



*Vermont Health Services Enterprise
Initial Implementation Review and
Assessment (“Lessons Learned”)*

Final (v1):

State of Vermont Health Services Enterprise

Release 1 Lessons Learned Report

Document Status: Submitted on March 27, 2014

Submitted by:

Charles Leadbetter, Principal
Danielle Ewing, Project Manager
BerryDunn McNeil & Parker, LLC
100 Middle Street
Portland, ME 04104
Phone: 207.210.8638
cleadbetter@berrydunn.com
dewing@berrydunn.com

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Table i: Version History

Draft Type	Delivery Date	Version
Working Draft	March 24, 2014	v.01
Final	March 27, 2014	v1

Executive Summary

The State of Vermont's (State) Health Services Enterprise (HSE) Program is the comprehensive collection of health information technology systems intended to support achievement of Vermont's unique vision of a single-payer healthcare system. Release 1 of the HSE solution, the Vermont Health Connect (VHC) online health benefit exchange, was targeted for deployment on October 1, 2013. The need for VHC arose as a result of the federal Affordable Care Act (ACA), which allowed each state the opportunity to establish a health benefit exchange by January 1, 2014, and was supported by Vermont's own health reform law, Act 48, passed by the legislature in May 2011.

In February 2014, the State engaged BerryDunn to conduct a Lessons Learned exercise to help evaluate the governance, management, and oversight of the implementation of the initial release of the HSE solution. The findings and recommendations resulting from this project are intended to become part of the State's lessons learned knowledge base, as well as to be incorporated into public presentations with stakeholders. Prior to beginning feedback gathering with project stakeholders, BerryDunn delivered its detailed, recommended approach to conducting project activities in the form of a "Playbook," which was accepted by the State.

Over the seven-day period between March 10 and March 17, 2014, the BerryDunn team met with 76 key project stakeholders selected from several State Agencies, Departments, and Divisions; vendors/contractors; and external business partners. Meetings were structured as individual interviews or group stakeholder sessions. The State's Request for Quote for the Lessons Learned project provided seven main areas for review, including:

1. Adherence to Project Management Methodology and Processes
2. Requirements Development
3. Vendor and State Implementation Planning and Readiness
4. Systems Development, Testing, and User Acceptance
5. Deployment Planning and Deployment
6. Risk Identification and Mitigation
7. Vendor and State Governance, Management, and Decision Making

Discussion of the seven assessment areas varied across individual interviews and group stakeholder sessions depending on the participants' project role(s), subject matter knowledge, and areas of relevance and interest. In general, for each assessment area reviewed, participants were asked what did and did not work well, and what recommendations they had to continue what worked well or to improve what did not work well. Prior to conducting interviews, all participants were sent a confidential online survey that, in addition to asking the same questions as the in-person interviews, allowed participants to rank how well they thought the seven assessment areas had been addressed by the project.

Key findings and recommendations derived directly from project stakeholder feedback are presented in Section 2.2 of this report. Although the specific language used by stakeholders has been altered in several cases to allow for aggregation and distillation of feedback and to maintain participant confidentiality, the BerryDunn team was careful not to change the underlying meaning of the feedback provided. Key findings and recommendations are those that were either mentioned most consistently by participants and/or that BerryDunn believes warrant particular attention based on the potential for impacting future project success. Various project stakeholders have many different perspectives and, as a result, may consider other findings and recommendations to be equally or more imperative. Therefore, although a subset of findings and recommendations is included in Section 2.2, a broader list of stakeholder feedback is provided in Appendix A, which readers are strongly encouraged to review. It is important to note that the scope of BerryDunn's engagement did not include validating the accuracy of feedback provided by stakeholders.

In addition to the findings and recommendations provided by project stakeholders, the BerryDunn team developed 10 high-level recommendations for consideration by the State based on the activities the team engaged in with the State and its stakeholders over the course of the Lessons Learned project. A common concern shared by stakeholders was that applying industry best practices to this specific Lessons Learned exercise would not be effective due to the complexities and constraints faced by the project. When identifying our recommendations, BerryDunn believed it was essential to consider the project context and unique constraints faced by the project team in Vermont for Release 1. These constraints include, but are not limited to:

- a. The go-live date for Release 1 was set by the federal government and was deemed immovable by many states.
- b. Vermont began the project late due to failed negotiations with Oracle.
- c. The federal government released guidance throughout the effort that modified project expectations and requirements.
- d. CGI created a project team of 180 or more people, who had little to no experience working together prior to this project.
- e. Many project resources (State and vendors) had never completed a software development project of this magnitude, did not have experience in the insurance industry, and did not fully understand the ACA.

A summary of BerryDunn’s independent recommendations is presented in Table ES.1, and additional details are included in Section 3.2.

Table ES.1: BerryDunn Lessons Learned Recommendations

#	Independent Recommendations
1	Utilize the results of the Lessons Learned exercise to institute impactful changes moving forward.
2	Continue to improve processes that identify, recognize, and plan for project constraints.
3	Improve requirements and scope management processes to ensure project phases are reasonable and achievable.
4	Proactively evaluate and modify the governance structure on large projects when necessary.
5	Document roles and responsibilities for project positions, make them transparent, and articulate them to project stakeholders.
6	Improve the visibility and transparency of decisions and, where appropriate, involve key stakeholders in effective decision making.
7	Improve project communication vehicles and processes.
8	Continue to seek ways to improve vendor contract management.
9	Communicate project health to all stakeholders regularly and engage executive leadership appropriately to inform them about project challenges.
10	Continue to evolve the concept of Enterprise Architecture (Business, Data, Applications, and Technology Infrastructure) for the Health Service Enterprise program.

It is essential to recognize that although this report provides recommendations from project stakeholders and independent recommendations from BerryDunn, our intent is not to suggest the degree to which Release 1 may have achieved a different outcome had they been implemented. The primary purpose of the Lessons Learned exercise is to inform future phases of this, and other, HSE projects to improve their likeliness of success. We believe the feedback provided by project stakeholders and the recommendations offered by BerryDunn accomplish this purpose and will provide value for future State efforts.

Acknowledgements

BerryDunn extends its thanks to all State, vendor, and external business partner team members who took the time to meet with us and/or to respond to the survey to share their personal feedback and experiences related to Release 1 of the HSE solution. Their passion, commitment, and genuine desire to help Vermont citizens were evident across the spectrum of participants. The insights provided are critical to this report and to improving the State’s efforts regarding future phases of this and other projects.

1 Introduction

1.1 Background

The Affordable Care Act (ACA), signed into law by President Barack Obama in March 2010, allowed each state the opportunity to establish a health benefit exchange (HBE) by January 1, 2014 to help individuals and small employers purchase affordable health insurance coverage. In May 2011, the Vermont legislature passed its own health reform law, Act 48, which established the creation of a state HBE and put it on a path towards single payer healthcare by 2017.

The Health Services Enterprise (HSE) Program is the comprehensive collection of health information technology (IT) systems intended to support achievement of Vermont's unique vision of a single payer system. The HSE consists of the Vermont Health Connect (VHC) online health benefit exchange, the Integrated Eligibility & Enrollment System, the Medicaid Management Information System (MMIS) Replacement Project, and Clinical Public Health Information and Surveillance technologies (Health Information Exchange, or HIE). Vermont plans to incrementally deploy each of the strategic IT components upon its new health and human services service-oriented architecture (SOA) platform that allows for a modular, flexible, interoperable, and learning computing environment leveraging shared services, common technology, and detailed information. Release 1 of the HSE solution (the health benefit exchange and related Medicaid eligibility) was targeted for deployment on October 1, 2013.

1.2 Lessons Learned Project Purpose

The State of Vermont (SoV or State) engaged BerryDunn in February 2014 to conduct a Lessons Learned exercise to help evaluate the governance, management, and oversight of the implementation of the initial release of the HSE solution. Goals of the effort include answering the following central questions:

- How can the SoV change its approach, staffing, or management structure going forward to improve implementation of future projects?
- What specific lessons learned should the SoV incorporate directly into ongoing and/or future projects to reduce risks, improve implementation, and ensure success?

The findings and recommendations resulting from this project are intended to become part of the State's lessons learned knowledge base to be used as input into future phases of the VHC project and other HSE projects. In addition, they will be incorporated into public presentations with stakeholders that address actions the State is pursuing to strengthen the governance, management, and oversight of HSE program efforts.

1.3 Methodology

After being awarded the Statement of Work to perform the Lessons Learned project and prior to beginning feedback gathering with project stakeholders, BerryDunn delivered its detailed, recommended approach to conducting project activities in the form of a “Playbook,” which the State accepted.

Sections 1.3.1 and 1.3.2 provide additional detail regarding the approach and methods the BerryDunn team employed for gathering stakeholder feedback, the assessment areas and questions used to structure feedback gathering, and the approach to report development.

1.3.1 Approach to Feedback Gathering

1.3.1.1 Stakeholder Groups

Over the seven-day period between March 10 and March 17, 2013, the BerryDunn team met with 76 key project stakeholders selected from several State Agencies, Departments, and Divisions; vendors/contractors; and external business partners. Representatives from the following groups were included:

- VHC core project team, project leads, and business leads
- VHC project managers and Project Management Office (PMO) team members
- HSE Executive Steering Committee (ESC) members
- HSE Operational Steering Committee (OSC) members
- Other State Agency executive stakeholders
- Selected business leadership representatives (e.g., Economic Services Division)
- CGI – the State’s Systems Integrator (SI) for VHC – and CGI’s primary subcontractors
- Gartner – VHC’s Quality Assurance, Independent Verification and Validation (IV&V), and HSE Governance vendor
- Carriers providing health and dental insurance in Vermont

1.3.1.2 Feedback-Gathering Methods

Meetings were structured as individual interviews or group stakeholder sessions. With the exception of individuals who could not attend in person due to reasons including office location, inclement weather, or scheduled vacation, the majority of meetings occurred in person between March 10 and 14 in Burlington and Montpelier. Participants in group stakeholder sessions were also encouraged to follow up with BerryDunn team members privately if they preferred to provide direct, one-on-one feedback to interviewers.

In addition to the individual interviews and group stakeholder sessions, all participants were sent a confidential online survey. The survey included the same questions as the in-person interviews and sessions, but also allowed for ranking answers on a numeric scale showing level of agreement with the statement that specific project assessment areas went very well. The survey provided interviewees the opportunity to respond to questions that were not addressed fully or at all due to time constraints during meetings, or that participants were not comfortable vocalizing in front of others.

1.3.1.3 Assessment Areas and Questions

The State's Request for Quote (RFQ) for the Lessons Learned project provided seven main areas for assessment, including:

1. Adherence to Project Management Methodology and Processes
2. Requirements Development
3. Vendor and State Implementation Planning and Readiness
4. Systems Development, Testing, and User Acceptance
5. Deployment Planning and Deployment
6. Risk Identification and Mitigation
7. Vendor and State Governance, Management, and Decision Making

Discussion of the seven assessment areas varied across individual interviews and group stakeholder sessions depending on the participants' project role(s), subject matter knowledge, and areas of relevance and interest. In general, the following questions were asked in relation to each assessment area reviewed:

- What worked well?
- What recommendations do you have to ensure that what worked well continues to be used on this and other projects?
- What did not work well?
- What recommendations do you have to improve this or prevent it from occurring in other projects?

Finally, time permitting, three general questions¹ were asked at the end of the interview, as follows:

- What other information would you like to provide to us about this project?

¹“Other information” provided is incorporated into Section 2.2 and Appendix A of this report. Feedback on “other questions that should have been asked” and “individuals who performed exceptionally well” is not included in this report as the questions are more process-oriented and internally focused.

- What other questions should we have asked?
- Is there someone who worked on the project who performed exceptionally well that you would like to recognize?

1.3.2 Approach to Report Development

The focus of this project was to collect and report on the lessons learned by key participants who have been closely involved in Release 1 of the HSE solution. We believe this “inside out” approach will provide tremendous value to the SoV and its citizens, and we commend them on the importance they have placed on the perspectives of these stakeholders.

As a result, key findings and recommendations captured by BerryDunn through individual interviews, group sessions, online surveys, and other direct participant feedback are provided in Section 2 of this report. Appendix A includes a broader list of findings regarding what did and did not go well on the project, along with associated recommendations from project stakeholders. It is important to note that BerryDunn has summarized participant feedback into themes due to the impracticality of including every individual comment in the report given the number of people interviewed and the large volume of feedback gathered. We believe this approach also provides an additional layer of confidentiality since it may be possible to identify and link participants to specific feedback based on the nature of the unadulterated comments that were provided.

In addition to summarizing participant feedback, BerryDunn has offered independent recommendations to the State in Section 3 of the report. Because the scope of BerryDunn’s engagement did not include performing an independent review and audit, recommendations are primarily based upon participant feedback and the team’s experience with large scale system implementations and HBEs.

1.4 Project Influences

Several assumptions and constraints influenced the Lessons Learned project approach and outcomes. “Assumptions” are premises about the business, policy, technical, and/or project environment that, for the sake of the project, are taken as fact. “Constraints” are known facts over which there is limited or no control. Constraints can affect the scope, direction, planning, and implementation of a project, as well as the format and content of the Lessons Learned report.

The assumptions and constraints included in Sections 1.4.1 and 1.4.2 relate specifically to the Lessons Learned project. The BerryDunn team believes, however, that to place the Lessons Learned project in the proper context, it is important to highlight a key external constraint that impacted Release 1 of the HSE solution -the aggressive timeline states had to work within to develop and implement their HBEs. Federal statute and subsequent regulations required HBEs to be fully operational by January 1, 2014, and to support initial open enrollment into qualified health plans by October 1, 2013. Although the ACA was passed in March 2010, the Supreme

Court ruling upholding the constitutionality of the healthcare law did not occur until June 2012. In addition, states often did not receive the federal guidance, rules, and regulations required to make key decisions until much later than would typically be required to support the timely and successful development and implementation of such a large scale IT system as VHC.

1.4.1 Assumptions

The following assumptions should be considered for this Lessons Learned project:

- The scope of the review and assessment is limited to activities that occurred before October 1, 2013.
- Feedback provided by stakeholders may vary due to their different perspectives, which could lead to perceived conflicting findings. It is important to recognize this is an expected part of a Lessons Learned project as stakeholders will likely not agree on all aspects of what went well or what can be improved. Sampling a diverse group is helpful to understand differing perspectives.
- The scope of BerryDunn's engagement did not include validating the accuracy of the feedback provided by stakeholders.
- The Lessons Learned report developed by BerryDunn will be made available to the public.

1.4.2 Constraints

The following constraints influenced this Lessons Learned project:

- Release 1 of the HSE solution was a substantial undertaking, and many project areas could be included in the review and assessment. Due to time constraints and the scope of BerryDunn's engagement, the focus of the Lessons Learned exercise was limited to governance, management, and oversight of the initial release, using the seven assessment areas referenced in Section 1.3.1.3 and outlined in the State's RFQ.
- Individuals from multiple diverse State and external stakeholder groups participated in various aspects of Release 1 of the HSE solution. Due to time constraints and the limited scope of BerryDunn's engagement, feedback was gathered from a list of key project stakeholders selected by the SoV. Approximately 76 project stakeholders were engaged in the Lessons Learned exercise (see Section 1.3.1.1 for a list of stakeholder groups included).
- Individuals selected to participate in individual interviews, group stakeholder sessions, and/or the online survey had competing demands for their time. Unavailability of project stakeholders for the full amount of time requested may have impacted the ability of the BerryDunn team to receive comprehensive feedback from all stakeholders.

- Given the politically charged and highly publicized nature of the ACA and HBEs both nationally and in Vermont, HSE project stakeholders may have been sensitive to being interviewed and reticent to provide honest feedback.
- BerryDunn’s planned level of effort for this project included 434 hours over an 8-12 week timeframe, involving five primary consultants and an administrative staff member. The expectation for the level of detail provided by BerryDunn in this final report should be commensurate with the level of effort planned for the project.
- The BerryDunn team’s knowledge of the HSE project was limited to review of the documentation provided by the SoV and uploaded to the State SharePoint site for viewing, as well as information garnered from the SoV during project kickoff meetings. Documents reviewed include, but are not limited to, VHC PMO bi-weekly reports from July and August 2013, bi-weekly quality assurance reports from before October 2013, VHC’s Operational Readiness Review PowerPoint presentation, the risk and issue log, deliverable review reports, and VHC’s Project Management, Test, and Implementation Plans.

1.5 Report Format

This report contains four primary sections – Section 1, Section 2, Section 3, and Appendix A – followed by a supporting Appendix B with a glossary of acronyms.

Section 1, Introduction, provides background and introductory information on the Lessons Learned project and report.

Section 2, Results from Project Stakeholders, presents rating charts for each project assessment area from online survey results, as well as key Lessons Learned findings and recommendations based on all feedback-gathering activities.

Section 3, Independent Recommendations, contains BerryDunn’s recommendations based upon Lessons Learned participant feedback and BerryDunn’s experience with large scale system implementations and HBEs.

Appendix A includes tables providing a more comprehensive list of stakeholder response themes for each project assessment area. Tables are comprised of subsections listing aspects of the project area that worked well, aspects that did not work well, and recommendations on activities to continue or to improve on within each of the respective areas.

2 Results from Project Stakeholders

2.1 Survey Ratings

As noted in Section 1.3.1.2, all Lessons Learned participants were sent a confidential online survey. Thirty-eight of the 76 individuals who were sent a survey responded. In addition to providing open-ended responses² to the questions in Section 1.3.1.3 of this report, the survey allowed each participant to quantitatively rank the seven project assessment areas on a numeric scale (from 1 to 5, 5 being best) showing level of agreement with the statement that the project went very well in each assessment area.

The following charts summarize the results of the ratings for each project assessment area. Greater than half of respondents disagreed or strongly disagreed that the project went very well in each assessment area, with the exception of risk identification and management, for which 45% of individuals disagreed or strongly disagreed.

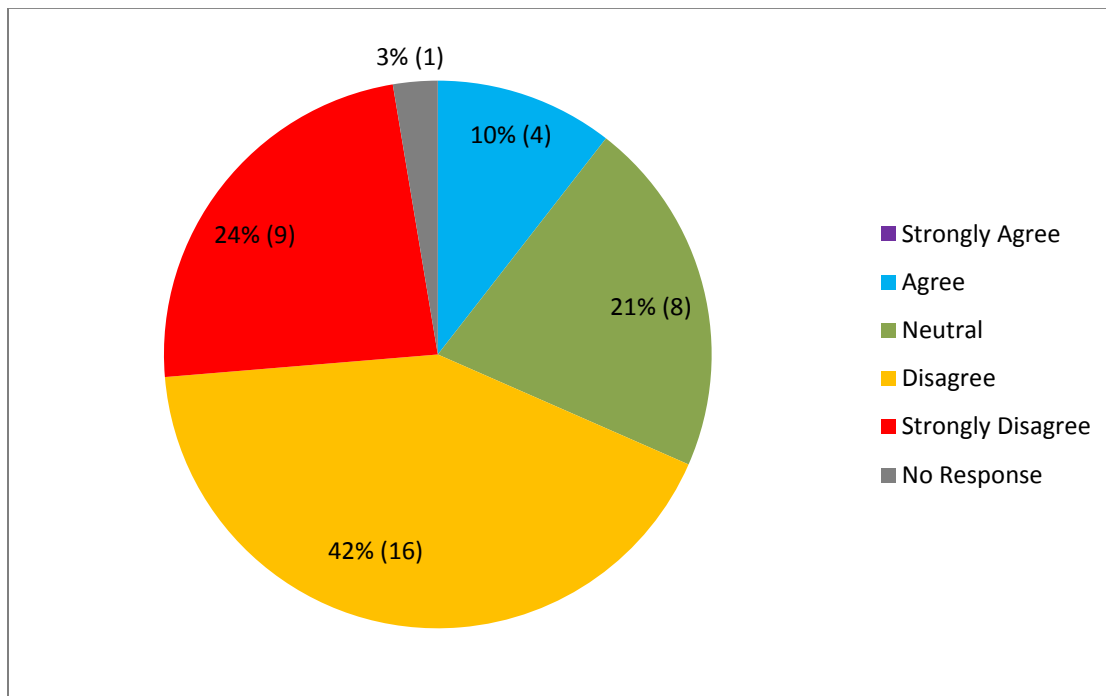


Figure 2.1.1 Adherence to Project Management Methodology and Processes

² Responses to open-ended questions are incorporated into report Section 2.2 and Appendix A.

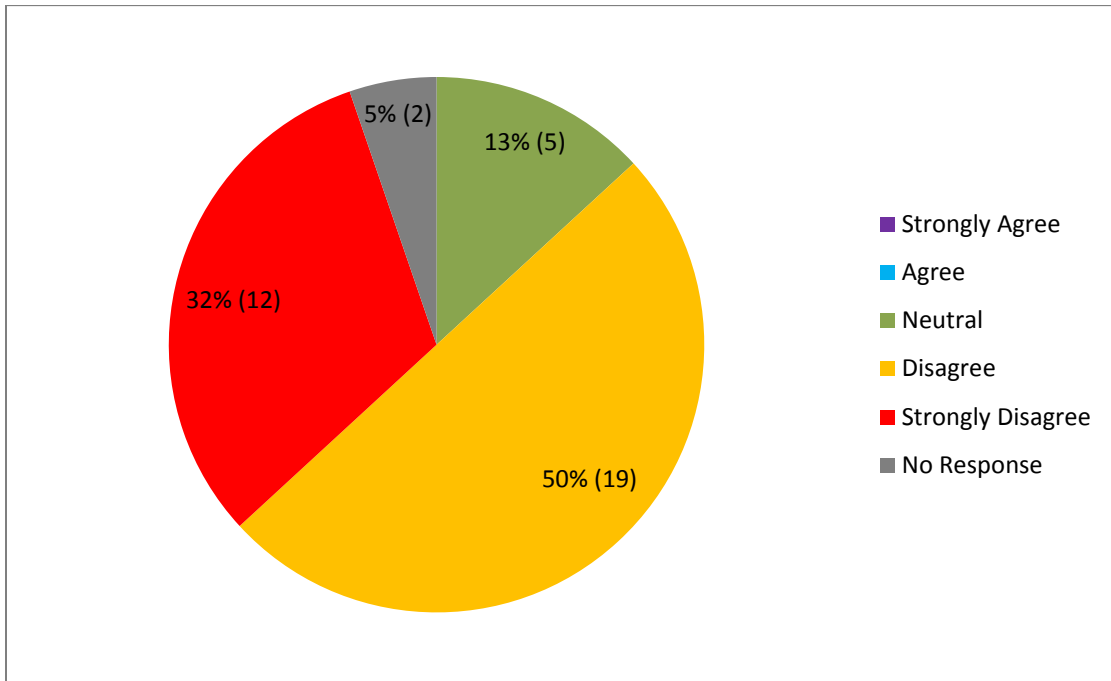


Figure 2.1.2 Requirements Development

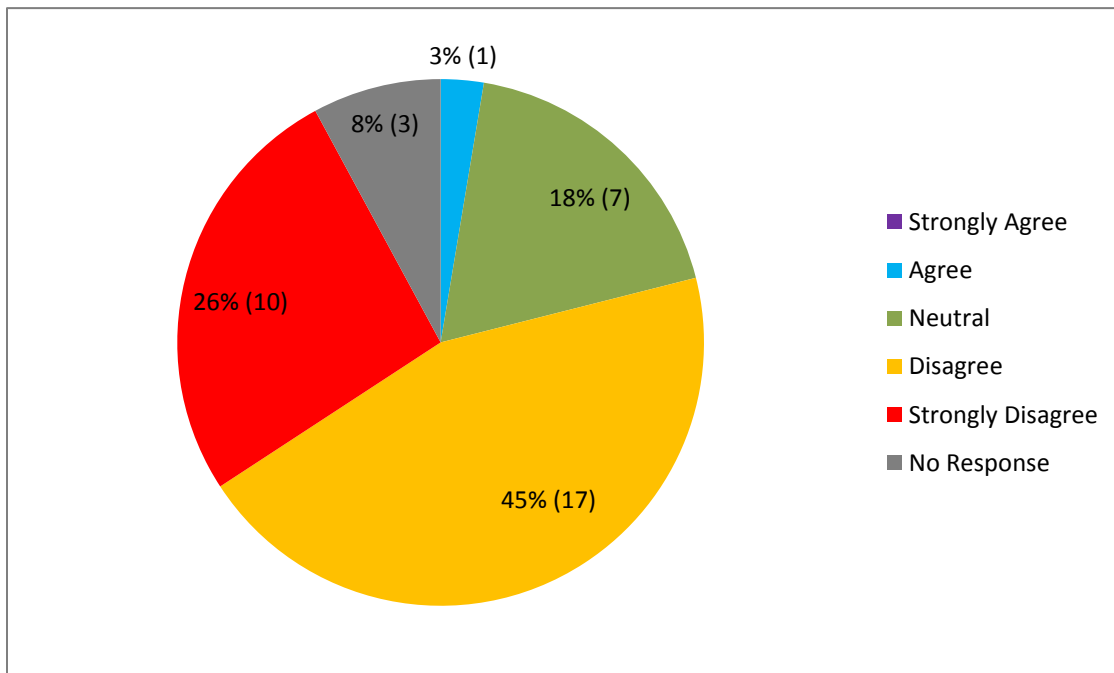


Figure 2.1.3 Implementation Planning and Readiness

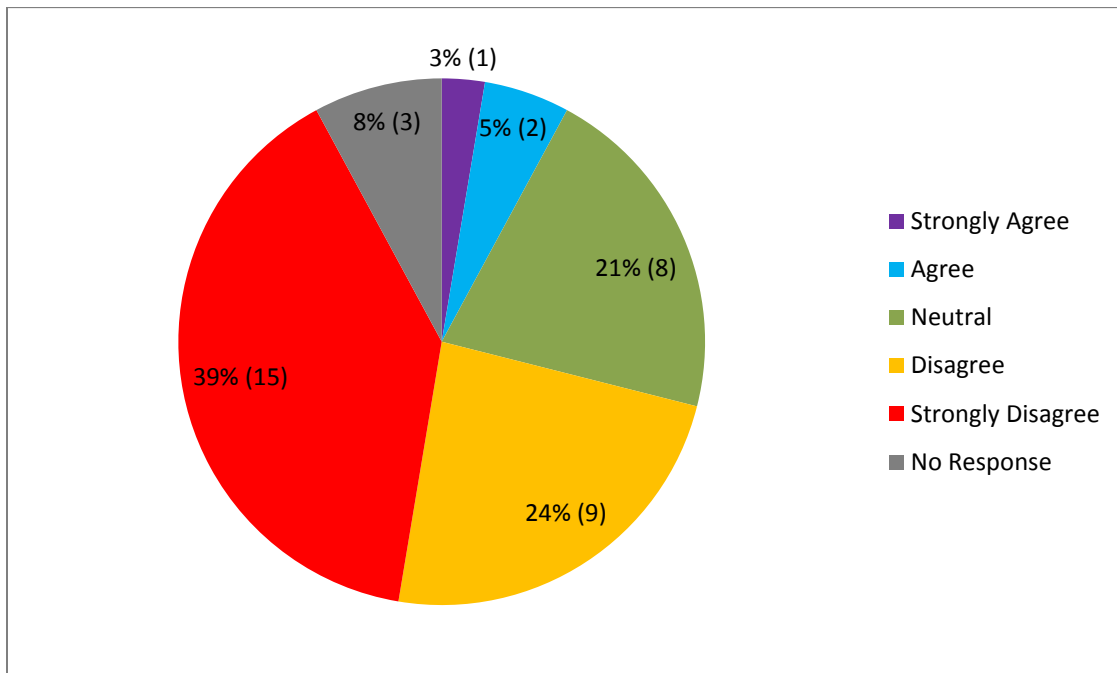


Figure 2.1.4 Systems Development, Testing, and User Acceptance

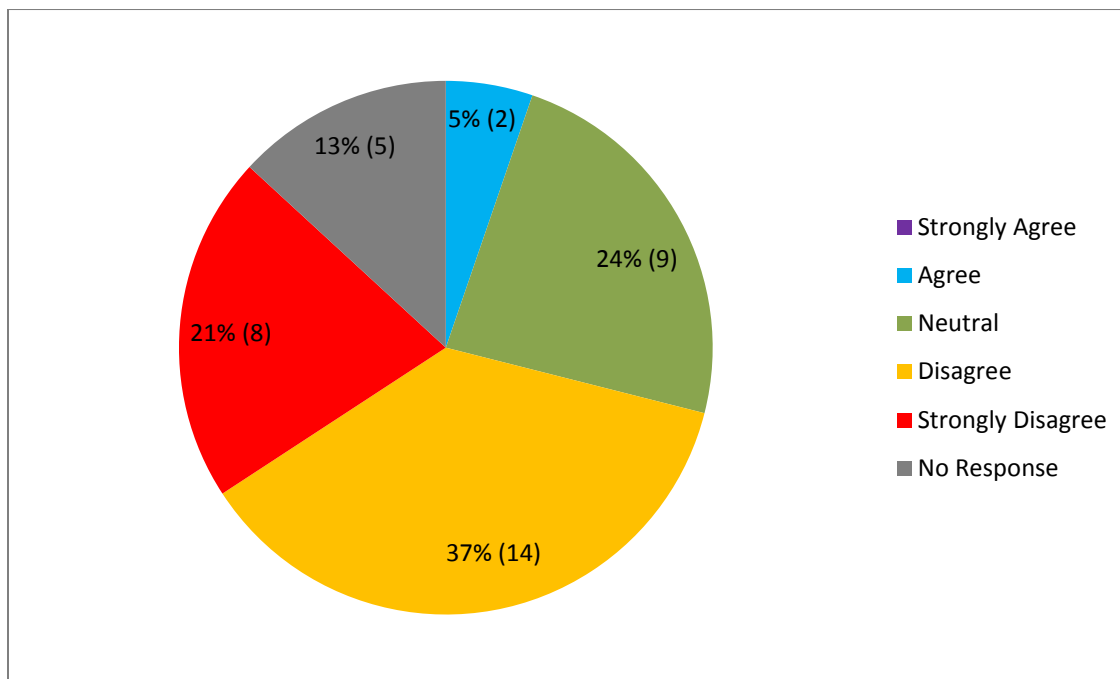


Figure 2.1.5 Deployment Planning and Deployment

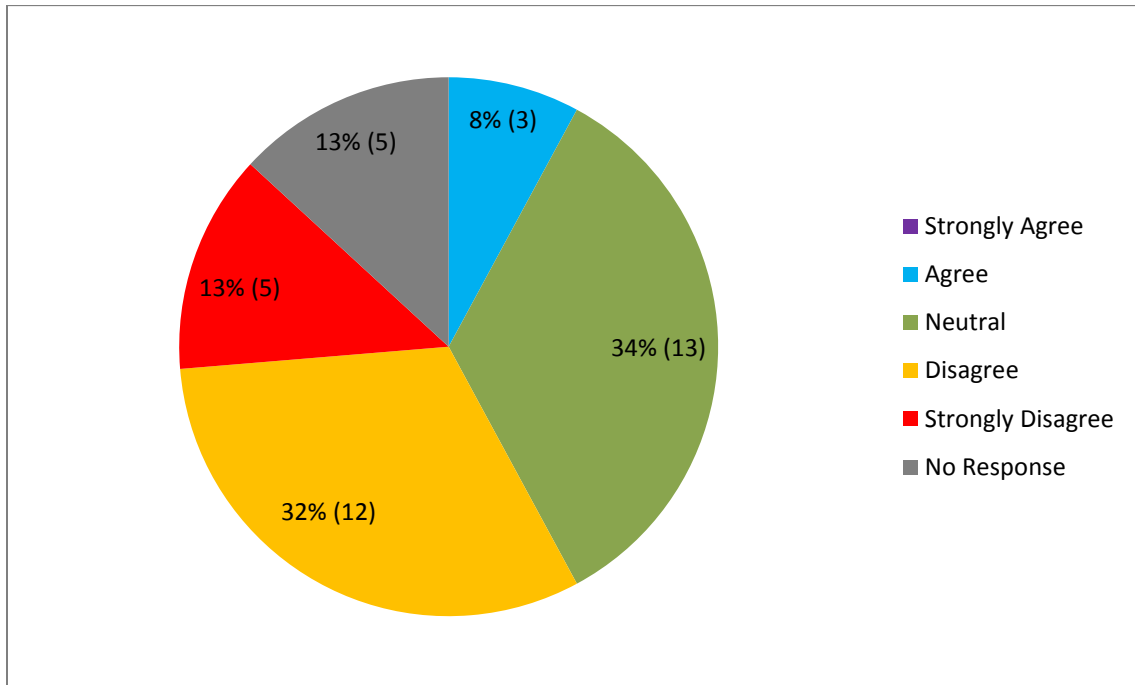


Figure 2.1.6 Risk Identification and Mitigation

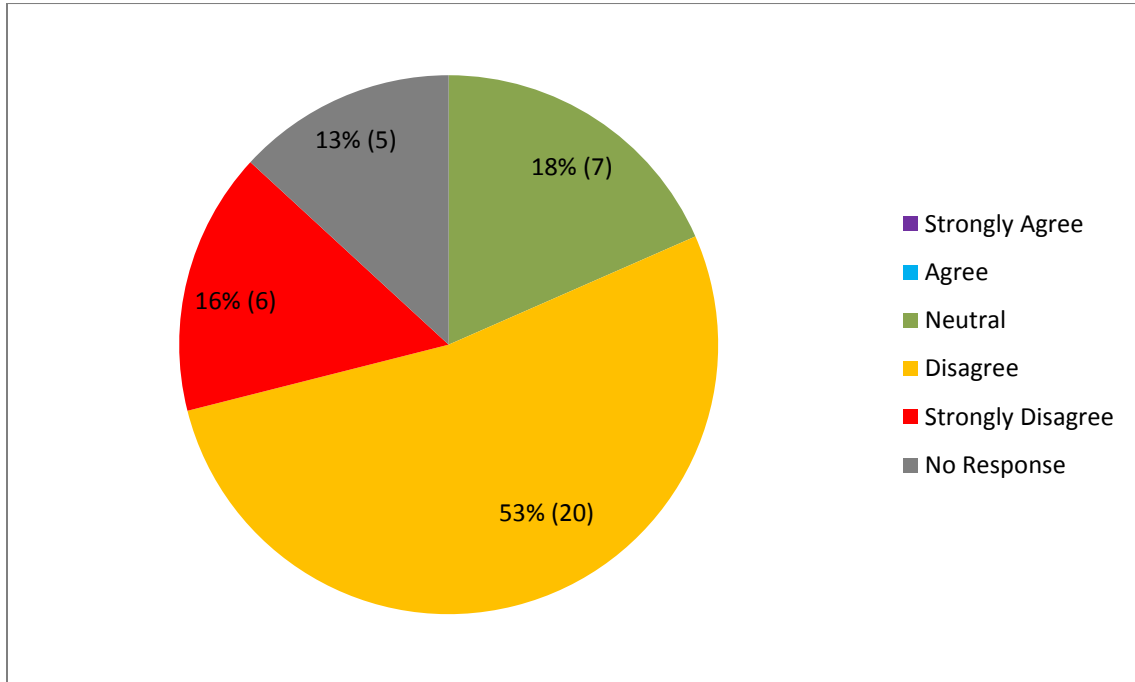


Figure 2.1.7 Vendor and State Governance, Management, and Decision Making

2.2 Key Findings and Recommendations

This section provides a summary of key findings and recommendations derived directly from project stakeholder feedback provided during individual interviews, group stakeholder sessions, online surveys, or other communications between stakeholders and BerryDunn interviewers. Although the specific language used by stakeholders has been altered in several cases to allow for aggregation and distillation of feedback into key findings and recommendations and to maintain participant confidentiality, the BerryDunn team was careful not to change the underlying meaning of the feedback provided. It is important to recognize when reading the findings and recommendations in Section 2.2 and Appendix A of this report that the scope of BerryDunn’s engagement did not include validating the accuracy of feedback provided by stakeholders.

Key findings and recommendations are those that were either mentioned most consistently by participants and/or that BerryDunn believes warrant particular attention from the State based on the feedback BerryDunn received and the potential for impacting project success. Various project stakeholders have many different perspectives and, as a result, may consider other findings and recommendations to be equally or more imperative. Therefore, although a subset of findings and recommendations is included in this section, readers are strongly encouraged to review the broader list of stakeholder feedback provided in Appendix A.

Table 2.1: Assessment Area 1 -Adherence to Project Management Methodology

Assessment Area 1 -Project Stakeholder Key Findings and Recommendations
<i>What worked well?</i>
Foundation for project management processes was established within AHS and for the HSE program
State recognized that project managers were needed and were willing to augment staff and invest in them
More seasoned team members helped “green” team members come up to speed with project management; VHC employees absorbed project management methodologies at a good rate and pace
Recognition of the need for, and establishment of, the PMO
Initial project management processes defined using industry best practices
State business leads worked with designated project managers to develop and track task-based project plans for their functional areas
Project status reports generated and shared on a regular basis, including with leadership
<i>Recommendations to continue what worked well</i>
Pairing of project managers with subject matter experts/business leads, allowing the team of professionals to focus on their particular strengths and move the project forward
Strong adherence to project management processes

Assessment Area 1 -Project Stakeholder Key Findings and Recommendations
PMO, business leads, and team leads should keep publishing and presenting project status to the team members, elevating problems, and holding owners accountable
Continue project management basics now that the basics are established
Revisit and refine methodology and processes throughout the course of the project
<i>What did not work well?</i>
Not enough time spent training State staff on project management methodology
Lack of written procedures to help VHC staff understand what project management methodology means; existed at a very high level only
No clear definition of roles and responsibilities; lack of common understanding of the roles of the project manager and the business lead
Project managers not able to fulfill their role but instead were used in diverse ways by the business leads to whom they are assigned and often times relegated to more administrative roles rather than project leadership; made it difficult to establish a culture of individual and group accountability based on project management methodology and tools
Individual sub-plans for workstreams, when placed end to end, never fit within the overall project work plan
No consistency across SoV project plans
No resource-loaded IT delivery project plan/schedule existed, and delivered plans were not followed
Insufficient identification of dependencies between IT project plan and functional operational readiness plans
Responsibilities of vendor management and contract management are not well understood by broader AHS involved parties
Lack of a communication plan and execution of that plan to agency-wide stakeholders
Lack of clarity regarding the role of PMO
Decisions made by the State outside of the change control process, resulting in downstream negative results because proper change control and impact analysis processes were skipped for expediency
<i>Recommendations to improve what did not work well</i>
Establish roles, responsibilities, and accountability at the beginning of the project and communicate within the entire organization
Establish and communicate project charters early on
Define what success looks like for the project, communicate this across teams, and manage to it
Define approaches, tools, and methodologies at the start; apply a disciplined approach to the use of these throughout the project

Assessment Area 1 -Project Stakeholder Key Findings and Recommendations
Provide enterprise-wide training of project management fundamentals to develop internal project management skills; business must understand the role of the PMO and project managers and use them correctly
Require vendor to provide resource-loaded project plan with SoV dependencies
Develop unified functional and IT project plans with interdependencies, providing a high-level common view of the project
Project management must have some conflict with the business to prevent scope creep and to ensure project managers can act in their designated capacity
Establish a strong PMO that cuts across the agencies so that the subject matter expertise and decision making can be leveraged

Table 2.2: Assessment Area 2 -Requirements Development

Assessment Area 2 -Project Stakeholder Key Findings and Recommendations
<i>What worked well?</i>
Well-defined Business Requirements Document (BRD) sessions with a high level of SoV staff engagement by previous IT vendor and consultants (before November 2012)
SoV spent significant amount of time formulating the business processes that would drive the IT implementation; the team understood that the development should be business focused and not IT solutions focused
Adopting another state's requirements as an initial development accelerator
Nonfunctional (technical) requirements developed well; a clear list exists
Good contractual specifications of technical standards and applicable regulations
Re-scoping of functional requirements occurred in June/July 2013 and were focused on three phases: enroll (October 1), operate (January 1), and optimize (after January 1)
<i>Recommendations to continue what worked well</i>
Create and use BPMs for future projects
Emphasize the need for SoV engagement early in developing requirements, with focused facilitation
Business lead model seems to work well; having business leads with deep subject matter expertise from within existing agencies is effective
Move from BRD to elaborated requirements gathering and continue to do BPMs
Bring in independent subject matter experts to help with requirements development and functional design, as appropriate

Assessment Area 2 -Project Stakeholder Key Findings and Recommendations
What did not work well?
Agreed to a set of requirements in the contract with the SI based on another state's system but then added VT-specific business requirements; these decisions were made within the VHC team and did not follow a change control process
State operations teams had a hard time "reinventing the path" from the way legacy systems functioned; lacked the vision for how things "could be" so they built the business requirements from the old system (focused on what they did not want to lose) instead of understanding what the outcomes should be
State team did not have a big picture sense of what the business goals were, where they were trying to get to
Best practice was not followed for the definition of functional requirements (e.g., work flows, use cases, traceability matrices)
Lacked a clear process and tools for managing what scope should be, how to prioritize it, and how to understand the impacts of scope decisions
Requirements traceability matrix (RTM) did not equate to the business processes that the business required; the RTM managed by the SI and the expectations from the State for business functionality were never in sync
Decisions were made by the State outside of the change control process and resulted in downstream negative results because proper change control and impact analysis processes were skipped for expediency
Requirements gathering process lasted well past the point where development and comprehensive testing was possible; requirements were visited and revisited
De-scoping/re-scoping occurred too late in the project
IT roles and responsibilities were not and still are not clear; Department of Information and innovation (DII) was working on the platform but Release 1 was both (platform and project) and then DII started to take over the IT pieces
Did not think about requirements development as an enterprise process (there is existing technical architecture with HSE solution and project; there is no business architecture associated with this)
Recommendations to improve what did not work well
Ensure scope is clear prior to contract being signed and communicate to key project stakeholders
Establish and follow scope management processes and institute checks and balances, including establishing formal change control processes, to ensure they are not circumvented and to minimize scope creep
Establish a business process optimization phase/business process design or redesign activities to translate scope to requirements; BPMs need to be the centerpiece of requirements
Adopt phases to meet deadlines based on prioritized scope

Assessment Area 2 -Project Stakeholder Key Findings and Recommendations
Understand when de-scoping/re-scoping needs to occur and do it early enough to have an impact
Find a management model that allows for the backfilling of people in their jobs so that they can be more fully dedicated to business requirements development for these projects
Business must develop tools and processes to prioritize processes and requirements
Develop a willingness to make some stakeholders unhappy from time to time and learn to say “no” despite the “yes” culture and culture of inclusiveness
Consider making the contracting process (RFP development in the area of requirements development) more of an iterative process, e.g., agile, if requirements are not fully known or defined

Table 2.3: Assessment Area 3 -Implementation Planning and Readiness

Assessment Area 3 -Project Stakeholder Key Findings and Recommendations
<i>What worked well?</i>
Project team, which overall had little or no project implementation experience, was incredibly dedicated and willing to work to get a job that was well beyond their control completed
Some contingency planning was developed before October 1
Daily stand-up meetings with leadership to check in with business leads responsible for execution
Project manager focus on objectives, countdown, and daily meetings
Education of public (outreach, education, call center)
Privacy, security, and policy training
Development of assister channels (call center, navigators, brokers) related to communications, public relations, etc.
Establishment of a PMO (as a virtual organization) with the idea of blowing up the silos within and across State agencies
Wrapped an Enterprise Architecture (EA) program at the State level around the HSE program and specifically around the shared platform; aligned and created all the component strategies and EA principles to business goals for AHS and SoV IT strategies
Navigator program planning
<i>Recommendations to continue what worked well</i>
Continue to expand EA presence
Use daily stand-up meetings to keep everyone up to date and alert to risks and danger before they arise
Create "SWAT teams" by workstream to quickly remedy issues
Ensure enough time for implementation planning and assign a resource on the vendor and SoV side to lead jointly

Assessment Area 3 -Project Stakeholder Key Findings and Recommendations
Changing the PMO to become part of AHS and bringing on a Program Director and Manager
<i>What did not work well?</i>
SoV did not have a true, functional project plan that reflected the actual approach being taken to manage the implementation
Not enough planning around contingencies and potential failures; planning and readiness focused more on what would happen in the event the deployment went as planned
No dedicated organizational change management existed from the beginning of project; PMO organizational change management was not allowed to deliver until well past critical path, and communications and other change initiatives were not implemented until August for an October launch
Lack of focus on training prior to go-live, including a lack of understanding of the significance of a having a system training environment and training materials
Continuing lack of definition on roles and responsibilities with respect to implementation activities, e.g. training and testing; resulted in several people working on the same task or not doing the task at all
Resource needs identified in readiness were not addressed, repeatedly; not enough resources and the right resources not engaged
No global readiness check list for go-live
Needed to prepare the staff for managing workarounds instead of training for new tools and new processes
<i>Recommendations to improve what did not work well</i>
Stay agile in planning and execution
Eliminate "failure is not an option" zealousness from leadership
Ensure timing for go-live is determined by project readiness and not political deadlines
Develop an implementation team that is charged with planning and executing implementation
Have operational readiness and training handled at an enterprise level
Develop and complete a global readiness checklist for go-live
Implement organizational change management principles as soon as possible when contemplating change, with a dedicated change management professional
Identify and invest in front-line State staff "champions"; involve them in the change management process early on, including developing the "to be" state ahead of go-live and helping to communicate that vision to their teams
Engage in robust contingency and business continuity planning
Never go live prior to training and begin awareness training and change readiness training months prior to any anticipated go-live

Table 2.4: Assessment Area 4 -Systems Development, Testing, and User Acceptance

Assessment Area 4 -Project Stakeholder Findings and Recommendations
<i>What worked well?</i>
Hard work, dedication, and long hours by the team to achieve go-live
Collocating SoV team with SI to ensure real-time input given concurrent design, testing, and user acceptance testing (UAT) approach
Business team encouraged to organize and fulfill business architecture efforts around business processes and capabilities due to insufficient time for them to holistically understand EA and other technology aspects of the project
Establishing clear guidelines for SOA development, nonfunctional requirements, and hosting/maintenance and operations through the EA program
Combining project management, business lead, business analyst, and technical staff to create effective test teams
Actionable testing plan agreed to initially by SI and SoV and modified along the way as needed in order to meet evolving definition of reasonable and achievable
<i>Recommendations to continue what worked well</i>
Ensure each workstream has the consistent assignment of the "four-in-a-box" small development team
Have business focus on Business Architecture to support the EA
If presented with the same time constraints, be creative in developing alternatives and make smart management decisions, such as joint testing instead of a sequential testing
Continue to mature the SoV EA by clarifying the strategies, guiding principles, and architecture for business, application, information, and technical domains
Draw UAT testers from end-user community; encourage business lead involvement in all aspects of testing for their respective workstreams
<i>What did not work well?</i>
Development methodology was not clearly defined (waterfall, agile)
Poor approval structure for moving forward during DDI
Code promotion throughout the Systems Development Lifecycle (SDLC) is immature
Scope was dynamic, and go-live code releases were occurring until the last minute
Requirements were not well defined, diminishing ability to decompose the Requirements Traceability Matrix (RTM) into tests that proved functionality existed and worked
Test plan was developed but not followed, e.g., no adherence to entry or exit criteria
Testing was disorganized and only covered a fraction of the necessary scope due to compressed timeline (e.g., integration testing conducted over a weekend, no payment process testing); appeared to be a risk accepted by the SoV

Assessment Area 4 -Project Stakeholder Findings and Recommendations
Testing timeframe was significantly compressed, and the time that was available was far too close to the date of implementation to allow for careful and thoughtful resolution of identified issues
Releases were promoted with known errors that did not have workarounds
Business leads were not adequately involved in testing; at times, they were asked to sign off on UAT with limited or no exposure to the process they were signing off on
Business leads' concerns not heeded when they expressed concern to leadership about go- live due to lack of UAT functionality
Functional design for the end-to-end system existed, but development was not completed by October 1 so end-to-end testing could not be completed
Appropriate testing environments were not available; environments that were available were not consistent, so testing resulted in false positives and false negatives
Acceptance that SoV staff experience with the system may be compromised without recognizing the downstream customer implications, e.g., functionality missing or not working not only impacts State staff but also the Vermont citizen
Carriers were not engaged by the State adequately for integration testing; very little carrier functionality testing performed
Recommendations to improve what did not work well
Do not sacrifice quality for functionality
Provide the project with stronger leadership skills and more experienced staff who understand testing practices and methodology
Have the "four-in-a-box" team champion integration of its proposed features through RACI (Responsible, Accountable, Consulted, Informed) routing and larger proof of concept integration prototypes; engage that team in owning the use cases and UAT
Testing must be considered at the enterprise level; coordinating testing across multiple projects and ensuring there are enough resources to accomplish the testing that is needed is critical to future success
Allow the business to prevent deployment from moving forward without adequate testing and training
Develop and approve a full testing plan that includes all testing, e.g. unit, system, integration, stress and user acceptance testing and strong test management plans
Create a robust, integrated test plan developed from the bottom up, including integration and other system touch points, instead of viewing it as just a schedule
Communicate testing plan to all staff
Maintain better coordination and compilation of testing resources
Have a "sandbox" environment for stakeholders to be shown rather than told what the design is; prototype!

Table 2.5: Assessment Area 5 -Deployment Planning and Deployment

Assessment Area 5 -Project Stakeholder Findings and Recommendations
<i>What worked well?</i>
SoV teams and SI work ethic and collaboration through deployment planning and deployment
Upfront definition of defect severity (and their impact to deployment)
Mini-plans (three to five days) used for final deployment and readiness were well-designed and thought out
Resolver group escalation map
SR escalation path
Command center added significant value to the project, brought representation from all areas, was critical in diagnosing issues, and connected operations and executive levels for fast decision making
Integration between SoV and SI command centers
Deployment phase had a more structured process for execution and escalating issues
<i>Recommendations to continue what worked well</i>
Build strong, informed deployment plans
Create a Command Center with appropriate representation from all functions necessary for as long as the deployment requires
Implement the Command Center earlier in the project, and make it more driven by project managers
Assign an Information Officer in the Command Center with a clearly defined role within the communications plan
DII should drive minimum State standards on deployment
<i>What did not work well?</i>
Insufficient deployment planning due to timeline, resulting in premature system deployment
Executive level lacked understanding around the significance of impacts to project go-live
Communication to key stakeholders regarding deployment was inadequate and occurred too late in the project
No defined deployment process, deployment management, or configuration management
Deployment occurred without complete clarity on what was being deployed and the manual efforts that would be required after go-live as a result of what was and wasn't deployed; no discussion occurred on trade-off capabilities regarding system functionality
Misrepresentation of the severity of deployment issues with SI and COTS vendors not communicating how far behind they were, yet continued to make unachievable promises to the business leads
Deployment planning was based on best case scenarios
No appropriate contingency plan for deployment

Assessment Area 5 -Project Stakeholder Findings and Recommendations
Underestimated the customer support (call center) requirements and resources needed
Recommendations to improve what did not work well
Develop strong, informed deployment plan early and ensure it accounts for risks and interruptions in project schedule
Plan and implement training before go-live
Plan deployment for worst-case scenarios
Create a clear understanding and communication of the governance and expectations for deployment across stakeholders early in the project, with guidance from the PMO
De-scope earlier and communicate the importance of this, so the project is reasonable and achievable in the time period given with the resources available
Communicate what is reasonable and achievable for deployment to the public and the team
Clearly define acceptance criteria against best practices within the implementation plan
Spend more time on outreach to carriers and provide technical staff assistance
Develop a mechanism to differentiate decisions that don't need executive leadership involvement
Consider lessons learned from other states' experiences
Follow the defined deployment plan, and conduct lessons learned after each deployment

Table 2.6: Assessment Area 6 -Risk Identification and Mitigation

Assessment Area 6 -Project Stakeholder Findings and Recommendations
What worked well?
Risk identification and documentation occurred
Risk and issue communication and escalation to executive leaders occurred, risk reports were produced and shared, and decisions made along the way
A risk threat matrix was built to identify, track, and quantify significance of the risk for prioritization
Forum to discuss risks and issues existed; frequent meetings to identify risks and issues occurred, and project managers did an excellent job of tracking them
Project managers created a risk methodology and shared the risk register
RAP implemented in May 2013 with the purpose of taking risks and issues out of the business framework and escalating them to another process driven by project managers
Recommendations to continue what worked well
Continue to discuss risks and mitigation strategies in status reports
Define risk and issue processes with management guidelines and communicate them
Have a resource devoted to risk management

Assessment Area 6 -Project Stakeholder Findings and Recommendations
Develop contingency plans based on identified risks
Continue keeping a risk log and communicating it regularly across stakeholders
Secure enough staff to execute the RAP properly, and gain executive team support for staffing of this process
<i>What did not work well?</i>
Lack of a common definition and fundamental understanding of the difference between a risk and an issue
Risks inherent in decisions were not always identified, ultimately leading to greater risks, e.g., the business made some decisions with the best interest of citizens in mind, irrespective of the practicality from an IT perspective and without a full understanding of the implications of those decisions
Risks were not documented at the level where a single owner could be assigned
Lack of understanding and process for risk and issue prioritization
Team struggled with defining severity based on probability and impact, and impact was not expressed in meaningful terms, e.g. additional cost, quality issues, schedule delays, operational impacts, causing project leadership to make decisions on risk management strategies with limited information
Mitigation strategies for risks and issues were underdeveloped, and contingency planning was insufficient
Contingency planning was not done realistically or by the right people and it occurred too late; staff did not understand the operational implications of the risks involved
Leadership did not address escalated issues and should have been more involved in risk mitigation
Executive committee did not get risks early enough; when they did, large reports were often provided rather than an executive dashboard with manageable amounts of information
"Homework" often wasn't done on risks and issues before they were escalated to the executive committee, increasing the timeframe for resolution as additional questions needed to be answered and information gathered
PMO needed to step into risks and issues and help escalate to the executive team to drive closure
Lack of understanding of how to read and interpret IV&V reports, risk "colors" (e.g., red, yellow, green) and what to do with the information
<i>Recommendations to improve what did not work well</i>
Provide training on risk identification and mitigation to SoV staff, e.g., definitions of risks versus issues, different strategies for dealing with both, how to define severity and priority
Make risk management a more integral part of the program; include them in frequent project reviews as opposed to a stand-alone weekly or bi-weekly meetings
Dedicate appropriate resources to risk identification, tracking, and management

Assessment Area 6 -Project Stakeholder Findings and Recommendations
Foster a culture that recognizes that issue and risk management are positives and are critical to project success
Provide a clear definition of "impact" so that business leads provide consistent impact statements
Ensure that risk management includes prioritization; do not make everything a first priority
Assign probability and impact to risks and mitigate before they become issues
Train and task middle management with digesting IV&V reports and other risks and issues reports, creating a dashboard with only the most critical risks and issues for executives
Present recommendations along with the risks that are escalated to executives
Standardize communication of risks and issues and clarify the escalation path to leadership, build a process for visibility and transparency, and expect timely decision making from leadership
Communicate implications to leadership in a more defined manner to ensure immediacy is understood

Table 2.7: Assessment Area 7 -Vendor and State Governance, Management, and Decision Making

Assessment Area 7 -Project Stakeholder Findings and Recommendations
<i>What worked well?</i>
Governor wanted to achieve success and was willing to do what it took, including prioritizing the creation of positions and expediting contracts
Executive leadership functioned well as a group when they came together in the spring of 2013
Project staff, including State project lead, worked hard and were capable
Policy behind the project was well understood
Once decisions were made, people knew what to do
Took an enterprise approach to the project; had an advanced vision to build VHC as an enterprise approach, developing system design that includes VHC, IE, and MMIS
Development of a PMO
Decision to co-locate SI with the State offices and bring other Agency staff (DCF, AHS) to the location to create a sense of team
<i>Recommendations to continue what worked well</i>
Strong communication between team members
Empower SoV leadership and management to make decisions without delay
Appreciate the staff's hard work
Have vendor work on-site
Include trade-off analysis and contingency planning as part of the decision making process
Status reports from business leads should continue for the entire project

Assessment Area 7 -Project Stakeholder Findings and Recommendations
<i>What did not work well?</i>
Culture does not encourage questioning, conflict, or engaged problem solving, and inexperienced leadership does not know when to raise issues above them
Political climate did not allow DII to be forthcoming about the success or failure of the project
Lack of adequate staffing was a major hindrance; project did not have the appropriate type and number of resources
Lack of cohesion between SoV and subcontractor staff, and little support in some areas of the project due to their lack of experience or knowledge
Unclear definitions of roles and responsibilities, and a mismatch between authority and responsibility
RACI matrix used for the project did not have the right individuals as accountable and did not indicate the final authority for decision making
OSC charter was unclear
Decisions were being made outside of group structure, were not being documented, communicated, or followed through on
Repeat discussions about problems that had already been solved due to poor decision communication
No centralized processes, procedures, and clear responsibility for vendor and contract management
External communication about what challenges were coming and appropriate expectation setting with the public and press could have been improved
<i>Recommendations to improve what did not work well</i>
Create a culture that is transparent about the political objectives and timelines by balancing business and technical reality with policy goals
Define staffing model early on and submit staffing requests to the appropriate agencies
Leverage the governance structure and make sure people understand roles and responsibilities and how to use existing communication channels
Engage strong leadership to provide oversight across and between agencies, let them lead, and make them accountable
Ensure appropriate representation on both the OSC and ESC to ensure decisions and guidance is timely and effective
Develop a dashboard with risks and decisions for executive leadership
Develop shared objectives and a shared vision of the future to make facilitate joint decision making
Improve communication of decisions to all key stakeholders
Make vendor management the purview of project management, adhering to published, consistent SoV standards that can be learned and relied upon
Ensure a detailed communications plan is in place and is supported by all stakeholders

3 Independent Recommendations

3.1 Summary

As a result of working with the State to develop the Playbook for the Lessons Learned exercise, summarizing feedback received during the survey process, and facilitating the individual interviews and group stakeholder sessions, the BerryDunn team developed 10 high-level recommendations for consideration by the State. The following table represents a summary of the team’s recommendations.

Table 3.1: BerryDunn Lessons Learned Recommendations

#	Independent Recommendations
1	Utilize the results of the Lessons Learned exercise to institute impactful changes moving forward.
2	Continue to improve processes that identify, recognize, and plan for project constraints.
3	Improve requirements and scope management processes to ensure project phases are reasonable and achievable.
4	Proactively evaluate and modify the governance structure on large projects when necessary.
5	Document roles and responsibilities for project positions, make them transparent, and articulate them to project stakeholders.
6	Improve the visibility and transparency of decisions and, where appropriate, involve key stakeholders in effective decision making.
7	Improve project communication vehicles and processes.
8	Continue to seek ways to improve vendor contract management.
9	Communicate project health to all stakeholders regularly and engage executive leadership appropriately to inform them about project challenges.
10	Continue to evolve the concept of Enterprise Architecture (Business, Data, Applications, and Technology Infrastructure) for the Health Service Enterprise program.

BerryDunn’s recommendations are not intended to encompass all recommendations provided by project participants through the survey and in-person interviews and sessions, which are summarized in Section 2 and Appendix A. Rather, this section highlights the recommendations that the BerryDunn team believes are important to communicate above and beyond those provided by project stakeholders.

3.2 Recommendations

Detailed descriptions of BerryDunn’s recommendations are as follows:

1. **Utilize the results of the Lessons Learned exercise to institute impactful changes moving forward.** BerryDunn team members felt strongly that participants were engaged and offered honest and meaningful feedback regarding areas that went well and areas that could have been improved for Release 1 during the Lessons Learned feedback-gathering activities. A consistent message provided by participants was that it was extremely important to them that the State act on the feedback that was shared. We recommend the State consider the following:
 - a. Enhance the existing “best practices” for Lessons Learned activities to occur at key milestones throughout the completion of this project, and in other large projects within the State.
 - b. Continue to refine the Lessons Learned Playbook so that others can benefit from the methodology used for this project. Consider adding the Playbook to the tools and templates offered by DII.
 - c. Project leadership from the State and CGI should review this report in its entirety. In particular, we recommend analyzing the full set of findings and recommendations summarized in Appendix A: Findings and Recommendations from Project Stakeholders.
 - d. Develop an “action item” list and begin addressing actions for Phase 2 of the HSE project. Communicate this list transparently across all project stakeholders. Demonstrate to all teams that the State and CGI have heard the feedback and are proactively doing something with it.
 - e. Establish the means by which to recognize individuals who were identified as performing exceptionally well by Lessons Learned project participants. Continue recognition activities into future phases of this and other projects.
 - f. Incorporate recommendations from participants regarding “other questions that should have been asked” into future Lessons Learned exercises.
 - g. Continue to meet with other states to gain meaningful feedback on lessons learned from their HBE implementations. Select a broad spectrum of states to meet with, including those who reportedly have had more or less success with their implementations than Vermont.
 - h. Conduct internal meetings with HSE stakeholders who met with BerryDunn to share Lessons Learned results and outcomes. Discuss how the feedback will be used.

2. Continue to improve processes that identify, recognize, and plan for project constraints. A common concern shared by stakeholders was that applying industry best practices to this specific project would not be effective due to its complexities and constraints, and as a result the Lessons Learned exercise would ultimately fall short of providing meaningful recommendations. When identifying our recommendations, we believed it was essential to consider the project context and unique constraints. These included, but are not limited to:

- a. The go-live date for Release 1 was set by the federal government and was deemed immovable by many states.
- b. Vermont began the project late due to failed negotiations with Oracle.
- c. The federal government released guidance throughout the effort that modified project expectations and requirements.
- d. CGI created a project team of 180 or more people who had little to no experience working together prior to this project.
- e. Many project resources (State and vendors) had never completed a software development project of this magnitude, did not have experience in the insurance industry, and did not fully understand the ACA.

A critical part of project management, and ultimately the decisions made that impact timing and approach, should be based on a deep and meaningful understanding of the constraints. Moving forward on this and other projects, defining activities that are reasonable and achievable based on identified project constraints is a key success factor. The State must be adaptive in the use of best practices and continue to make prudent decisions given recognized constraints.

3. Improve requirements and scope management processes to ensure project phases are reasonable and achievable. Improving the processes used to manage expectations related to business requirements, nonfunctional requirements, and system specifications is critical to ongoing success. One of the most common challenges shared by participants was that the State and CGI had originally contractually agreed upon Hawaii's requirements in order to expedite the contract process (in part due to timing constraints of the project – see #2 above), which did not address the unique needs of the State of Vermont. It is our understanding that conversations regarding scope, requirements (what), and specifications (how) continue to be a challenge on the project even after October 1. Recommendations for this area include:

- a. Articulate and follow an agreed-upon process for adding and removing requirements and scope during the project.
- b. Clarify and articulate to project stakeholders the difference between business and nonfunctional requirements (the “what” that is expected) and system specifications (the “how” business and nonfunctional requirements will be implemented).

- c. Agree upon the list of business and nonfunctional requirements as early as possible during the project with the SI. The process for transforming business and nonfunctional requirements into system specifications should be led by the SI using the process agreed upon with the State.
 - d. Develop a methodology for identifying expectations for whether or not a requirement is essential (must have), conditional (strongly desired), or optional (a nice to have) as part of defining business and nonfunctional requirements. Additionally, when a program is comprised of multiple phases like the HSE program, an enterprise approach to requirements traceability should be considered that determines when, in terms of phases, each requirement is expected to be designed, developed, implemented, tested, and made operational.
 - e. Set expectations and project deadlines that are reasonable and achievable. It is a significant risk to hold the project accountable to deadlines that are not reasonable or achievable given known project constraints.
 - f. Utilize “level of effort” calculations with key project activities and requirements/system specifications to help gauge staffing expectations and needs for both the State and vendors.
 - g. Consider off-the-shelf software to help manage requirements, requirements modifications and scope tracking, level of effort, and requirements traceability for purposes of testing. These types of requirements tracking tools will also help to manage requirements from the enterprise perspective, and assist in managing and communicating plans for what functionality is planned in which release. The State should consider requiring future SIs to utilize the State’s requirements tool.
- 4. Proactively evaluate and modify the governance structure on large projects when necessary.** A common theme reported during the Lessons Learned exercise was that the project governance structure was not articulated and communicated clearly throughout all phases of the project, and that the governance structure had challenges meeting evolving project needs. At times, project leadership and business leads remained in silos and did not follow, or bypassed, the established project governance model. We recommend the State consider the following:
- a. Document the project governance model and disseminate to all project stakeholders.
 - b. Establish success criteria for key milestones (such as the October 1 go-live) early in the project.
 - c. Focus additional time on effective risk mitigation activities (spending appropriate time on highly probable/highly impactful risks) before they become issues.
 - d. Create communication channels so that project stakeholders can share concerns about the established governance process. Consider a process that protects the

anonymity of individuals who provide feedback as this can often lead to the most helpful suggestions.

- e. Evaluate the governance structure at predetermined milestones in the project to ensure appropriate stakeholder involvement and project leadership.
- f. Make adjustments to the governance model that reflect project progress and/or a more thorough understanding of the risks and issues facing the project as time progresses; refinement in governance structure is often necessary.

5. Document roles and responsibilities for project positions, make them transparent, and articulate them to project stakeholders. Lessons Learned participants frequently reported during feedback-gathering activities that they lacked a clear understanding of project roles and responsibilities. We recommend the State consider the following:

- a. Develop descriptions of key project roles and include a high-level list of the associated responsibilities.
- b. Share the roles and responsibilities documentation with all project stakeholders. All project team members should understand key roles and responsibilities for all positions across the project. Update this document when subsequent modifications to roles and responsibilities are required.
- c. Differentiate between full-time, part-time, and temporary staff.
- d. Enforce and hold individuals accountable for fulfilling their roles and responsibilities; empower them to function autonomously and make decisions within the boundaries of their positions.

6. Improve the visibility and transparency of decisions and, where appropriate, involve key stakeholders in effective decision making. Many project participants, particularly on the business side, felt that decision making by project leadership lacked transparency in that it did not involve the State business leads frequently enough. Stakeholders reported that decisions were often revisited for reasons including inadequate tracking and communication of decisions that were already made. Additionally, it was often unclear who should participate in decision making and who had final decision making authority. Although we recognize time constraints often necessitate expedited decision making, we recommend the State consider the following:

- a. Develop a “decision log” that is maintained electronically in the project’s SharePoint repository and is accessible by all project staff. The decision log should document decisions that *need* to be made on the project, as well as decisions that *have been* made.
- b. Include key information in the decision log such as what decision needs to be made, who needs to participate in making the decision, and what the due date for making it is. When a decision is made, the log should include what the outcome

of decision making was, when the decision was made, and the owner or point of contact for the decision.

- c. Develop a communication process that enables all project stakeholders to articulate to project leadership when they would like to participate in a decision within the log. Project stakeholders, particularly business leads, should recognize that involvement in all decisions is neither practical nor reasonable. This is particularly true when timelines are severely constrained, as they were with Release 1. However, involvement of business leads in key decisions is an area that can be improved.
- d. Establish a process that ensures project decisions are owned and actively managed, incorporating the use of the decision log as a management tool.

7. Improve project communication vehicles and processes. Ineffective project communications and a lack of transparent decision making were commonly perceived areas for improvement. We recommend the State consider the following:

- a. Develop a project newsletter that describes progress being made and plans for the upcoming reporting period.
- b. Continue to leverage the State's investment in SharePoint as a central repository for project activities. Consider maintaining a central repository for risks and issues, decisions, contact lists, and the project schedule.
- c. Develop a decision log that is kept in the project's SharePoint repository and is accessible by all project staff. The decision log should document decisions that need to be made, as well as decisions that have been made.
- d. Develop descriptions of key project roles and include a high-level list of their responsibilities. Share the roles and responsibilities documentation in a manner that all project team members have access to it and that allows subsequent modifications to the document to be immediately available to all project stakeholders.
- e. Create communication channels so that project stakeholders can share concerns about the project openly and without fear of consequence. Consider a process that protects the anonymity of individuals who provide feedback as this can often lead to the most helpful suggestions.

8. Continue to seek ways to improve vendor contract management. Executives and project leadership provided many comments during the feedback-gathering process regarding the importance of improving vendor contract management. We recommend the State consider the following:

- a. We understand that the State has been contemplating involving contract management resources in the HSE program and contract administrators within projects. The State should continue to consider the importance of adding full-time

State contract management position(s) on projects of this size as a resource that can help project leadership manage change requests and ensure the State receives contract deliverables in a timely fashion.

- b. Enhance the focus and understanding of project constraints (see recommendation #2) and work diligently to measure vendor progress on key project milestones in a manner that is reasonable and achievable given these existing constraints. Hold the vendor accountable to establishing a work plan that is achievable. Setting reasonable and achievable goals given real project constraints is as important (if not more) to effective vendor management as it is to managing State staff.
- c. Clarify and formalize changes in scope and requirements as part of an approved change management process that involves State and vendor sign off.

9. Communicate project health to all stakeholders regularly and engage executive leadership appropriately to inform them on project challenges. Participants reported one of the project challenges was that executive leadership was not engaged until problems had already started to affect project outcomes. Executive leaders themselves frequently reported that this type of IT project was new to them and that a better mechanism to engage and inform them would have been helpful for Release 1.

- a. Continue to develop and refine the processes of the PMO for AHS and develop a methodology by which the portfolio of ongoing IT projects can be effectively monitored by executive management.
- b. Develop a monthly report that communicates the overall health of the project from several perspectives, e.g., the triple constraints of cost, schedule, and scope in addition to other project health indicators such as risk and issue mitigation, staffing, software testing results, and effective decision making. Consider the dissemination of the monthly report to all project stakeholders. If appropriate, consider having report development be the responsibility of the IV&V vendor for projects where IV&V services are being provided.
- c. Differentiate risks and issues that are being effectively mitigated from those that are negatively impacting the project and are not being effectively mitigated. Define criteria for how and when to elevate risks and issues to executive leadership.
- d. Leverage the twice monthly meeting with executive leadership to focus on an improved understanding project health, and consider developing a dashboard with project key performance indicators.

10. Continue to evolve the concept of Enterprise Architecture (Business, Information/Data, Application/Integration, and Technology Infrastructure) for the Health Service Enterprise Program. The concept of an HBE is a new business model for the State and is complex, changing, and challenging. It was reported that the Business Architecture was not clear and that decisions regarding how the business needed to operate further challenged changing requirements and ultimately the ability for the State and CGI to agree on system specifications for how the software needed to support business needs. We have been told that the other areas of the Enterprise Architecture (Information/Data, Application/Integration, and Technology Infrastructure) are more mature and functional than the Business Architecture. Given the immaturity of the business aspect of the HBE (having never existed previously), the lack of progress on the Business Architecture is not surprising. However, challenges can emerge when technical decisions and Enterprise Architecture components impact, or in some cases constrain, business decisions that are not yet determined.

- a. AHS and DII should be able to articulate expectations for Enterprise Architecture across the enterprise and how it should be used on similar projects. An important focus for this documentation should be how the concepts of Business Architecture drive Technical Architecture decisions.
- b. The business processes of the HBE should be documented.
- c. It was frequently reported that business leads needed assistance in articulating their business needs. Although project management staff had significant project management experience, the State should consider independent consulting firms to provide specific ACA, Business Process/Modeling, Enterprise Architecture, and other expertise that will be required to complete these activities.
- d. Staffing on the State and vendor side was constrained because of the availability of resources in Vermont. Consider seeking subcontractor resources from other states.

Appendix A: Findings and Recommendations from Project Stakeholders

This section provides a broad list of findings and recommendations derived directly from project stakeholder feedback provided during individual interviews, group stakeholder sessions, online surveys, or other communications between stakeholders and BerryDunn interviewers. Findings and recommendations that are also included in Section 2.2 of this report are shaded in light green in Tables A.1 to A.7.

Although the specific language used by stakeholders has been altered in several cases to allow for aggregation and distillation of feedback into key findings and recommendations and to protect participant confidentiality, the BerryDunn team was careful not to change the underlying meaning of the feedback provided. It is important to recognize when reading the findings and recommendations in Section 2.2 and Appendix A of this report that the scope of BerryDunn’s engagement did not include validating the accuracy of the feedback provided by stakeholders.

Table A.1: Assessment Area 1 -Adherence to Project Management Methodology

Assessment Area 1 -Project Stakeholder Findings and Recommendations
<i>What worked well?</i>
Foundation for project management processes was established within AHS and for the HSE program
State recognized that project managers were needed and were willing to augment staff and invest in them
Initial project management processes defined using industry best practice
State functional workstreams (non-IT) that did not have dependencies on system development adhered to project management methodology
State business leads worked with designated project managers to develop and track task-based project plans for their functional areas
Project managers brought critical tasks to the attention of the business
Common experience and understanding emerged once tools were developed and in place
Project status reports generated and shared on a regular basis, including with leadership
Milestone roadmap created to build urgency and for reporting to executives
More seasoned team members helped “green” team members come up to speed with project management; VHC employees absorbed project management methodologies at a good rate and pace
RACI matrix created for Design, Develop, and Implement (DDI) stage and Operations
Grant management; VHC was able to respond to grant timelines adequately
Certain project management mechanics worked well on a small scale, e.g., meeting coordination, group backlog and activity management

Assessment Area 1 -Project Stakeholder Findings and Recommendations
Able to abandon non-working methodologies and create new processes when needed; recognized the plan needed to be adapted in the middle of the project and adapted it
Risk and issue identification and tracking; one risk log existed and risk and issues began to originate “in the field”
Management decentralized to teams with different workstreams and project managers
Recognition of the need for, and establishment of, the PMO
Ability to leverage federal money to support project management augmentation
Project managers brought structure to the project and were knowledgeable, professional, effective, and cooperative
Daily and weekly business lead meetings effective keeping business leads engaged with each other and about the project globally
<i>Recommendations to continue what worked well</i>
Pairing of project managers with subject matter experts/business leads, allowing the team of professionals to focus on their particular strengths and move the project forward
Strong adherence to project management processes
PMO, business leads, and team leads should keep publishing and presenting project status to the team members, elevating problems, and holding owners accountable
Continue project management basics now that the basics are established
Revisit and refine methodology and processes throughout the course of the project
Continue to have a customer-centric focus in the project management process
<i>What did not work well?</i>
Responsibilities of vendor management and contract management are not well understood by broader AHS involved parties
Not enough time spent training State staff on project management methodology
Lack of written procedures to help VHC staff understand what project management methodology means; existed at a very high level only
No clear definition of roles and responsibilities; lack of common understanding of the roles of the project manager and the business lead
State was focused on the business problem but not on the project management structure to execute the project
Work began without a signed Project Charter
PMO did not run the projects and had no “teeth”

Assessment Area 1 -Project Stakeholder Findings and Recommendations
Project managers not able to fulfill their role but instead were used in diverse ways by the business leads to whom they are assigned and often times relegated to more administrative roles rather than project leadership; made it difficult to establish a culture of individual and group accountability based on project management methodology and tools
Functional management restrained project management presentation of conflicts and issues
Little to no fidelity to the PMO or core project management standards
Program Director was appointed but not provided the resources or authority to ensure compliance with industry best practices for project management
Too many project managers involved in the project, sourced from the same organization, under the same management, compounded by weak project management leadership on the State side
No minutes or action items captured during many meetings
Leadership emphasized and placed pressure on business leads to determine the business processes that would eventually comprise the functionality of the HBE with little guidance on how that should be done
Lack of change management focus for leadership; no clear understanding of the definition of change management and how it was being undertaken on this project
Communication of project artifacts and dissemination of those artifacts challenging, including getting them in front of vendors
Many urgent tasks eliminated the focus on the critical few tasks
Individual sub-plans for workstreams, when placed end to end, never fit within the overall project work plan
No consistency across SoV project plans
No resource-loaded IT delivery project plan/schedule existed, and delivered plans were not followed
Insufficient identification of dependencies between IT project plan and functional operational readiness plans
Lack of clearly defined milestones and contingency plans if milestones were not reached
Outputs of the project management group did not lead to inputs anywhere - leadership did not know what to do with the them (e.g. risks, issues, operational readiness)
Emphasis on policy and schedule instead of operational feasibility
All aspects - scope management, schedule management (detailed baseline and critical path), vendor and contract management, communication plan, resource planning (SoV and vendor), training, operational contingency planning, organizational readiness
Experienced, mature project managers with basic business and IT knowledge were lacking
Inability to hold stakeholders accountable as mapped on the RACI due to constant change, no adherence to job description boundaries, and uneven competencies of the team

Assessment Area 1 -Project Stakeholder Findings and Recommendations
Lack of a communication plan and execution of that plan to agency-wide stakeholders
Lack of clarity regarding the role of PMO
Deliverables submitted for contract payments were of poor quality
IT development and delivery of the project did not follow project management methodologies; no comprehensive end to end plan existed, starting with the procurement through scope and requirements definition and ending with testing and implementation
IT scope and schedule were changed by the vendor without going through the agreed upon change process
Decisions made by the State outside of the change control process resulting in downstream negative results because proper change control and impact analysis processes were skipped for expediency
No budget, cost control, or authority for assigning resources
<i>Recommendations to improve what did not work well</i>
Establish roles, responsibilities, and accountability at the beginning of the project and communicate within the entire organization
Establish and communicate project charters early on
Define what success looks like for the project, communicate this across teams, and manage to it
Define approaches, tools, and methodologies at the start; apply a disciplined approach to the use of these throughout the project
Track action items from meetings until completion if they add value
Make the State part of the team earlier and make CGI meet with front line workers on a regular basis to ensure distribution of info
Provide enterprise-wide training of project management fundamentals to develop internal project management skills; business must understand the role of the PMO and project managers and use them correctly
Document PMO procedures/processes and audit adherence
Require vendor to provide resource-loaded project plan, with SoV dependencies
Develop unified functional and IT project plans with interdependencies, providing a high level common view of the project
Improve technical leadership and involvement in even the earliest parts of the plan development
Document business processes and force routing by RACI for approvals
Enforce minimum standards, with stage gates for go/no-go
Force resolution of conflicts at leadership level
Project management must have some conflict with the business to prevent scope creep and to ensure project managers can act in their designated capacity

Assessment Area 1 -Project Stakeholder Findings and Recommendations
Increase transparency to minimize inter-departmental sabotage
Fully develop contingency plans at a comprehensive detailed level
Provide more flexibility in the project management methodology and processes to adapt to the deficiencies in time, resources, etc.
Strengthen the PMO – provide the necessary resources and give the Program Director authority to execute
Establish structure for project management team
Improve knowledge transfer
Involve experienced people
Explain importance of the project to everyone involved
Use more State project management resources as well as source project managers from multiple vendors, giving State leadership complete control over them.
Empower project managers and allow them to do their jobs (did not give them ownership because they weren't State employees - this was a cultural issue)
Provide more than just verbal support; ensure the project manager is supported throughout and business does not always supersede project management
Deploy project management through the value proposition, accompanied with a core of structure and process
AHS should have one risk and issue template used across all projects to support swift, concise escalation
Grow the scope of project management utilization, with what worked as a foundation to larger scale work plans and integrated views across the project, both State and vendors
Perform early, honest, and frequent reviews of the plan, people, and methodology
Communicate the agreed upon methodologies and plan as clearly and as often as possible
Establish a strong PMO that cuts across the agencies so that subject matter expertise and decision making can be leveraged
Define staff roles and expectations more clearly so staff can successfully support the completion of project deliverables
Establish one PMO/Command Center and adhere to the Change Control Process better
Limit the number of management and assessment tools
Follow the Project Management Plan end to end; change as needed but follow once it is approved for reliable, repeatable output and success
Communicate point to point versus many to many to the degree possible
Improve the velocity of communication

Assessment Area 1 -Project Stakeholder Findings and Recommendations
Get back to the basics on an SDLC methodology and do not move forward with procuring a vendor without proper vetting or executing a schedule that does not show a critical path to success
Better ties between, or a definition of, the contract/procurement/management lifecycle is required
Communication Plan - need regular, broad organizational updates/"goings on" and efficient "closing the loop" for escalated risks and issues with the executive team
Include a quality component to contract deliverable payments
Do not allow a project to go ahead without the primary vendor providing a scope, schedule and budget that can be integrated into the State project plan
Implement SoV standards for project management and enforce not only with project managers but also functional management
Actively manage the risk of process getting overwhelmed by schedule pressures
Consider an AHS Vendor Management Office
Project management vendor should not have also provided staff augmentation to SI as there was a real or perceived conflict of interest
Obtain project management expertise in three areas -industry, Vermont business, product (solution)
Identify who needs to be convinced of the value proposition of project management during the project charter development process; once identified, work with them to facilitate and communicate understanding
Use federal templates and guidelines when possible for budgeting purposes
Improve vendor and State staff project onboarding process
Where feasible and practical, leverage project management expertise from within the State and externally
Free State employees from existing operational responsibilities, reapply them to the project, and backfill them

Table A.2: Assessment Area 2 -Requirements Development

Assessment Area 2 -Project Stakeholder Findings and Recommendations
<i>What worked well?</i>
VHC staff are driven individuals with no "legacy baggage" who understand the business and what requirements are important
Initial requirements sessions were led and documented by external consultant with expertise
Well-defined BRD sessions with a high level of SoV staff engagement by previous IT vendor and consultants (before November 2012)
Using teams of four was a good approach, i.e., each business lead had an assigned project manager, business analyst, and SI counterpart

Assessment Area 2 -Project Stakeholder Findings and Recommendations
SoV spent significant amount of time formulating the business processes that would drive the IT implementation; the team understood that the development should be business focused and not IT solutions focused
SoV business leads vocal in their desire to see results of design sessions with SI, including the output of requirements handwritten on flipcharts
Good contractual specifications of technical standards and applicable regulations
Adopting another state's requirements as an initial development accelerator
State very engaged and set aside significant time to work on requirements; SI worked hard to gather information while staying close to the approved RTM
DII identified the risk of not having clearly articulated business requirements
Nonfunctional (technical) requirements developed well; a clear list exists
From a premium processing perspective, vendor provided much needed technical expertise
Re-scoping of functional requirements occurred in June/July 2013 and were focused on three phases: enroll (October 1), operate (January 1), and optimize (after January 1)
Had very knowledgeable industry, commercial experts involved in requirements development, and the State was able and willing to listen to them
Managed some expectations with federal government and public before October 1, re: not going to make deadline, and some functionality deferred to after October 1
<i>Recommendations to continue what worked well</i>
Create and use BPMs for future projects
Emphasize the need for SoV engagement early in developing requirements, with focused facilitation
Business lead model seems to work well; having business leads with deep subject matter expertise from within existing agencies is effective
Recognize the importance of DII's recommendation for well-defined business requirements
Move from BRD to elaborated requirements gathering and continue to do BPMs
Bring in independent subject matter experts to help with requirements development and functional design, as appropriate

Assessment Area 2 -Project Stakeholder Findings and Recommendations
What did not work well?
Agreed to a set of requirements in the contract with the SI based on another state's system but then added VT-specific business requirements; these decisions were made within the VHC team and did not follow a change control process
State operations teams had a hard time "reinventing the path" from the way legacy systems functioned; lacked the vision for how things "could be" so they built the business requirements from the old system (focused on what they did not want to lose) instead of understanding what the outcomes should be
State team did not have a big picture sense of what the business goals were, where they were trying to get to
A lot of time was misspent modifying Hawaii's requirements instead of starting from scratch
Best practice was not followed for the definition of functional requirements (e.g., flows, use cases, traceability matrices)
Lacked a clear process and tools for managing what scope should be, how to prioritize it, and how to understand the impacts of scope decisions
Dynamically changing federal requirements needed to be incorporated without tracking or change control process for scope management
Requirements were not specific enough and could not be mapped to SoV business processes as they do not all exist
Requirements sessions were not facilitated well by the SI
End users or other non-involved staff that will need to use the system should give their perspective – too 'internal' in perspective to gather requirements
RTM did not equate to the business processes that the business required; the RTM managed by the SI and the expectations from the State for business functionality were never in sync
Re-scoping in mid-2013 was a constructive process and useful, but as time elapsed scope continued to change
Too accommodating of health plan wishes and changing demands, which resulted in loss of time and undue system complexity
Chose to include Medicaid plans, an additional State cost-sharing reduction and State subsidy, etc., in the HBE for October 1; when suggested by the vendor that the State go for "vanilla" for October 1, they were told VT-specific needs did not allow for vanilla
Requirements development was performed in multiple parallel threads so teams did not have visibility into other team's requirements; end result was that interdependent parts did not integrate well
Belief in SDLC and managing scope only held as long as requirements were not being managed or reduced

Assessment Area 2 -Project Stakeholder Findings and Recommendations
Lack of communications on the part of State leadership to front line teams that SI was working from another state's set of requirements
Decisions related to requirements, priorities, and timing were unreasonable given time frame; scope was too big for the time frame allowed
Decisions were made by the State outside of the change control process and resulted in downstream negative results because proper change control and impact analysis processes were skipped for expediency
Change request processes were cumbersome and confusing
Despite the extensive amount of time reviewing requirements, time to revisit open questions was highly inadequate; SI also repeatedly asked State staff to revisit requirements, re-prioritize, add comments, etc. on points already addressed multiple times
Validation of the RTM turned into "recreate" requirements
SI contract included delivery of a technical solution from another state due to transitive procurement process, but the SoV functional requirements and desired scope did not align with this
RTM was incomplete; information was never pulled into a usable document to ensure individual requirements mapped to business processes
Broken chain of authority for business leads responsible for workstreams; no formal routing and approval process
Difficulty understanding which business stakeholder owned which business requirement, resulting in particular challenges such as de-scoping
No explicit strategy or open strategic decisions prevented clarity of business case development
Approach, format, personnel and "owners" changed continuously during requirements gathering with no shared roadmap of understanding
Procurement method for this project created huge obstacles for completing and obtaining agreement by all stakeholders on the functional requirements; discussion and repeated revisions of the requirements continued up until go-live
Requirements gathering process lasted well past the point where development and comprehensive testing was possible; requirements were visited and revisited
Requirements were validated with no regard for the complexity or effort required
Previous efforts to define unique requirements for Vermont that did not get leveraged (VIEWS, Oracle, KPMG)
Project went through several different project managers and functional architects
Lack of involvement of cross-expertise and appropriate stakeholders created challenges when one group felt it was satisfactory and later on another group realized it was not, resulting in requirements that did not meet everyone's needs
De-scoping/re-scoping occurred too late in the project

Assessment Area 2 -Project Stakeholder Findings and Recommendations
Needed more recognition that requirements were evolving throughout the project (Vermont's expectations, CMS guidelines)
State team very thin in terms of redundancy and point people were wearing more than one hat
No system of checks and balances to ensure that business requirements were being met; had to take point person's word for it
Policy people were making IT decisions
IT roles and responsibilities were not and still are not clear; DII was working on the platform but Release 1 was both (platform and project) and then DII started to take over the IT pieces
Did not think about requirements development as an enterprise process (there is existing technical architecture with HSE solution and project, there is no business architecture associated with this)
Business does not have an understanding of nonfunctional requirements, creating disconnects in the process and leading to a lack of transparency to the end user
<i>Recommendations to improve what did not work well</i>
Ensure scope is clear prior to contract being signed and communicate to key project stakeholders
Establish and follow scope management processes and institute checks and balances, including establishing formal change control processes, to ensure they are not circumvented and to minimize scope creep
Establish a business process optimization phase/business process design or redesign activities to translate scope to requirements; BPMs need to be the centerpiece of requirements
Adopt phases to meet deadlines based on prioritized scope
Approach requirements gathering by focusing on the business outcomes, working backwards from there
Understand when de-scoping/re-scoping needs to occur and do it early enough to have an impact
Find a management model that allows for the backfilling of people in their jobs so that they can be more fully dedicated to business requirements development for these projects
Identify functional and cross-functional owners to support requirement definition and validation
Listen to experts who have the industry insight and experience into how to conduct large enterprise software rollouts, and follow proven protocols
State technical expertise needs to be engaged in building IT projects beyond review and critiquing after a best effort has been made
Move beyond power struggles and be one team for Vermonters
Functional requirements must be mapped to business processes, which control scope
Nonfunctional requirements are not based on business processes but cannot be ignored; the Vermont Enterprise Architecture Framework and standard and listed nonfunctional requirements cannot be ignored

Assessment Area 2 -Project Stakeholder Findings and Recommendations
Effort needs to be on what scope is critical and what is “good enough”; not everything can be priority 1
Agree on the RTM validation process and adhere to it
Business must develop tools and processes to prioritize processes and requirements
Establish "owners" of specific scope and make them responsible for communication to others
Ask at the beginning of the project "what is our number 1 goal -e.g., “to stand up a system that works”, determine what needs to be done to accomplish that goal, and communicate that
Understand with the business processes are before developing an SI contract; requirements need to be developed by the business, not the technology vendor, prior to the technology vendor doing requirements validation, design, and build
Avoid changing directions in the middle of the project, and ensure adequate time is built in to develop, review, and obtain sign-off on the requirements early in the project
Communicate a clear definition of business lead roles, responsibilities and accountability to help everyone understand who's supposed to be doing what across the development lifecycle
Drive the requirements process with an overall business strategy; all requirements should be mapped directly to the business process they support
Start with outcomes and develop requirements needed to achieve those outcomes; add a value engineering phase where the cost benefit of specific outcomes can be evaluated
Follow standard contracting processes
Allow for all business leads to weigh in on requirements before signing a contract
Illustrate the process for requirements gathering and over-communicate the defined requirements
Define the business requirements first, then build out to the system requirements
Develop a willingness to make some stakeholders unhappy from time to time and learn to say “no” despite the “yes” culture and culture of inclusiveness
Include the right State people at requirements sessions and empower them to make decisions on behalf of the State, both business and technical
Take time to integrate teams early on for a project of this magnitude
Communicate with those who were impacted when de-scoping activities occur
Proof of concept could have helped to bridge the gap between business needs and requirements
When time is constant, the scope has to change (triple constraint)
Limit the number of people involved, be less inclusive
Consider making the contracting process (RFP development in the area of requirements development) more of an iterative process, e.g., agile, if requirements aren't fully known or defined
Do not box ourselves into a date if the end date is not immovable

Assessment Area 2 -Project Stakeholder Findings and Recommendations
Allowed for more communication amongst the team to understand where they are and what was and was not realistic
Understand best practices, and if you don't then have the right people in the room to understand best practices and those who can identify risks
Take an enterprise approach to managing requirements - looking at business process management, and the big picture
Fully integrate nonfunctional requirements into the process to achieve transparency
Perform a gap analysis for effective requirements development

Table A.3: Assessment Area 3 -Implementation Planning and Readiness

Assessment Area 3 -Project Stakeholder Findings and Recommendations
<i>What worked well?</i>
Project team, which overall had little or no project implementation experience, was incredibly dedicated and willing to work to get a job that was well beyond their control completed
Some contingency planning was developed before October 1
Daily stand up meetings with leadership to check in with business leads responsible for execution
The fact that a plan existed and that people attempted to follow it
The attitude, effort, and commitment shown by all parties was exemplary; all parties -- State and vendors showed each other respect and appreciation throughout the early implementation phase
Education of public (outreach, education, call center)
Privacy, security, and policy training
Development of assister channels (call center, navigators, brokers) related to communications, public relations, etc.
Project manager focus on objectives, countdown, and daily meetings
Partnership with Maximus
Some workflows defined for major business functions was very helpful
Started strong from a planning perspective
Establishment of a PMO (as a virtual organization) with the idea of blowing up the silos within and across State agencies
Navigator program planning
External communications
Wrapped an EA program at the State level around the HSE program and specifically around the shared platform; aligned and created all the component strategies and EA principles to business goals for AHS and SoV IT strategies

Assessment Area 3 -Project Stakeholder Findings and Recommendations
Recommendations to continue what worked well
Continue to expand EA presence
Continue to hire and promote staff who are committed to the goals of the designated project
Use daily stand-up meetings to keep everyone up to date and alert to risks and danger before they arise
Create "SWAT teams" by workstream to quickly remedy issues
Develop internal project management skills so business leads can meaningfully represent their teams and their workstreams in risk analysis. Be clear on who is responsible for being the final voice on the level of risk and who is responsible for accepting stated risks on behalf of the program team
Ensure enough time for implementation planning and assign a resource on the vendor and SoV side to lead jointly
Open communication and mutual respect during difficult times produces the best efforts
Changing the PMO to become part of AHS and bringing on a Program Director and Manager
What did not work well?
SoV did not have a true, functional project plan that reflected the actual approach being taken to manage the implementation
Operational framework was very immature and in a constant state of flux
Use of email instead of other tools for communication, e.g., Acrobat x for routing or workflow management solutions or an updated, well-maintained SharePoint site, etc.
Continuing lack of definition on roles and responsibilities with respect to implementation activities, e.g. training and testing; resulted in several people working on the same task or not doing the task at all
Resource needs identified in readiness were not addressed, repeatedly; not enough resources and the right resources not engaged
Contingency planning should have started earlier, when it was clear the project was not going to be ready
Not enough planning around contingencies and potential failures; planning and readiness focused more on what would happen in the event the deployment went as planned
No dedicated organizational change management existed from the beginning of project; PMO organizational change management was not allowed to deliver until well past critical path, and communications and other change initiatives were not implemented until August for an October launch
Needed to prepare the staff for managing workarounds instead of training for new tools and new processes
Little to no work was done to prepare the organization (existing teams - Medicaid, those dealing with private insurance) for the changes coming

Assessment Area 3 -Project Stakeholder Findings and Recommendations
Little to no opportunity to train the hundreds of personnel who were expected to use the system and to be prepared to interact with customers
Lack of focus on training prior to go-live, including a lack of understanding of the significance of a having a system training environment and training materials
Training was challenging given the lack of product knowledge, working functionality, and DDI deadlines and a train the trainer approach was not appropriate for a project of this magnitude
Appropriate development - test - training - staging - production environments were not available
Scope, functional delivery per approved timelines, and deliverables according to the project plan were and still remain missing
Difficult to plan implementation because it was not clear when things would be delivered
Contingency planning was hampered by a lack of visibility into "what would be there"
In the absence of clear deliverable roadmaps from the SI, planning for readiness became unrealistic
Not having a full IT project plan with testing and training fully mapped out was a critical mistake
Launching while known Severity 1 defects were not fixed was a major issue, along with not fully testing and or training
Speed of delivery and lack of clarity of scope of critical path due to regular de-scoping did not allow for business processes/workarounds to "catch-up" to the changing scope of system delivery
Business leads did not understand the business well enough to engage in implementation planning
Project managers were not well-versed in systems integration and often caused inefficiencies
ACCESS Remediation was not included in any operational readiness processes with VHC; ACCESS Remediation was never a priority for VHC
Business processes were not used during the implementation, which spells doom for COTS projects
No global readiness check list for go -live
Not enough gate checks throughout the project; gate checks that did exist did not have measurable criteria specified ahead of time so that the vendor and the project knew how they would be evaluated during the gate check
Vendor's business model did not allow them to staff the project to fit the constricted timeline
Too much faith in what the SI was telling us and thought we were more prepared than we were
Spent a lot of time on external communications and not enough on internal communications
Did not have an understanding of what it takes to plan an implementation
Refused to pay attention to the red flags
Policy stakeholders with decision making authority had limited understanding of the insurance industry

Assessment Area 3 -Project Stakeholder Findings and Recommendations
Recommendations to improve what did not work well
Stay agile in planning and execution
Communicate progress to the team more frequently
Ensure adequate time is in plan/schedule to build reasonable implementation and deployment plans
Include as much subject matter expertise as possible and have a strong PMO to oversee planning; if external project managers are used, ensure that they have the trust of the business leads
Assign a single leader in charge of oversight of team for planning and deployment, rather than team leadership approach
Develop an implementation team that is charged with planning and executing implementation
Have operational readiness and training handled at an enterprise level
Create cross-functional support systems
Apply best practice project management procedures and adjust for COTS implementations; a COTS package was purchased, but the project was treated as a custom build
COTS methodology and best practice product implementation practices must be used
Think about contingency planning early in the process and think big!
Dedicate resources to contingency planning
Engage in robust contingency and business continuity planning
Eliminate "failure is not an option" zealousness from leadership
Ensure timing for go-live is determined by project readiness and not political deadlines
Follow standard organizational change management processes, e.g., plan, train and enable changes
Implement organizational change management principles as soon as possible when contemplating change, with a dedicated change management professional
Develop a change management approach (bottom up approach, not just top down); get people who will do the daily work on board
Identify and invest in front-line State staff "champions"; involve them in the change management process early on, including developing the "to be" state ahead of go- live and helping to communicate that vision to their teams
Never go live prior to training, and begin awareness training and change readiness training months prior to any anticipated go-live
Develop an outsourced approach to training (not train the trainer) and develop customized training materials for SoV
Follow "transition" phase through proper training for end users.

Assessment Area 3 -Project Stakeholder Findings and Recommendations
Demand demos of system functionality as an input to business process validation and training readiness
Create an implementation plan, assign an accountable resource(s) to driving the plan to completion, and remember that this is not a part time job
Establish walkthroughs between SI and business leads to demonstrate the functionality State is being asked to sign off on so there is confidence it is developed properly
Executive leadership must present a united front (all being on the same side), build bridges, and present vision for success
Develop and complete a global readiness checklist for go-live
Map functional requirements to the implementation timeline
Implement clear and concise gate checks so that the vendor and the State clearly understand expectations as early as possible in the project
Understand level of effort and staff appropriately

Table A.4: Assessment Area 4 -Systems Development, Testing, and User Acceptance

Assessment Area 4 -Project Stakeholder Findings and Recommendations
<i>What worked well?</i>
Hard work, dedication, and long hours by the team to achieve go-live
Initial planning of what the initial system and environment would look like
Decision to bring in a COTS software product solution
Collocating SoV team with SI to ensure real-time input given concurrent design, testing, and UAT approach
Business team encouraged to organize and fulfill business architecture efforts around business processes and capabilities due to insufficient time for them to holistically understand EA and other technology aspects of the project
Establishing clear guidelines for SOA development, nonfunctional requirements, and hosting/maintenance and operations through the EA program
Application Lifecycle Management (ALM) tool provided by vendor set up in a timely fashion
High quality blueprint test cases from federal government as a good place to kick off testing
Availability of strong test management and planning tools
Use of remote team for SI-driven testing
Very strong, organized SoV UAT lead
SI leveraged a shared test center, creating efficiencies in the process
Design and testing of 19 master use cases, preparing the team for UAT

Assessment Area 4 -Project Stakeholder Findings and Recommendations
Collaborative UAT process resulting in the business team understanding how the system would work
SoV and SI decision to perform joint testing based on the time constraints and lack of an environment; showed that functionality existed and that there were many unexpected errors to address
Combining project management, business lead, business analyst, and technical staff to create effective test teams
Actionable testing plan agreed to initially by SI and SoV and modified along the way as needed in order to meet evolving definition of reasonable and achievable
<i>Recommendations to continue what worked well</i>
Collaborate across teams and systems, beginning with initial planning and throughout the project
Ensure each workstream has the consistent assignment of the "four-in-a-box" small development team
Hire professionals who connect to project mission
Have business focus on Business Architecture to support the EA
Purchase of a COTS application instead of opting for custom built
Distinguish between feature development and design integration
If presented with the same time constraints, be creative in developing alternatives and make smart management decisions, such as joint testing instead of a sequential testing
Continue to mature the SoV EA by clarifying the strategies, guiding principles, and architecture for business, application, information, and technical domains
Draw UAT testers from end-user community; encourage business lead involvement in all aspects of testing for their respective workstreams
Leverage current staff to support test case development and testing
Dedicate last two to three months before go-live to testing and readiness only
<i>What did not work well?</i>
Development methodology was not clearly defined (waterfall, agile)
Poor approval structure for moving forward during DDI
Little collaboration between SoV and SI on design; by the time SoV was engaged on design, development was well under way
Code promotion throughout the SDLC is immature
Code releases were too large, rather than having more frequent, smaller code releases
Little ability to have multiple independent code releases in testing simultaneously
Code releases did not fit within maintenance schedules
Scope was dynamic, and go-live code releases were occurring until the last minute

Assessment Area 4 -Project Stakeholder Findings and Recommendations
SI development staff not experienced; mismatch in skills required for technical positions, and limited leadership demonstrated
Lack of SI leadership in the area of development and testing
State staff had limited technical expertise
ACCESS Remediation had to compete for the same business resources that VHC was using for testing; at times it appeared testing resources were off limits to the ACCESS Remediation team due to VHC priorities
Project managers not well-versed in systems integration, often causing inefficiencies
Staff supporting the development and testing process were subcontractors and not accustomed to working with SI
COTS front-end software product chosen was not functional or user friendly
COTS front-end software product was 'vaporware' and warnings of this were ignored
The Vermont citizen's "experience" and system needs were prioritized too frequently over the needs and experience of other stakeholders SoV staff, VHC operations, carriers, etc., which ultimately impacts citizens
Comprehensive use cases were not pre-developed for testing
Requirements were not well defined, diminishing ability to decompose the RTM into tests that proved functionality existed and worked
Testing completed for only very basic things and not for exceptions
Test plan was developed but not followed, e.g., no adherence to entry or exit criteria
Testing was disorganized and only covered a fraction of the necessary scope due to compressed timeline (e.g., integration testing conducted over a weekend, no payment process testing); appeared to be a risk accepted by the SoV
Testing timeframe was significantly compressed, and the time that was available was far too close to the date of implementation to allow for careful and thoughtful resolution of identified issues
Conducting design, testing, and UAT simultaneously created risk
Releases were promoted with known errors that did not have workarounds
Business leads were not adequately involved in testing; at times, they were asked to sign off on UAT with limited or no exposure to the process they were signing off on
Business leads asked to develop UAT scripts without the benefit of a demo of what the system was going to do
Business leads did not have visibility into testing activities outside of UAT
Business leads served as proxies for the stakeholders they represented during UAT
UAT did not give confidence to business leads that the system was ready to be operational

Assessment Area 4 -Project Stakeholder Findings and Recommendations
Business leads' concerns not heeded when they expressed concern to leadership about go-live due to lack of UAT functionality
Inadequate testing to prove the nonfunctional requirements were met by CGI
Integration and regression testing was inadequate, partially due to the project timeline and partially due to the product vendor not having a complete and functional product
Functional design for the end-to-end system existed, but development was not completed by October 1 so end-to-end testing could not be completed
SI did not provide staff or other resources to enable them to develop and deploy the necessary testing environments
Appropriate testing environments were not available; environments that were available were not consistent, so testing resulted in false positives and false negatives
Environments that were available to test in were frequently either unavailable or unstable, making testing extremely challenging
"Walkthrough" demonstration of portal with COTS product vendor outside of the integrated system environment was done in lieu of testing
Inadequate testing of the portal experience for SoV staff and Navigators
Acceptance that SoV staff experience with the system may be compromised without recognizing the downstream customer implications, e.g., functionality missing or not working not only impacts State staff but also the Vermont citizen
No middle-level stakeholder (business lead) interest in testing VHC; reluctance to get engaged with UAT resulted in UAT being abandoned in favor of critical fixes
Joint testing approach (SIT and UAT) suggested by SI exposed users to SIT defects, which was in inefficient use of users' time and caused rework
Testing mentality was 'can we exchange data?' instead of 'is the data exchanged the right data and does it do what we want it to?'
Carriers were not engaged by the State adequately for integration testing; very little carrier functionality testing performed
Recommendations to improve what did not work well
Refrain from procuring a software product that is incomplete or immature, and ensure that the vendor can support their product and the project to enable success
Require the approval of business process and usability requirements related to development
Build the ability to replace vendor staff that is not performing into the contract
Adhere to project schedule and risk management strategies
Approve and utilize the data and software change management migration plans early in the project
Do not compromise best practice under any circumstances

Assessment Area 4 -Project Stakeholder Findings and Recommendations
Do not sacrifice quality for functionality
Provide the project with stronger leadership skills and more experienced staff who understand testing practices and methodology
Have the "four-in-a-box" team champion integration of its proposed features through RACI routing and larger proof of concept integration prototypes; engage that team in owning the use cases and UAT
Contract with "top notch" external project and testing managers
Communicate to executives that cutting corners on development and testing is a critical project risk
Testing must be considered at the enterprise level; coordinating testing across multiple projects and ensuring there are enough resources to accomplish the testing that is needed is critical to future success
Use entry and exit criteria and phase gates
Do not design, develop, and test simultaneously
Engage middle management in the development and testing phase, empower them, and make them accountable
Allow the business to prevent deployment from moving forward without adequate testing and training
Delay deployment until all testing is completed
Develop and approve a full testing plan that includes all testing, e.g. unit, system, integration, stress and user acceptance testing and strong test management plans
Create a robust, integrated test plan developed from the bottom up, including integration and other system touch points, instead of viewing it as just a schedule
Make testing a layered set of processes and follow the System Development Life Cycle; design, testing and user acceptance must be done in separate stages, providing time to react and adjust
Communicate testing plan to all staff
Maintain better coordination and compilation of testing resources
Implement a gate check approach to testing for time constraints to provide confidence to business leads that progress is being made
Tie testing back to requirements
Tie test scripts to use cases
Understand the test scenarios and if they will be executed properly given dependencies, e.g., invoice, billing
Conduct system integration testing thoroughly prior to UAT
Make UAT a critical part of go-live activities
Engage in more testing with carriers for integration testing

Assessment Area 4 -Project Stakeholder Findings and Recommendations
Better prepare test environments to be ready at all stages of development
Have a "sandbox" environment for stakeholders to be shown rather than told what the design is; prototype!
Stand up the environments for system development, testing, deployment, and UAT as soon as possible

Table A.5: Assessment Area 5 -Deployment Planning and Deployment

Assessment Area 5 -Project Stakeholder Findings and Recommendations
<i>What worked well?</i>
SoV teams and SI work ethic and collaboration through deployment planning and deployment
Deployment plans well-developed, discussed, and executed
Upfront definition of defect severity (and their impact to deployment)
Mini-plans (three to five days) used for final deployment and readiness were well-designed and thought out
Crisis management enabled deployment of partial functionality
Resolver group escalation map
SR escalation path
Environment used for final phases of testing was converted to the production environment
Command center added significant value to the project, brought representation from all areas, was critical in diagnosing issues, and connected operations and executive levels for fast decision making
Integration between SoV and SI command centers
DII engagement with SI vendor
Deployment phase had a more structured process for execution and escalating issues
Carriers involved with the October 1 deadline did what they could to make it successful
QHP portion of the project was smoother than the Medicaid portion of deployment
<i>Recommendations to continue what worked well</i>
Build strong, informed deployment plans
Embrace collaborative spirit
Encourage more social and team building exercises between SI and SoV
Create a Command Center with appropriate representation from all functions necessary for as long as the deployment requires
Implement the Command Center earlier in the project, and make it more driven by project managers

Assessment Area 5 -Project Stakeholder Findings and Recommendations
Assign an Information Officer in the Command Center with a clearly defined role within the communications plan
DII should drive minimum State standards on deployment
<i>What did not work well?</i>
Insufficient deployment planning due to timeline, resulting in premature system deployment
Executive level lacked understanding around the significance of impacts to project go-live
Communication to key stakeholders regarding deployment was inadequate and occurred too late in the project
No defined deployment process, deployment management, or configuration management
No automated deployment process or configuration management (e.g., Puppet, Capistrano, or Chef)
All contracted environments were not available
Immature deployment practices and lack of governance caused the development environment to be unusable for several months
Inability to deliver all environments on schedule caused significant delays and logistical problems for deployment, and resulted in going live in the staging environment
User provisioning was uneven and late
Regression testing into other pre-existing systems was not adequate
Deployment occurred without complete clarity on what was being deployed and the manual efforts that would be required after go-live as a result of what was and wasn't deployed; no discussion occurred on trade-off capabilities regarding system functionality
ACCESS code could not go live until VHC went live
Misrepresentation of the severity of deployment issues with SI and COTS vendors not communicating how far behind they were, yet continued to make unachievable promises to the business leads
Deployment planning was based on best case scenarios
Deployment was hindered due to planning and development activities constantly changing with hot fixes, new code releases, and new functionality continuing up to go-live
No clear definition of what was in Release 1 or when it was deemed "complete"
No appropriate contingency plan for deployment
Internal pressure to go-live even when functionality was not ready to be deployed
Underestimated the customer support (call center) requirements and resources needed
Severe portal issues, lack of speed, bugs, and issues upon go-live
Very little functionality deployed by October 1 for carriers, no appropriate visibility into the status of preparations for carriers, and inability to confirm accuracy of carrier information on website

Assessment Area 5 -Project Stakeholder Findings and Recommendations
Couldn't process applications until after October 1
Limited payment options upon deployment
Some nonfunctional requirements, such as access and security, were not provided for October 1
<i>Recommendations to improve what did not work well</i>
Develop strong, informed deployment plan early and ensure it accounts for risks and interruptions in project schedule
Plan and implement training before go-live
Test and ensure functionality prior to deployment
Acknowledge when system isn't ready for deployment
Prepare an adequate number of environments
Publish release notes prior to deployment
Hire consultants specific to the issues to be tackled (e.g., Siebel)
Plan deployment for worst-case scenarios
Provide proper demonstrations
Create a clear understanding and communication of the governance and expectations for deployment across stakeholders early in the project, with guidance from the PMO
Ensure pre-requisites for deployment (technology, infrastructure, support, etc.) are adequate and can be delivered in time to meet the project schedule
De-scope earlier and communicate the importance of this, so the project is reasonable and achievable in the time period given with the resources available
Communicate what is reasonable and achievable for deployment to the public and the team
Clearly define acceptance criteria against best practices within the implementation plan
Spend more time on outreach to carriers and provide technical staff assistance
Develop a mechanism to differentiate decisions that don't need executive leadership involvement
Allow carriers the opportunity to review and ensure health insurance information on the portal is correct so consumers have a positive experience
Consider lessons learned from other states' experiences
Follow the defined deployment plan, and conduct lessons learned after each deployment

Table A.6: Assessment Area 6 -Risk Identification and Mitigation

Assessment Area 6 -Project Stakeholder Findings and Recommendations
<i>What worked well?</i>
Risk identification and documentation occurred
Risk and issue communication and escalation to executive leaders occurred, risk reports were produced and shared, and decisions made along the way
A risk threat matrix was built to identify, track, and quantify significance of the risk for prioritization
Forum to discuss risks and issues existed; frequent meetings to identify risks and issues occurred, and project managers did an excellent job of tracking them
Project managers created a risk methodology and shared the risk register
RAP implemented in May 2013 with the purpose of taking risks and issues out of the business framework and escalating them to another process driven by project managers
<i>Recommendations to continue what worked well</i>
Continue to discuss risks and mitigation strategies in status reports
Define risk and issue processes with management guidelines and communicate them
Emphasize risk management as a collaborative effort
Have a resource devoted to risk management
Develop contingency plans based on identified risks
Continue keeping a risk log and communicating it regularly across stakeholders
Secure enough staff to execute the RAP properly, and gain executive team support for staffing of this process
Allocate staff to fixing one problem immediately when it presents itself as a critical risk
<i>What did not work well?</i>
Lack of a common definition and fundamental understanding of the difference between a risk and an issue
Defects were incorrectly identified as risks or issues rather than functionality that wasn't working, which should be handled differently
Lack of leadership presence and/or engagement at risk status meetings
Executives supported risk and issue management in theory, but did not support it with resources
Too many contractors were involved in the risk process; some positions would benefit from being SoV staff
No comprehensive risk analysis prior to go-live
Lack of regular updates on risk based on changes or new capabilities
Early risks and associated mitigation strategies were focused on technical, not business, risk

Assessment Area 6 -Project Stakeholder Findings and Recommendations
Velocity of the project dictated that a focus be applied to issues, not risks <i>before</i> they became issues
Risks inherent in decisions were not always identified, ultimately leading to greater risks, e.g., the business made some decisions with the best interest of citizens in mind, irrespective of the practicality from an IT perspective and without a full understanding of the implications of those decisions
IT and business were making decisions but often project management wasn't involved, so the decisions and any associated risks weren't captured
Risks were not documented at the level where a single owner could be assigned
Lack of understanding and process for risk and issue prioritization
Volume of risks made it difficult to understand where the emphasis needed to be placed
Team struggled with defining severity based on probability and impact, and impact was not expressed in meaningful terms, e.g. additional cost, quality issues, schedule delays, operational impacts, causing project leadership to make decisions on risk management strategies with limited information
Project management focused on risk identification and tracking but not on mitigating those risks before they became issues
Risks often became issues because project leaders were reacting to crises only and could not focus on risk mitigation due to time and resource constraints
Business leads were responsible for defining and determining mitigation plans for risks and issues with a short timeline and little support
Lack of knowledge of system functionality by business leads prevented them from understanding that certain risks or issues existed
Mitigation strategies for risks and issues were underdeveloped, and contingency planning was insufficient
Contingency planning was not done realistically or by the right people and it occurred too late; staff did not understand the operational implications of the risks involved
No contingency plan executed before October 1, and plans developed prior to that time were not practical or technologically feasible
Ineffective communication of realized risks to external and partner stakeholders to allow for contingency planning on their part
Issues or paths to solutions were not identified by project stakeholders, and they did not always maintain a questioning attitude
Leadership did not address escalated issues and should have been more involved in risk mitigation
Risks were escalated but only managed to acceptance, not to closure
Internal risk and issue warnings were not escalated to executive leadership effectively or efficiently
Executive committee did not get risks early enough; when they did, large reports were often provided rather than an executive dashboard with manageable amounts of information

Assessment Area 6 -Project Stakeholder Findings and Recommendations
"Homework" often wasn't done on risks and issues before they were escalated to the executive committee, increasing the timeframe for resolution as additional questions needed to be answered and information gathered
Disregard for risk amongst the leadership was driven by lack of experience and the attitude that failure is not an option
OSC and ESC did not address high probability and high impact risks
PMO needed to step into risks and issues and help escalate to the executive team to drive closure
Visibility for business leads into the list of risks and issues was limited to what the VHC leadership group wanted to share
Risks were not comprehensive and decision making happened in silos; no risk escalation process or holistic risk plan developed, and only a small subset of risks made it to the register
Lack of understanding of how to read and interpret IV&V reports, risk "colors" (e.g., red, yellow, green) and what to do with the information
<i>Recommendations to improve what did not work well</i>
Implement RACI for clear roles and responsibilities
Hold individuals accountable for completing mitigation strategies (not whole team)
Provide training on risk identification and mitigation to SoV staff, e.g., definitions of risks versus issues, different strategies for dealing with both, how to define severity and priority
Make risk management a more integral part of the program; include them in frequent project reviews as opposed to a stand-alone weekly or bi-weekly meetings
Dedicate appropriate resources to risk identification, tracking, and management
Foster a culture that recognizes that issue and risk management are positives and are critical to project success
Allow for open discussion of negative outcomes or trends without blame
Provide a clear definition of "impact" so that business leads provide consistent impact statements
Ensure that risk management includes prioritization; do not make everything a first priority
Assign probability and impact to risks and mitigate before they become issues
Consider a mechanism for a focus on weekly top ten risks
Manage the risk process across the enterprise, allowing project management leadership to drive that process and ensure appropriate enterprise representation
Train and task middle management with digesting IV&V reports and other risks and issues reports, creating a dashboard with only the most critical risks and issues for executives
Present recommendations along with the risks that are escalated to executives

Assessment Area 6 -Project Stakeholder Findings and Recommendations
Strengthen organization among leadership related to decisions on risks and issues, and build in a project oversight function
Standardize communication of risks and issues and clarify the escalation path to leadership, build a process for visibility and transparency, and expect timely decision making from leadership
Escalation path should include resolution of conflicts, publishing of decisions, enforcement of those decisions, and socialization of them with good communication plan
Define a process for defining and escalating risks that is actionable and meaningful to leadership; involve the right people (business, project managers, IT)
Communicate implications to leadership in a more defined manner to ensure immediacy is understood
Allow the PMO to escalate all urgent risk and issues that have no path to closure to the ESC
Ensure contract holds all vendors accountable to standards, laws, regulations
Require comprehensive risk analysis, including third party verification before go-live
Require a more comprehensive business risks analysis, including contingency options
Require updated risks for every change or new feature through a formal change management structure
Improve mitigation and resolution strategies by involving business leads and subject matter experts when possible
Develop actionable contingency plans
Develop a stronger partnership between technology and business so that the business' desire can be balanced with technological practicality, i.e., the right balance of risk versus reward can be determined
Create a unified issue and risk process between the SoV and the SI
Be transparent about risk with external parties, and partner with them to create contingency plans

Table A.7: Assessment Area 7 -Vendor and State Governance, Management, and Decision Making

Assessment Area 7 -Project Stakeholder Findings and Recommendations
<i>What worked well?</i>
Governor wanted to achieve success and was willing to do what it took, including prioritizing the creation of positions and expediting contracts
Governor attempted to set realistic expectations with the public
Executive leadership functioned well as a group when they came together in the spring of 2013
Project staff, including State project lead, worked hard and were capable
Having new members of the team with a different (outside) perspective was beneficial
A culture was created that supported the project and wanted it to succeed
Policy behind the project was well understood

Assessment Area 7 -Project Stakeholder Findings and Recommendations
Decision making from SoV and SI became more efficient after first few months through regular meeting participation
Once decisions were made, people knew what to do
Management involved in the day to day activities of the project did a good job making decisions to keep the project moving
State made a good effort to have a disciplined approach to making decisions, but there was not always fidelity to the process defined through the PMO, its charter, and RACIs
Process developed to engage carriers for decision making
Good collaboration, advanced planning, and decision making across State government for health plan design work and reviewing rates and forms, with plans approved through regulatory process and made public by July 2013
Contingencies and trade-offs prevented most coverage gaps for citizens of Vermont
Management was present in all major meetings during last couple months
Took an enterprise approach to the project; had an advanced vision to build VHC as an enterprise approach, developing system design that includes VHC, IE, and MMIS
Development of a PMO
Governance was discussed and well-defined, local governance worked well
An HSE-specific governance structure was developed
VHC business owners worked well with SI staff using a governance structure outside of PMO made up of the key SoV and SI staff
Embedding VHC in same Department as Medicaid helped minimize infighting and fragmentation seen in other states
Attempted good governance with SI by working collaboratively to adjust the schedule and creating a positive working relationship on several levels
Made good vendor management decisions like combining premium processing vendor with SI under one contract and making the interface with ACCESS a separate contract
Decision to co-locate SI with the State offices and bring other Agency staff (DCF, AHS) to the location to create a sense of team
Vendors being on-site
Vendors were responsive, available, and worked collaboratively with SoV staff
Vendor provided numerous daily and weekly in-person reporting opportunities to the State
Early in the project, status reports including areas of concern were requested of business leads
Individuals within the business office and in other departments on the project team worked exceedingly hard without documented processes that reflected memoranda of understanding between agencies

Assessment Area 7 -Project Stakeholder Findings and Recommendations
Recommendations to continue what worked well
Strong communication between team members
Empower SoV leadership and management to make decisions without delay
Adherence to established processes, service-level agreements, management structure, RACI
Appreciate the staff's hard work
Have vendor work on-site
Include trade-off analysis and contingency planning as part of the decision making process
Share information at timely (but not excessive) meetings with all necessary parties
Status reports from business leads should continue for the entire project
What did not work well?
Culture expected that people will work 24/7 to fix a problem with minimal support, while still being held accountable for all other responsibilities
Culture was created that placed blame about anything not going well on the SI
Culture does not encourage questioning, conflict, or engaged problem solving, and inexperienced leadership does not know when to raise issues above them
Project constraints were not recognized
Political climate did not allow DII to be forthcoming about the success or failure of the project
Political and policy goals need to be balanced with operational reality
Staffing model was not developed early enough, and there was no appropriate resource plan
Lack of adequate staffing was a major hindrance; project did not have the appropriate type and number of resources
Cultural reluctance to hire more State staff (i.e., desire to keep government small), especially in the face of criticism regarding any money spent for the HBE; leaders needed to submit paperwork to get start the hiring process, and legislative approval needed for some positions
Difficult to recruit staff due to short term positions, part time status, and low pay; also takes time to find qualified people, particularly due to location
Equity issues (pay and level) cause internal conflict
Reluctance to share or move approved full-time, permanent positions within or across other agencies
Several project resources were new to state government and new to the HBE process
Not enough State staff on the project (temporary positions couldn't be effective) and State staff expertise was lacking
Some staff lacked understanding of the insurance industry, which created challenges for communication and decision making without industry knowledge

Assessment Area 7 -Project Stakeholder Findings and Recommendations
Lack of cohesion between SoV and subcontractor staff, and little support in some areas of the project due to their lack of experience or knowledge
Contractors were not legally allow to be part of some meetings so lacked the background on these discussions (e.g., project management contractor could not be part discussions regarding contracting)
Unclear definitions of roles and responsibilities, and a mismatch between authority and responsibility
Empowerment did not occur and no one had real authority
No functional organization chart available to the project
RACI matrix used for the project did not have the right individuals as accountable and did not indicate the final authority for decision making
Business units were not unified and operated in silos
Disconnect existed between policy and operations
Business leads did not interact with IV&V vendor
No fidelity to processes defined through the PMO
No checks and balances built into the project processes
Too many layers
Governance structure was weak and ill-defined; the model was immature and developed as the project evolved
No clarity of a governance structure for the program and how the VHC project fits within the program
OSC charter was unclear
Structure of the OSC did not work; meetings were more a forum for opinions than a decision making body of business and technical leads
OSC was ineffective, with too many people to make decisions or provide guidance
Lack of understanding of the role and value of the OSC; some leaders stopped going to the meetings because they were not perceived as a good use of time
ESC was ineffective at quickly resolving any issues or decisions that were escalated to them and were not fully engaged in this project
Misunderstanding regarding the Program Director role; some thought person in this position should deeply understand project management and others thought the person should deeply understand the business side
Unclear who was responsible for the HBE – the State CIO or the AHS CIO
Governance structure did not define what level the executive committee should function at, so they operated at a higher level than was effective, but were also expected to be 'in the weeds' at times
More transparency and understanding was needed regarding DII roles, and their expertise should have been leveraged more

Assessment Area 7 -Project Stakeholder Findings and Recommendations
Lack of communication between committees; too many committees and too many meetings being held
Decisions were not made in a timely manner, nor were they based on facts or directed toward fixing the problems
Decisions were made based on short term objectives rather than focusing on the priority items that lead to the most successful outcomes; speed seemed to be the objective, not success
Politics appeared to drive decisions
Lack of shared objectives for decision making
Decisions were being made outside of group structure, were not being documented, communicated, or followed through on
Some decisions made by a single executive or sub-group of executive leadership without subject matter experts/business leads being involved and providing input
Repeat discussions about problems that had already been solved due to poor decision communication
Lack of communication regarding project decisions led to inefficiencies for business leads
Decisions were made in silos
Often appeared that the vendor was driving decision making
Lack of clarity about what DII (broader than just PMO) and VHC is responsible for regarding vendor management
No centralized processes, procedures, and clear responsibility for vendor and contract management
Environment not set up to hold vendors accountable
Never a consistent SI point of contact assigned to the business leads, and frequent changes in who was assigned where
SI should have been more aggressive in client management; should have been more empowered to do their job with the experience they bring to the table
SI not transparent with timelines, which created a domino effect for the rest of the project
Long term view of the program for upcoming releases such as single payer, IE and other HSE efforts negatively impacted the ability to deliver Release 1
Converting enterprise vision into operations was difficult because this vision relied on 'buying' services from other State agencies due to funding
External communication about what challenges were coming and appropriate expectation setting with the public and press could have been improved
Very little project status reporting or communication, including to carriers and other external stakeholders
External business partners sometimes heard important news first through the press rather than directly from the SoV

Assessment Area 7 -Project Stakeholder Findings and Recommendations
Many government entities involved in establishment of the HBE, often with overlapping jurisdictions, making it unclear to external stakeholders and business partners who owned what, who made decisions, and at what level
Multiple internal SoV entities needed to understand and incorporate feedback from carriers, leading to time delays; too many people had to approve established processes for carriers, and it was often unclear who at the State needed to answer questions
Federal government “winging it” led to more flexibility but also more uncertainty; when issues were raised they looked the other way, and this reinforced poor behavior
Recommendations to improve what did not work well
Create a culture that is transparent about the political objectives and timelines by balancing business and technical reality with policy goals
Create a ‘critical success factors’ list to help with go/no-go decision making
Create centers of excellence like DII has for Cloud Management and Service Oriented Architecture
Define staffing model early on and submit staffing requests to the appropriate agencies
Leverage the governance structure and make sure people understand roles and responsibilities and how to use existing communication channels
Staff the PMO appropriately and don't allow it to be circumvented
Empower the Program Director to be able to balance political needs, delivery reality, and operational implications of options
Engage strong leadership to provide oversight across and between agencies, let them lead, and make them accountable
Ensure appropriate representation on both the OSC and ESC to ensure decisions and guidance is timely and effective
Close the gap between DII and AHS in terms of governance, roles, and responsibilities
Make governance group a manageable size so they can be nimble and make timely decisions
Develop a dashboard with risks and decisions for executive leadership
Provide project teams with clear business, change management, and decision making processes and levels of authority
Understand which decisions can be delegated with the “trust but verify” approach; balance micromanaging with allowing people to make decisions in a timely way
Build a strong management team who are empowered but do not try to solve every problem themselves, i.e., they hire people who can do what they cannot do
Develop shared objectives and a shared vision of the future to make facilitate joint decision making
Establish and communicate consequences for not supporting decisions that are made or for sabotaging decisions

Assessment Area 7 -Project Stakeholder Findings and Recommendations
Improve communication of decisions to all key stakeholders
Improve the ability for business leads to communicate consequences of decisions (e.g., de-scoping) and the impact on Vermonters and program integrity to leadership
Create minutes, decisions, and actions for every meeting
Executive team should consider a mechanism for elevating dissenting opinions about decisions made at the executive level
Provide strong vendor management by holding the vendor accountable based on contractual commitments, and penalize them if they don't deliver
Make vendor management the purview of project management, adhering to published, consistent SoV standards that can be learned and relied upon
Bring in independent assistance, such as quality assurance, to provide a bridge between business teams and SI
Improve the State's ability to review subcontractors and replace ones that are not working out well
Create a certain level of trust in the SI and believe their feedback regarding what is possible – don't let policy dictate system functionality
Empower appropriate staff to make decisions, engage a strong Program Manager and Program Director that will be liaisons to the executive committee
When doing something new, understand the scope, level of effort, and resources needed; bring in business managers and involve them in the process from day one
Create a Communication Center
Improve communication between the State's enterprise PMO and SI project management
Improve communication between business stakeholders at all levels
Ensure a detailed communications plan is in place and is supported by all stakeholders
Consider newsletters to improve communications across a broad group
When communicating with carriers, issue information in writing (e.g., bulletins)
Move faster on contractor decisions, with solid requirements and scope
Add single payer to the scope of the HSE program

Appendix B: Glossary of Acronyms

Table B.1: Glossary of Acronyms

Acronym	Definition
ACA	Affordable Care Act
AHS	Agency of Human Services
ALM	Application Lifecycle Management
BPM	Business Process Model
BRD	Business Requirements Document
CIO	Chief Information Officer
COTS	Commercial Off –the-Shelf
DDI	Design, Development, and Implementation
DII	Department of Information and Innovation
EA	Enterprise Architecture
ESC	Executive Steering Committee
HBE	Health Benefit Exchange
HIE	Health Information Exchange
HSE	Health Services Enterprise
IE	Integrated Eligibility
IT	Information Technology
IV&V	Independent Verification and Validation
MMIS	Medicaid Management Information System
OSC	Operations Steering Committee
PMO	Project Management Office
RACI	Responsible, Accountable, Consulted, and Informed
RAP	Rapid Action Plan
RFQ	Request for Quote
RTM	Requirements Traceability Matrix
SDLC	Systems Development Lifecycle
SI	Systems Integrator
SOA	Service-Oriented Architecture
SoV	State of Vermont
UAT	User Acceptance Testing
VHC	Vermont Health Connect