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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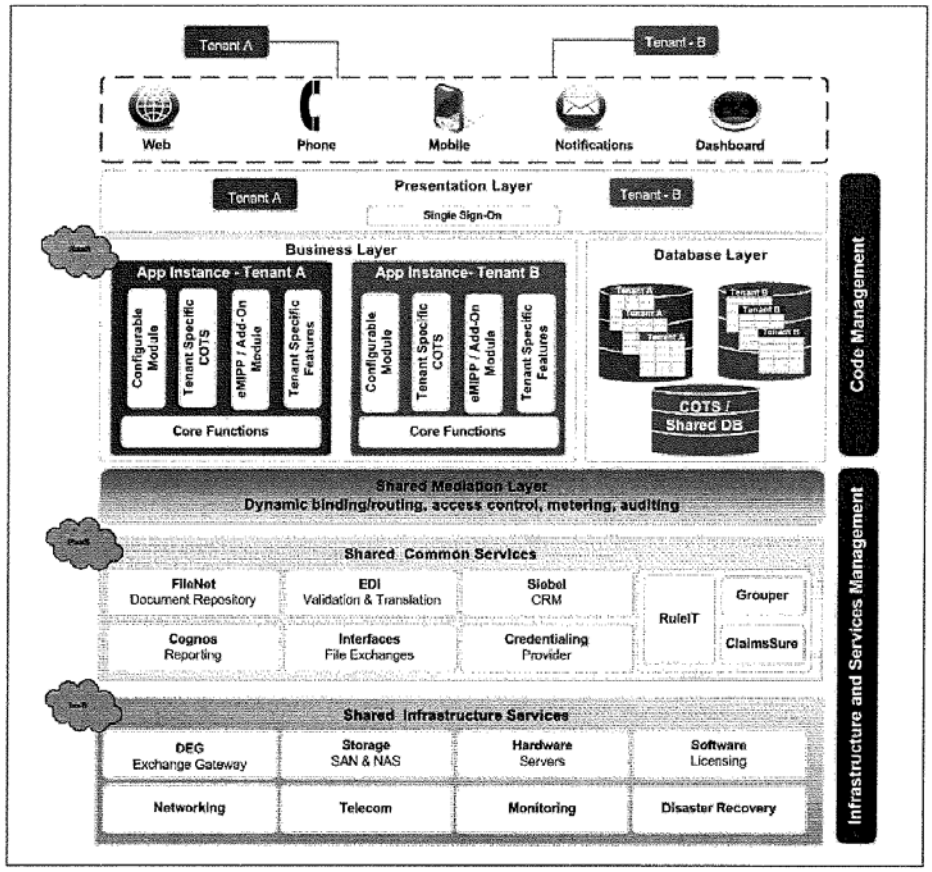

Figure 4. Cloud Health Care Engine

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.

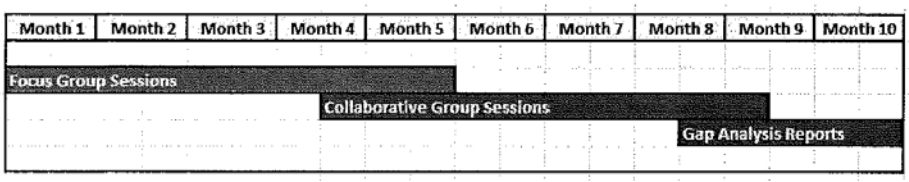

Figure 5. Initial Project Timeline

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:

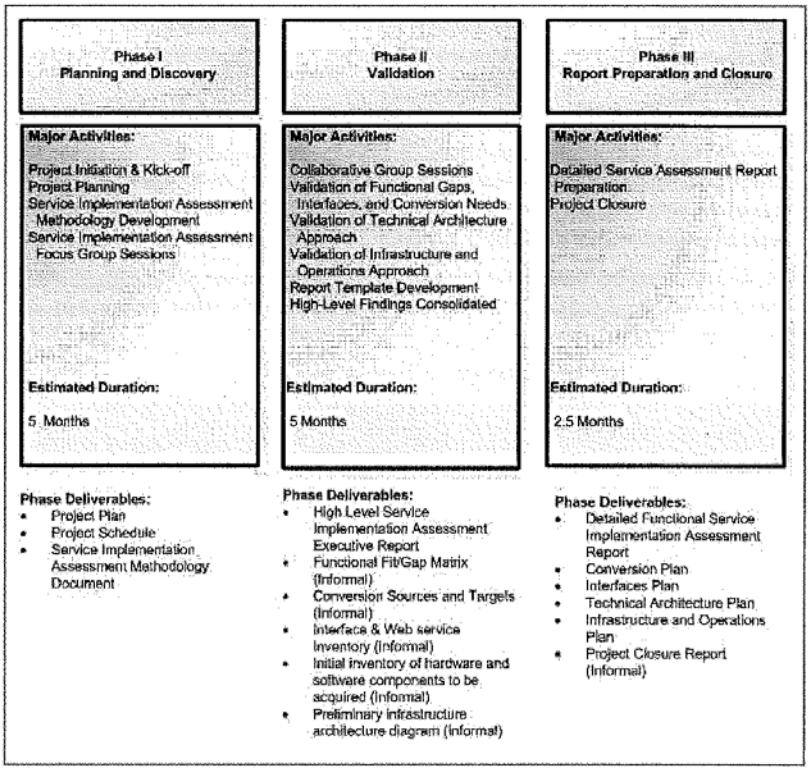

Figure 6. High-Level Project Phases and Activities

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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.

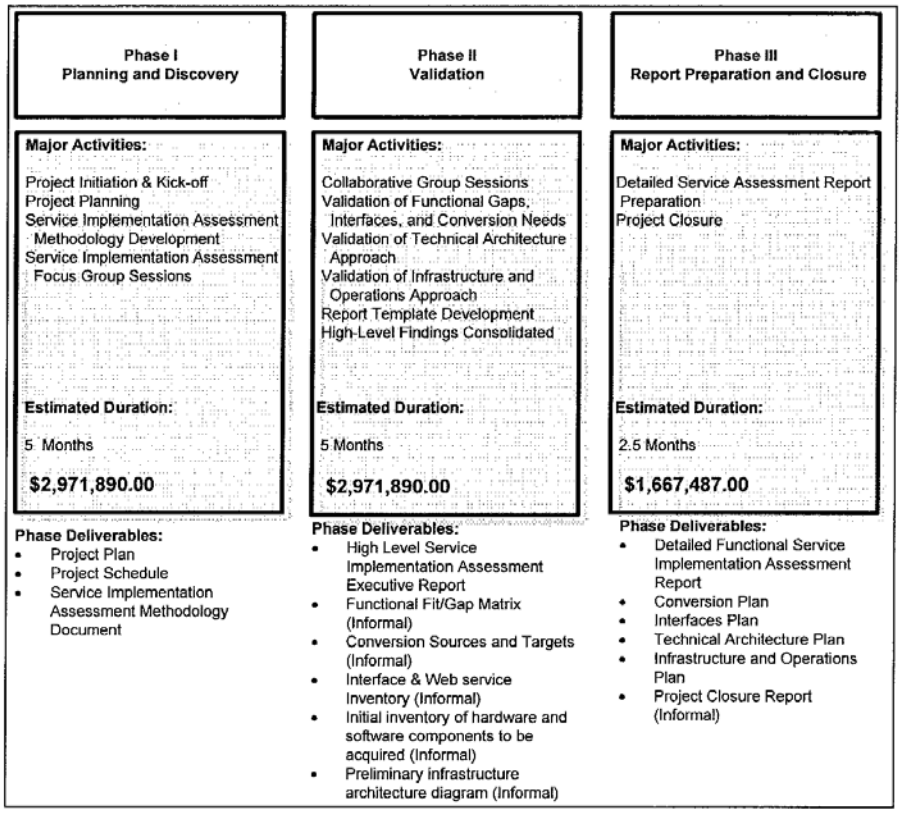

Figure 7. Project Phases with Costs

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

Prepared For:

State of Michigan
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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)