Hawaii BHA Integrated Case Management System Project

Final IV&V Report for the period of March 26 - April 20, 2018

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Overview

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Executive Summary

Overall Project Health:

Several risks were closed during this reporting period. IV&V opened one new observation that addresses project resourcing, and one new risk speaks to the timing of user story approval. Thus far, the project remains on schedule for completion.

Feb 18	Mar 18	Apr 18	Process Areas	IV&V Findings and Observations	Overall Health
M	L	L	Vendor Project Management	IV&V observed progress in this area and several (5) findings were closed during the current reporting period. The closed risks addressed: #1 Unclear SDLC, #9 Attention to knowledge transfer, #11 SME participation challenges, #15 Attention to tracking out-of-scope requirements, and #22 Unclear risk management processes. Risks that remain in this area primarily focus on potential impacts to the project timeline (e.g., data migration, resource availability), and ensuring that system functionality will meet the DOH's needs (e.g., sprint durations, incorporation of pain points and process improvements).	
L	L	L	Requirements Management	Clarification around TFS governance is still required. Requirement elaborations (and some notes that are captured during demonstration sessions) are not always consistently documented in TFS, which can negatively impact the project scope and timeline. IV&V believes that clarifying *requirements* through requirements elaboration is different from clarifying *functionality*. While both can be done based upon the user stories, BHA must take ownership of the requirements to ensure that the solution will meet their program needs and objectives.	

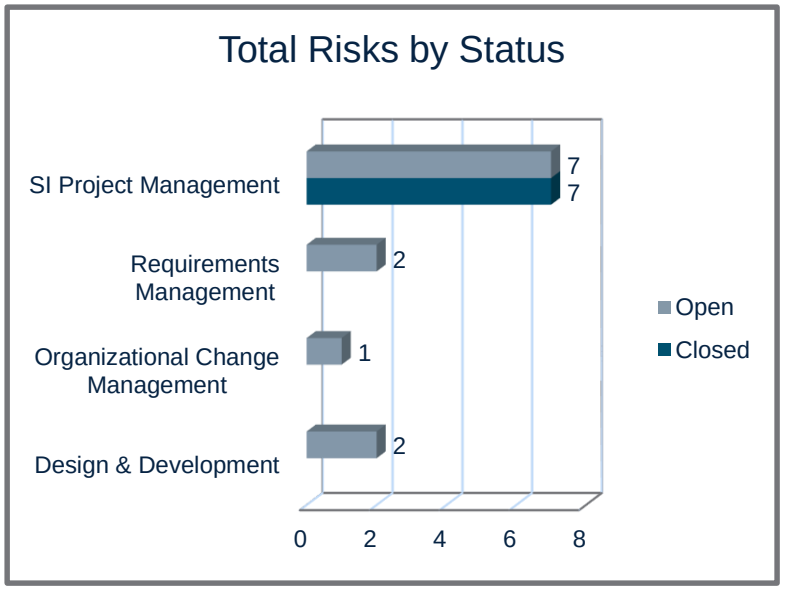
Executive Summary

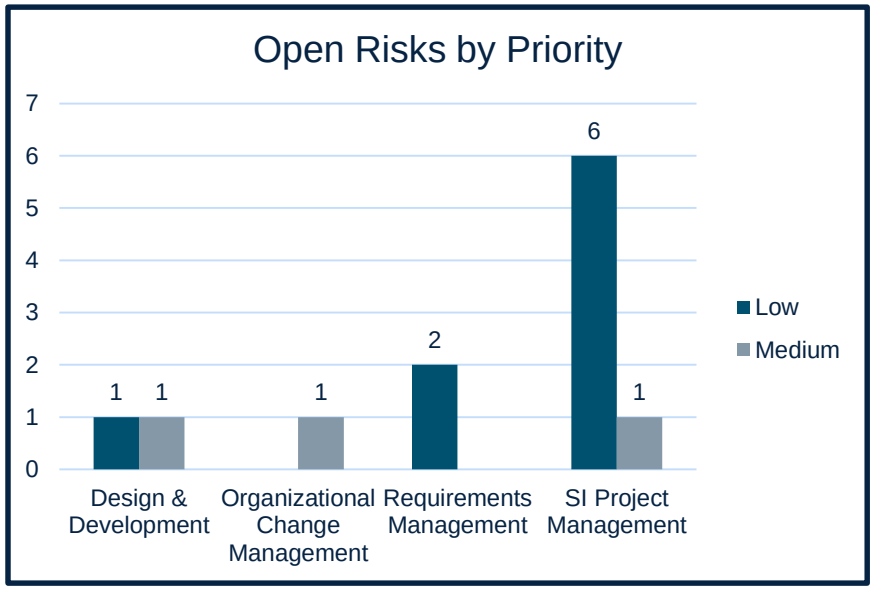
Feb 18	Mar 18	Apr 18	Process Areas	IV&V Findings and Observations	Overall Health
M	L	L	Design and Development	IV&V still needs to get a better understanding of how the SI plans to mitigate the potential risks of using its accelerator; particularly in relation to risks cited in other areas that speak to the solution meeting the BHA's needs. While the project is mitigating the risk of potential development delays by asserting firmer deadlines for user story approval and moving unapproved early iteration user stories to future iterations, IV&V will continue to monitor the open risks in this area.	
M	M	M	Organizational Change Management	A comprehensive strategy to support user adoption does not appear to exist. While the SI has committed to mid-sprint SME validations of functionality to provide the opportunity for user involvement, this does not appear to be occurring on a consistent basis. During this assessment period the BHA assumed the lead responsibility for developing a more comprehensive OCM Plan, with assistance from RSM. Thus, the BHA distributed a "User Engagement and Opportunities for Organizational Change Management" staff survey to help focus their initial OCM efforts. The survey will be distributed on a periodic basis throughout the project to monitor progress. IV&V will review the draft OCM Plan during the coming assessment period.	

Executive Summary

As of this reporting period, PCG has identified a total of 25 findings (19 risks and 6 observations) on the Hawaii BHA Integrated Case Management System Project.

Focusing on the total number of project risks, 7 of the 19 risks have been closed, leaving 12 open risks. Of those, there are zero high risks, 3 medium risks (or 25%) and 9 low risks (or 75%) as shown below.





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IV&V Activities

The activities that PCG performed to inform the IV&V report for the current period are listed below. Upcoming activities are also included. For specifics, see Appendix B – Inputs.

- IV&V activities performed during the reporting period:
  1. Attended weekly SI project status meetings
  2. Facilitated IV&V Monthly Report review meetings
  3. Facilitated IV&V Status meeting
  4. Attended Calculator review sessions
  5. Attended Data Migration Meeting
  6. Attended select Daily Scrum meetings
  7. Attended Project Steering Committee meeting
  8. Drafted SI Deliverable review process
  9. Drafted IV&V Monthly Report review process
  10. Reviewed the following deliverables: *SI Iteration Plan, SI Iteration 1 Test Plan, SI Iteration Schedule, SI Updated Data Migration Strategy, SI Updated Roadmap*

- IV&V activities planned for the upcoming reporting period:
  1. Attend weekly SI project status and analysis meetings
  2. Attend other strategy & analysis meetings as needed
  3. Attend bi-weekly IV&V meeting
  4. Review SI draft and final project deliverables
  5. Prepare/review IV&V Monthly Report
  6. Attend Project Steering Committee meeting

IV&V Findings and Recommendations

Process Areas Reviewed

Throughout this project, IV&V will verify and validate activities performed in the following process areas. Those areas that were reviewed during the current period are asterisked below:

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

* Indicates process area addressed in this report

IV&V Findings and Recommendations

Vendor Project Management

#	Key Findings (Classified as Observations, Risks or Issues)	Criticality Rating
23	**Potential project schedule impact due to data migration delays (R):** The project has assigned CAMHD technical staff to assist DDD staff in support of these efforts. As an outcome, DDD decided against migrating Medisoft data to the new solution. DDD also assigned additional staff to the project to help with data clean-up and validation. Although the SI and BHA have made strides in addressing the data migration risks through weekly status/planning meetings and other activities with the hopes that development roadblocks can be avoided, IV&V will continue to monitor this risk due to its significance to the project.	M
16	**Unclear review and approval process for project deliverables (R):** Some confusion remains over deliverable names and the approval process but efforts are underway to clarify and ensure all deliverables are meeting project needs. Meetings to provide further clarification are upcoming. IV&V will continue to monitor to validate that this process is consistently followed.	L
18	**Competing priorities of BHA SMEs could negatively impact the project timeline (R):** BHA is working with SI to mitigate resource challenges, as some key members of the project team have been over-tasked. CAMHD resources have been reallocated to assist DDD in support of data migration. The project has asserted firmer deadlines to address delays in user story approval.	L
25	**SI Solution Architect extended leave could impact project productivity/quality *(New Observation!):*** Since this position currently fills several significant project roles (e.g., Development Lead, Lead Business Analyst, and Scrum Master) the project schedule may be impacted. The SI has been tasked with developing a transition plan to provide adequate coverage during this staff outage.	L
19	**Access to enhanced federal funding may impact the project budget and/or scope (I):** Ability to access enhanced federal funding as initially planned is at risk due to external dependencies (e.g., State Medicaid Agency delays in completing its MITA State Self-Assessment (SS-A) and completion of P-APD). DHS plans on submitting the P-APD during the coming review period, with the BHA I-APD to follow. The BHA is pursuing other funding sources to bridge this gap.	M

Issues 18 and 19 are not specific to the SI but have a significant impact on project completion.

IV&V Findings and Recommendations

Vendor Project Management

	---------- Monitoring for Closure ----------	
2	**Long sprint / iteration cycles (R):** As mentioned in last month's report, the SI has committed to targeted, mid-sprint SME validations of functionality to address concerns over sprint durations and increase user involvement. However, it appears that this only occurred for the Calculator 2.0 sprint, and has not been carried forward into Iteration 1. IV&V suggests getting this agreement in writing and will monitor the consistency and frequency of SI initiated mid-sprint demos in future iterations.	L
5	**Late-game analysis of requirements awaiting details from external sources (R):** Sign-off is being sought on some user-stories that may require further analysis based upon external dependencies.	L
17	**SI Resource (PM) Turnover (O):** IV&V observed that some of the PM practices that were implemented upon project start-up may not have been carried over to the SI's new PM. For example, although the SI is contractually required to develop Deliverable Expectation Documents (DEDs) prior to developing draft deliverables, this practice is no longer occurring.	L
6	**SI identification/tracking of pain points (R):** While CAMHD and DDD have identified pain points, the SI's process to address these pain points remains unclear. This risk is also discussed in the OCM process area on page 13 of this report.	L
3	**Attention to process improvement seems insufficient (R):** While some improvements have been seen in this area, IV&V has concerns over the SI's attention to the details of DOH's expressed needs (e.g., drag and drop functionality in Calculator 2.0 functionality, calendar vs. calculator functionality).	L

IV&V Findings and Recommendations

Vendor Project Management Discussion

#	Recommendations	Progress
23	Suggest SI analyze data migration dependencies to avoid development delays. Once identified, IV&V suggests that the SI validate and/or update the user stories and architectural plans that may impact the project schedule. Suggest BHA continue to coordinate resources to accelerate data migration activities, track detailed data migration tasks, and work with the SI to ensure development is not delayed.	In-process
16	Meet with the SI to clarify deliverable review and approval processes in accordance with RFP requirements. Deliverable review sessions should be considered to ensure clear understanding and open dialog around each deliverable. Deliverables should only be signed off when all issues have been resolved with BHA leadership and the signoff process should leave no room for ambiguity. Deliverable names should also be clarified. Finally, recommend BHA and SI come to agreement on deliverables best suited (and most beneficial) to be "live" documents (i.e. documents that will continue to be updated throughout the project as content becomes available/solidified).	In-process
18	Analyze/monitor BHA SME capacity to avoid 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.	In-process
19	Recommend BHA continue to work closely with DHS to pursue available funding options	In-process

IV&V Findings and Recommendations

Requirements Management

#	Key Findings (Classified as Observations, Risks or Issues)	Criticality Rating
20	**TFS governance process (R)**: TFS (Microsoft's Team Foundation Server) is the projects 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.	L
14	**Tracking of requirement elaborations (R):** IV&V has found that the elaboration (i.e., clarification) of requirements and notes recorded during demos are not always consistently tracked in TFS. IV&V recognizes that further elaboration can occur as tasks under the user stories are created. However, while functionality may be further clarified, the actual requirement may not necessarily be clarified through this process. Greater requirements clarification increases the likelihood of building the functionality to meet those requirements. If the focus is on user stories, the developer may only create the functionality in the user story rather than focusing on finding better ways to meet the requirement (which may be different from what's in the user story). To mitigate this risk, the BHA must ensure that the requirements are clearly captured in the user stories and that the acceptance criteria is met.	L

Best Practices
• The RTM includes traceability throughout design, code, and test phases
• Analysis is performed to verify that system requirements meet federal and state regulations, program requirements and objectives
• Major stakeholders and users are consulted and involved in the activities related to system functionality

Recommendations	Progress
• Request SI to document the TFS governance process and provide to BHA for review and approval	In-process
• Request SI define and employ a process for requirement elaboration tracking and approval	Not started

IV&V Findings and Recommendations

Design and Development

#	Key Findings (Classified as Observations, Risks or Issues)	Criticality Rating
12	**Use of accelerator (R):** While IV&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 monitored in relation to IV&V's observations in other areas (see page 8).	L
21	**Architecture Blueprint and Roadmap deficiencies (O):** IV&V cited deficiencies in the SI's Architecture Blueprint and Roadmap deliverables based on industry best practice. Our review of these revised deliverables is pending delivery by the SI in the next reporting period.	M
24	**Delays in approving user stories could impact the project schedule *(New Risk!)*:** While the project has asserted firmer deadlines to address delays in BHA's approval of user stories and the SI has been able to move unapproved early iteration user stories to future iterations to avoid delays in development, further delays could impact the project schedule. Approval of outstanding user stories is anticipated next month.	M

Best Practices
• The system design is viable, based on scalability, maintainability, completeness and efficiency • The proposed technical architecture is able to scale up to meet future workload and performance criteria • The technical architecture is easily adaptable to new or changes in application requirements • The solution supports federal MITA-alignment requirements

Recommendations	Progress
• Recommend BHA request SI to document the measures that will be taken to mitigate the risks of using an Accelerator.	In-process
• Recommend SI document sufficient design details in the architectural blueprint document and that content focus on what the SI will do as opposed to what the products/platform can do.	In-process
• Recommend BHA work with SI to ensure delays do not incur project delays or additional costs.	In-process

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IV&V Findings and Recommendations

Organizational Change Management

#	Key Findings (Classified as Observations, Risks or Issues)	Criticality Rating
7	**Minimal attention to User Adoption (R):** The project seems to lack a comprehensive strategy to support user adoption and organizational change management (OCM). While the SI has committed to mid-sprint SME validations of functionality to provide the opportunity for user involvement, this has only occurred during the Calculator 2.0 sprint (see Finding #2). This risk has attracted the attention of the State CIO and the project has recognized the need for a formal OCM Plan that will be reviewed by ETS. The BHA has initiated a "User Engagement and Opportunities for Organizational Change Management" survey to help focus their OCM efforts and develop user adoption metrics.	M
6	**Use of pain points to improve OCM (R):** (See Vendor Project Management Finding #6) The SI's process to address BHA's pain points has not been clearly documented. The project's ability to address those pain points will help to show users that the system is solving real business problems and lead to increased adoption rates. The BHA has assumed the lead role in developing a more thorough OCM Plan to support the project's needs with support from RSM. An OCM survey was distributed to staff during this assessment period to inform the development of the Plan. IV&V will review this Plan upon delivery of the draft and monitor OCM activities throughout the project.	L

Best Practices	Recommendations	Progress
• An OCM Plan that addresses the integration of individual and organizational change management to ensure the achievement of business results is developed. • The OCM Plan includes steps to assess the level of change that will be required to determine the appropriate change management techniques that will be required.	• Request the SI adopt a general user adoption strategy that is reflected in the OCM Plan.	In-process
	• Agree on an approach for how the SI will utilize/incorporate the pain point list in the OCM Plan.	In-process
	• Commence work on a comprehensive OCM Plan immediately.	In-process

Appendix A

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

- 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).

- 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.

- 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.

Appendix A, cont'd.

- Criticality Ratings

Criticality Rating	Definition
H	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.
M	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.
L	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.

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 (3/26/18 – 4/20/18)
2. BHA IV&V Monthly Report review meeting
3. BHA/RSM IV&V Monthly Report review meeting
4. IV&V Status meeting (4/11/18)
5. Data Migration Meeting (3/28/18)
6. RSM Calculator 2.0 Post UAT Review
7. RSM Calculator 2.0 Follow up
8. BHA-ITS Review Iteration #1 Test Plan
9. Daily Scrum meetings (selected)
10. Project Steering Committee meeting

Artifacts reviewed during the reporting period:

1. SI Iteration Plan
2. SI Iteration 1 Test Plan
3. SI Iteration Schedule
4. SI Updated Data Migration Strategy
5. SI Updated Roadmap
6. SI Updated User Story Life Cycle
7. SI Defect (Bug) Life Cycle
8. SI Weekly Status Reports
9. Daily Scrum Notes (selected)
10. SI Project Schedule

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Id	Identified Date	Summary	Observation	Significance	Recommendation	Updates	Process Area	Type	Priority	Status	Closure Reason	Iteration	Risk Owner
BHA IV&V Findings Log													
1	09/01/17	**Non-agile (or unclear) SDLC**	The SI has initially provided limited details of their project methodology, 'WaterScrumFall', which seems to be a mixture of Agile and waterfall methods and results in some confusion over which aspects of Agile the SI will employ.	The BHA's stated project objectives include a desire for rapid development, interactive/collaborative design (focus on the user), adaptability to change, predictable delivery and schedules, and short sprint cycles. There are several benefits to utilizing agile methods, typically: • High product quality • Higher customer satisfaction • Increased project control	Recommend BHA request the SI continue to provide further SDLC 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. Recommend SI clearly communicate plans and details of upcoming activities before the activities begin so that BHA has time to prepare and plan their resources beforehand. IVV will continue to monitor to validate that the BHA's expectations are met.	3/25/18: SI stated the Scrum Master role will be split between the existing architect and the PM. Unclear how this will impact the effectiveness of the Scrum Master role in the WaterScrumFall model. IV&V has an initial concern that the Scrum Master may be performing roles with competing priorities, which is a practice discouraged by most agile veterans. 3/20/18: SI has provided some good details of their Agile methodology as part	SI Project Management	Risk	Low	Closed	SI has made strides in clarifying and communicating their methodology.	0	
2	09/01/17	**Long sprint / iteration cycles**	The SI has chosen 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 iterations can introduce a risk that the SI will waste valuable time developing a design without timely user feedback to course correct, which could negatively impact the project schedule and budget.	Recommend BHA request the SI continue to provide further SDLC 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. IVV will continue to monitor to validate that the BHA's expectations are met.	4/18/18: Unclear if SI is providing sufficient mid-sprint demos to validate user story implementations. IV&V is only aware of one such demo reported by BHA during Iteration 1. 4/1/18: SI has committed to providing mid-sprint demos for select SMEs to validate complex or unclear user story implementations.	SI Project Management	Risk	Low	Open		0	
3	09/01/17	**Attention to process improvement seems insufficient**	SI analysis techniques that seem to avoid delving into opportunities for process improvement.	This could lead to a 'to-be' design that automates existing processes rather than improve them. Requirement 272 in the DOH's RFP states, "The SI will be vigilant to look for and identify opportunities for process improvement and notify DOH". See related risk titled "Visual Tools". The SI could decide BHA must pay for (via contract mods or swaps) enhancements that should have been part of the original design and identified during discovery and design phases. Swaps involve the removal of original requirements in place of newly discovered requirements/functionality (enhancements). Swapping out original requirements/features can degrade the quality of the system and lead to unmet user expectations. Swapping can incur significant future costs as it's likely BHA will need to implement (and acquire separate funding for) features that get swapped out of the original fixed price project scope.	IV&V recommends that BHA set expectations and request greater detail around the SI's 'to-be' analysis methods. Other suggestions include: 1) Consider a short CRM overview session for SMEs to familiarize them with CRM capabilities to better understand and articulate process improvements that can be supported by the Dynamics CRM platform. 2) Consider demos from other similar BHA Dynamics CRM implementations to better understand and articulate process improvements that the solution can support. 3) Meet with the SI to request elicitation and maintenance of prioritized business problems, pain points, and improvement opportunities that are reviewed with SMEs regularly to ensure the solution is solving the right business problems and taking advantage of opportunities to improve processes through the new CRM capabilities. IVV will continue to monitor for instances where process improvements should be implemented and validate that the BHA's expectations are met.	4/11/18: During a sprint demo of the Calculator, BHA was surprised to find out that drag & drop functionality was overlooked by the SI analysts. SI has stated that this feature was out identified by BHA as a requirement, even though the tool that the Calculator is mimicing includes this feature. When asked if the SI analyst asked SMEs if the Calculator would require the same drag and drop functionality, the SI provided no response. Seems the SI analysts assumed the more difficult method of opening each event and changing the time/date. 3/14/18: SI demo'd progress on a separate development effort called the "Calculator". SI garnered and encouraged feedback from SME's. 3/1/18: BHA has indicated that individual efforts by SI analysts during user story approval seems to have made up for some of the lack of analysis depth during the discovery phase. 2/27/18: BHA has contracted BHA in a separate effort to develop a calendar (calculator). BHA has indicated that initial SI analysis seems to continue to lack appropriate depth.	SI Project Management	Risk	Low	Open		0	
4	09/01/17	**Visual tools**	The SI PM/Lead Analyst has demonstrated a general reluctance to utilize visual tools (e.g. whiteboard diagraming, Dynamics CRM demos, etc.) that would help to facilitate to-be system design discussions	Failure to effectively engage stakeholders can increase the risk of poor discovery (and schedule) risk and unmet user needs. Typically, most users/SMEs are visual and may not be able to articulate complex as-is processes and to-be designs based on verbal walk throughs alone. Once displayed visually SMEs are better able to identify what	Request that the SI employ more visual methods during discovery and actively demonstrate key features of Dynamics CRM. IVV will continue to monitor to validate that the BHA's expectations are met.	2/24/18: IV&V has observed BHA requesting use of visual tools and the SI has responded. 10/2/17: The SI has recommended an xRM site for BHA to review as an	SI Project Management	Risk	Medium	Closed	SI seems more willing to utilize visual tools.	0	
5	09/01/17	**Late-game analysis of requirements awaiting details from external sources**	Appears 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 putting 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).	One of the primary benefits of an Agile approach is that requirements that 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 no longer meet the needs of the users. This could also incur additional project costs if the SI fails to accurately estimate late-game user stories and considers any late-game requirements as enhancements that will incur additional cost or swaps (see observation #26).	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, IVV will continue to monitor to validate that the BHA's expectations are met.	3/25/18: The SI is seeking User Story signoff in order to lock in project scope. When asked about requirements whose details may become more clear at a later point in the project they have stated that there will be the opportunity to swap out functionality for requirements whose details may be more readily available later in the project. However, it may not be clear that swapped out functionality has an associated future cost as it's likely BHA will need to implement (and acquire separate funding for) features that get swapped out sometime in the future.	SI Project Management	Risk	Low	Open		0	
6	09/01/17	**SI identification/ tracking of pain points**	SI currently does not track or effectively utilize business process pain points.	Agile methods typically focus on solving real problems and employ methods to allow the users to provide timely (typically with shorter sprints) feedback to ensure that the business problems are 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 the system is solving as well as showing them traceability 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 maximum 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. In the end, this could lead to a reduction of ongoing project funding, a weakened SI reputation, and public scrutiny.	Suggest BHA/SI agree on an approach to leverage the BHA's pain points throughout the project. IV&V also recommends that the project's OCM strategy address/incorporate these pain points to show users that the system is solving real business problems which should lead to increased adoption rates. While the SI's draft PMP includes an OCM Plan that provides some information (mostly around training) IV&V recommends the SI commence work on a comprehensive OCM Plan immediately. Once an agreement is reached, IVV will continue to monitor to validate that the BHA's expectations are met.	4/11/18: CAMHD is tracking pain points, which have been sent to RSM, DD will do the same. BHA plans to meet with SI to discuss use of pain points. 3/2/18: SI has stated that tracking pain points is out of scope and that pain points have been addressed within the user stories. IV&V will continue to recommend, at minimum, the project maintain a short list of (mostly high-level) business pain points. 1/25/18: BHA has assumed responsibility for tracking pain points. The process for how the SI will utilize this list needs to be identified and monitored.	SI Project Management	Risk	Low	Open		0	

7	09/01/17	**Minimal attention to User Adoption (buy-in)**	SI seems to lack a comprehensive strategy to support user adoption.	Failure to implement an effective user adoption strategy could lead to resistance during system rollout, refusal to participate in the development/rollout process, resistance to use the system, and negative public perceptions (including the media). In the end, this could lead to a reduction of ongoing project funding, a weakened SI reputation, as well as long-term public scrutiny and criticism.	Recognizing that the SI has committed to mid-sprint SME validations of functionality 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 problems the system is actually solving and provides traceability of pain points to system features during sprint demos. IV&V also recommends BHA request the SI adopt a general user adoption strategy going forward. IVV will continue to monitor to validate that the BHA's expectations are met.	4/18/18: Unclear if SI is providing sufficient mid-sprint demos to validate user story implementations. IV&V is only aware of one such demo reported by BHA during Iteration 1; seems this demo was initiated by BHA. 4/13/18: BHA is in the process of gathering feedback from their users/SMEs through a "User Engagement and opportunities for Organizational Change Management" survey to address this risk. 4/1/18: SI has committed to mid-sprint SME validations of functionality which should provide the opportunity for better user involvement. 3/7/18: BHA indicated that RSM subcontractor met with them recently to address OCM. 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. 2/21/18: 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.	Organizational Change Management	Risk	Medium	Open		0	
8	09/01/17	**Lack of receptiveness**	IV&V has observed the SI PM/Lead Analyst has not been receptive to questions from the BHA PM, SMEs, and IV&V, discouraging participation during discovery and other sessions.	Effective meeting facilitation requires being open to questions and suggestions from the attendees, while keeping the meeting on track. If participation is not encouraged, user buy-in and adoption of the system is at risk.	Recommend BHA request SI address this behavior at a management level and track progress as part of separate but regular engagement manager meetings with BHA. IV&V will continue to monitor to validate that the BHA's expectations are met.	2/15/18: SI has added 3 PM resources to the project and shifted the . Seems Lead Analyst responsibilities have shifted to another team member. 1/22/18: SI announced that its PM/Lead Analyst is leaving the SI Firm.	SI Project Management	Risk	Medium	Closed	IV&V has not observed lack of receptiveness since the departure of PM/Lead analyst.	0	
9	03/27/18	**Attention to knowledge transfer appears to be insufficient**	Impact was seen to the Calculator UAT effort due to incorrect assumptions that were made by new SI resource during testing.	Failure to onboard new SI resources with an effective knowledge transfer strategy and activities can cause potential rework and project delays.		4/2/18: BHA has since reported that new SI resources are now up to speed and UAT is going well.	SI Project Management	Observation	Low	Closed	BHA has reported that new SI resources are now up to speed and UAT is going well.	0	
10	09/01/17	**Lack of preparation**	SI PM/Lead Analyst, at times, seems to lack preparation for discovery sessions and other status meetings. For example, BHA has expressed frustration with the SI when asked questions that are clearly contained in the process flows provided by BHA to the SI well ahead of discovery sessions. IV&V has identified instances of meeting schedule confusion, late meeting agenda's, and a general lack of meeting productivity.	Lack of good preparation for SI meetings with clients can create a reluctance among BHA attendees to attend and/or participate. This can also produce a general lack of confidence in the SI to achieve project objectives which can negatively impact user adoption.	Recommend SI review and prepare questions based on process flows before discovery sessions. Recommend BHA leadership address this with SI engagement manager and consider adding the topic of "project management effectiveness" as a regular project status meeting agenda item. IV&V will continue to monitor to validate that the BHA's expectations are met.	2/15/18: SI added 3 PM resources to the project and shifted the Lead Analyst responsibilities to another team member. 1/22/18: SI announced that its PM/Lead Analyst is leaving the SI Firm.	SI Project Management	Risk	Low	Closed	IV&V has not observed lack of preparation since the departure of PM/Lead analyst.	0	
11	09/01/17	**SME participation challenges**	At times, key SMEs have been absent from discovery meetings. Some meetings have ended abruptly when the SI and BHA realize the right SMEs have not shown up. At times SMEs seem to lack a sense of urgency or understanding around full participation and the value of attending meetings in person.	Failure to ensure the right SMEs are in the room for a discovery session can cause project delays, unproductive meetings, and frustration on the part of SMEs that have attended. Lack of full SME participation could lead to inaccurate requirements gathering and incomplete/inaccurate user stories and could also negatively impact user adoption.	Recommend the SI make efforts to conduct meetings in a manner that engages the SMEs, encourages participation by silent attendees, and utilizes visual techniques to stimulate interest. This may also include providing clear meeting agendas, meeting purpose statements, meeting type (whiteboard session, system demo, material review), lists of materials to bring, and calling out key participants in their invites. Suggest the project PM's reschedule meetings when key SMEs are not able to attend. Recommend BHA provide clear guidance to SMEs regarding the importance of meeting attendance and the preference for attending in person (especially if they are a key participant). IV&V will continue to monitor to validate that the BHA's expectations are met.	4/2/18: SME participation seems to be improving as evidenced from their energetic engagement during the recent Calculator sprint demo. 3/25/18: Seems several SI meetings still lack a clear agenda and purpose statements. 3/2/18: BHA seems to have addressed part of this risk as the correct SME's seem to be in attendance. However, some SME's continue to prefer to call-in to meetings instead of attending in-person. IV&V has observed that some SME's call into meetings and provide little to no input. IV&V will continue to monitor for full participation including SME's in-person attendance to project meetings.	SI Project Management	Risk	Low	Closed	SME participation seems to be improving as evidenced from their energetic engagement during the recent Calculator sprint demo. SI seems to be communicating meeting purpose and meeting agenda's seem to be provided when necessary.	0	

12	09/01/17	**Use of accelerator**	The SI intends to utilize an accelerator as a starting point for system development. Seems the accelerator involves essentially retrofitting code and a configuration package, from system(s) previously developed, into the BHA ITS as a foundational component. Additionally, at times it seems like the SI is remiss to suggest design concepts that don't align with the existing functionality of their accelerator.	While IV&V recognizes efficiencies can be gained and the value of re-use, failure to optimize the system to meet BHA specific needs can lead to a solution that is less than optimal/productive and require BHA users to employ work arounds and lengthy processes to complete their work. The risks around employing the RSM accelerator are still unclear, however, use of accelerators, in general, have been known to be difficult to modify and maintain due to: - Bugs could occur that are not easy to track down because its buried in the complex functionality of the accelerator - Interactions with accelerator could cause bugs - Added complexity -Removal of any component that's not needed can cause unforeseen interactions or complications (may break other things in the accelerator)	Recommend BHA request the SI identify strategies and activities to mitigate typical issues/problems/risks associated with the use of accelerators. Recommend BHA monitor for and request SI base design decision on what's best suited for BHA and not on what functionality already exists in the accelerator. IV&V will continue to monitor for the same throughout the development phase.	4/19/18: 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. 4/5/18: SI responded with more details regarding risk mitigation steps they are taking and mentioned accelerator documentation. IV&V has requested documentation be provided to the project. 4/3/18: IV&V received response from the SI on 4/3/18, stating that "Our Accelerator was made available for Hawaii use on March 19, 2018, which belies this finding." IV&V is not clear how this response addresses the potential risks raised in the January IV&V report. IV&V has requested a further details. 4/2/18: SI has agreed to provide mitigation strategies they've employed for this risk. 2/5/18: SI has stated that they have not seen the same accelerator risks that IV&V has described in this risk. BHA leadership has stated that they have seen these risks in other state accelerator-based projects.	Design & Development	Risk	Low	Open		0	
13	09/02/17	**User story approval process**	There seems to be some initial confusion around the process for user story management and approval. SI guidance around these processes seems reactionary instead of planned. In addition, seems TFS governance has not been clearly thought through or clearly established.	Continued confusion around user story management and approval and a lack of planned requirements management can lead to inefficient user story review, delayed user story approval, and unnecessary rework for BHA resources whose capacity is already constrained. Failure to establish effective TFS governance can lead to ineffective/inefficient use of TFS and poor requirement and user story management. Reactive changes to TFS governance, when weakness are realized, can incur significant rework and cause further confusion. In addition, the RFP requires that, "The SI firm shall utilize the fullest capabilities of Visual Studio Online (referenced throughout as Team Foundation Services, or TFS) for solution Application Lifecycle Management (ALM), in addition to Visual Studio for development purposes." It also requires that, "The SI firm shall engage TFS experts as needed to assist with establishing TFS governance and best practices for the project."	Recommend BHA request SI engage TFS experts who can provide technical configuration as well as guidance on TFS best practices. Suggest SI document best practices (for later insertion into the CMP) as soon as possible to alleviate any additional confusion around TFS governance. Once better governance has been solidified, IV&V will continue to monitor to validate that the BHA's expectations are met.	2/26/18: Closing out this finding as user story approval is nearing completion. We created another risk (#20) that focuses on primarily on TFS governance. 1/30/18: The SI and BHA have made some progress towards improving and defining the user story approval process. IV&V will continue to monitor for well-defined requirements management processes going forward. 1/25/18: RFP requires TFS governance to be documented in the Configuration Management Plan which is currently being developed by the SI. However, IV&V has logged a separate risk that some deliverable content, like TFS governance, is not being provided at a point in the project when it is urgently needed.	SI Project Management	Risk	Low	Closed	User story approval is coming to an end and the process seems to be working.	0	
14	09/03/17	**Tracking of requirement elaborations**	It is unclear if SI is tracking requirement elaborations.	IV&V has found that the elaboration (i.e., clarification) of requirements, and notes recorded during demos are not always consistently tracked in TFS. IV&V recognizes that further elaboration can occur as tasks under the user stories are created. However, while functionality may be further clarified, the actual requirement may not necessarily be clarified through this process. Greater requirements clarification increases the likelihood of building the functionality to meet those requirements. If the focus is on user stories, the developer may only create the functionality in the user story rather than focusing on finding better ways to meet the requirement (which may be different from what's in the user story). To mitigate this risk, the BHA must ensure that the requirements are clearly captured in the user stories and that the acceptance criteria is met.	Recommend BHA request SI define and employ a process for formalizing scope changes as well as requirement elaboration tracking and approval. Once an agreement is reached, IVV will continue to monitor to validate that the BHA's expectations are met.	4/27/18: Discussion during draft report walk-thru offered some clarification, and RSM agreed that the drag and drop functionality is within scope. IV&V needs to confirm that notes are recorded as requests under 'work type' in TFS. Extra attention will be required to ensure that acceptance criteria exist for all user stories. 4/11/18: Disagreements have arisen regarding expected features in the Calculator product. BHA expected features such as drag & drop as well as the tools connection to service authorizations and was surprised when the SI stated the features were not captured in the user stories. Without clear elaboration of requirements and clear sign off on the elaborations, conflicts such as these may continue throughout the project. Failure to properly elaborate system requirements can result in loss of important functionality, unmet user expectations, and/or force BHA to swap (remove other requirements) to make up for misunderstood requirements. 1/25/18: SI has stated that they are tracking requirements elaborations, but it seems they are doing it outside of TFS. The IV&V team needs more information on how this is occurring.	Requirements Management	Risk	Low	Open		0	
15	09/04/17	**Attention to tracking out-of-scope requirements appears to be insufficient**	The SI logging of out-of-scope requirements, improvement opportunities, and user stories is below BHA expectations.	Failure to capture out-of-scope items at the time of discovery could be a lost opportunity to capture what was identified and discussed. Out-of-scope features could then be forgotten or lost along the way as well as valuable notes from those point in time discussions. The state could be left spending valuable time/money at a later point to rediscover requirement, user stories, features, and opportunities for improvement. This practice can actually be beneficial to the SI as it inspires follow-on work for the incumbent SI.	Request the SI track out of scope requirements and/or user stories as the opportunity arises (e.g. if identified in discovery, sprint demos, UAT, etc.) so these are not lost or forgotten. Recommend including details in TFS of the discussion regarding these items so discussions are not repeated at a later date. Once an agreement is reached, IVV will continue to monitor to validate that the BHA's expectations are met.	4/2/18: SI has recently (starting 3/19/18) adding out-of-scope requirements, flagged in TFS as "Requests", as part of the Calculator development effort. There are currently 19 requests. 3/1/18: SI has stated that some of the user stories they created were later realized to be out-of-scope and will status these in TFS as "deferred". However, SI has stated that tracking out-of-scope requirements is outside the scope of the contract and will not be logging them as part of SI/SME interactions.	SI Project Management	Risk	Low	Closed	SI has begun capturing out-of-scope requirements, flagged in TFS as "Requests".	0	

16	01/23/18	**Unclear review and approval process for project deliverables**	SI has delivered the Project Management Plan (including project work plan), Deliverable Expectation Document, and Test Strategy. The SI PM/Lead Analyst has stated there is an assumption of tacit signoff on some or all of these deliverables due to the fact that they have been delivered and that BHA has offered little to no response. To date, the SI has not conducted review sessions of these deliverables with BHA stakeholders.	The RFP states, "All deliverables require state signoff as acknowledgement that the deliverable was satisfactorily performed/developed." Without an explicit signoff process for deliverables, the SI may assume their customer has agreed to plans, methodologies, activities and processes, when they have serious concerns. For example, the Project Management Plan should provide details of methods, processes and activities that will be employed throughout the project. Lack of clear understanding and agreement of project methods and activities can reduce project productivity, quality, and effective management. Misunderstandings about project approach and process may increase the risk of negative impact to the budget and schedule, not to mention BHA stakeholder frustration. If deliverables are assumed to be approved and the SI is unwilling to update deliverables to BHA satisfaction, the project will be left with inadequate documentation meant to guide project activities and impact the effectiveness of system turnover to the BHA technical team.	Recommend BHA request the SI clarify and follow an agreed upon deliverable acceptance and sign-off process, which should include review sessions to ensure clear understanding and open dialog around each deliverable. Recommend deliverables only be signed off when all issues have been resolved with BHA leadership as well as a signoff process that leaves no room for ambiguity. Recommend BHA and SI come to agreement on deliverables best suited to be "live" documents (documents that will continue to be updated throughout the project as content becomes available/solidified). Recommend BHA request SI deliverable review sessions on key deliverables (e.g. Architecture Blueprint, Configuration Management Plan, Data Management Plan) prior to signoff. Once an agreement is reached, IV&V will continue to monitor to validate that the BHA's expectations are met.	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. 4/11/18: Recommend requesting SI update PMP, agreeing it is a living document. 4/11/18: BHA has stated there does appear to be some confusion around terminology (e.g., document names). IV&V believes there remains room for clarification around the DCF process as part of the overall deliverable review and acceptance process. Unbeknownst to IV&V, some of the deliverables that we have been waiting for (such as the Configuration Management Plan) were approved quite some time ago, which has added to the confusion. In response, IV&V has created a deliverable tracking log. IV&V recommends BHA review any critical deliverables that RSM and/or DOH consider to be approved, and rather than re-opening them, identify if there are any critical findings associated with the deliverables that may impact the project, and add them to our risk log as appropriate. 4/9/18: Although the SI provided comments on IV&V's proposed DCF Review process on 3/14/18, we could not find any evidence of BHA's final approval of this document/process. Re-categorization of this risk as 'monitor for closure' in the March 2018 IV&V report is pending BHA's acceptance of RSM's proposed revisions to the DCF Review process. 4/3/18: SI has implemented a deliverable tracking list in SharePoint. 4/2/18: There still seems to be some confusion around which deliverables (e.g. PMP) have been approved by BHA. SI has stated that deliverables have been	SI Project Management	Risk	Low	Open		0	
17	01/23/18	**SI resource turnover**	On 1/22/18, the SI announced that its PM/Lead Analyst is leaving the SI Firm. Concern has been raised by BHA leadership and IV&V that key project discovery, analysis, and design details will be lost. In addition, on 10/30/18 the SI lost a subcontracted project manager/assistant and their replacement has been delayed, currently scheduled for 2/5/18.	Loss of key project discovery, analysis, and design details could negatively impact the productivity of SI efforts and the project schedule. The risk of an ineffective knowledge transfer from the departing PM/Lead Business Analyst to the SI's new PM can still be realized despite the SI's best efforts. While the remaining team that participated in discovery remains largely intact, it is unclear how long it will take for the incoming PM to get up to speed and equal the same level of knowledge/productivity that the outgoing PM (who spent 100's of hours leading the discovery effort) provided.		4/18/18: It has been noted that some of the responsibilities that were previously known to / performed by the prior PM may not have been transferred over to the current SI PM. Of note is the DAD process, and the development of DEDs, which are contractually required for all deliverables: *C. Deliverable Expectation Document. In accordance with the Schedule of Deliverables (Exhibit "A"), the CONTRACTOR shall develop and deliver to the state a DED that provides an outline of what will be included in each required deliverable to ensure that:* *1) there is a shared understanding of the content and appropriate level of detail,* *2) that time spent by the CONTRACTOR preparing deliverables is efficiently utilized, and* *3) the state's expectations shall be met upon the delivery of draft documentation/artifacts.* 3/15/18: SI provided a document providing clarification of roles and responsibilities. While the Scrum Master role was not mentioned, SI stated Scrum Master role would be split between the PM and the architect.	SI Project Management	Observation	Low	Open		0	
18	09/01/17	**Competing priorities of BHA SMEs could negatively impact the project timeline**	Some state staff have at times been constrained by other duties and have shown some resistance to participate in project activities. SME attendance and participation in project meeting has been waning at times, requiring meetings to be rescheduled.	SMEs competing priorities can negatively impact the overall quality of work the project relies on; delays SMEs response to project needs could negatively impact the project schedule.	Analyze/monitor BHA SME capacity to avoid 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. IV&V will continue to monitor concerns over constrained stakeholder capacity throughout the project.	4/11/18: BHA is working with SI to mitigate resource challenges, currently key members of the project team are over tasked. CAMHD resources to assist DDD in support of project tasks (e.g. data migration). 4/2/18: BHA stated that final user story approval delays are mostly due to SME indecisiveness, a smaller part due to limited SME capacity. BHA mitigation strategy is to propose a finalized user story and give SME's a deadline, if not met user story will be left as is. 3/25/18: BHA SME's will be a key resource for data migration. IV&V has concern these activities could be delayed if the level of effort is greater than expected. 3/20/18: Final user story approval has been delayed and caused schedule slippage, seeming due to delays in BHA business resource responsiveness. SI has logged this as a project risk but it seems unclear whether this has hindered developer productivity. 10/2/17: BHA leadership has addressed this issue and attendance to project meetings has improved. However, participation still seems to be lacking. Many times, attendees prefer to call instead of attending in person. In person attendees are typically much more engaged than those who call in. Many attendees who call-in offer little to no input.	SI Project Management	Risk	Low	Open		0	

19	09/01/17	**Federal funding risk**	Ability to access enhanced federal funding as initially planned is at risk due to State Medicaid Agency delays in completing its MITA State Self-Assessment (SS-A) prior to the submittal of DOH's IAPD.	Delays in securing enhanced funding has delayed system development. Inability to claim federal funds could negatively impact the project budget, scope and schedule.	Recommend BHA continue to work closely with DHS to pursue available funding options. IV&V will continue to monitor progress.	2/22/18: Approach to draw-down of federal funding was discussed in the project steering committee meeting. DHS plans to submit a PAPD, with which DOH's IAPD would be aligned. According to DHS, work on the PAPD is pending receipt of DOH's IAPD. In the meantime, DOH is also pursuing 50/50 admin claiming to support the project. This will require an update to DHS' Cost Allocation Plan (to allow DOH's project costs to be submitted on the CMS-64 form).	SI Project Management	Issue	Medium	Open		0	
20	2/23/18	**TFS governance appears to be insufficient**	TFS (Microsoft's Team Foundation Server) is 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 analysts to project managers to BHA project leadership) relies on TFS as their primary source of project information and activity tracking. Seems the SI's 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 veterans often tout the importance of establishing clear standards, templates 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 through diagramming the user story process flow, concerns remain that TFS governance has not been thoroughly established, which can lead to ineffective/inefficient use of TFS throughout the project and inadequate requirements management. In addition, the RFP requires that, "The SI firm shall utilize the fullest capabilities of Visual Studio Online (referenced throughout as Team Foundation Services, or TFS) for solution Application Lifecycle Management (ALM), in addition to Visual Studio for development purposes."	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 BHA's expectations are met.	4/11/18: Some confusion seems to continue to exist over TFS governance. Details of governance (e.g. how they will use tags) continue to be worked out and communicated during scrum calls and other meetings. Unclear if TFS governance decisions made during these calls are documented or effectively communicated to all TFS users or to users that missed the call. 3/15/18: SI provided Visio diagram of "Request Life Cycle" includes some details of user story tracking and makes mention of new user story status conventions. 2/26/18: This finding is a breakout of a closed finding (#13) that focuses on TFS governance. 2/23/18: RFP requires TFS governance to be documented in the Configuration Management Plan which is currently being developed by the SI.	Requirements Management	Risk	Low	Open		0	
21	2/23/18	**Architecture Blueprint and Roadmap deficiencies**	IV&V reviewed the SI's draft Architecture Blueprint and Roadmap deliverables and observed that the documents seem to be missing key information.	The architectural blueprint document provides key system design details (captured during the design phase) and infrastructure details critical to the development phase. Lack of a 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 signficance of this deliverable to the project, it was included in this finding.		4/25/18: Updated to include Roadmap deficiencies 3/19/18: SI provided responses to DCF comments but have yet to deliver updated Architecture Blueprint Document. 3/7/18: With the environment buildout beginning shortly and development currently slated to begin on 3/12, IV&V is concerned this document lacks sufficient environment buildout details. 2/23/18: IV&V provided comments to BHA via DCF (document comment form) and awaits BHA/SI responses. Draft seems to focus on what the Dynamics CRM platform can do (out of the box) as opposed to what the SI will do to meet BHA system specific needs.	Design & Development	Observation	Medium	Open		0	
22	2/23/18	**Unclear risk management processes**	The current SI risk management plan provides few details of the risk management process. Though weekly status reports contain a slide for risk there has been little to no updates to this slide for some time now. During the status meeting there is little to no discussion around risks. Also, the risk slide and the RSM risk log seem out of sync. Additionally, SI has chosen to provide little to no response to the risks IV&V has identified, the majority of which are within the SI's control to mitigate.	Lack of attention to risk management could reduce overall project quality and health and produce unexpected problems going forward. Unexpected problems are typically more difficult to manage, are more labor intensive and costlier to manage than risks that are carefully managed.		4/2/18: SI has improved their tracking and communication of risks by creating a SharePoint Issue & Risk Repository list, adding additional slides to their weekly status report, and discussing risks during the status meeting. 3/25/18: SI provided a basic plan with few details of how the steps provided would be performed. Also, SI stated data migration itself will beginmat the beginning of Iteration 2. IV&V remains concerned that the late start could produce surprises that the project will have trouble dealing with. 3/22/18: SI continues to warn that data migration can end up taking a significant level of effort but without a detailed plan it's difficult to determine the level of effort, user story dependencies, and impacts to schedule. Delays in delivery of data management plan adds to this risk. 3/21/18: SI delivered data migration strategy. 3/7/18: Weekly data migration planning meetings established.	SI Project Management	Observation	Low	Closed	SI has made great strides in managing risks including enhanced tracking and communication of risk through the use of a SharePoint-base Issue & Risk Repository log as well as an increased focus on risk management during weekly status reports.	0	
23	3/25/18	**Delays in data migration activities could impact the development schedule**	The process of solidifying the data migration strategy and identifying data migration dependencies is in process. The SI provided details of their data migration plan on 3/21, however, development (Iteration 1) is already underway and data migration dependencies seem unclear. Data migration activities can be a significant undertaking and can cause project delays. SI is tracking data mapping in support of data migration as a risk.	Data migration strategy development and planning is typically performed ahead of development work to mitigate the risk of data migration activities causing project delays. Several factors have increased this risk: - BHA is responsible for the bulk of data migration activities - IV&V has already identified a risk (#18) that BHA resources could be constrained - Data migration activity level of effort is often underestimated - Development delays due to data migration delays are not uncommon	Suggest SI analyze data migration dependencies to avoid development delays. Once identified, IV&V suggests that the SI validate and/or update the user stories and architectural plans (based on possible dependencies) that may impact the project schedule. Consideration should be given to increasing BHA resources to accelerate data migration activities, track detailed data migration tasks, and work with the SI to ensure development is not delayed.	4/17/18: BHA seems to be making good progress in this area with strong SI coordination support. SI has been providing stakeholders with regular updates on migration activity status and to the data migration strategy. Recently completed migration tasks include: mapping data load category from source system to target entity, mapping data conversion category from source system to target entity. BHA has shifted resources to address this risk; CAMHD technical staff is assisting DDD with DDD data migration activities. 4/11/18: SI created a SharePoint folder for everyone to post data migration documents. SI requested BHA provide all data next week, however, may be difficult to meet this deadline. 4/2/18: Project held 2 data migration meetings the week of 3/26. 3/21/18: SI delivered data migration strategy. 3/7/18: Weekly data migration planning meetings established.	SI Project Management	Risk	Medium	Open		1	

24	4/17/18	**Delays in approving user stories could impact the project schedule**	BHA delays in finalizing the user stories could impact the project schedule. While BHA SME capacity constraints is partially to blame, SME indecisiveness appears to be the primary reason for the delays. BHA has stated that project leadership will soon finalized user stories for the SMEs and give them a due date for any objections/changes. So far, the SI has been able to move unapproved iteration 1 user stories to future iterations to avoid delays in development.	SI has stated that user story approval delays have impacted the project schedule and could delay iteration 1 sprint demo scheduled for 4/24/18. This delay could potentially push out the entire project schedule.	Recommend BHA work with SI to ensure delays do not incur additional project costs. Recommend BHA continue current mitigation strategy of project leadership finalizing user stories for SMEs and make efforts to ensure SME participation in sprint demos (and mid-sprint demos) so there is clear understanding system functionality as relates to the delayed user stories. Recommend BHA work with the SI to move user stories that require further analysis to later iterations. Recommend BHA request the SI assist SMEs with user stories that require further analysis or demonstration of CRM functionality/capabilities in order for SMEs to confidently approve them.	4/18/18: mpp dated 4/18/18 shows no slippage in iteration 1 sprint demo (show & tell). 4/17/18: As of 4/17, 94% of user stories have been approved. 4/9/18: Iteration 1 user stories fully approved.	Design & Development	Risk	Medium	Open		1	
25	4/18/18	**SI Solution Architect extended leave could impact project productivity/quality**	SI has announced that the project Solution Architect will soon be going on extended (expected 3-4 weeks) leave. He currently holds several significant project roles beyond Solution Architect, including Development Lead, Lead Business Analyst, and Scrum Master. The SI has committed to transitioning responsibilities to existing project SI resources to ensure continuity.	Projects that rely on a single person as the focal point of key project decisions, operational activities, system design, code/configuration quality, and understanding of user story and requirement elaborations risk serious impacts to the project when that person is no longer available for any period of time. Impacts can include reduced overall team productivity, poor feature and architectural design decisions, poor code/configuration quality, and project delays. Attempts to transition responsibilities can often times fall short once its realized the difficulty of transferring tacit knowledge to other team members.		4/11/18: SI announced the Solution Architect will soon be out on paternity leave (estimated at 3-4 weeks), his responsibilities will be distributed to the existing project team while he is out. Recommend BHA request further details of coverage while he is out and how this will be managed. 4/2/18: Seems the project Solution Architect currently holds multiple additional project roles including: Scrum Master, Development Lead, Lead Business Analyst. Some additional roles may be temporary, while roles are transitioned to new resources, but may still pose a risk to the effectiveness of these roles when managed by a single individual.	SI Project Management	Observation	Low	Open		1	