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 experiences developing and delivering various client projects are incorporated into the project strategy and planning activities.

In undertaking this project, CNSI will employ its Collaborative Assessment Methodology (CAM) tailored for the MaaS SIA initiative.

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 1 depicts the tools CNSI will utilize on this project.

Table 1. CNSI Project Tools

Tool	Purpose
Microsoft Visio	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.

While Microsoft Visio and Microsoft Office are industry-standard tools, the following subsection provides additional information about As-One.

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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 its web-based enterprise program management solution, As-One. As shown in Figure 3, 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 and HFS oversight personnel direct visibility into project performance.

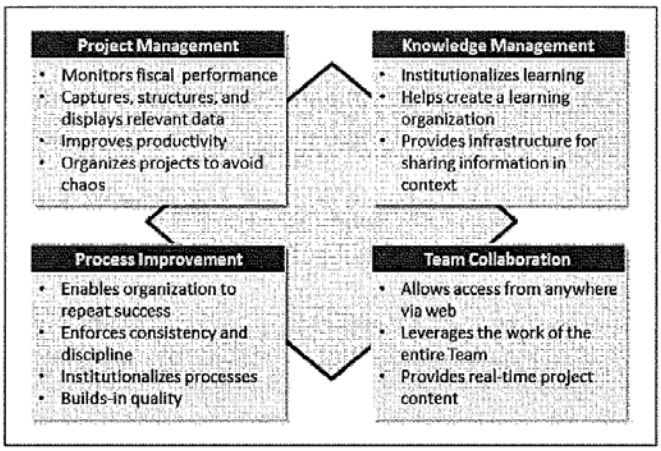

Figure 3. As-One Collaboration and Improvement Conceptual Model

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 all authorized users to share real-time data specific to the user's authority and association. As-One is provided via a standard web browser. As-One has been widely used in previous MDCH projects. Training will be provided for team members new to the program.

2.4 MaaS Technical Architecture Approach

2.4.1Background

CHAMPS foundation is the eCAMS application which is a platform built on multi-tier architecture comprised of the Application, Middleware and Database layers. In addition there are various Commercial Off-The-Shelf (COTS) products that are integrated with the eCAMS platform to provide comprehensive Medicaid Claims Processing capabilities. The fully integrated application that is currently supported in Michigan is referred to as CHAMPS.

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The CHAMPS application will be extended to support the Illinois' HFS Medicaid program by transforming the application architecture to enable the multi-tenancy cloud-model. At present, the traditional single-tenant CHAMPS application has been utilizing the resources to support one organization – Michigan. The overarching objective is to enable this single application to support both Michigan and Illinois by enabling the system as a service in the cloud.

2.4.2 Approach

The guiding principles of CNSI's proposed approach for leveraging the cloud model are based on the CMS Cloud Computing Standard. This standard is built on the following five basic essential characteristics:

1. On-Demand self service capability
2. Broad network access
3. Resource pooling
4. Rapid elasticity
5. Measured service

There are many approaches to accomplish the multi-tenant cloud model. Because of the inherent nature of Medicaid claims processing, the high volume transactions, and the need for data security compliant with HIPAA, CNSI is proposing a Cloud Health Care Engine (HCE) that will enable the existing platform to transform into a next generation cloud model that implements the three service models of the CMS Cloud Computing Standard and National Institute of Standards and Technology recommendations on Cloud Computing Reference Architecture. These service models include:

1. Software as a Service (SaaS)
2. Platform as a Service (PaaS)
3. Infrastructure as a Service (IaaS)

CNSI's cloud solution will include:

- **SaaS components including:**
    - **A single code base** to support multi-tenant use ensures that the same code is deployed for all tenants. This is further achieved by reengineering the eCAMS platform to externalize the configurable tenant-specific extensions that can be incorporated into the shared codebase.
    - **Database sharing** where computing resources are shared between all the tenants on a server, but each tenant has its own set of data that remains logically isolated from the data that belongs to all other tenants. Data isolation provides the necessary data security and supports handling high volume transactions. The data architecture will be the same for all tenants, but will allow for an extended schema to incorporate tenant specific data needs.
    - **Shared middleware with multiple application instances** where tenants use different instances of the application deployed on different instances of the shared middleware. Tenants share the operating system and servers. Since the middleware instance is different, each tenant is allocated its own set of operating system processes, for example JVM and HEAP size.

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- **PaaS components including core services sharing with a centralized mediation layer** which mediates between requests coming from users belonging to multiple tenants and multiple instances of an application. This centralized layer routes requests from a particular tenant's users to a tenant specific application instance and efficiently enables additional common multi-tenancy features such as access control, metering, monitoring, and auditing among others. An example of this approach includes the use common content management tool IBM FileNet® to store the content from multiple tenants in a centralized document repository by routing the tenant specific requests.
- **IaaS components for infrastructure sharing to** allow multiple tenants to share hardware, software, storage, and network.

The deployment approach is along the community cloud model (MDCH and HFS being the two tenants) in accordance with CMS Cloud Computing Standard and National Institute of Standards and Technology recommendations on Cloud Computing Reference Architecture and applicable State of Michigan Standards.

Figure 4 depicts proposed architecture for CNSI's MaaS cloud solution.

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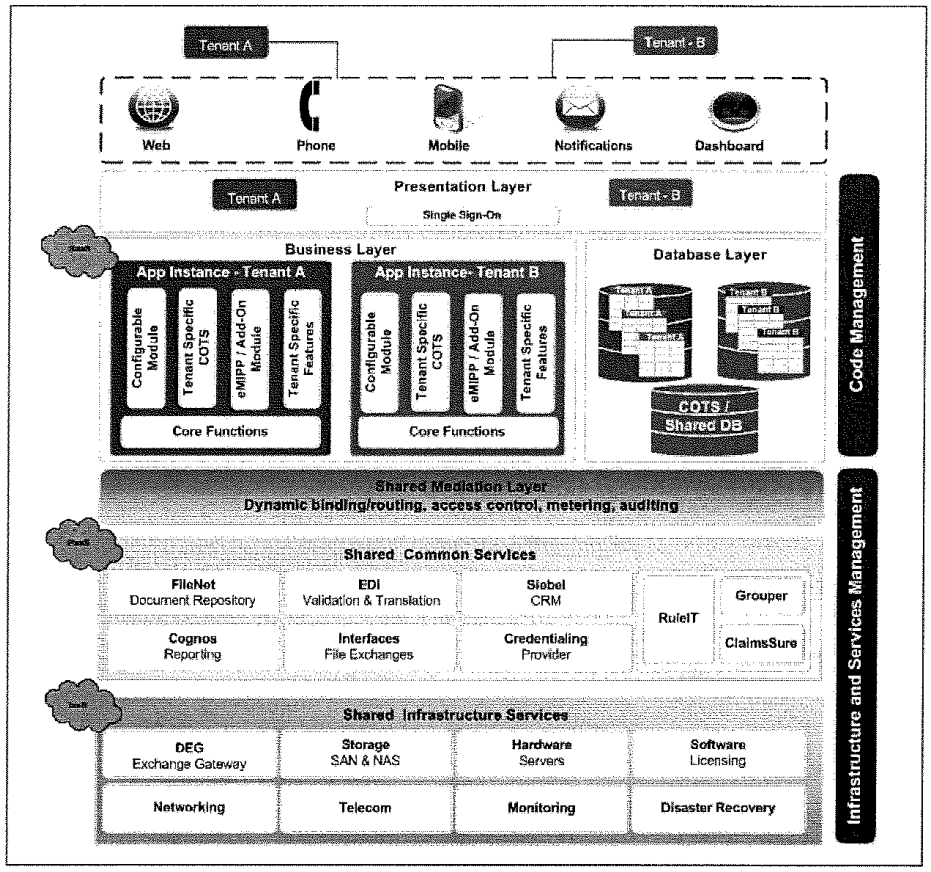

Figure 4. Cloud Health Care Engine

Figure 4 is a conceptual illustration of CNSI's Cloud Health Care Engine. This architecture entails technical implementation for software, platforms and infrastructure as well as logical hierarchies and delivery mechanisms to extend the management of these artifacts as a service.

The business components, databases and the shared middleware that constitute the SaaS layer, provide business features and their delivery mechanisms like the web, phone and other mobile devices.

Shared common platform services, the PaaS layer, promotes and facilitates standardization of common application environments for participating tenants. It is designed for tenants to select server platforms or complete software stacks based on the specific requirements of each tenant.

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Shared infrastructure services, the IaaS layer, includes logical integration points for supplemental value added features as shown and is designed to be scalable to add newer features with time.

Together, these three layers comprise the logical elements of a cloud environment. CNSI's proposed Cloud Health Care Engine implementation approach is in line with the CMS's Cloud Computing Standard (CMS-CISO-2011-vIII-std3.2) and implements recommendations of the National Institute of Standards and Technology (NIST SP 500-292) on Cloud Computing Reference Architecture.

The proposed architecture will undergo DTMB's enterprise architecture (EA) review process to ensure that the solution will also meet all State of Michigan standards.

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2.5 Technical and Phased Approach Work Plan

CNSI has created an initial work plan and timeline for the MaaS SIA. This work plan describes the expected activities we envision for the proposed phases. The timeline is presented in Figure 5 below. A detailed work plan is presented in 2.5.1 Phased Approach Work Plan.

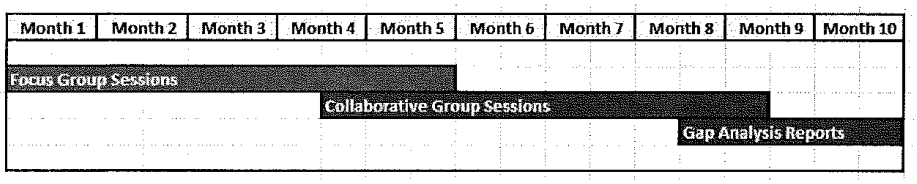

Figure 5. Initial Project Timeline

CNSI structured this work plan to address the overall relationships of the phases, activities, and tasks 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 essence of a successful project is planning, and proper planning requires developing a detailed, task-oriented approach. By reviewing CNSI's work plan, project participants can obtain a clear and thorough understanding of its proposed three-phased approach to the MaaS SIA.

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2.5.1 Phased Approach Work Plan

CNSI proposes a three-phased approach to the MaaS SIA effort. Within each phase, CNSI will operate three parallel tracks including functional gap analysis, technical architecture planning, and infrastructure and operations planning.

The three phases are as follows:

Phase I: Project Initiation and Planning, Information Gathering Focus Group Sessions

Phase II: Collaborative Review and Validation Sessions

Phase III: Assessment Report Preparation

Figure 6 provides a high-level overview of the project phases with major activities and anticipated deliverables:

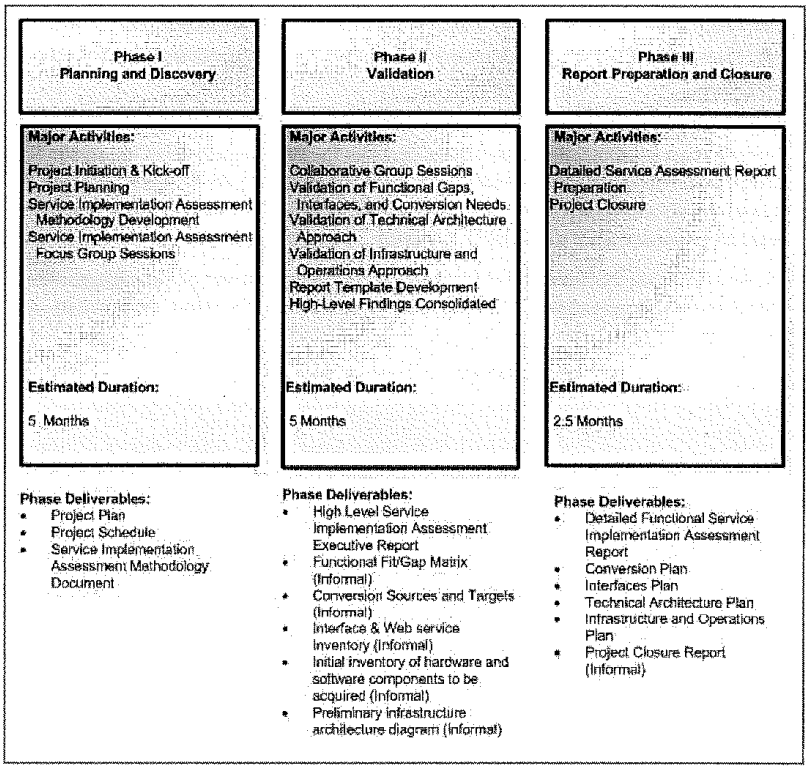

Figure 6. High-Level Project Phases and Activities

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As presented in the initial work plan schedule, because of the tight implementation schedule there will be an overlap between Phase I and Phase II to allow for completion of data gathering sessions while beginning review and validation sessions. CNSI will begin the collaborative review sessions as soon as an independent piece of work has been completed. Overlap between Phase II and Phase III will also occur as expected completion of the final reports will begin when the validation and review work has been completed. The detail of these overlaps will be further elaborated and agreed upon in Phase I as the Project Plan and Schedule are finalized.

The Service Implementation Assessment will consist of three tracks:

- Functional Assessment – This will identify all functional fits and gaps between CHAMPS and the Illinois MMIS operation. Gaps may exist on either side and will be evaluated and remediated during the subsequent MaaS implementation project.
- Technical Architecture Assessment – CNSI, along with DTMB where appropriate, will perform a detailed technical analysis to architect the appropriate MaaS cloud solution that meets the functional needs of Michigan and Illinois while providing a scalable platform for future growth. The recommended technical architecture solution will meet all applicable State of Michigan standards.
- Infrastructure and Operations Assessment – CNSI, in partnership with DTMB, will build an Infrastructure and Operations Plan which identifies the key components of the cloud infrastructure required for the cloud solution and lays out a path for bringing the MaaS cloud solution to an operational state. The recommended infrastructure and operations solution will meet all applicable State of Michigan standards.

In Table 2, 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 2. High-Level Activities by Phase and Track

Key Activity	Description	Phase and Track
Project Initiation	Establish the project team structure, key stakeholders, project infrastructure, and operating guidelines for team activities throughout the course of the project.	Phase I – All
Assessment Planning	Develop assessment methodology and core analysis artifacts to be used for all three track assessment activities. Develop focus group meeting schedule.	Phase I – All
Functional Assessment Discovery	Identify functional differences between MDCH and HFS through CHAMPS demonstrations and functional use case, data structure walkthroughs, and related fit/gap analysis.	Phase I – Functional

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Key Activity	Description	Phase and Track
Conversion Assessment Discovery	Identify HFS data sources to be converted and identify CHAMPS data model targets and gaps.	Phase I – Functional
Interfaces Assessment Discovery	Identify required interfaces by reviewing interfaces held in common with MDCH and unique HFS inbound and outbound interfaces.	Phase I – Functional
Technical Architecture Assessment Discovery	Develop an architecture approach based on the assessment performed both on functional and infrastructure areas.	Phase I – Technical Architecture
Infrastructure and Operations Assessment Discovery	Review existing infrastructure and operational components and capacities and develop base asset inventories.	Phase I – Infrastructure and Operations
Phase I Deliverables • **Project Management Plan** • **Project Schedule** • **Analysis Methodology and Approach Document** • Focus Group Meeting Notes and Artifacts		
Functional Analysis Validation	Analyze interaction of functional differences discovered, validate differences, and confirm cross-functional interactions.	Phase II – Functional
Conversion Analysis Validation	Validate interaction of HFS data sources to be converted and confirm CHAMPS data model targets and gaps.	Phase II – Functional
Interfaces Analysis Validation	Validate interaction of HFS unique interfaces and functional and cross-functional implications for the cloud model.	Phase II – Functional
Technical Architecture Analysis	Review the approach and create a detailed technical plan that would support the cloud model.	Phase II – Technical Architecture
Infrastructure and Operations Analysis	Develop initial shared infrastructure and operations capacity and growth projections and needs based on Michigan and Illinois expected growth trends.	Phase II – Infrastructure and Operations
MaaS Implementation Executive Report	Consolidate high-level assessment findings across all tracks into a concise executive summary report.	Phase II – All

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Key Activity	Description	Phase and Track
Phase II Deliverables • Informal Deliverables– to be incorporated into Phase III Report Deliverables o Validated Functional Gap Matrix (To be incorporated into Phase III Report Deliverable) o Validated potential sources and targets inventory for Data Conversion (Informal – to be incorporated into Phase III Report Deliverable) o Validated potential interfaces and web services inventory o Initial inventory of hardware and software components to be acquired o Preliminary infrastructure architecture diagram • **High-Level Service Implementation Assessment Executive Report**		
Functional Assessment Report	Prepare validated functional assessment analysis report.	Phase III – Functional
Conversion Plan	Prepare validated initial plan for HFS data conversion.	Phase III – Functional
Interfaces Plan	Prepare validated initial plan for interface changes to address HFS' unique interface needs.	Phase III – Functional
Technical Architecture Plan	Finalize the technical approach plan and provide the details on the transformation of eCAMS into a cloud HCE.	Phase III – Technical Architecture
Infrastructure and Operations Plan	Prepare infrastructure and operations asset inventory and proposed implementation timeline.	Phase III – Infrastructure and Operations
Project Transition and Closure	Formally conclude the SIA effort and conduct turnover to the Remediation and Implementation Team.	Phase III – All
Phase III Deliverables • **Detailed Functional Service Assessment Analysis Report** • **Conversion Plan** • **Interfaces Plan** • **Technical Architecture Plan** • **Infrastructure and Operations Plan** • Project Closure and Transition Report (Informal)		

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2.5.1.1 Phase I – Project Initiation and Planning, Information Gathering Focus Group Sessions

Activity 1 - Project Initiation

During this activity CNSI will develop the Project Management Plan, conduct the formal project kickoff, and deliver team training and orientation. The Project Management Plan outlines the standards and procedures for risk, issue, and action item management, project governance including coordination between this project team and the MDCH PMO, communications plan, deliverable management plan, project work breakdown structure (WBS), and baseline schedule.

Milestones associated with this activity include:

- Project Charter is published.
- Project Management Plan and Schedule are delivered.
- Project Kickoff Meeting is completed.

Activity 2 – Assessment Planning

The tasks for this activity start at the same time as the Project Initiation tasks are being completed. Assessment Planning tasks include developing the data collection tools needed for each track of the Assessment, developing the templates that will be used to document meetings, guide presentations and demos and collect inventory information. Team members complete orientation and training activities and perform dry-runs of system demonstrations and focus group sessions. Assessment techniques are developed and documented. Staff assignments for each track are finalized by CNSI, MDCH, DTMB, and HFS and the focus group meeting schedule is developed. Any security requests for access to physical properties and State systems will be defined and submitted as a part of this activity.

Milestones associated with this activity include:

- Staff directory is completed.
- Assessment templates are loaded to As-One.
- Security requests are authorized and completed.
- Staff training and orientation is completed.
- Initial Focus Group schedule is published.
- Assessment Methodology Document is delivered.

Activity 3 – Functional Assessment Discovery

This is the core data gathering activity for identifying potential differences in system needs between MDCH and HFS. A series of Focus group meetings will be conducted for each major functional area of CHAMPS. Medicaid Information Technology Architecture (MITA) 3.0 business areas and business processes will be used to guide discussions where it is determined that CHAMPS, as currently used by

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MDCH, does not provide system support for an area where HFS currently has MMIS support. The functional focus group sessions will begin with a demonstration of the target area of CHAMPS.

The CHAMPS design specification artifacts will be used as the baseline for documenting differences in operation of the two Medicaid programs. CNSI will collaborate with HFS to identify Illinois documentation to be reviewed as part of the analysis such as policy documentation, claims edits, and benefits plan descriptions. Reports, correspondence business rules, and logical data models as represented through CHAMPS screens will be reviewed as a part of this activity. The assessment team will identify the functional areas of the system where there are functional fits and functional gaps.

The milestone associated with this activity is completion of the Initial Functional Fit/Gap Matrix for review and validation in Phase II.

Activity 4 – Conversion Assessment Discovery

This activity involves reviewing the data conversion landscape for the State of Illinois. The CNSI team will meet with key stakeholders to begin the process of identifying potential sources of legacy data for conversion. The discovery will involve both formal meetings with key business areas along with informal discussions with key business and technical representatives. Conversion Discovery will be coordinated to ensure that it is well aligned with the functionality of the system.

The milestone associated with this activity is the completion of a comprehensive list of potential HFS conversion sources.

Activity 5 – Interfaces Assessment Discovery

This activity involves reviewing the interface landscape for the State of Illinois. The Interfaces Team will meet with key stakeholders to begin the process of identifying the required inbound interfaces, outbound interfaces, and external web services. Discovery will involve both formal meetings with key business areas along with informal discussions with key business and technical representatives. Interfaces Discovery will be coordinated to ensure that it is well aligned with the functionality of the system.

The milestone associated with the activity is the completion of a comprehensive list of HFS interfaces and web services unique to HFS.

Activity 6 – Technical Architecture Assessment Discovery

The assessment team will study the current technology landscape at HFS and put together architecture models that illustrate the existing relationships between data, functions and platform components.

We will collect and/or develop inventory for existing data, function/application, and platform components. This phase will involve conducting architecture interviews, reviewing existing documents, and analyzing gathered data.

The milestones associated with the activity include:

- Current high level system component diagram is prepared.
- Current data architecture definition is documented.
- Current technical architecture is documented.

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- Non-functional requirements are documented.
- Current application deployment and hosting methodology is documented.
- Current technical architecture principles, constraints and assumptions are documented.

Activity 7 – Infrastructure and Operations Assessment Discovery

This activity involves two primary tasks. The first is an in depth analysis of the existing infrastructure and currently planned upgrades. This part of the assessment results in an asset inventory. The second is a sizing analysis of MDCH and HFS volume and capacity growth trends. This task is closely linked to the Technical Architecture Assessment Discovery Activity. This activity is done in collaboration with DTMB.

The milestones associated with this activity include:

- Asset Inventory data capture is completed.
- A capacity and growth sizing analysis is completed.

2.5.1.2 Phase II: Collaborative Review and Validation Sessions

Activity 1 – Functional Analysis Validation

This is the activity where the project team performs detailed analysis of the data gathered in the discovery phase. The analysis will focus on cross-functional system interactions. For example changes in the data captured for provider enrollment may result in the identification of other functional gaps related to member lock-in or provider validation during claim processing. The analysis will identify additional gaps not seen in the review of individual functional areas. Following analysis, the Functional Fit/Gap Matrix will be updated. CNSI will collaborate with MDCH and HFS for functional gap validation through a series of CAM meetings.

The milestone related to this activity is the validation and finalization of the updated Functional Fit/Gap Matrix.

Activity 2 -- Conversion Analysis Validation

This activity involves validation of the sources and targets for conversion and collaboration with MDCH and HFS to determine conversion strategies. During this activity, the CNSI team will also identify the DTMB-approved tools and methodologies to be used for the conversion effort. CNSI will collaborate with MDCH and HFS for conversion validation through a series of CAM meetings.

The milestone for this activity is the completion and validation of the Inventory of Conversion Sources and Targets.

Activity 3 -- Interfaces Analysis Validation

This activity involves validation interfaces identified during the discovery phase and collaboration with MDCH and HFS to determine interface strategies. During this activity, the CNSI team will also identify the DTMB-approved tools and methodologies to be used for the interfaces. Interfaces validated will

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include interfaces common to both MDCH and HFS and interfaces that are unique to only one State. CNSI will collaborate with MDCH and HFS for interfaces validation through a series of CAM meetings.

The milestone for this activity is the completion and validation of the Inventory of Interface Sources and Targets.

Activity 4 – Technical Architecture Analysis

As part of architecture validation, CNSI will review all aspects of the architecture including requirements, reliability, availability, performance, security, error recovery, operations, administration, maintenance, and provisioning. The assessment will ensure completeness, understanding design choices, and prioritizing areas of concern.

This phase will also involve study and analysis of tools and third party COTS applications that may be required to support eCAMS HCE Implementation or additional functional features as required by the business functional units at HFS.

The milestones associated with this activity include:

- Analysis of current architecture is completed.
- Assessment of proposed application architecture design is completed.
- Analysis of tenancy approach is documented.
- Scalability approaches and strategies are identified.
- Security authorization and authentication approaches are defined.
- Audit and compliance approaches are defined.
- The provisioning and implementation approach is defined.
- The architecture is validated through the DTMB EA review process.

Activity 5 – Infrastructure and Operations Analysis

This activity involves reviewing the impacts of the information captured through the functional assessment discovery focus groups along with the assets, and capacity and growth trends to identify the components of the infrastructure needed to support the MDCH/HFS alliance. The analysis will be done in collaboration with DTMB. The analysis will also factor in the technical architecture strategies and approaches identified in Phase I and incorporate the unique needs of the cloud eCAMS HCE implementation. The analysis phase will identify the timeline for acquisition and installation of the additional components necessary for the new architecture.

The milestones for this activity include:

- Completion of an initial inventory of hardware and software components to be acquired.
- Completion of the preliminary infrastructure architecture diagram.

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Activity 6 – MaaS SIA Executive Report

This activity will produce a formal report documenting overall outcome of the SIA efforts across functional, technical, architectural, operational, and infrastructure domains.

The milestone associated with this activity is the delivery of the report to MDCH management. MDCH will provide the report to other involved organizations including HFS and DTMB.

2.5.1.3 Phase III: Assessment Report Preparation

Activity 1 – Functional Assessment Report

In this activity the CNSI team will build a comprehensive report of the synergies and differences found and validated in Phases I and II. The report will present detailed findings for each business area assessed and will describe material differences to be resolved during the Remediation and Implementation Project. This will include the validated fit/gap matrix.

The milestone associated with this activity is MDCH approval of the Functional Assessment Report. MDCH will provide the report to other involved organizations including HFS and DTMB.

Activity 2 – Conversion Plan

A comprehensive Conversion Plan will be built based on the results of the discovery and subsequent validation activities. The plan will outline the Data Conversion Strategy and identify the tools and methodologies for the conversion. The plan will include a high level inventory of conversion sources and targets including information about the location and technology composition of the data. The report will also describe the scope, strategies, proposed tools and methodologies for data conversion.

The milestone associated with this activity is MDCH approval of the Conversion Plan. MDCH will provide the report to other involved organizations including HFS and DTMB.

Activity 3 – Interfaces Plan

A comprehensive Interfaces Plan will be built based on the results of the Interfaces Discovery effort. The plan will outline the Interfaces Strategy and identify the tools and methodologies for interfaces. The plan will include a high level inventory of inbound interfaces, outbound interfaces, and external web services.

The milestone associated with this activity is MDCH approval of the Interfaces Planning Report. MDCH will provide the report to other involved organizations including HFS and DTMB.

Activity 4 – Technical Architecture Plan

During this phase the team will summarize current technical architecture findings. We will also compare current technical architecture to target technical architecture requirements and this task relates to building the infrastructure and operations plan for the Michigan/Illinois cloud solution.

The Technical Architecture Plan also defines what components and relationships are needed to address the implementation of the proposed MaaS in the cloud, not how the eventual applications will deliver on these. The how will require much further analysis by the application architects and their respective development teams during later phases of this project.

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This Plan will include design, development and maintenance processes of the proposed technical architecture approach. It will also include a high level plan for design and development of administrative features for regular operational maintenance for the solution that includes areas like Tenancy, Scalability, Provisioning and Implementation of upgrades.

MDCH approval of the plan is the milestone associated with this activity. MDCH will provide the report to other involved organizations including HFS and DTMB.

Activity 5 – Infrastructure and Operations Plan

This task involves building the Infrastructure and Operations Plan for the Michigan/Illinois cloud solution. This will be done in collaboration with DTMB. The Infrastructure and Operations Plan will be based on the findings documented in the Functional Fit/Gap Analysis and the Technical Architecture Plan. The Infrastructure Plan will finalize the target infrastructure required to support the cloud solution along with the currently available infrastructure assets. Based on the requirements and available assets, a plan will be constructed for acquiring and implementing the infrastructure components.

In addition, a high level Operations Strategy will be built based on the Service Implementation model and timeline. The strategy will be used to guide activities in the remediation and Service implementation effort that will follow completion of the Assessment. Key components of the strategy will include a phased implementation approach, and the operations support strategy to be used throughout the phases. Based on these key factors, a high level Transition to Operations Plan will be constructed.

The milestone associated with this activity is MDCH and DTMB approval of the Infrastructure and Operations Plan. MDCH will provide the report to other involved organizations including HFS.

Activity 6 – Project Transition and Closure

This activity concludes the Assessment effort and provides both lessons learned and a high-level timeline for the Remediation and Implementation Project to follow. As a part of this activity, the Assessment Team will prepare a high-level timeline outlining key activities and related timeframes for the Remediation and Implementation Project. The project team will conduct any turnover sessions needed to bring the Remediation and Implementation Project team up to speed on the project. This activity includes a final audit of the project documentation stored on As-One. As part of project closure the CNSI team will conduct lessons learned sessions with the project team and prepare a project closure report.

The milestones associated with this activity include:

- High-level timeline is constructed.
- Lessons learned sessions are documented.
- Turnover sessions are completed.
- Project closure report is delivered.

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Section 3: General Assumptions

1. The MaaS SIA will use the CHAMPS system and supporting architecture and infrastructure as the baseline for undertaking the project. Major initiatives currently underway in Michigan will be included as part of the baseline discussion. This includes implementation of CORE Operating Rules, ICD-10, and the Affordable Care Act-related modified adjusted gross income-based eligibility impacts on CHAMPS.
2. Major initiatives facing both Michigan and Illinois will be included as gaps in the fit/gap analysis. An example of an initiative is the mandated use of Health Plan ID and Other Entity Identifier.
3. CHAMPS is a living system. Throughout the course of this project, CHAMPS is expected to be be enhanced. Major enhancements will be periodically presented in the functional fit/gap analysis sessions for review and categorization as a "fit" or a "gap."
4. The MITA 3.0 business areas and processes will provide an alternate baseline in for functions not fully supported by CHAMPS.
5. CNSI assumes that HFS and MDCH 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.
6. HFS will provide background information and technical artifacts needed on a timely basis. Due dates are collaboratively agreed upon for any such requests.
7. HFS will provide timely access to business documentation to include the Illinois State Medicaid Plan, edit and pricing rules, Medicaid Policy Manuals and other internal documentation needed to complete the assessment.
8. HFS will provide the Assessment Team with the means to view or access to their legacy system in test mode.
9. HFS agrees to provide access to specific contacts outside the HFS organization that may exchange data with the HFS program via interface or web service.
10. The gap analysis relative to the HFS Data Warehouse will be conducted by Optum and is not included in the scope of CNSI's effort.
11. The gap analysis relative to all COTS products included in the baseline CHAMPS solution are considered a part of CHAMPS and are included in the scope of CNSI's effort. This includes Cognos, Doc1, Oracle Financials, Java Composite Application Processing Suite (JCAPS), Seibel Customer Relationship Management (CRM), EDIFECS, and FileNet integration within CHAMPS.
12. The gap analysis relative to FileNet implementation will be conducted by DTMB and is not included in the scope of CNSI's effort.
13. State of Michigan resources will be available to attend and will present in all meetings conducted with HFS.

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Section 4: Proposed Project Cost

This section of CNSI's proposal presents the fixed price overall labor cost estimates for completing the MaaS SIA project. The cost was derived based on the expected effort required as presented in the initial work plan, composed of the three phases depicted in Figure 6. The total fixed price labor cost for the MaaS Service Implementation Assessment project is $7,611,267. There are no hardware or software licensing costs.

The overall project labor cost is detailed within each phase, along with a presentation of the major activities and planned deliverables as depicted in Figure 7.

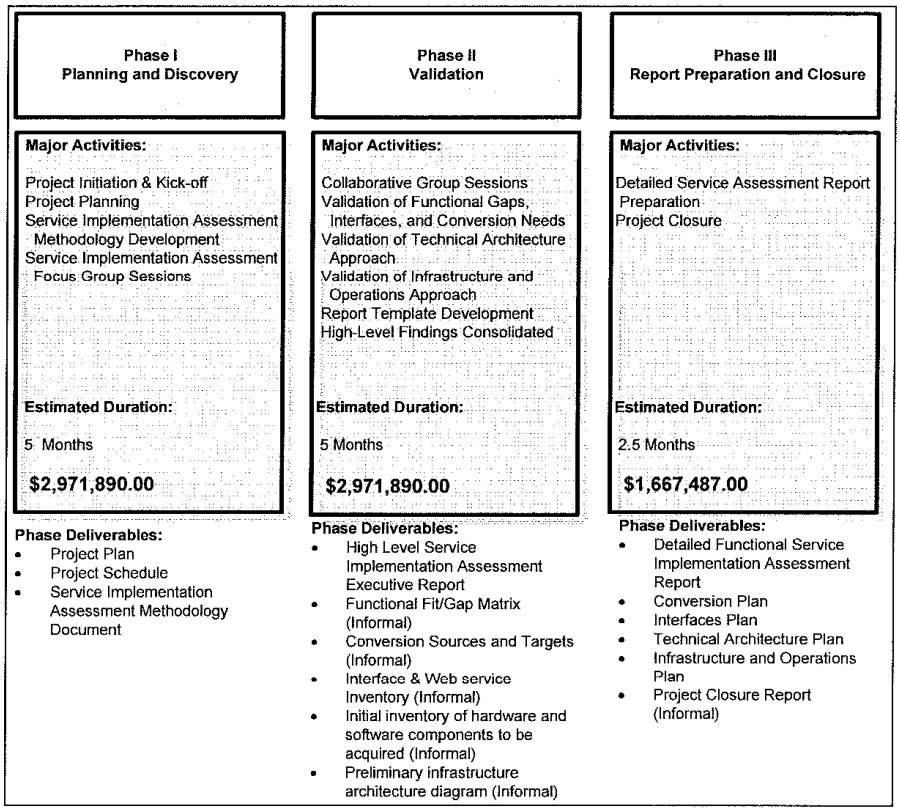

Figure 7. Project Phases with Costs

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Impact of Change to ACA Medicaid Eligibility Requirements on CHAMPS Statement of Work

Prepared For:

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April 8, 2013

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Section 1: Introduction

The Affordable Care Act[1] (ACA), signed into law on March 23, 2010, requires Medicaid Eligibility and Enrollment Initiatives to be established throughout the United States of America. Medicaid Eligibility and Enrollment Initiatives should provide individuals and small businesses access to health insurance coverage and the ability to compare and purchase health insurance regardless of preexisting conditions.

Under the federal mandate, access to health insurance exchanges must be in place by October 1, 2013. Coverage under health insurances selected through Medicaid Eligibility and Enrollment Initiatives is federally mandated to begin by January 1, 2014. The Medicaid Eligibility and Enrollment Initiatives are expected to be operated, or overseen, by state governments.

The State will implement a State modified adjusted gross income (MAGI) eligibility determination system for Medicaid and CHIP eligibility assessment. This new system will complete Medicaid enrollment for applicants who meet the MAGI standards under at least one of the four federally mandated coverage groups (children, pregnant women, parents or caretakers, and adults).

The State intends to establish a new system (hub) to manage the exchange of data between a Medicaid Eligibility and Enrollment Initiative, the State MAGI eligibility determination system, BRIDGES, MAXSTAR, and the Community Health Automated Medicaid Processing System (CHAMPS). The new system will apply the Michigan Department of Community Health's (MDCH's) MAGI standards to Michigan residents who apply for insurance through a Medicaid Eligibility and Enrollment Initiative.

While there will be a direct connection between the State MAGI eligibility determination system hub and CHAMPS, the Medicaid enrollments completed through the State MAGI eligibility determination system will also continue to be sent to BRIDGES. These Medicaid enrollments will continue to flow from BRIDGES to CHAMPS as they do today. The MIChild (CHIP) enrollments completed through the State MAGI eligibility determination system will continue to be sent to MAXSTAR. These MIChild enrollments will continue to flow from MAXSTAR to CHAMPS as they do today.

[1] (Office of the Legislative Councel May, 2010)

The objective of this project is to augment CHAMPS to:

1. Interface with the State of Michigan HUB to process eligibility transactions.
2. Manage multiple new data interfaces to and from the new State MAGI eligibility determination system using web services (SOAP).
3. Support both Synchronous and Asynchronous transactions from new State MAGI eligibility determination system.
4. Modify existing inbound and outbound data interfaces as needed to accommodate new ACA coverage group information.
5. Ensure only one enrollment and Medicaid or CHIP identifier is assigned to each enrolled individual.
6. Correctly assign both legacy benefit plan identifiers and the new federally mandated ACA coverage groups on the beneficiary's records.
7. Accurately adjudicate claims, enroll beneficiaries into managed care plans and pay those plans, and provide eligibility verification responses in accordance with the ACA benefit plans as well as the legacy benefit plans assigned to the beneficiary.

The State has also elected to support the Medicaid population defined under ACA[2]. This may result in an increased volume of claims and eligibility transactions, the potential for newly defined benefit programs with associated business rules, different cost sharing/co-pay rates per income range, and more complex interface logic to incorporate the Michigan MAGI qualification as a new source of eligible members.

Figure 1 depicts CNSI's vision to seamlessly integrate the State's MAGI eligibility determination system into the existing flow of Medicaid eligibility and enrollment data.

[2] (Analysts International Corperation 2012)

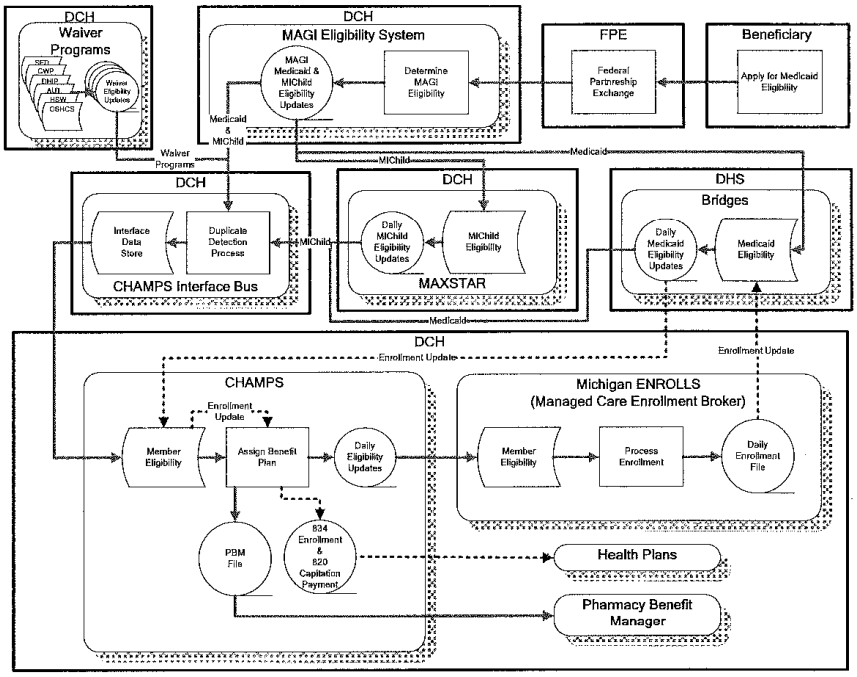

Figure 1. Seamless Integration of the MAGI Eligibility Determination System

1.1 Regulatory and Business Drivers for Change

This project supports MDCH's goal to fully assess and implement changes to all existing Medicaid systems downstream of eligibility determination in order to comply with ACA regulations. Medicaid processing includes, but is not limited to, selecting a Medicaid health plan, enrolling into a health plan, de-enrollment, reactivation, redeterminations, administrative changes to beneficiary information, claims payment, and so on. This also involves collapsing Michigan's more-than-20 existing eligibility groups into just the four groups established under ACA.

The project aligns Michigan's CHAMPS Medicaid management information system (MMIS) to seamlessly support the ACA Medicaid eligibility requirements and:

- Retains existing eligibility, benefit plan, and managed care programs and processes while accommodating new programs and processes required to support ACA.
- Preserves support for waiver eligibility from non-MAGI sources, such as Children Special Health Care Services (CSHCS), Serious Emotional Disturbance Waiver (SED), Children's Home and Community Based Services Waiver Program (CWP), and Habilitation Supports Waiver Program (HSW).

- Improves Medicaid eligibility processing efficiency through tighter coupling of Medicaid eligibility determination, eligibility verification, managed care enrollment, and claim processing.
- Delivers the most cost-effective solution with realistic, proven strategies to ensure implementation within the required timeline.

1.2 CNSI Capabilities

CNSI's approach to conducting this project is based on its extensive knowledge of CHAMPS design, implementation, and operations. As a solution provider, CNSI aligns its clients' business processes and information systems to allow them to access the right information at the right time, empowering them to achieve their desired business results and create enterprise value. Our professionals have extensive industry and technology experience and flexible tools and methodologies to deliver on time and on budget. CNSI completes jobs for its clients by delivering on its promises with speed and purpose in accordance with client specifications and expectations.

For the Impact of Change to ACA Medicaid Eligibility Requirements on CHAMPS on CHAMPS project, we will use our business, technical, and operational knowledge of the MDCH Medicaid program, CHAMPS system capabilities, MDCH's ACA High-Level Business Requirements, and Federal Data Services Hub requirements to identify, design, test, and implement the changes required in CHAMPS to support Michigan's ACA Medicaid eligibility requirements.

CNSI brings an experienced team of Medicaid and CHAMPS subject matter experts (SME), technical and architectural experts, and project management expertise to support this endeavor in the collaborative style CNSI has used in its previous work with MDCH. CNSI's experience working with MDCH has led it to incorporate the following factors in developing this statement of work:

- **CNSI's experience with the Federal Data Services Hub**

  The Federal Data Services Hub enables the communication between health insurance entities, including Federally Funded Exchanges (FFEs), federal agencies, and states. It acts as a single interface point for exchanges to the federal agency partners and provides common functional service support, simplifying the integration required of the exchanges. Common services allow for adherence to federal and industry standards regarding security, data transport, and information safeguards management.

  CNSI holds a position of the Chief Architect on the Federal Data Services Hub Project. As a major partner on the project team, CNSI designed and built the data services hub. CNSI's areas of expertise include solutions architecture, business analysis, large systems development, service-oriented architecture (SOA), and agile development.

- **CNSI's capability to conduct detailed analysis of CHAMPS system requirements**

  Above all else, CHAMPS is a multifunctional MMIS-certified information system that integrates all Medicaid activities into a complete system. As such, the existing CHAMPS (designed, developed, and implemented by CNSI) system is the baseline from which the required changes to support ACA Medicaid eligibility requirements will be defined. CNSI is positioned to take advantage of the extensive knowledge accumulated during the CHAMPS implementation, HIPAA 5010 migration, ICD-10 assessment project, and ICD-10 remediation project to

strategically apply to the Impact of Change to ACA Medicaid Eligibility Requirements on CHAMPS project.

- **CNSI's capability to validate business requirements**

  The prompt validation of MDCH ACA Medicaid eligibility business requirements is key to ensuring the system meets MDCH's ACA Medicaid eligibility processing needs. CNSI's proven approach to requirement validation will ensure the following design, development, testing, and implementation phases succeed. CNSI will conduct collaborative application design (CAD) sessions where each requirement is reviewed and validated among a focus group of MDCH and CNSI business and technical experts. The results of the requirement validation CAD sessions are documented in a formal requirement specification document (RSD) deliverable. This document provides the foundation upon which system design will be created.

- **CNSI's detailed understanding of CHAMPS' integration with other systems within the Medicaid enterprise**

  CNSI is uniquely qualified to remain sensitive to the State's needs while determining the granular business and technical changes needed to maintain seamless integration between CHAMPS, BRIDGES, MAXSTAR, Pharmacy Benefit Management, and multiple waiver program eligibility systems. Because of its multi-year history of collaboration with MDCH and understanding of CHAMPS, CNSI can provide business and technical expertise in support of requirement validation, design, and testing while allowing MDCH SMEs to participate strategically, as required. CNSI understands that MDCH 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 MDCH staff members are involved at the right time and in the correct context. Using its knowledge of the system, the CNSI team will be able to minimize MDCH involvement to the sessions most critical to the completion of the project.

- **CNSI's technical leadership to support MDCH's vision**

  Beginning with the implementation of the CHAMPS system, CNSI has continually shown technical leadership. Through collaboration with its equally forward-thinking MDCH leadership, CNSI has jointly achieved milestones that have moved Medicaid business into a modern state. CNSI has continued to drive innovation through the implementation of eMIPP, HealthBeat, and myHealthButton. This proven technical leadership will help deliver the most effective and efficient changes and seamlessly integrate ACA Medicaid eligibility processing into Michigan's Medicaid enterprise.

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 MDCH'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 is confident in its team's ability to achieve that goal. CNSI has assembled a team with the best combination of technology, support, project implementation skills, experience, and expertise who are dedicated to the Impact of Change to ACA Medicaid Eligibility Requirements on CHAMPS project initiative and overall successful implementation of Michigan's ACA Medicaid eligibility processing. Figure 2 depicts CNSI's proven, customer-centric project high level organization chart for the Impact of Change to ACA Medicaid Eligibility Requirements on CHAMPS project.

However, MDCH is the most important member 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, MDCH's project team.

The project's success depends on the full and active participation of MDCH's designated staff members from the initial planning activity through the requirements, design, and testing activities that will ultimately lead to the project's completion, acceptance, and implementation.

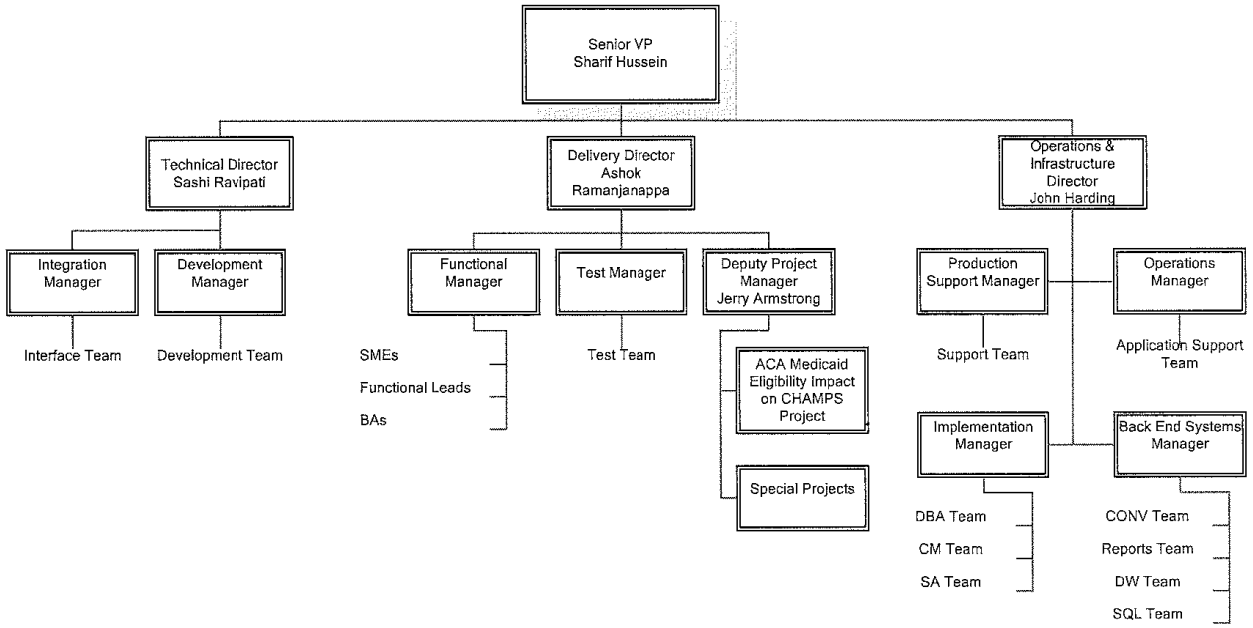

Figure 2. CNSI's Proven Customer-Centric Project Organization

Section 2: Project Management, Methodology, Tools, and Technical Approach

This section presents our project management approach, methodology, tools, technical approach, and phased work plan for accomplishing all tasks required for the Impact of Change to ACA Medicaid Eligibility Requirements on CHAMPS project and overall successful implementation of Michigan's ACA Medicaid processing. This section describes the scope of activities to be addressed throughout the project, from the Requirement Validation phase to the Optimization and Stabilization phase, and the techniques and methodologies the project team will use. The goal of this section is to demonstrate that CNSI understands how to validate requirements, produce detailed design, and develop, test, and implement the functionality needed to seamlessly integrate ACA Medicaid eligibility processing into Michigan's Medicaid enterprise.

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 3 shows CNSI's project and quality management framework and how the related activities interact with other project tasks.

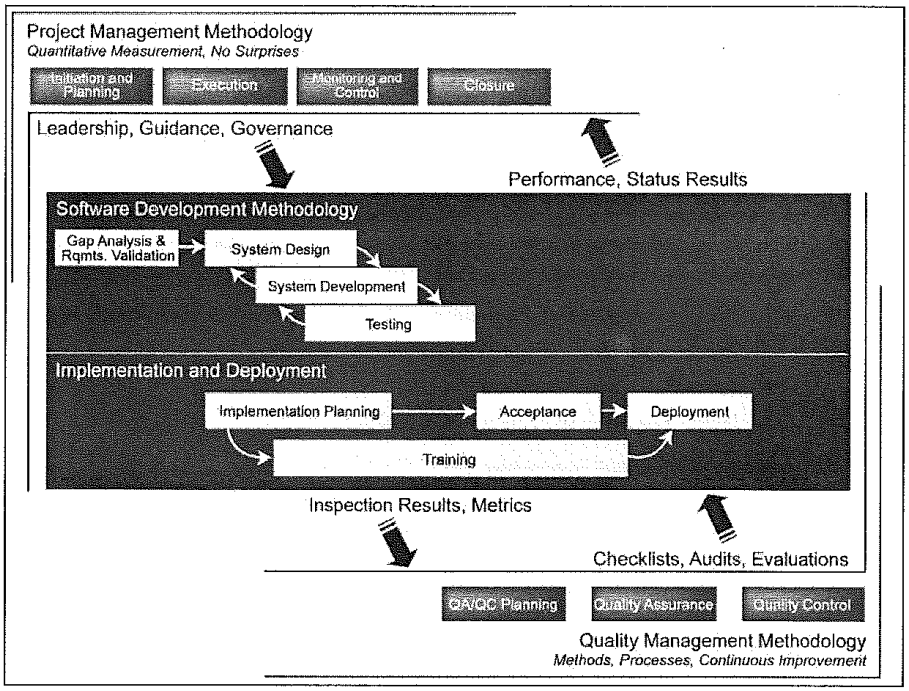

Figure 3. CNSI's Project Management and Quality Management Framework

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 processes, 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 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 project management plan (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 and performs the work of the project. For the design phase, this will include the software development methodology included in the iVision360 approach.
- **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 complete the Impact of Change to ACA Medicaid Eligibility Requirements on CHAMPS 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 MDCH.
- 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.
- 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 PMP, CNSI expects to collaborate with the MDCH project management team to further customize CNSI's project management system to successfully complete the project.

The overall engagement will be managed by DCH project manager, while the Impact of Change to ACA Medicaid Eligibility Requirements on CHAMPS project will be managed by CNSI's project manager. CNSI Project manager will provide weekly updates on the status of the Impact of Change to ACA Medicaid Eligibility Requirements on CHAMPS project to State project manager.

An integrated project management board will be set up that consists of State and CNSI members. The board will meet on a weekly basis to discuss the status of the project, to resolve any issues or

discrepancies and identify /resolve / mitigate risks. The board will also control the change management related to 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 to 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 for MDCH.

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 MDCH and the methodology.
- The **Life Cycle** work approach addresses unique expertise while providing overall integration across the full Impact of Change to ACA Medicaid Eligibility Requirements on CHAMPS project life cycle.
- The flexibility to be adapted to meet MDCH's unique requirements, while confirming that our experienced staff members follow our established practices.
- The ability to integrate additional application- and technology-specific requirements to further enhance the quality and speed of our delivery.

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 with CHAMPS into a single, integrated approach. It provides the structure for integrating our capabilities while allowing individual project teams the flexibility to use client-mandated tools.

CNSI's methodology abstracts the specifics of technologies and techniques. The right assembly of technologies, techniques, and deliverable processes requires the specific experience and expertise found with CNSI's staff.

Time invested in an effective plan with clear objectives has repeatedly shown to be a key to effective 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 more cost-effective rapid delivery.

Moreover, 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.

In undertaking this project, CNSI will employ its iVision360 system development life cycle (SDLC) methodology tailored for the Impact of Change to ACA Medicaid Eligibility Requirements on CHAMPS project initiative.

CNSI's iVision360 is a unique blend of the waterfall methodology, iterative agile development, and rapid prototyping. 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 entire life cycle. Software projects succeed or fail largely from the developer'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 sessions with an integrated team of developers, analysts, and testers. 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.
- **Prototyping to Reduce Complexity:** Prototypes are developed when necessary (and if applicable to the project) to model and present complex interactions. Prototyping is not applicable for this project.

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 incorporate change, issue, and risk management processes. 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

Methodology	Key Benefits Blended into iVision360
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
Rapid Prototyping	Reduce risk by visualizing complex features "A picture is worth 1,000 words" Immediate sense of progress
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 and testing software. These phases represent major bodies of work that must be accomplished to move systematically through the life cycle. Table 2 describes the phases of iVision360.

Table 2. 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

Supporting Task	Major Activities	Artifacts
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

2.3 Project Management Tools

Tools, properly applied within the methodology framework, will reduce the time to project completion by providing predefined processes, templates, documents and training materials. More importantly, the use of appropriate tools will help reduce risk and increase the benefits from the project.

It is also important to note, that we will continue to use the tools already proven effective during the previous undertaking to reduce time to completion and mitigate risk.

Table 3 depicts the tools CNSI will utilize on the project.

Table 3. CNSI Project Tools

Tool	Purpose
ReqTrace	CNSI's requirements database, used during requirements validation sessions and 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

While 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 database 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 that is being used in our MMIS projects. ReqTrace has the capability for storing several attributes for requirements, revisions, notes, and comments.

CNSI began using ReqTrace with the CHAMPS project. 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.

2.3.2 As-One

Believing that continuous collaboration and information-sharing are key factors to successful project execution, CNSI will use its web-based enterprise program management solution, As-One. As shown in Figure 4, 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.

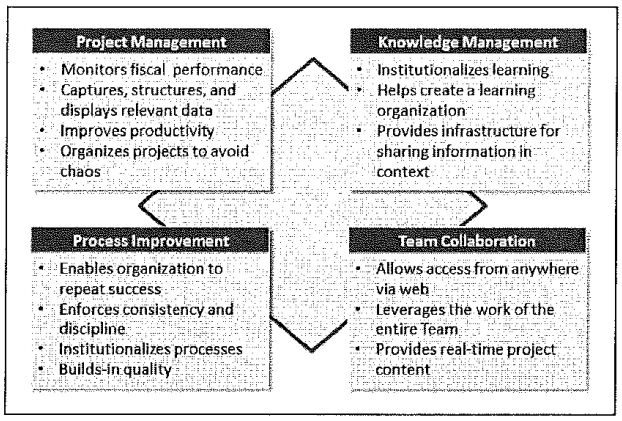

Figure 4. As-One Collaboration and Improvement Conceptual Model

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 has proven to be a successful project knowledge base for CHAMPS which allows CNSI and DCH users to share real-time data specific to authorized users. As-One will continue to be used as the project knowledge base for the Impact of Change to ACA Medicaid Eligibility Requirements on CHAMPS project.

2.4 Technical and Phased Approach Work Plan

CNSI has created an initial work plan and timeline for the Impact of Change to ACA Medicaid Eligibility Requirements on CHAMPS project. This work plan describes the expected tasks for the proposed phases and major activities CNSI proposes to use for this project. This information is presented in Figure 5. A detailed description of the activities within each phase is presented in *Section 2.4.1 iVision360 Iterative Development, Testing, and Documentation Approach.*

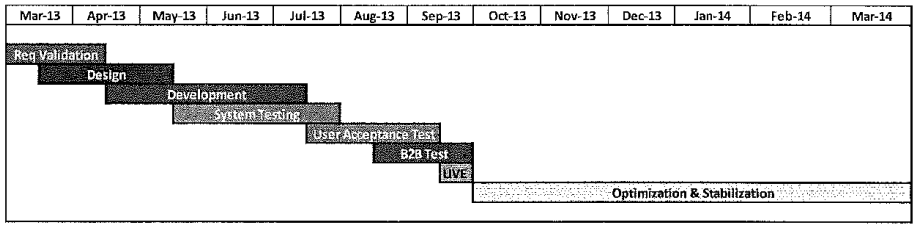

Figure 5. Initial Project Work Plan

CNSI structures work plans to address the overall relationships of the numerous phases, activities, and tasks 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 essence of a successful project is planning, and proper planning requires developing a detailed, task-oriented approach. By reviewing CNSI's work plan, MDCH can obtain a clear and thorough understanding of our proposed technical approach to the project. CNSI proposes a four-phased approach, as described in *Section 2.4.2 Phased Approach Work Plan*, to the implementation and rollout of the Impact of Change to ACA Medicaid Eligibility Requirements on CHAMPS project.

The following subsections further describe how CNSI will employ its iVision360 methodology in the proposed iterative development, testing, and documentation approach for the Impact of Change to ACA Medicaid Eligibility Requirements on CHAMPS project.

2.4.1 iVision360 Iterative Development, Testing, and Documentation Approach

CNSI will engage in iterative analysis and design with MDCH early on in Phase I in order to begin early iterative development in Phase II. CNSI plans to produce deliverables during each phase.

During Phase I, CNSI will provide an opportunity for MDCH to review requirements analysis and design documents as soon as a set of logical iterations are completed for a use case. CNSI will expect initial signoff from MDCH upon acceptance of iteration document scope. This will help cut down the time required for overall document review and approval. The documents to be reviewed comprise specific use cases for each subsystem. At the end of all iterations for a phase, an overall As-Built Detailed System Design Document (DSDD) will also be produced for final delivery and acceptance to State.