Overview

- Executive Summary
- IV&V Activities
- IV&V Findings and Recommendations
- Appendices
  - A – Findings and Recommendations Log
  - B – Inputs
# Executive Summary

**Overall Project Health:**

The overall project health has reduced from caution to a good criticality rating due to successful mitigation of risk related to the deliverable expectation document (DED) process for future Iterations and the verification of requirements traceability of requirements to users in TFS. Two findings were closed during this reporting period and no new findings were opened. Thus far, the project remains on schedule for completion.

<table>
<thead>
<tr>
<th>Apr 18</th>
<th>May 18</th>
<th>Jun 18</th>
<th>Process Areas</th>
<th>IV&amp;V Observations</th>
<th>Overall Health</th>
</tr>
</thead>
<tbody>
<tr>
<td>L</td>
<td>M</td>
<td>L</td>
<td><strong>Vendor Project Management</strong></td>
<td>Various potential impacts on the project timeline (e.g., deliverable reviews, resource availability, process improvements) have been cited in this process area. Several of the findings that IV&amp;V is monitoring relate to ensuring that system functionality will meet the DOH's needs. See pages 7 – 8 for more details on IV&amp;V findings in this area.</td>
<td>G</td>
</tr>
<tr>
<td>L</td>
<td>M</td>
<td>L</td>
<td><strong>Requirements Management</strong></td>
<td>TFS governance has not been thoroughly established, which can lead to inadequate requirements management. Requirements elaboration, including the formalization of agreed-upon scope changes, is not currently tracked in TFS, which can negatively impact the project timeline.</td>
<td>G</td>
</tr>
<tr>
<td>L</td>
<td>M</td>
<td>M</td>
<td><strong>Design and Development</strong></td>
<td>The project is now adhering to a new DED process and has approved all but a handful of user stories for future Iterations. The Architecture Blueprint, however, has not yet been updated but the project is moving forward with design and development activities for Iterations 2 and 3. Finally, a list of over 35 functionality-related questions, concerns, and potential gaps were documented during the Iteration 2 demonstrations. These items have been added to the product backlog but it is not clear how they will be addressed.</td>
<td>Y</td>
</tr>
</tbody>
</table>

PCG Technology Consulting

Public Focus. Proven Results.
# Executive Summary

<table>
<thead>
<tr>
<th>Apr 18</th>
<th>May 18</th>
<th>Jun 18</th>
<th>Process Areas</th>
<th>IV&amp;V Observations</th>
<th>Overall Health</th>
</tr>
</thead>
<tbody>
<tr>
<td>n/a</td>
<td>L</td>
<td>L</td>
<td>Testing</td>
<td>The contract requires delivery of Test Cases with Test Plans, and the State needs to be afforded the opportunity for review. Per the Draft Iteration 2 DED, a listing of test cases will be delivered with the Iteration 2 Test Plan. Per the DED, this will take place the week prior to the iteration 2 demo. The project is investigating an improved mechanism for validating test cases and ensuring timeliness.</td>
<td>G</td>
</tr>
<tr>
<td>n/a</td>
<td>L</td>
<td>L</td>
<td>Data Management</td>
<td>There are currently no open IV&amp;V findings in this process area. The Data Management Team continues to meet regularly and work collaboratively on the development of the Data Dictionary and the Data Management Plan.</td>
<td>G</td>
</tr>
<tr>
<td>M</td>
<td>M</td>
<td>M</td>
<td>Organizational Change Management</td>
<td>A comprehensive strategy to support user adoption has been agreed to; however, the agreed upon artifacts and documents have not yet been provided. Without a documented Organizational Change Management (OCM) Plan, the project is challenged with ambiguity regarding roles, task ownership, and activity timelines for estimating resources and other OCM-related costs. IV&amp;V anticipates the risk in this category will be effectively reduced when the OCM Plan and related documentation has been completed and approved. In addition, DOH awaits the training (sandbox) environment for collecting user feedback during Iteration 2. The execution details regarding the sandbox environment (e.g., entrance criteria, feedback loops, etc.) have not yet been defined. Although the BHA completed a &quot;User Engagement and Opportunities for Organizational Change Management&quot; survey to gather user adoption metrics from SMEs to help focus their OCM efforts, IV&amp;V is not aware of any follow-up or mitigation activities identified from the survey results though survey feedback highlighted areas of improvement.</td>
<td>Y</td>
</tr>
</tbody>
</table>
As of this reporting period, PCG has identified a total of 29 findings (2 issues, 21 risks, and 6 observations) on the Hawaii BHA Integrated Case Management System Project. Focusing on the total number of IV&V findings, 14 of the 29 findings have been closed, leaving 15 open findings. Of those, there are two medium issues (13%), 1 medium risk (7%) and 12 low risks (80%) as shown below.
IV&V Findings and Recommendations

Process Areas Reviewed

Throughout this project, IV&V will verify and validate activities performed in the following process areas:

- Vendor Project Management
- Requirements Management
- Design and Development
- Testing
- Data Management *
- Organizational Change Management

* There are currently no open IV&V findings in this process area.
## IV&V Findings and Recommendations

### Vendor Project Management

<table>
<thead>
<tr>
<th>#</th>
<th>Key Findings</th>
<th>Criticality Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
<td><strong>Unclear review and approval process for project deliverables:</strong> The project initiated a new DED (Deliverable Expectation Document) process for Iteration 2 deliverables. IV&amp;V provided comments to DOH on the DED and recommended clarifications related to acceptance criteria. IV&amp;V will continue to monitor the new deliverable management process throughout Iteration 2. Further, IV&amp;V continues to monitor the status of the three outstanding deliverables from Iteration 0: Data Management, System Security, and Architecture Blueprint. These deliverables establish a framework and provide principles and standards that other project deliverables inherit in order to align with the project’s objectives and processes.</td>
<td>L</td>
</tr>
<tr>
<td>19</td>
<td><strong>Access to enhanced federal funding may impact the project budget and/or scope:</strong> Although some constraints that were impeding the project’s ability to access enhanced federal funding have been removed (e.g., DHS' completion of P-APD), concerns still exist around the project’s ability to draw down enhanced federal funding. DOH will submit the IAPD to DHS for formal submittal to CMS as soon as possible.</td>
<td>M</td>
</tr>
</tbody>
</table>

### Recommendations

<table>
<thead>
<tr>
<th>Recommendations</th>
<th>Progress</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Clarify the deliverable review and approval processes in accordance with RFP requirements and agree on deliverables best suited to be &quot;live&quot; documents (updated throughout the project).</td>
<td>In-process</td>
</tr>
<tr>
<td>• BHA to work closely with DHS to pursue available funding options.</td>
<td>In-process</td>
</tr>
<tr>
<td>• SI to clarify acceptance criteria for each Iteration 2 deliverable in the Iteration DED.</td>
<td>In-process</td>
</tr>
</tbody>
</table>
### Monitoring for Closure

<table>
<thead>
<tr>
<th></th>
<th>Finding</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td><strong>Long sprint / iteration cycles:</strong> The SI is working to establish a training environment for DOH to conduct demonstrations on the previous iteration’s functionality in order to support OCM efforts. IV&amp;V will monitor impact of implementing this environment.</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td><strong>Attention to process improvement seems insufficient:</strong> DOH recorded over 35 gaps/questions/concerns from the Iteration 2 demo that should be addressed. These items are currently logged as ‘requests’ in the Production Backlog to be planned into future iterations. This process should be re-evaluated since some requests may not be appropriately deferred to a future iteration.</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td><strong>Late-game analysis of requirements awaiting details from external sources:</strong> Meetings and discussions continue (e.g. with Med Quest) in order to address pending decisions.</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td><strong>SI identification/tracking of pain points:</strong> While CAMHD and DDD have identified pain points, the SI’s process to address these pain points has been unclear. A weekly Thursday meeting with an open agenda to answer questions and respond to issues as they are identified has been initiated.</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td><strong>SI Resource Constraint:</strong> Key SI resources have returned to the project. <strong>IV&amp;V is closing this risk.</strong></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td><strong>Competing priorities of BHA SMEs could negatively impact the project timeline:</strong> At times, project team members have been constrained by other duties and have shown some resistance to participate in project activities. BHA continues working with SI to mitigate resource challenges.</td>
<td></td>
</tr>
<tr>
<td>28</td>
<td><strong>Contractual DED Process not being utilized by SI:</strong> The rating for this risk has been reduced to Low since the draft DED for Iteration 2 deliverables has been delivered for DOH review. IV&amp;V has assessed for completeness and fitness, and provided feedback to DOH recommending clarification regarding acceptance criteria for each Iteration 2 deliverable.</td>
<td></td>
</tr>
</tbody>
</table>
# IV&V Findings and Recommendations

## Requirements Management

<table>
<thead>
<tr>
<th>#</th>
<th>Key Findings</th>
<th>Criticality Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>14</td>
<td><strong>Tracking of requirement elaborations:</strong> Requirements elaboration (i.e. the formalization of scope changes based on agreements between the SI and BHA) is not currently tracked in TFS, which can generate rework and impact the project schedule. IV&amp;V has observed the review and approval of user stories but not requirements which may not be a comprehensive approach. In June, IV&amp;V completed a targeted assessment and confirmed that the project is able to trace requirements to user stories to test cases in TFS for Iterations 1 and 2. In light of this validation, IV&amp;V is <strong>reducing the rating of this risk to Low</strong>. However, IV&amp;V’s assessment did not include confirmation of regarding the ‘completeness’ of requirements elaboration into downstream user stories, as the assessment scope was limited to only Iterations 1 and 2.</td>
<td>L</td>
</tr>
<tr>
<td>20</td>
<td><strong>TFS governance process:</strong> TFS (Microsoft’s Team Foundation Server) is the Project’s central repository database of all requirements, user stories, development tasks, test cases, bugs, and source code. While some progress has been made towards clarifying TFS governance (how the tool, and certain aspects of the tool will be used), concerns remain that confusion may still exist, which can lead to inadequate requirements management.</td>
<td>L</td>
</tr>
</tbody>
</table>

## Recommendations

<table>
<thead>
<tr>
<th>Recommendations</th>
<th>Progress</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Request SI define and employ a process for requirements elaboration tracking and approval, including user stories</td>
<td>Completed</td>
</tr>
<tr>
<td>• Request IV&amp;V perform a targeted requirements traceability assessment</td>
<td>Completed</td>
</tr>
<tr>
<td>• Request SI to document a TFS governance process which is approved by BHA</td>
<td>In-process</td>
</tr>
</tbody>
</table>
# IV&V Findings and Recommendations

## Design and Development

<table>
<thead>
<tr>
<th>#</th>
<th>Key Findings</th>
<th>Criticality Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td><strong>Use of accelerator:</strong> While IV&amp;V recognizes efficiencies can be gained with an accelerator, failure to optimize the system to meet BHA specific needs is a potential risk that should be regularly monitored. The SI is working on documentation which outlines how the system is configured, including .net code or scripts, to assist the DOH understanding of the level of customization and/or level of effort of making changes using the accelerator.</td>
<td>L</td>
</tr>
<tr>
<td>21</td>
<td><strong>Architecture Blueprint deficiencies:</strong> The updated Architecture Blueprint is still pending delivery by the SI. Since Iteration 1 is now complete and Iterations 2 and 3 are in process, IV&amp;V has transitioned this finding from a risk to an issue. Further, planning for Phase 2, which includes interfaces, new resources, and potentially a revised approach, is underway and, until the blueprint is finalized, it is unclear if Phase 2 planning activities are aligned with the blueprint.</td>
<td>M</td>
</tr>
<tr>
<td>24</td>
<td><strong>Delays in approving user stories could impact the project schedule:</strong> The project has approved all but a handful of user stories for future Iterations. <strong>IV&amp;V is closing this risk.</strong></td>
<td></td>
</tr>
<tr>
<td>27</td>
<td><strong>DOH requires procurement of Scribe Insight Licenses for Data Conversion activities:</strong> Scribe Insight licenses are required to create Scribe packages to migrate and program data transformations for legacy data dictionaries. It is unclear when these licenses are required to support the data conversion effort in accordance with the project work plan but the project is actively discussing the procurement options for these licenses.</td>
<td>L</td>
</tr>
</tbody>
</table>

### Recommendations

- **BHA to ensure SI design decisions are based on what's best suited for BHA and not on existing (base) accelerator functionality.**
  - **Progress:** In-process

- **SI to document sufficient design details in the architectural blueprint, and that the content should focus on what the SI will do as opposed to what the products/platform can do.**
  - **Progress:** In-process

- **DOH to procure Scribe Insight licenses in time to support project work plan tasks and activities**
  - **Progress:** In-process
IV&V Findings and Recommendations

Testing

<table>
<thead>
<tr>
<th>#</th>
<th>Key Findings</th>
<th>Criticality Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>29</td>
<td><strong>Timing of Delivery of Test Case Details:</strong> The contract requires delivery of Test Cases and Scripts with Test Plans, and the State needs to be afforded the opportunity for review. Per the Draft Iteration 2 DED, a listing of test cases will be delivered with the Iteration 2 Test Plan. Per the DED, this will take place the week prior to a the iteration 2 demo. The project is investigating an improved mechanism for validating test cases and ensuring timeliness. IV&amp;V will continue to monitor the timing of the delivery and confirmation of test cases and scripts in the Iteration 2 and 3 Test Plans.</td>
<td>L</td>
</tr>
</tbody>
</table>

**Recommendations**

- SI to include test cases, scripts, and expected and actual results associated with each Iteration Test Plan for DOH review and approval

**Progress:** In-process
IV&V Findings and Recommendations
Organizational Change Management

<table>
<thead>
<tr>
<th>#</th>
<th>Key Findings</th>
<th>Criticality Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td><strong>Minimal attention to User Adoption (buy-in):</strong> The SI has committed to a training (sandbox) environment to provide the opportunity for user feedback beginning with Iteration 2. The execution details regarding the training environment (e.g., entrance criteria, feedback loops, etc.) have not yet been defined. The BHA completed a &quot;User Engagement and opportunities for Organizational Change Management&quot; SME survey to gather user adoption metrics to help focus their OCM efforts. IV&amp;V is not aware of any follow-up or mitigation activities identified from the survey results though survey feedback highlighted areas for improvement. Finally, a documented OCM Plan would serve to alleviate the ambiguity regarding roles, task ownership, and activity timelines. IV&amp;V plans to review the draft OCM plan which is scheduled to be delivered in June.</td>
<td><strong>M</strong></td>
</tr>
<tr>
<td>6</td>
<td><strong>Use of pain points to improve OCM:</strong> (See Vendor Project Management Finding #6) In support of DOH’s OCM strategy, the SI has been working closely with DOH to develop a process for how the project will leverage the BHA pain points list throughout the project. The BHA has requested more information from the SI on the practical application of its OCM strategy as the project moves ahead. The Weekly Thursday meeting between the SI and the State enables the project to touch base on project-related impediments or issues which includes OCM-related topics as well but IV&amp;V has not yet observed any discussion related to pain points in this meeting.</td>
<td><strong>L</strong></td>
</tr>
</tbody>
</table>

**Recommendations**

<table>
<thead>
<tr>
<th>Recommendations</th>
<th>Progress</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Request the SI support DOH in the development of a comprehensive OCM strategy.</td>
<td>In process</td>
</tr>
<tr>
<td>• Agree on an approach for how the SI will utilize the pain point list created by BHA</td>
<td>In process</td>
</tr>
<tr>
<td>• Recommend SI commence work on a comprehensive OCM Plan immediately</td>
<td>In process</td>
</tr>
</tbody>
</table>
Appendix A

This appendix provides the details of each finding and recommendation identified by IV&V. Project stakeholders are encouraged to review the findings and recommendations log details as needed.

- See Findings and Recommendations Log (provided under separate cover)
- Project Health Rating Definitions

- **G**
  - The project is under control and the current scope can be delivered within the current schedule.
  - The project’s risks and issues have been identified, and mitigation activities are effective. The overall impact of risk and issues is minimal.
  - The project is proceeding according to plan (< 30 days late).

- **Y**
  - The project is under control but also actively addressing resource, schedule or scope challenges that have arisen. There is a clear plan to get back on track.
  - The project’s risk and/or issues have been identified, and further mitigation is required to facilitate forward progress. The known impact of potential risks and known issues are likely to jeopardize the project.
  - Schedule issues are emerging ( > 30 days but < 60 days late).
  - Project Leadership attention is required to ensure the project is under control.

- **R**
  - The project is not under control as there are serious problems with resources, schedule, or scope. A plan to get back on track is needed.
  - The project’s risks and issues pose significant challenges and require immediate mitigation and/or escalation. The project’s ability to complete critical tasks and/or meet the project’s objectives is compromised and is preventing the project from progressing forward.
  - Significant schedule issues exist (> 60 days late). Milestone and task completion dates will need to be re-planned.
  - Executive management and/or project sponsorship attention is required to bring the project under control.
## Criticality Ratings

<table>
<thead>
<tr>
<th>Criticality Rating</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>H</td>
<td>A high rating is assigned if there is a possibility of substantial impact to product quality, scope, cost, or schedule. A major disruption is likely and the consequences would be unacceptable. A different approach is required. Mitigation strategies should be evaluated and acted upon immediately.</td>
</tr>
<tr>
<td>M</td>
<td>A medium rating is assigned if there is a possibility of moderate impact to product quality, scope, cost, or schedule. Some disruption is likely and a different approach may be required. Mitigation strategies should be implemented as soon as feasible.</td>
</tr>
<tr>
<td>L</td>
<td>A low rating is assigned if there is a possibility of slight impact to product quality, scope, cost, or schedule. Minimal disruption is likely and some oversight is most likely needed to ensure that the risk remains low. Mitigation strategies should be considered for implementation when possible.</td>
</tr>
</tbody>
</table>
Appendix B: Inputs

This appendix identifies the artifacts and activities that serve as the basis for the IV&V observations.

Meetings attended during the reporting period:

1. Weekly SI project status meetings (5/26/18 – 6/22/18)
2. BHA IV&V Monthly Report review meeting
3. BHA/RSM IV&V Monthly Report review meeting
4. IV&V Status meeting (6/8/18)
5. Iteration 2 Demonstrations (6/12/18)
6. BHA ITS Weekly Status Meeting (selected)
7. BHA ITS Iteration 3 Planning (series of 3 meetings)
8. Weekly Data Migration Meeting (selected)
9. Daily Scrum meetings (selected)
10. RSM Phase 2 Planning Meetings (selected)

Artifacts reviewed during the reporting period:

1. SI Iteration Plan
2. SI Iteration Test Plan
3. SI Iteration Schedule
4. SI Weekly Status Reports
5. Daily Scrum Notes (selected)
6. SI Project Schedule

Eclipse IV&V® Base Standards and Checklists

[Image: Eclipse IV&V Standards]
<table>
<thead>
<tr>
<th>ID</th>
<th>Date</th>
<th>Overview</th>
<th>Significance</th>
<th>Recommendation</th>
<th>Updates</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>9/1/17</td>
<td>Long sprint / iteration cycles</td>
<td>Low</td>
<td>SI's change to employ long iteration cycles. Typical agile development projects employ two-week iteration cycles. The benefits of Agile development revolve around timely feedback from users based on short iteration cycles. Longer iteration cycles can introduce a risk that the SI will waste valuable time developing designs without timely user feedback to course correct, which could negatively impact the project schedule and budget.</td>
<td>Recommend SI request the SI continue to provide further DISC and iteration activity details and request the SI engage with key SME's throughout the iteration to ensure the system design and functionality meets their needs and expectations. SI will continue to monitor to validate that the SI's expectations are met.</td>
</tr>
<tr>
<td>3</td>
<td>9/1/17</td>
<td>Attention to process improvement seems insufficient</td>
<td>Low</td>
<td>SI could lead to a 'faster' design that automates existing processes rather than improve them.</td>
<td>SI recommends that SI solicit expectations and request greater detail around the SI's 'to-be' analysis. Other suggestions include: 1) Consider a short CRM overview session for SME's to familiarize them with CRM capabilities to better understand and articulate process improvements that can be supported by the Dynamics CRM platform. 2) Consider demo's from other similar SI's to Dynamics CRM implementations to better understand and articulate process improvements that can be supported by the Dynamics CRM platform. 3) Meet with the SI to solicit elicitation and maintenance of prioritized business problems, pain points, and improvement opportunities that are reviewed with SME's regularly to ensure the solution is solving the right business problems and taking advantage of opportunities to improve processes through the new CRM capabilities. SI will continue to monitor for instances where process improvements should be implemented and validate that the SI's expectations are met.</td>
</tr>
<tr>
<td>Id</td>
<td>Identified Date</td>
<td>Summary</td>
<td>Observation</td>
<td>Significance</td>
<td>Recommendation</td>
</tr>
<tr>
<td>----</td>
<td>----------------</td>
<td>---------</td>
<td>-------------</td>
<td>--------------</td>
<td>----------------</td>
</tr>
<tr>
<td>1</td>
<td>09/01/17</td>
<td>Late-game analysis of requirements awaiting details from external sources</td>
<td>Apparent the SI does not perform late-game analysis of requirements, preferring to define all user stories upfront until other dependencies are known. For example, instead of testing the DHS interface requirement specification on hold until it's clear whether DHS will provide a web service, the SI is now defining specifications for a manual import (non-web service).</td>
<td>One of the primary benefits of an Agile approach is that requirements are not ready to be fully defined (e.g., requirements that are awaiting outside agency information/details), can be addressed later without a loss of productivity. An unwillingness to define requirements at a later date may increase the risk that the SI develops features that are not needed or, in time, where it makes sense, on requirements with external dependencies. Once an agreement is reached, IV&amp;V will continue to monitor to validate that the BHA's expectations are met.</td>
<td>Recommend BHA and the SI come to agreement on a limited list of requirements that will be defined at a later date. Recommend the SI avoid spending time where it makes sense, on requirements with external dependencies. Once an agreement is reached, IV&amp;V will continue to monitor to validate that the BHA's expectations are met.</td>
</tr>
<tr>
<td>2</td>
<td>09/01/17</td>
<td>Identify/track tracking of pain points</td>
<td>If currently does not track or effectively utilize business process pain points.</td>
<td>Agile methods typically focus on solving real problems and employ methods to allow the users to provide timely (typically, with shorter sprint) feedback to ensure that the business problems being solved. Tracking pain points can be an effective OCM strategy for user adoption and buy-in by providing visibility to the users of problems that the system is solving as well as showing them transiability of pain points to system features during sprint demos. Failure to track pain points and business problems can lead to a final product that fails to provide meaningful value to the users. Failure to succinctly document, track, and reference business process pain points in sprint demos could lead to reduced user adoption and executive buy-in, support, and satisfaction.</td>
<td>The SI does not currently have a prioritized list of pain points in the project. The project has an opportunity to swap out functionality for requirements whose details may become more visible at a later point in the project. However, it may not be clear that swapped out functionality has an associated future cost as it's likely the SI will need to implement (and acquire separate funding for) features that get swapped out sometime in the future.</td>
</tr>
</tbody>
</table>
Recognizing that the SI has committed to a training (sandbox) environment for SMA validation of functionality and/or to provide the opportunity for user involvement, IV&V would suggest that other measures should be taken as well. For example, although the State has initiated the practice of tracking pain points, the process for how the SI will utilize this list has not been clearly identified and monitored. Tracking pain points can be an effective OCM strategy for user adoption and buy-in as it provides visibility to the users of the problems the system is actually solving and provides traceability of pain points to system features during sprint demos.

IV&V also recommends that the SI adopt a general user adoption strategy going forward. IV&V will continue to monitor to validate that the SI’s expectations are met.

3/2/18: The SI view seems to be that this risk should be addressed as part of OCM which is outside the scope of their contract. IV&V has explained that opportunities to increase user adoption can occur throughout the SDLC and the SI should take advantage of those opportunities whenever possible as part of good SDLC practices.

3/9/18: The SI has requested the BHA request the SI to identify strategies for BHA and not on what functionality already exists to suggest design concepts. Although the SI has committed to a training (sandbox) environment for SME validations of functionality and to provide the opportunity for user involvement, IV&V would suggest that other measures should be taken as well.

3/12/18: Unclear if the SI is providing sufficient mid-sprint demos to validate user story implementations. IV&V is aware of one such demo reported by BHA during iteration 1; seems this demo was initiated by BHA.

3/15/18: BHA is in the process of gathering feedback from their users/SMs through a “User Engagement and opportunities for Organizational Change Management” survey to address this risk. It has committed to mid-sprint SMA validations of functionality which should provide the opportunity for greater user involvement.

3/17/18: BHA indicated that RSM subcontractor met with them recently to address OCM.

3/21/18: The SI has released a new plan and presented to BHA a high-level strategy that seems to address some elements of user adoption. The IV&V team will continue to monitor this risk in future reporting periods.

5/21/18 - SI committing to training (sandbox) environment for Division level staff beginning with iteration 2. In addition, the project conducted a survey focused on user involvement. The CIO requested that the State have not yet been documented or communicated.

6/8/18: BHA working with SI to determine how soon the training (sandbox) environment can be set up for iteration 2 and what steps can be taken to expedite so it is needed soon. In the CARDMC Training Plan, there are 2-3 demonstrations planned for each iteration since this is an important step for OCM.

5/25/18 - RSM committed to providing documentation to the State which outlines how the system is configured, how the tool will be used is insufficient and does not address how the SI plans to mitigate the use of the tool in the accelerator. IV&V will continue to monitor for the same throughout the development phase.

5/30/18: Documentation for the acceptor still not provided by BHA.

6/19/18: IV&V is unaware if DHS has obtained access to the sandbox environment yet. But a documented OCM Plan would serve to articulate the ambiguity regarding roles, task ownership, and activity timelines.

6/26/18: SI connecting to training (sandbox) environment for Division level staff beginning with iteration 2. In addition, the project conducted a survey focused on gathering feedback from their users/SMs through a “User Engagement and opportunities for Organizational Change Management” survey to address this risk.

7/12/18: SI responding to Accelerator documentation request with details of Accelerator capabilities but provided little to no details that would help assure mitigation of this risk.

7/13/18: SI responded with more details regarding risk mitigation steps they are taking and mentioned accelerator documentation. IV&V requested documentation be provided to the project.

7/14/18: SI responding to Accelerator documentation request with details of accelerator capabilities but provided little to no details that would help assure mitigation of this risk.

7/13/18: SI has agreed to provide mitigation strategies they’ve employed for this risk.

7/15/18: SI has stated that they have not seen the same accelerator risks that IV&V has described in this risk. BHA has not provided this, they have seen these risks in other state accelerator reviewed previously.

BHA Findings 2018 June Report

3 of 6
BHA Findings 2018 June Report

Requirements elaboration

14/03/17

Tracking of requirement elaborations

It is unclear if SI is tracking the elaboration of requirements (i.e. the formulation of scope changes based on agreements between the SI and BHA) and it is not currently tracked in TFS, which can generate significant rework and change confusion amongst the project team. Further, failure to capture sufficient details of user stories can lead to user stories that fall to adequately address user needs or preferences. This could result in future increased project costs. For example, the SI could decide BHA must pay for (or contract costs of) any enhancements that should have been part of the original design and defined during initial user story definition. Swaps involve the removal of original lower priority requirements in favor of new, more important requirements. Swapping requirement requirements between projects may increase the risk of negative impact to project risk. Failure to monitor these requirements can degrade the quality of key system deliverables.

Recommendation

Recommend that requirements are fully elaborated as a component of user story development, with results of requirements being signed and agreed to by BHA. In instances where user stories are already completed, JAD sessions are recommended to ensure the requirements are fully elaborated, documented, and agreed to.

4/16/18

Disagreements have arisen regarding expected features in the Calculator product. BHA expected features such as drag & drop as well as real-time connection to service notifications, and was surprised to find out that the tool that the Calculator would require the same drag and drop functionality, the SI provided no response. The SI analysis assumed the most difficult aspect of mapping each event and changing the tool interface.

4/22/18

Unclarified review and approval process for project deliverables

It has delivered the Project Management Plan (PMP) and SI discussed key deliverables to be created for approval. SI stated that the PMP will be updated for the next iteration. There has been no discussion about the project deliverables, the standards for delivering them or the process to approve them. The PMP states, "All deliverables require state signoff as stated in the RFP. Without an explicit signoff process for deliverables, the project will be left with inadequate documentation meant to guide the project team and impact the effectiveness of project activities and impact the effectiveness of project activities and impact the effectiveness of project activities and impact the effectiveness of project activities and impact the effectiveness of project activities."

Recommendation

Recommend that requirements are fully elaborated and where needed, re-stated and agreed as part of user story development. This will aid in Requirements traceability efforts.

4/26/18

Recommend BHA request SI define and employ a deliverable tracking process, which should include review sessions to ensure understanding and open dialog about each deliverable. Recommend deliverables only be signed off when all issues have been resolved. DOH. In instances where user stories are already completed, JAD sessions are recommended to ensure the requirements are fully elaborated, documented, and agreed to.

4/30/18

Calendar review and approval process for project deliverables

TFS. The IV&V team needs more information on how this is occurring.

5/11/18

REDO: IV&V has observed the approval of user stories but not requirements which may not be a comprehensive approach. In instances where user stories are already completed, JAD sessions are recommended to ensure the requirements are fully elaborated, documented, and agreed to. The State has been working diligently with the SI to understand the traceability of requirements in TFS and the SI has provided various definitions to questions, and developed a query to extract the TFS data needed by the State to verify traceability. Since iteration 3 approaches completion and the State is still verifying the query and traceability in TFS, IV&V is raising awareness of this risk to BHA. BHA should verify the traceability of requirements as well as the TFS demonstration anticipated May 16.

6/2/18

Recommend that requirements are fully elaborated and where needed, re-stated and agreed as part of user story development. This will aid in Requirements traceability efforts.

6/9/18

Recommend BHA request SI define and employ a deliverable tracking process, which should include review sessions to ensure understanding and open dialog about each deliverable. Recommend deliverables only be signed off when all issues have been resolved. DOH. In instances where user stories are already completed, JAD sessions are recommended to ensure the requirements are fully elaborated, documented, and agreed to.

6/14/18

4/16/18: IV&V provided the Project with a revised DCF review process document to help clarify the process. BHA is currently reviewing the process.

4/22/18

4/12/18

4/11/18: Recommend requesting SI update PMP, agreeing it is a living document.

4/11/18: Recommend requesting SI update PMP, agreeing it is a living document.

4/11/18: Recommend requesting SI update PMP, agreeing it is a living document.

4/11/18: Recommend requesting SI update PMP, agreeing it is a living document.

4/11/18: Recommend requesting SI update PMP, agreeing it is a living document.

4/11/18: Recommend requesting SI update PMP, agreeing it is a living document.

4/11/18: Recommend requesting SI update PMP, agreeing it is a living document.

4/11/18: Recommend requesting SI update PMP, agreeing it is a living document.

4/11/18: Recommend requesting SI update PMP, agreeing it is a living document.

4/11/18: Recommend requesting SI update PMP, agreeing it is a living document.

4/11/18: Recommend requesting SI update PMP, agreeing it is a living document.

4/11/18: Recommend requesting SI update PMP, agreeing it is a living document.

4/11/18: Recommend requesting SI update PMP, agreeing it is a living document.

4/11/18: Recommend requesting SI update PMP, agreeing it is a living document.

4/11/18: Recommend requesting SI update PMP, agreeing it is a living document.

4/11/18: Recommend requesting SI update PMP, agreeing it is a living document.

4/11/18: Recommend requesting SI update PMP, agreeing it is a living document.

4/11/18: Recommend requesting SI update PMP, agreeing it is a living document.

4/11/18: Recommend requesting SI update PMP, agreeing it is a living document.

4/11/18: Recommend requesting SI update PMP, agreeing it is a living document.

4/11/18: Recommend requesting SI update PMP, agreeing it is a living document.

4/11/18: Recommend requesting SI update PMP, agreeing it is a living document.

4/11/18: Recommend requesting SI update PMP, agreeing it is a living document.

4/11/18: Recommend requesting SI update PMP, agreeing it is a living document.

4/11/18: Recommend requesting SI update PMP, agreeing it is a living document.

4/11/18: Recommend requesting SI update PMP, agreeing it is a living document.

4/11/18: Recommend requesting SI update PMP, agreeing it is a living document.

4/11/18: Recommend requesting SI update PMP, agreeing it is a living document.

4/11/18: Recommend requesting SI update PMP, agreeing it is a living document.

4/11/18: Recommend requesting SI update PMP, agreeing it is a living document.

4/11/18: Recommend requesting SI update PMP, agreeing it is a living document.

4/11/18: Recommend requesting SI update PMP, agreeing it is a living document.

4/11/18: Recommend requesting SI update PMP, agreeing it is a living document.

4/11/18: Recommend requesting SI update PMP, agreeing it is a living document.

4/11/18: Recommend requesting SI update PMP, agreeing it is a living document.

4/11/18: Recommend requesting SI update PMP, agreeing it is a living document.

4/11/18: Recommend requesting SI update PMP, agreeing it is a living document.

4/11/18: Recommend requesting SI update PMP, agreeing it is a living document.

4/11/18: Recommend requesting SI update PMP, agreeing it is a living document.

4/11/18: Recommend requesting SI update PMP, agreeing it is a living document.

4/11/18: Recommend requesting SI update PMP, agreeing it is a living document.

4/11/18: Recommend requesting SI update PMP, agreeing it is a living document.

4/11/18: Recommend requesting SI update PMP, agreeing it is a living document.

4/11/18: Recommend requesting SI update PMP, agreeing it is a living document.

4/11/18: Recommend requesting SI update PMP, agreeing it is a living document.

4/11/18: Recommend requesting SI update PMP, agreeing it is a living document.

4/11/18: Recommend requesting SI update PMP, agreeing it is a living document.

4/11/18: Recommend requesting SI update PMP, agreeing it is a living document.

4/11/18: Recommend requesting SI update PMP, agreeing it is a living document.

4/11/18: Recommend requesting SI update PMP, agreeing it is a living document.

4/11/18: Recommend requesting SI update PMP, agreeing it is a living document.

4/11/18: Recommend requesting SI update PMP, agreeing it is a living document.

4/11/18: Recommend requesting SI update PMP, agreeing it is a living document.

4/11/18: Recommend requesting SI update PMP, agreeing it is a living document.

4/11/18: Recommend requesting SI update PMP, agreeing it is a living document.

4/11/18: Recommend requesting SI update PMP, agreeing it is a living document.

4/11/18: Recommend requesting SI update PMP, agreeing it is a living document.

4/11/18: Recommend requesting SI update PMP, agreeing it is a living document.

4/11/18: Recommend requesting SI update PMP, agreeing it is a living document.

4/11/18: Recommend requesting SI update PMP, agreeing it is a living document.

4/11/18: Recommend requesting SI update PMP, agreeing it is a living document.

4/11/18: Recommend requesting SI update PMP, agreeing it is a living document.

4/11/18: Recommend requesting SI update PMP, agreeing it is a living document.

4/11/18: Recommend requesting SI update PMP, agreeing it is a living document.

4/11/18: Recommend requesting SI update PMP, agreeing it is a living document.

4/11/18: Recommend requesting SI update PMP, agreeing it is a living document.

4/11/18: Recommend requesting SI update PMP, agreeing it is a living document.

4/11/18: Recommend requesting SI update PMP, agreeing it is a living document.

4/11/18: Recommend requesting SI update PMP, agreeing it is a living document.

4/11/18: Recommend requesting SI update PMP, agreeing it is a living document.

4/11/18: Recommend requesting SI update PMP, agreeing it is a living document.

4/11/18: Recommend requesting SI update PMP, agreeing it is a living document.

4/11/18: Recommend requesting SI update PMP, agreeing it is a living document.
<table>
<thead>
<tr>
<th>ID</th>
<th>Identified Date</th>
<th>Summary</th>
<th>Observation</th>
<th>Significance</th>
<th>Recommendation</th>
<th>Updates</th>
<th>Process Area</th>
<th>Type</th>
<th>Priority</th>
<th>Status</th>
<th>Closure Reason</th>
<th>Iteration</th>
</tr>
</thead>
<tbody>
<tr>
<td>18</td>
<td>09/01/17</td>
<td>Federal funding risk</td>
<td>Some state staff have at times been concerned by other duties and have shown some resistance to participate in project activities. Skill attendance and participation in project meetings has been varying at times, requiring meetings to be rescheduled.</td>
<td>Low</td>
<td>Recommend BHA request SI to document the TFS tool usage.</td>
<td>Recommend BHA continue to work closely with SI to pursue available funding options.</td>
<td>BHA</td>
<td>Low</td>
<td>Open</td>
<td>0</td>
<td>Another Project Management</td>
<td>0</td>
</tr>
</tbody>
</table>

### Notes

**TFS governance appears to be insufficient**

TFS (Microsoft's Team Foundation Server, referred to in the projects central repository database of all requirements, user stories, development tasks, test cases, bugs, and source code. Each project team member (from developers to project managers to SI project leadership) relies on TFS as their primary source of project information and activity tracking. Seems the SI TFS governance (how the tool will be used) has not been clearly thought through or clearly established. TFS is a highly customizable, flexible, and complex tool that is utilized in different ways by different project team members. TFS vendors often tout the importance of establishing clear standards, conventions, and processes (i.e. governance) for entering and managing data in TFS before data entry begins. While some progress has been made towards clarifying TFS governance for SI through the user story process flow, concerns remain that TFS governance has not been thoroughly established, which leads to insufficient/inefficient use of TFS throughout the project and inadequate requirements management. In addition, the BPA requires that, "The BPA shall identify and describe the TFS governance process and provide to BHA for review and approval. Once better governance has been solidified, IV&V will continue to monitor to validate that the BPA's expectations are met." **Recommend BHA request SI to document the TFS governance process and provide to BHA for review and approval. Once better governance has been solidified, IV&V will continue to monitor to validate that the BPA's expectations are met.**

### Notes

**Federally funded risk**

- **Priority:** Open
- **Process Area:** Updates
- **Date:** 2/23/18
- **Significance:** Low
- **Summary:** Competing priorities of BHA SMEs could negatively impact the project timeline. BHA’s competing priorities can negatively impact the overall quality of work the project involves, delay BHA’s response to project needs could negatively impact the project schedule. Analysts/monitor BHA SME capacity to assist potential project delays and communicate expectations clearly to staff. Recommend BHA leadership actively encourage and support staff participation and assist them with prioritizing their duties to accommodate full participation in the project. Recommend BHA consider staff augmentation to meet project specific needs. SMEs will continue to monitor concerns over diminished stakeholder capacity throughout the project.

### Notes

**TFS governance appears to be insufficient**

TFS (Microsoft’s Team Foundation Server) is the substrate of DOH’s IAPD. MITA State Self-Assessment planned is at risk due to delays in completing its WFA State Self-Assessment (SIA) portion to the substrate of DOH’s IAPD.

- **Date:** 2/26/18
- **Summary:** This finding is a breakout of a closed finding (#13) that focuses on TFS governance. IV&V will continue to monitor planning for future iterations and for Phase 2 interfaces.
- **Recommendation:** Recommend BHA request SI to document the TFS tool usage.
- **Updates:** BHA Findings 2018 June Report

### Notes

**TFS governance appears to be insufficient**

TFS (Microsoft's Team Foundation Server) appears to be insufficient for the projects central repository database of all requirements, user stories, development tasks, test cases, bugs, and source code. Each project team member (from developers to project managers to SI project leadership) relies on TFS as their primary source of project information and activity tracking. Seems the SI TFS governance (how the tool will be used) has not been clearly thought through or clearly established. TFS is a highly customizable, flexible, and complex tool that is utilized in different ways by different project team members. TFS vendors often tout the importance of establishing clear standards, conventions, and processes (i.e. governance) for entering and managing data in TFS before data entry begins. While some progress has been made towards clarifying TFS governance for SI through the user story process flow, concerns remain that TFS governance has not been thoroughly established, which leads to insufficient/inefficient use of TFS throughout the project and inadequate requirements management. In addition, the BPA requires that, "The BPA shall identify and describe the TFS governance process and provide to BHA for review and approval. Once better governance has been solidified, IV&V will continue to monitor to validate that the BPA's expectations are met."

- **Recommendation:** Recommend BHA request SI to document the TFS governance process and provide to BHA for review and approval. Once better governance has been solidified, IV&V will continue to monitor to validate that the BPA's expectations are met.
- **Updates:** BHA Findings 2018 June Report

### Notes

**Federally funded risk**

- **Priority:** Open
- **Process Area:** Updates
- **Date:** 2/23/18
- **Significance:** Low
- **Summary:** Competing priorities of BHA SMEs could negatively impact the project timeline. BHA’s competing priorities can negatively impact the overall quality of work the project involves, delay BHA’s response to project needs could negatively impact the project schedule. Analysts/monitor BHA SME capacity to assist potential project delays and communicate expectations clearly to staff. Recommend BHA leadership actively encourage and support staff participation and assist them with prioritizing their duties to accommodate full participation in the project. Recommend BHA consider staff augmentation to meet project specific needs. SMEs will continue to monitor concerns over diminished stakeholder capacity throughout the project.

### Notes

**TFS governance appears to be insufficient**

TFS (Microsoft’s Team Foundation Server) appears to be insufficient for the projects central repository database of all requirements, user stories, development tasks, test cases, bugs, and source code. Each project team member (from developers to project managers to SI project leadership) relies on TFS as their primary source of project information and activity tracking. Seems the SI TFS governance (how the tool will be used) has not been clearly thought through or clearly established. TFS is a highly customizable, flexible, and complex tool that is utilized in different ways by different project team members. TFS vendors often tout the importance of establishing clear standards, conventions, and processes (i.e. governance) for entering and managing data in TFS before data entry begins. While some progress has been made towards clarifying TFS governance for SI through the user story process flow, concerns remain that TFS governance has not been thoroughly established, which leads to insufficient/inefficient use of TFS throughout the project and inadequate requirements management. In addition, the BPA requires that, "The BPA shall identify and describe the TFS governance process and provide to BHA for review and approval. Once better governance has been solidified, IV&V will continue to monitor to validate that the BPA’s expectations are met."

- **Recommendation:** Recommend BHA request SI to document the TFS governance process and provide to BHA for review and approval. Once better governance has been solidified, IV&V will continue to monitor to validate that the BPA’s expectations are met.
- **Updates:** BHA Findings 2018 June Report
21 2/24/18 Architecture Blueprint and Roadmap deficiencies

IV&V reviewed the SI's updated Architecture Blueprint and Roadmap deficiencies and observed that the document seems to be missing key information. The architectural blueprint document provides key reference and design details (captured during the design phase) and infrastructure details critical to the development phase. Lack of planned and documented design decisions could lead to confusion and rework by the development team and can hinder strategic planning (e.g., licensing) for the project team. In the end, this could lead to a less than optimal development phase. Similar deficiencies were noted in the Roadmap, and due to the significance of this deliverable to the project, it was included in the finding.

Recommendation
Revise the latest draft of the Architecture Blueprint to align with industry standards.

4/22/18 IV&V of the stories are in Phase 2 and are for interfaces. Phase 2 is feasible to utilize a different approach and resources. Phase 2 Planning is underway and it is not able to leverage the principles and/or framework that an Architecture Blueprint should provide.

5/21/18 IV&V provided comments to SI via DCF (document comment form) and we note SI/DV response. It is unclear what the dynamic OM platform can do (out of the box) as opposed to what the SI will deliver. A workplan should provide the data conversion effort IAW the project requirements.

5/25/18 Indicate in the deliverable review response which changes must be made in order for the deliverable to be approved.

5/25/18 RSM confirmed that the updated Architecture Plan will be updated and resubmitted in June.

6/19/18 The updated Architecture Plan is still pending from RSM. Since Iteration 3 and 4 have completed and deliverable for Iteration 2 are being submitted, IV&V is changing this finding from a risk to an issue.

6/21/18 The DRAFT DED for Iteration 2 deliverables has been delivered. IV&V has assessed for completeness, fitness, and provided feedback to DOH. Need clarification re: acceptance criteria for all deliverables.

Vendor Project Management Risk Open

6/25/18 The SI/DV response on DEDs not being utilized by SI

The contractually required DED process is not being followed. Deliverable review and approval criteria are typically assigned when a DED is not developed and agreed to in advance of development of each deliverable.

Recommendation
IV&V should confirm to the contract requirements of developing DEDs prior to developing deliverables. Indicate in the deliverable review response which changes must be made in order for the deliverable to be approved.

6/25/18 IV&V provided comments to SI via DCF (document comment form) and we note SI/DV response. It is unclear when these licenses are required to impact the project.

5/21/18 - RSM's test scripts. DOH staff possess institutional knowledge of the needed depth, breadth, and overall coverage of requirements and how they flow to RSM test cases and test activities. Additionally, DOH staff have an optimal understanding of how the requirements and associated test activities best fit into the project's proven processes, for an overall end to end business viewpoint.

6/25/18 - IV&V should confirm to the contract requirements of providing Test Cases for DOH review and approval.

5/21/18 Per the RSM iteration 2 DED, a listing of test cases will be delivered with the Iteration Test Plan. For this DED, this will take place the week prior to the a/t iteration demo, which may be too late to issue in the RSM.

5/21/18 - IV&V provided comments to SI via DCF (document comment form) and we note SI/DV response. It is unclear when these licenses are required to impact the project.

5/25/18 RSM confirmed that the updated Architecture Plan will be updated and resubmitted in June.

5/25/18 - RSM confirmed that the updated Architecture Plan will be updated and resubmitted in June.

6/21/18 - The updated Architecture Plan is still pending from RSM. Since Iteration 3 and 4 have completed and deliverable for Iteration 2 are being submitted, IV&V is changing this finding from a risk to an issue.

6/21/18 - The DRAFT DED for Iteration 2 deliverables has been delivered. IV&V has assessed for completeness, fitness, and provided feedback to DOH. Need clarification re: acceptance criteria for all deliverables.

Vendor Project Management Risk Open

6/25/18 III&V Findings 2018 June Report

DEF risk findings were not created to require SCRIB packages to migrate and program data types to legacy data dictionaries. SCRIB Insight licenses are required to support the data conversion effort IAW the project requirements.

Recommendation
The SCRIB Insight licenses must be acquired and utilized to support project efforts.

5/10/18 The contractually required SCRIB Insight licenses are not utilized by the SI.

5/21/18 - IV&V reviewed the SI's updated Architecture Blueprint and Roadmap deficiencies and observed that the documents seem to be missing key information. The architectural blueprint document provides key reference and design details (captured during the design phase) and infrastructure details critical to the development phase. Lack of planned and documented design decisions could lead to confusion and rework by the development team and can hinder strategic planning (e.g., licensing) for the project team. In the end, this could lead to a less than optimal development phase. Similar deficiencies were noted in the Roadmap, and due to the significance of this deliverable to the project, it was included in the finding.

Recommendation
Revise the latest draft of the Architecture Blueprint to align with industry standards.

5/21/18 - IV&V reviewed the SI's updated Architecture Blueprint and Roadmap deficiencies and observed that the documents seem to be missing key information. The architectural blueprint document provides key reference and design details (captured during the design phase) and infrastructure details critical to the development phase. Lack of planned and documented design decisions could lead to confusion and rework by the development team and can hinder strategic planning (e.g., licensing) for the project team. In the end, this could lead to a less than optimal development phase. Similar deficiencies were noted in the Roadmap, and due to the significance of this deliverable to the project, it was included in the finding.

Recommendation
Revise the latest draft of the Architecture Blueprint to align with industry standards.

5/21/18 - IV&V reviewed the SI's updated Architecture Blueprint and Roadmap deficiencies and observed that the documents seem to be missing key information. The architectural blueprint document provides key reference and design details (captured during the design phase) and infrastructure details critical to the development phase. Lack of planned and documented design decisions could lead to confusion and rework by the development team and can hinder strategic planning (e.g., licensing) for the project team. In the end, this could lead to a less than optimal development phase. Similar deficiencies were noted in the Roadmap, and due to the significance of this deliverable to the project, it was included in the finding.

Recommendation
Revise the latest draft of the Architecture Blueprint to align with industry standards.