed

STATE OF MICHIGAN
DEPARTMENT OF TECHNOLOGY, MANAGEMENT AND BUDGET
PROCUREMENT
P.O. BOX 30026, LANSING, MI 48909
OR
530 W. ALLEGAN, LANSING, MI 48933

CHANGE NOTICE NO. 19
to
CONTRACT NO. 071B6200168
between
THE STATE OF MICHIGAN
and

NAME & ADDRESS OF CONTRACTOR:	PRIMARY CONTACT	EMAIL
Client Network Services, Inc. (CNSI) 702 King Farm Boulevard, 2nd Floor Rockville, MD 20850	John H. Cousins III	jee@cns-inc.com
	TELEPHONE	CONTRACTOR #, MAIL CODE
	(301) 634-4600	

STATE CONTACTS	AGENCY	NAME	PHONE	EMAIL
CONTRACT COMPLIANCE INSPECTOR:	DTMB	John Spitzley	(517) 335-6612	spitzleyj1@michigan.gov
BUYER:	DTMB	Steve Motz	(517) 241-3215	motzs@michigan.gov

CONTRACT SUMMARY:

DESCRIPTION: **Medicaid Services Administration**

INITIAL EFFECTIVE DATE	INITIAL EXPIRATION DATE	INITIAL OPTIONS INCLUDED	CURRENT EXPIRATION DATE
March 14, 2006	September 30, 2011	Two One-Year	September 30, 2018
PAYMENT TERMS	F.O.B	SHIPPED	SHIPPED FROM
N/A	N/A	N/A	N/A

ALTERNATE PAYMENT OPTIONS:	AVAILABLE TO MiDEAL PARTICIPANTS
☐ P-card ☐ Direct Voucher (DV) ☐ Other	☐ YES ☒ NO

MINIMUM DELIVERY REQUIREMENTS:

N/A

DESCRIPTION OF CHANGE NOTICE:

OPTION EXERCISED:	EFFECTIVE DATE OF CHANGE:	EXPIRATION DATE:
☒ NO ☐ YES	November 12, 2013	September 30, 2018

Effective immediately this contract is hereby INCREASED to provide funding for various Community Health Administrative Management Payment System (CHAMPS) initiatives that include not to exceed $10,000,000.00. All initiatives funded by this change notice require prior approval by the Michigan Department of Community Health, Medical Services Administration of a project proposal before they are authorized to proceed. Project proposals will be added to the contract through subsequent change notices as they are approved.

All other terms, conditions, pricing and specifications remain unchanged.

VALUE/COST OF CHANGE NOTICE:	$ 10,000,000.00

ESTIMATED AGGREGATE CONTRACT VALUE:	$ 381,392,904.00

CHANGE NOTICE NO.19 to CONTRACT NO. 071B6200168

FOR THE CONTRACTOR:	**FOR THE STATE:**
Client Network Services, Inc. (CNSI)	
Firm Name	Signature
	Kim Stephen, Director of the Bureau of Budget and Purchasing
Authorized Agent Signature	Name/Title
	Micigan Department of Community Health
Authorized Agent (Print or Type)	Enter Name of Agency
Date	Date