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DEPT. COMM. NO. 306

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May 11, 2021

The Honorable Ronald D. Kouchi,
President, and
Members of The Senate
Thirty-First State Legislature
Hawaii State Capitol, Room 409
Honolulu, Hawaii 96813

The Honorable Scott K. Saiki,
Speaker, and
Members of The House of Representatives
Thirty-First State Legislature
Hawaii State Capitol, Room 431
Honolulu, Hawaii 96813

Dear President Kouchi, Speaker Saiki, and Members of the Legislature:

Pursuant to HRS section 27-43.6, which requires the Chief Information Officer to submit applicable independent verification and validation (IV&V) reports to the Legislature within ten days of receiving the report, please find attached the report the Office of Enterprise Technology Services received for the State of Hawaii Department of Health Hawaii BHA Integrated Case Management System Project.

In accordance with HRS section 93-16, this report may be viewed electronically at http://ets.hawaii.gov (see "Reports").

Sincerely,

Douglas Murdock (May 11, 2021 17:19 HST)

DOUGLAS MURDOCK
Chief Information Officer
State of Hawai'i

Attachment (2)

Hawaii BHA Integrated Case Management System Project – *Phase 3*

Final IV&V Report for the period of

April 1 – April 30, 2021

Final submitted: May 10, 2021

PUBLIC CONSULTING GROUP

Solutions that Matter

Agenda

Executive Summary

IV&V Findings & Recommendations

Appendices

- A – Rating Scales
- B – Inputs
- C – Project Trends

Executive Summary

The Project successfully deployed Release 3.14 (R3.14) to production on 4/11/2021 with minimal defects. Several R3.12 Root Cause Analysis (RCA) action items were prioritized in April and are in the queue for execution to address issues in the areas of deployment and vendor (Microsoft) issues. Other RCA mitigating action items have yet to be prioritized. The Project Team has incorporated into the release process an on-going post-production deployment debrief and has made updates to the DevOps Tool to include fields for continued tracking and logging of RCA information.

Work for R3.15 is being regression tested in preparation for the upcoming production release starting on 5/6/21.

IV&V will continue to monitor the other high criticality findings for release deployment, regression testing, quality and Microsoft issues. We encourage the Project to consider our recommendations to mitigate risk and avoid the reoccurrence of issues in upcoming planned releases.

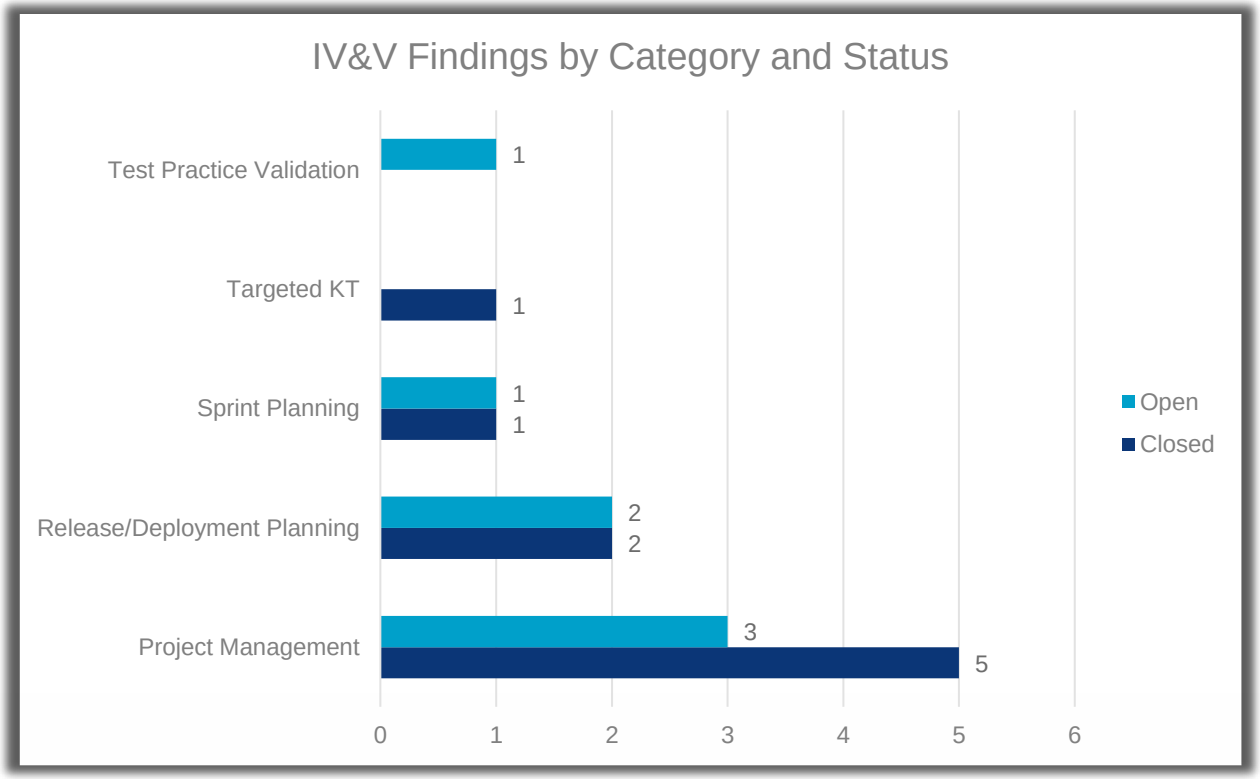
Feb	Mar	Apr	Category	IV&V Observations
Y	Y	Y	**Sprint Planning**	IV&V continues to recommend the need for skilled MS Dynamics resources to permanently support BHA's technical needs. CAMHD's recruitment activities for their open IT Technician position are on a temporary freeze. BHA continues to take on more lead responsibilities in the areas of user story ownership and performing code reviews. The rating for this category remains Yellow (medium criticality) for the April reporting period. IV&V will continue to monitor this category moving forward.
G	G	G	**User Story (US) Validation**	There are no active findings in User Story (US) Validation category which remains Green (low criticality) for the April reporting period. IV&V will continue to monitor the US development and validation process in upcoming reporting periods.
R	R	R	**Test Practice Validation**	The project deployed R3.14 to production in April. BHA planning efforts to develop automated regression test scripts continues. The rating for this category remains Red (high) for the April reporting period. IV&V will continue to monitor this category in upcoming reporting periods.

Executive Summary

Feb	Mar	Apr	Category	IV&V Observations
R	R	R	**Release / Deployment Planning**	The criticality rating for this category remains Red (high) for the April reporting period. An RCA action item for mitigating issues with deployments has been prioritized and is in the queue for execution. IV&V will continue to monitor this category in May.
G	G	G	**OJT and KT Sessions**	The criticality rating for the OJT and KT Sessions category remains Green (low) for the April reporting period with no active findings.
G	G	G	**Targeted KT**	There are no active findings in this category which remains Green (low criticality) for the April reporting period. IV&V will continue to monitor this category moving forward.
G	G	G	**Project Performance Metrics**	The Project met its performance metrics for R3.14. IV&V will keep the criticality rating for this category a Green (low) and will continue to monitor this category moving forward.
G	G	G	**Organizational Maturity Assessment**	The criticality rating for the Organization Maturity Assessment (OMA) will remain Green (low). Planning efforts for the next OMA (in May) are currently in progress.
Y	Y	Y	**Project Management**	Quality issues that impact DDI activities continue to be an IV&V concern. The Project has prioritized a few RCA mitigating action items for execution and should continue to prioritize the remaining RCA items to improve overall quality. A new preliminary concern has been added to this report to address the upcoming DDD Project Manager leave of absence. The criticality rating for this category remains Yellow (medium) for the April reporting period. IV&V will continue to monitor this category in May.

Executive Summary

As of the April 2021 reporting period, there are a total of seven open findings – three High Issues, three Medium Issues, and one Medium Risk spread across the Sprint Planning, Release / Deployment Planning, Test Practice Validation, and Project Management assessment areas.



IV&V Findings & Recommendations

IV&V Findings & Recommendations

Assessment Categories

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

- Sprint Planning
- User Story Validation
- Test Practice Validation
- Release / Deployment Planning
- On-the-Job Training (OJT) and Knowledge Transfer (KT) Sessions
- Targeted Knowledge Transfer (KT)
- Project Performance Metrics
- Organizational Maturity Assessment
- Project Management

IV&V Findings & Recommendations
Sprint Planning

#	Key Findings	Criticality Rating
8	***Changed from Medium Risk to Medium Issue*** **- The BHA Technical Team bandwidth may not be adequate to meet the needs of the project, which could compromise project productivity.** As planned, BHA continued to take on more lead responsibilities in the areas of user story ownership and performing code reviews during the month of April. CAMHD was notified that their open IT Technical position is on a temporary freeze. IV&V has elevated this finding from a medium risk to a medium issue and will continue to monitor this finding.	M

Recommendations	Status
• The Project should investigate mechanisms of increasing the bandwidth of the BHA Technical Team, either by adding resources through new hires, or vendor contracts.	In progress
• The Project should assess, where possible, if there are responsibilities of the BHA Technical Team that can be reassigned to other project staff.	In progress
• The Project should evaluate where process inefficiencies can be addressed and streamlined to possibly free up the BHA Technical Team's availability.	In progress
• The Project should consider the formation of a first level M&O resource team to triage/address production defects in a timely manner, without disrupting new development work.	In progress
• The Project should consider procurement of an online training toolset to support OCM and technical efforts to offset the need for in-person training.	Completed

IV&V Findings & Recommendations

Test Practice Validation

#	Key Findings	Criticality Rating
2	***Change from High Issue to Medium Issue*** – **As a result of regression testing not being consistently performed, production releases are breaking and/or deprecating existing functionality in the production environment**. IV&V has confirmed with DDD that their current regression testing efforts are effective. IV&V recognizes that CAMHD does not perform industry standard regression testing to validate the introduction of new code does not break existing functionality. However, CAMHD performs component testing prior to production release, and are satisfied this meets their pre-production testing needs. Efforts to plan the development of automated regression test scripts with Microsoft continues. CAMHD has tentatively identified its planned resource for this project and plans to coordinate the needed tasks and activities with Microsoft in May. IV&V has reduced the criticality rating for this finding from a high issue to a medium issue as the project moves towards automation that will provide industry standard regression testing. IV&V will continue to monitor this finding.	M

Recommendations	Status
• Updating the regression test scripts to ensure consistency with system configuration.	Completed
• Modifying release schedules to allow for regression testing timeframes.	Completed
• Planning releases by functionality type to avoid unnecessary repetitive work being performed in any given section of the solution.	Completed

IV&V Findings & Recommendations

Test Practice Validation (cont'd)

Recommendations	Status
• Performing regression testing after every release, or possibly every other release, or potentially tying regression tests to full solution upgrade releases. In addition, consider alternating the DDD and CAMHD scripts every other release.	Completed
• Modifying regression test scripts to start AFTER case creation, limiting the time it takes to execute. (This recommendation was for a point in time and is no longer valid.)	Completed
• Modifying the deployment scripts based on information gained from previous release deployments.	Completed
• Pursuing additional formal training in AzureDevOps for test automation at the earliest possible juncture and commence efforts to automate at least the 2 primary regression test scripts.	In Progress
• Consulting with RSM to determine how the 'interim testing processes' can be improved until such time that automated testing is available for repeatable and complete industry standard regression testing.	Completed
• Implementing 'hard' code freeze dates as well as test environment deployment dates to ensure that testing and deployment activities are not rushed.	Completed
• IV&V recommends performing an RCA in collaboration with RSM for the continued concerns with regression testing efforts.	In Progress
• Determine if current regression testing timeframes are adequate and if not, add more time to the pre-production regression test efforts for all release deployments.	In Progress

IV&V Findings & Recommendations

Release / Deployment Planning

#	Key Findings	Criticality Rating
19	**High Issue - Due to ongoing deployment processes and technical execution issues, the Project may continue to encounter defects and challenges in meeting projected timelines for production and non-production deployments.** The R3.12 Root Cause Analysis (RCA) effort completed in March resulted in several recommendations for increasing the quality of deployments. One of the high priority items resulting from the RCA was to update the deployment checklists and provide a secondary review prior to executing a deployment. A task was assigned to a member of the Technical Team to update the checklists. IV&V will continue to monitor this finding.	H

Recommendations	Status
• Develop a plan to institutionalize the execution of “Smoke Testing” for promotions to non-production and production environments. This will help to ensure that all components needed to test have been properly deployed prior to the actual execution of test activities.	Open
• Work in collaboration with RSM to establish a transition plan for DOH to assume all deployment activities to ensure complete ownership of these processes. This should assist with consistency in approach and execution going forward.	Open
• As appropriate, consult with RSM on best practices that BHA could employ to support deployment.	In Progress

IV&V Findings & Recommendations

Release / Deployment Planning (cont'd)

Recommendations	Status
• Look at implementing 'hard' code freeze dates as well as test environment deployment dates to ensure that testing and deployment activities are not rushed.	Completed
• Request the assistance of the RSM Solution Architect in reviewing and correcting issues associated with consistency of the configurations across environments, ensuring that the test environment is capable of testing ALL functions of any given release without the need for using multiple test environments.	In Progress
• Request the assistance of the RSM Solution Architect in review of deployment scripts as a double check for accuracy and completeness prior to commencing deployment activities.	In Progress
• Ensure an operational and fully functional test environment is available to effectively conduct end-to-end regression testing prior to deploying a release to production.	Completed
• The Project Team should consider evaluating potential changes to improve/enhance existing processes and communications to address current release/deployment shortfalls.	In Progress
• IV&V recommends performing an RCA in collaboration with RSM for the continued concerns surrounding environment differences.	In Progress
• IV&V recommends updating the Project's Configuration Management Plan to address the current needs of the Project. This should include specific checklists geared at ensuring repeatable promotional processes by DOH.	In Progress
• Due to an error prone process of 'cherry picking' what is and what is not ready for deployment, IV&V recommends that DOH and RSM collaborate to determine an improved manner for managing DOH environments.	Open

IV&V Findings & Recommendations

Release / Deployment Planning (cont'd)

#	Key Findings	Criticality Rating
18	**High Issue - Due to consistent technical issues requiring escalation to Microsoft (MS), some project efforts are being delayed.** BHA continues to work with Microsoft on technical issues as they arise in the Government Community Cloud (GCC) instance. The issue with fields being locked has been resolved, however, a new MS ticket was opened to address workflows and business rules being disabled after a solution upgrade was applied. This issue has put a halt to all solution aware CRM development and code promotion work. This issue has delayed the R3.15 production release by at least a week. IV&V will continue to monitor this finding.	H

Recommendations	Status
• IV&V recommends the project to continue to monitor the status of outstanding Microsoft tickets and to escalate the priority of these tickets as deemed necessary.	In Progress

IV&V Findings & Recommendations

Project Management

#	Key Findings	Criticality Rating
10	***Closed Low Risk*** **- The COVID-19 pandemic and related "stay at home" order could hinder project activities and negatively impact the project schedule and budget.** The Project continues to maintain its ability to operate with staff working remotely, effectively overcoming the "stay at home, work from home order" that reduced BHA's ability to be fully functional in the office. The potential DDD and CAMHD budget challenges reported in March were also overcome during April, providing fiscal relief to BHA. As such, IV&V is closing this finding.	**Closed**

Recommendations	Status
• IV&V recommends BHA to ramp up efforts to setup, train, and assist stakeholders on remote work devices and tools and make every effort to help them to become highly functional with remote access technology (e.g., MS Teams/Skype).	Completed
• IV&V recommends the project and DOH create a detailed, documented risk mitigation strategy and plan that is reviewed regularly and revised to address the current state of the COVID-19 threat and related impacts over the next 6 to 12 months.	**Closed**
• IV&V recommends updates to the OCM Plan to include any new activities or updates to planned activities to aid the organization through this COVID-19 situation in the short and long term.	**Closed**

IV&V Findings & Recommendations

Project Management (cont'd)

#	Key Findings	Criticality Rating
15	**High Issue - Due to multiple quality concerns, the Project may continue to face impactful system defects.** BHA has commenced mitigation efforts to address the highest priority RCA items resulting from the R3.12 defects. Although the entire list has not yet been prioritized, specific action is being taken to update the existing deployment standard checklist to address issues found with deployments. Further, BHA is pursuing Microsoft (MS) User Group Membership in a local or nearby chapter and has reached-out to ETS to see if there are existing subscriptions that can be leveraged. Participating in a MS User Group would benefit BHA as it would be an excellent resource for networking with other users to help resolve system challenges quickly and for staying on top of D365 current events. The Project Team updated the DevOps Tool to include an RCA Category and Description fields for tracking future RCA information. To continue RCA efforts moving forward, a debrief of post-production deployments for future releases will be discussed at the Thursday Issues Meeting following a release deployment to production. IV&V notes that BHA is still working with Microsoft to schedule time to commence the efforts for regression testing automation. This functionality is expected to provide repeatable, automated regression test efforts for CAMHD and DDD in downstream releases. CAMHD has tentatively identified its planned resource for this project and plans to coordinate the needed tasks and activities with Microsoft in late April/early May. IV&V will continue to monitor this finding.	H

Recommendations	Status
• Perform revenue neutrality fiscal balance testing on a quarterly basis to ensure revenues are as expected.	In Progress
• Perform typical project testing including System Integration, User Acceptance, Performance, and Regression Testing.	In Progress

IV&V Findings & Recommendations

Project Management (cont'd)

Recommendations	Status
• Assign dedicated resources to provide oversight of CAMHD Fiscal Processes.	In Progress
• BHA and RSM to collaborate on the necessary revisions to the submitted design deliverables to increase level of detail and quality.	Completed
• Monitor implemented improvements for effectiveness.	In Progress
• Evaluate existing project staff skills and experience level to ensure they meet BHA support requirements.	Open
• IV&V recommends performing an RCA in collaboration with RSM after all future release deployments for continual quality improvement.	In Progress

IV&V Findings & Recommendations

Project Management (cont'd)

#	Key Findings	Criticality Rating
13	**Medium Issue – PII/PHI data in non-production environments.** There were no substantive changes for this finding in April. Due to resource constraints, establishing a plan for managing PHI/PII data in non-production BHA environments has not yet commenced. Technical staff bandwidth shortages continues to prevent BHA from accomplishing needed new activities to support the Max/Inspire Project. It remains unclear when this important security mitigation activity will be completed.	M

Recommendations	Status
• IV&V recommends if production data is necessary in any non-production environment that DOH establishes a plan for effectively managing the security of the PII/PHI data, including the potential masking of data.	In Progress
• IV&V recommends that DOH mitigates this finding by minimizing and/or masking PHI/PII data in designated non-production environments.	In Progress
• IV&V recommends DOH consider limiting the volume of environments and access necessary to support development work, which should help minimize this risk.	Open

IV&V Findings & Recommendations

Project Management (cont'd)

#	Key Findings	Criticality Rating
17	**Medium Risk - The bandwidth of CAMHD Leadership is being hampered by planning tasks and activities for assessing project expansion to other divisions.** CAMHD Leadership time spent on efforts outside of the INSPIRE Project continued to increase during early April but has decreased at the end of the month. Approximately 60-70% of Leadership time was spent on Phase 4 Planning, COVID Remediation, and the new Vaccine Registration application efforts. The CAMHD level of effort is anticipated to decrease to approximately 20% in May as DOH has hired a Project Manager in April who will be dedicated to the Vaccine Registration Project, instead of BHA resources IV&V will continue to monitor this finding.	M

Recommendations	Status
• IV&V recommends CAMHD look for opportunities to augment the management staffing for planning Phase 4 and M&O work.	In Progress

IV&V Findings & Recommendations

Project Management (cont'd)

#	Key Findings	Criticality Rating
20	**Preliminary Concern – The pending RSM contract expiration will require BHA to perform transition of the D365 solution to the State prior to contract end.** The RSM contract amendment is still pending approval. This amendment will extend the DD&I effort (Mod 5) to the end of December 2021 and will also provide M&O services (Mod 6) through May 2022. Mod 5 is expected to be approved in May 2021. This will delay the near-term need for a Transition Plan until first quarter 2022. IV&V will continue to monitor this finding.	N/A

IV&V Findings & Recommendations

Project Management (cont'd)

#	Key Findings	Criticality Rating
21	***New Preliminary Concern*** **– The DDD Project Manager will be on leave and unavailable to the project starting in May.** The DDD Project Manager performs most of the project duties on behalf of DDD and her absence may cause an increased level of risk to the project. DDD has commenced planning efforts and has assigned staff to backfill her, although they are currently assigned to other project tasks and activities. IV&V will continue to monitor this preliminary concern.	N/A

IV&V Findings & Recommendations

Project Performance Metrics

Metric	Description	IV&V Observations	IV&V Updates
Velocity	• Review and validate the velocity data as reported by the project • Verify the project is on pace to hit the total target number of US/USP for Phase 3	**April –** Available velocity was estimated at 60 user story points for R3.14, however a total of 58.5 USPs were completed and promoted to production. IV&V notes that RSM includes USP counts from Mid Sprint Deployments prior to a planned release as component of the planned release. IV&V notes that there were no Mid Sprint Deployments in April. Overall, the cumulative Phase 3 targeted USPs through R3.14 was planned for 1,158. The cumulative completed USPs total is currently 1,496.8.	N/A

IV&V Findings & Recommendations

Project Performance Metrics (cont'd.)

Metric	Description	IV&V Observations	IV&V Updates
Defect Metrics	Understand and track the following: • Defects by category (bug fixes) • US Points assigned to defects in a release vs US Points assigned to planned US in a release	**April** – R3.14 was comprised of 58.5 USPs that were released to production. • 70% of the total USPs were associated with planned user stories and requests. • 30% of the total USPs were associated with defects from the backlog.	N/A

IV&V Findings & Recommendations

Organizational Maturity Assessment

Measure	IV&V Observations
The Organizational Maturity Assessment (OMA) is updated on a bi-monthly basis. IV&V currently planning for the next OMA in May 2021.	

Appendix A: IV&V Rating Scales

Appendix A
IV&V Rating Scales

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)
- IV&V Assessment Category Rating Definitions

G	The assessment category is under control and the current scope can be delivered within the current schedule. The assessment category's risks and issues have been identified, and mitigation activities are effective. The overall impact of risk and issues is minimal. The assessment category is proceeding according to plan (< 30 days late).
Y	The assessment category 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 assessment category'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 assessment category. Schedule issues are emerging (> 30 days but < 60 days late). Project Leadership attention is required to ensure the assessment category is under control.
R	The assessment category is not under control as there are serious problems with resources, schedule, or scope. A plan to get back on track is needed. The assessment category'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 assessment category under control.

Appendix A
Finding 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

Appendix B
Inputs

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

Meetings attended during the April 2021 reporting period:

1. Daily Scrum Meetings (selected)
2. Twice Weekly RSM Issues Meeting
3. Weekly BHA-ITS Project Status Meeting
4. Bi-Weekly Check-in: CAMHD
5. Bi-Weekly Check-in: DDD
6. BHA IAPDU Planning Meeting
7. IV&V Draft IV&V Status Review Meeting with DOH
8. IV&V Draft IV&V Status Review Meeting with RSM and DOH

Artifacts reviewed during the April 2021 reporting period:

1. Daily Scrum Notes (selected)
2. Twice Weekly Issues Meeting Notes (selected)
3. Semantic Layer Design Document

Eclipse IV&V® Base Standards and Checklists

Appendix C: Project Trends

Appendix C
Project Trends

Trend: Overall Project Health										
Process Area	2020-2021									
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr
User Story Validation										
Test Practice Validation										
Sprint Planning										
Release / Deployment Planning										
OJT and KT Sessions										
Targeted KT										
Project Performance Metrics										
Organizational Maturity Metrics										
General Project Management										
Total Open Findings	**6**	**7**	**7**	**10**	**11**	**11**	**10**	**11**	**8**	**8**
Issue - high	0	0	0	0	0	0	4	4	4	3
Issue - medium	0	1	2	2	4	4	0	0	0	3
Issue - low	1	0	0	0	0	0	0	0	0	0
Risk - high	1	0	0	0	0	0	0	0	0	0
Risk - medium	2	3	3	3	2	2	2	2	4	1
Risk - low	1	0	0	0	3	3	4	4	0	0
Preliminary Concern	1	3	3	5	2	2	0	1	0	2

Solutions that Matter

ID No	Identified Dat	Title	Observation	Significance	Recommendation	Updates	Process Area	Finding Type	Priority	Status	Closure Reason	Risk Owner
1.000	12/31/2019	Detailed investigation into the project's sprint planning processes and adoption of generally accepted agile best practices.	IV&V is currently investigating the following topics as they relate to Sprint Planning and the project's overall approach to agile software development: - IV&V acknowledges that the project is now planning three sprints outs, however, it appears that only a "high-level" sprint planning roadmap has been produced, and it is unclear exactly how the project is targeting features for each release through the end of Mod 4. - IV&V is not aware of how the project is currently defining "done" for Mod 3 and Mod 4 Additionally, in the January 2020 reporting period, IV&V will seek additional information and visibility into the project's processes specific to prioritizing requests and how user stories in TFS	While having a high level roadmap is good, the project should be able to identify what feature enhancements will be targeted for each planned release. This roadmap will help the project manage scope and productivity. Relatedly, the "definition done" is an important artifact to ensure that the project is successful. Otherwise, the project will struggle to prioritize requests/enhancements and manage scope.	As much as possible, the project should identify what feature enhancements will be targeted for each Release and should clearly map out the roadmap out through the last Phase 3 release in September 2020. Additionally, the project should clearly define "Done" to ensure the project team is working towards the same goal and increase opportunities for success. Having a clear "definition of done" will help provide the project with guidance on how to stay within scope.	01/31/2020 - IV&V is closing this concern, and will be tracking items related to Definition of Done, roadmap, resourcing, and backlog grooming in new, separate findings.	Sprint Planning	Concern	N/A	Closed	Due to multiple new items being tracked at a more granular level, this item has been closed.	V Ramesh
2.000	12/31/2019	As a result of regression testing not being consistently performed, production releases are both breaking and deprecating existing functionality in the production environment.	R3.3 introduced a defect that deprecated features in production specific to Integrated Support and Life Trajectory functionality. DDD has informed IV&V that there are other examples of functionality being deprecated after a release, some of which are still being investigated. As of this report, IV&V has not evaluated the project's root cause analysis (RCA) process used to determine why such functionality was deprecated but will discuss further with BHA in January 2020.	Thorough vetting and validation of regression test cases is necessary to prevent both defects and the deprecation of production functionality when a release is pushed live. When defects occur in production, the project should follow a defined and repeatable process for determining the root cause of the problem.	To address regression testing, the Project should continue to pursue and/or consider: 1. Updating the regression test scripts to ensure consistency with system configuration - Completed 2. Modifying release schedules to allow for regression testing timeframes - Completed 3. Grouping releases by functionality type to avoid unnecessary repetitive work being performed in any given section of the solution - Completed 4. Performing regression testing after every release, or possibly every other release, or potentially tying regression tests to full solution upgrade releases. In addition, consider alternating the DDD and CAMHD scripts every other release - Completed 5. Modifying regression test scripts to start AFTER case creation, limiting the time it takes to execute - Completed 6. Modifying the deployment scripts based on information gained from previous release deployments - Completed	04/30/2021 - IV&V has confirmed with DDD that their current regression testing efforts are effective. IV&V recognizes that CAMHD does not perform industry standard regression testing to validate the introduction of new code does not break existing functionality. However, CAMHD performs component testing prior to production release, and are satisfied this meets their pre-production testing needs. Efforts to plan the development of automated regression test scripts with Microsoft continues. CAMHD has tentatively identified its planned resource for this project and plans to coordinate the needed tasks and activities with Microsoft in May. IV&V has reduced the criticality rating for this finding from a high issue to a medium issue as the project moves towards automation that will provide industry standard regression testing. IV&V will continue to monitor this finding. 03/31/2021 - R3.13 was promoted to production on 3/14/2021. The Root Cause Analysis (RCA) effort from R3.12 was completed in March resulting in several recommendations for increasing the quality of Testing. The corresponding RCA Action Plans	Test Practice Validation	Issue	Medium	Open		D Macdonald

3.000	12/31/2019	Usage of open source JavaScript framework for development and ongoing maintenance of Calculator 3.0 requires BHA to take a proactive approach to support and security.	IV&V learned in December 2019 that the Calculator 3.0 functionality is built in Vue.JS, an open source JavaScript framework. As this framework is relatively new, the open source support community is small. IV&V's concerns include: - The availability of reliable support for Vue.JS - The project's understanding of any known vulnerabilities with Vue.JS, and development of a process to remain current on vulnerabilities discovered by the support community. - The RSM lead for Calculator 3.0 went on extended parental leave in December 2019 IV&V acknowledges that BHA has downloaded Vue.JS to start getting familiar with it.	Open source tools and frameworks offer organizations great opportunities to build and configure customized solutions at lower costs than through software purchase or licensing. However, open source tools and frameworks often do not come with support models, other than those offered through the tool's community. Because of this, the organization bears the weight of seeking out reliable help and support, as well as much take a proactive approach to security and identifying any vulnerabilities in the tools.	IV&V recommends BHA work to establish a reliable and repeatable process for keeping abreast of communal updates and support opportunities for a new suite of tools - Completed IV&V recommends BHA continue to hold targeted KT sessions with RSM on maintaining Calculator 3.0 via a suite of tools, and determine what additional skillsets, training, and/or resources are needed to support BHA's long-term ownership of Calculator 3.0 - Completed	08/31/2020 - IV&V is unaware of any additional KT gaps being identified by DOH, and as such, is closing this finding. 07/31/2020 - The Project resolved the majority of the outstanding Calculator 3.0 defects during July which was implemented in the mid-sprint release on 7/17/2020. The final Calculator 3.0 Knowledge Transfer session was conducted on 7/17/2020. IV&V recommends BHA to identify and communicate any additional KT gaps to RSM during the month of August. If no additional needs are identified, IV&V will close this finding. 06/30/2020 - The project continued to focus attention on the Calculator 3.0 defects during the month of June. RSM conducted another Calculator 3.0 Knowledge Transfer session on 6/26/2020 and scheduled a final session for 7/17/2020. 05/31/2020 - The project continued to focus attention on the Calculator 3.0 user stories and defects during the month of May. RSM conducted another Calculator 3.0 Knowledge Transfer session on 5/29/2020 which IV&V attended. This session included the new C3.0	Targeted KT	Risk	Low	Closed	RSM has successfully held several KT sessions for this technology and functionality, and DOH staff have stated that it was well received.	D Macdonald
5.000	1/31/2020	Due to the project not following a detailed deployment script, the project may continue to experience defects related to deployment activities.	There have been several defects pushed to production with Phase 3 releases. Some of the defects introduced to production have been narrowed down to environmental promotional activities. In these instances, the DEV and TEST environments were not in sync with the production environment (missing business rules, missing components, missing dependencies, etc.). IVV is aware that DOH staff shadowed RSM staff for all deployment releases during Phase 2 with RSM providing instruction and DOH staff physically executing the tasks and activities via keyboard. For Phase 3, it is unclear whether a complete, up to date, and documented deployment script, or deployment notes, are being	A complete, up to date, and documented deployment script is needed to ensure the repeatability and stability of DOH's production deployments. Since there are currently two deployment types (patches and full solution upgrades), two scripts may be warranted. An embedded process and documented script will help ensure that mistakes are minimized, and that functionality is not mistakenly deprecated when deployments take place.	IVV recommends documenting deployment scripts for both the patch method and the full solution upgrade method. The script(s) should be in the form of a step-by-step procedure that walks through from start to finish of the deployment process and involve several technical staff to ensure staff availability to accomplish these tasks when primary deployment personnel are unavailable. Standardize the content of all developer deployment task notes, with a goal of eliminating any potential ambiguity to the Deployment Team, resulting in a cleaner and more repeatable set of deployment processes and instructions.	12/31/2020 - IV&V has closed this issue as the related recommendations below has been completed. A subsequent medium issue finding (#19) has been opened to address ongoing deployment processes and technical execution issues. 11/30/2020 - Release 3.10 was promoted to production on 11/11/2020. Approximately nine (9) new defects were identified after the deployment. Root causes are suspected to be a combination of insufficient testing from a business perspective coupled with deployment issues. A bulk record update task required as part of the implementation was not included in the deployment, resulting in contacts being deprecated from the Circle of Support in Inspire. It is unclear if any other deployment issues may have also contributed to the new defects. Deployment corrections were applied in a mid sprint release on 11/27/2020. Based on the recurrence of this finding, IV&V has changed this Risk to an Issue and will continue to monitor until resolved. 10/31/2020 - The RSM and DOH Teams have collaborated to develop a detailed Production Deployment Guide for R3.10 and are in the process of rehearsing some of the primary	Release/Deployment Planning	Issue	Medium	Closed	Key finding has been addressed and proposed IV&V recommendations have been completed. A subsequent finding #19 has been created to address on-going deployment processes and technical execution issues.	D Macdonald

6.000	1/31/2020	The project lacks a documented 'Definition of Done", which could challenge the project's ability to fully achieve the goals of Phase 3.	BHA does not have a documented 'Definition of Done' (DOD) for the BHA Top 100 User Stories of for Phase 3. Because of this, it is unclear how proposed functionality/features are prioritized for each sprint, and throughout Phase 3.	The 'Definition of Done" document guides the Project's vision, business, and technical goals that are important inputs for stakeholders to develop a Roadmap for Phase 3. Without the 'Definition of Done' document, the project is likely to struggle to prioritize proposed functionality/features which may be equally important but are at odds with each other.	Project is currently in the process of creating the Definition of Done. IV&V recommends that the project create this document and socialize this with project team before end of Feb 2020 IV&V recommends that the project consider the items from the prioritized list, available resources and define "Done" as a percentage of the identified priority list with room for flexibility to add any other features/enhancements that will be identified during Phase 3.	02/29/2020 - The project created and documented the Phase 3 Definition of Done and socialized it in February. IV&V recommends the project continually review and update the Definition of Done, adjusting as/if necessary. IV&V will continue to monitor the project's adherence to Definition of Done and progress against it but is closing out this concern as of the February report.	Project Management	Concern	N/A	Closed	Definition of Done completed and socialized.	V Ramesh
7.000	1/31/2020	The lack of consistent backlog grooming could result in the project backlog having obsolete, non-estimated, and poorly defined user stories.	The backlog of defects, requests, and user stories continues to grow. Currently, there are approximately 429 defects and requests, of which almost 200 have a status of 'New'. IVV notes that a large percentage of the backlogged work items do not have user story points estimated. Many of the items listed in the backlog are old, and some may have had needs or requirements change over time or may now be obsolete. IV&V notes that DDD and CAMHD have initiated this effort and agreed to prioritize grooming the backlog by the end of February.	A comprehensive, up-to-date backlog is a primary tenet of agile software development. If a backlog is carrying work items that may not ever be completed for any reason, they should be removed from the backlog to ensure its viability.	IVV recommends that CAMHD and DDD groom the backlog to bring it as current and accurate as possible. This should include deprecating items no longer needed, and fully defining those items that are not yet fully defined, readying them for configuration or developer resources. To the extent feasible, BHA should involve RSM SMEs in this process, if only for the interim to get "caught up" on grooming efforts. (Closed) VV recommends that the project consider utilizing an age-based methodology for the deprecation of 'older' user stories in the backlog that may no longer be applicable or needed by the Product Owners and developing a process for periodic cleansing of the backlog using the same methodology. (Closed)	06/30/2020 - IV&V has observed for another month that the project continues to groom the backlog. As a result, we are closing this finding. 05/31/2020 - The project team has determined the backlog grooming effort has caught up, as details for release 3.9 are completed and 3.10 is near completion. IV&V will keep this finding open for an additional month to validate that the backlog continues to be groomed as new stories and defects are identified. Efforts to keep the backlog groomed should take place each month so that release planning efforts are not delayed. 04/30/2020 - The project reported that 97% of the original backlog has been estimated at this time. That said, CAMHD has determined that there are several older, and possibly no longer necessary user stories in the backlog that are candidates for deletion. IV&V will keep this finding open and will re-assess it for impact during the month of May. 03/31/2020 - IV&V validates that the backlog grooming effort has made great progress, however it is still in progress. The revised target date for completion was most recently	Project Management	Risk	Low	Closed	The project has demonstrated they are consistently grooming the backlog.	D Macdonald

8.000	1/31/2020	The BHA Technical Team bandwidth may not be sufficient to meet the needs of the project, which could compromise project productivity.	The BHA Technical Team plays a role that is critical to project success. Currently, the responsibilities associated with the BHA Technical Team have expanded beyond their collective available bandwidth. IV&V notes that BHA began addressing this bandwidth issue, which includes increased collaboration with key RSM resources, and are working to potentially change the structure of the Technical Team.	The BHA Technical Team leads the efforts of all technical DOH staff on the project. As such, the Team's time is both extremely valuable and scarce. If the Team's expected workload exceeds bandwidth, the project could experience bottlenecks. Optimization of the BHA Technical Team's time is to the benefit of the project and plays a critical role in the project's ability to hit performance targets and achieve the Phase 3 definition of done.	The Project should investigate mechanisms of increasing the bandwidth of the BHA Technical Team, either by adding resources through new hires, or vendor contracts. The Project should assess, where possible, if there are responsibilities of the BHA Technical Team that can be reassigned to other project staff. The Project should evaluate where process inefficiencies can be addressed and streamlined to possibly free up the BHA Technical Team's availability. The Project should consider the formation of a first level M&O resource team to triage/address production defects in a timely manner, without disrupting new development work. The Project should consider procurement of an online training toolset to support OCM and technical efforts to offset the need for in-person training - COMPLETED.	04/30/2021 - As planned, BHA continued to take on more lead responsibilities in the areas of user story ownership and performing code reviews during the month of April. CAMHD was notified that their open IT Technical position is on a temporary freeze. IV&V has elevated this finding from a medium risk to a medium issue and will continue to monitor this finding. 03/31/2021 - BHA continued to take on more lead responsibilities in the areas of user story ownership and performing code reviews during the month of April. CAMHD remains hopeful their open IT Technical position will be posted in May. IV&V will continue to monitor this finding. 02/28/2021 - Due to lack of administrative approvals, the internal BHA efforts to post and fill technical positions have slowed. CAMHD is hopeful that the open IT Technical position will be posted in March. IV&V will continue to monitor. 01/31/2021 - Due to internal DOH processes, the recruiting announcement for CAMHD's open IT Technician position was delayed until February. IV&V will continue to monitor this finding. IV&V notes that the RSM Team continued to	Sprint Planning	Issue	Medium	Open		D Macdonald
9.000	1/31/2020	The lack of a Product Roadmap that provides direction on the top product features to be delivered in the near term (next 3 months), midterm, and long term could have an adverse impact on the Project's scope and schedule.	BHA does not have a single, definitive Product Roadmap for Phase 3 that addresses the functionalities, features, and / or enhancements to be built in order to fully address BHA's business needs. IV&V met with RSM and BHA on this topic in January, and notes that the project is actively working to address this concern.	A Roadmap is a tool that guides an agile project on what functionalities/features are targeted to be built and released and when users can have access to these functionalities. Without a defined Roadmap the project may not be able to effectively scope the top features to be released within Phase 3 and ensure the correct resources are available to accomplish the goal of each sprint and the Phase.	IV&V understands that the Project is in the process of creating a Short Term; Mid Term, and Long Term Roadmap. IV&V recommends the Project complete this by the end of February 2020 to understand if there are any constraints (resources, budget) that may hinder the project from releasing the needed functionalities/features targeted for Phase 3 as documented in the Definition of Done.	02/29/2020 - In February, the project further defined the Phase 3 Product Roadmap and aligned it with the Phase 3 Definition of Done. IV&V recommends the project continually review and update both the Product Roadmap and Definition of Done, adjusting as necessary. IV&V will continue to monitor the project's adherence to the Product Roadmap and progress against it but is closing out this concern as of the February report.	Project Management	Concern	N/A	Closed	Product Roadmap aligned with Definition of Done	V Ramesh

10.000	3/31/2020	The COVID-19 pandemic and the related "stay at home" order could hinder project activities and negatively impact the project schedule and budget.	On 3/23/2020, the Governor issued a “stay at home, work from home order” that has reduced state departments ability to be fully functional as the large majority of state workers will be required to work from home/remotely at least until the end of April and some offices may be completely shut down until that time as well. Unclear if the order will extend beyond that date.	DOH stakeholder participation in key activities could be significantly hindered, not only by required remote work by DOH and SI staff, but also by the flood of activities that could occur as the department could become overwhelmed processing and providing services due to the resulting economic impacts to citizens. Some stakeholders may be unable (due to stricter shutdown policies) or unwilling to perform these activities during this chaotic time. Planned SI on-site visits will also likely be changed to remote which could reduce the effectiveness of their project activities. Going forward most if not all project activities will more than likely be conducted remotely until this crisis passes.	- IV&V recommends BHA to ramp up efforts to setup, train, and assist stakeholders on remote work devices and tools and make every effort to help them to become highly functional with remote access technology (e.g. MS Teams/Skype) - Completed - IV&V recommends the project and DOH create a detailed, documented risk mitigation strategy and plan that is reviewed regularly and revised to address the current state of the COVID-19 threat and related impacts over the next 6 to 12 months - In Progress - IV&V recommends updates to the OCM Plan to include any new activities or updates to planned activities to aid the organization through this COVID-19 situation in the short and long term - Open	04/30/2021 - The Project continues to maintain its ability to operate with staff working remotely, effectively overcoming the “stay at home, work from home order” that reduced BHA's ability to be fully functional in the office. The potential DDD and CAMHD budget challenges reported in March were also overcome during April, providing fiscal relief to BHA. As such, IV&V is closing this finding. 03/31/2021 - The Project continued to maintain its ability to operate with staff working remotely, while COVID-related responsibilities continue to grow for CAMHD Leadership. The Governor announced that potential furloughs and/or layoffs of State workers will no longer be necessary based on the signing of the American Rescue Plan. IV&V has reduced the priority of this finding from Medium to Low and will continue to monitor moving forward. 02/28/2021 - As reported in January, there were no substantive changes observed for this finding in February. The Project continued to maintain its ability to operate with staff working remotely. IV&V continues to note that there may be potential future budget actions by the Governor due to projected State budget	Project Management	Risk	Low	Closed	The Project continues to maintain its ability to operate with staff working remotely, effectively overcoming the “stay at home, work from home order” that reduced BHA's ability to be fully functional in the office. The potential DDD and CAMHD budget challenges reported in March were also overcome during April, providing fiscal	D Macdonald
11.000	5/31/2020	The lack of design reviews for complex user stories has resulted in the promotion of incomplete solutions into production.	There were a couple incidents during May where the code promoted to production did not fully meet all requirements of associated user stories for CAMHD Progress Notes. The components that were developed and implemented were functional, however the effort was complicated by additional requirements being added during development that necessitated additional changes to the design. IV&V will continue to monitor the design review activity for large user stories moving forward	If all requirements within a functional design are not met, users could experience the inability to complete required processes, resulting in incomplete data collection and potential issues in service delivery.	IV&V recommends (and DOH has commenced) conducting technical design reviews for complex user stories prior to development to ensure designs are complete and all requirements associated with the design are met. IV&V observed this activity has been implemented by DOH in the month of May.	07/31/2020 - The Project continues to to spend additional time on the designs of complex user stories during June to ensure requirements and user story components were fully captured in design sessions. This process change has proven successful, and as such, IV&V recommends closing this concern. 06/30/2020 - IV&V acknowledges the Project Team continued to spend additional time on the designs of complex user stories during June to ensure requirements and user story components were fully captured in design sessions. IV&V will continue to monitor in July.		Concern		Closed	This process change to spend extra time on the design of complex user stories to ensure that all requirements are represented has proven to be successful.	

12.000	7/31/2020	DDD Project resource shortages may have a continued negative effect on user adoption, training, and overall OCM activities.	The user adoption and training efforts are hampered based on staffing shortages. DDD has stated that its users have been found to not be utilizing the system to its fullest extent in terms of system workflow, provide their insights and input, follow up, etc. To assist in OCM activities, DDD has defined the need for an interactive training tool to support Inspire.	The significance and impact of OCM can never be understated. It is clearly a best practice that best that all staff utilize the solution in the same manner. Variations in how the system is utilized by its users is likely to cause variations in data collection and analytical efforts using the data collected.	IV&V recommends that BHA does as much as possible within its sphere of influence to increase user adoption and training. This includes procurement of the online training toolsets to offset the need for in-person training, and adding staff as needed to support OCM and technical efforts. IV&V recommends DOH perform a detailed investigation of the specific variations as to how the system is currently being used by the user community. Consequently, users would be provided with constructive feedback on how the system should be utilized where gaps exist. This will likely lead to additional refresher training to close identified system knowledge gaps.	03/31/2021 - The DDD staff who've been part of the review process are pleased with the quality of the videos produced within the toolset and have determined that the toolset is a very helpful training tool for DDD staff and providers. As such, IV&V is closing this finding. 02/28/2021 - Training videos using the new toolset were nearing completion by the end of February. DOH is currently reviewing the drafts of the second set of videos and work is progressing well. IV&V will continue to monitor this finding until DDD has had sufficient time to determine the overall quality of the training work products and whether the new toolset is addressing user adoption and staffing shortages for these task efforts. 01/31/2021 - Training design activities using the interactive training toolset commenced in January and has attained good progress. The use of this tool is expected to provide some bandwidth relief for DDD staff members responsible for onboarding new staff members and providers, and to provide refresher training to existing staff members. IV&V will continue to monitor this finding 12/31/2020 - The contract to procure the interactive training toolset for onboarding new	Project Management	Risk	Low	Closed	The DDD staff who've been part of the review process are pleased with the quality of the videos produced within the toolset, and have determined that the toolset is a very helpful training tool for DDD staff and providers.	D Macdonald
13.000	8/31/2020	PII/PHI data in non-production environments	IV&V has been made aware that PII/PHI data currently exist in a non-production environment to meet project needs. Generally this is not a good security practice as the presence of PII/PHI data in non-production environments increases the potential for theft, loss or exposure thus increasing the organization's risk. Failure to secure PII/PHI data leaves the organization open to highly targeted social engineering attacks, heavy regulatory fines, and loss of client trust and loyalty.	Failure to secure PII/PHI data leaves the organization open to highly targeted social engineering attacks, heavy regulatory fines, and loss of client trust and loyalty.	IV&V recommends if production data is necessary in any non-production environment that DOH establishes a plan for effectively managing the security of the PII/PHI data, including the potential masking of data. IV&V recommends that DOH mitigates this finding by removing and/or masking any PHI/PII data in its non-production environments. NEW - IV&V recommends DOH consider limiting the volume of environments and access necessary to support development work, which should help minimize this risk.	04/30/2021 - There were no substantive changes for this finding in April. Due to resource constraints, establishing a plan for managing PHI/PII data in non-production BHA environments has not yet commenced. Technical staff bandwidth shortages continues to prevent BHA from accomplishing needed new activities to support the Max/Inspire Project. It remains unclear when this important security mitigation activity will be completed. 03/31/2021 - There were no substantive changes for this finding in March. Due to resource constraints, establishing a plan for managing PHI/PII data in non-production DOH environments has not yet commenced. Based on continued delays, it remains unclear when this important security mitigation activity will be completed. IV&V has raised the priority of this finding from a Low Risk to a Medium Issue due to delays in resolving this finding. IV&V will continue to monitor. 02/28/2021 - There were no substantive changes for this finding in February. BHA is establishing a plan for managing its PHI/PII data in non-production environments. Based on continued delays, it is unclear when this	Project Management	Issue	Medium	Open		D Macdonald

14.000	8/31/2020	Project not able to access Activity Logs	The Project recently deployed audit log functionality into production whereby these logs can be accessed and exported as needed. However, IV&V was made aware access to activity logging for users with just view permissions will not be available from Microsoft in the public sector environment until the end of September 2020. The unavailability of these specific activity logs could potentially hamper the investigation of future security events until implemented.	The unavailability of activity logs may hamper the investigation of future security breaches.	IV&V recommends that DHS continues to collaborate with Microsoft until the activity logging feature is available in all BHA non-production environments.	03/31/2021 - Per BHA, this finding is no longer an issue and recommends closure. IV&V is closing this finding. 02/28/2021 - BHA continued this effort in February despite a workaround being necessary from Microsoft due to a layering issue. Based on continued delays, it is unclear when this important security activity will be completed. IV&V will continue to monitor this finding. (Per Kamu, this status information did not correctly reflect the issue as the layering issue has no relation to the activity logs.) 01/31/2021 - The implementation effort for this activity moved forward in January. Some of the entities will have activity logging completed in the planned early February Release 3.12, while others will be delayed until Release 3.13. IVV will continue to monitor. 12/31/2020 - The planning effort for identifying the entities that will require activation of the new activity logs was completed during December. The implementation effort has been prioritized for inclusion in Release 3.12. IV&V will continue to monitor this finding until implemented. 11/30/2020 - The DOH technical team has commenced the analytical effort to determine	Release/Deployment Planning	Risk	Low	Closed	Finding has been resolved.	D Macdonald
15.000	9/30/2020	Due to multiple quality concerns, the project may continue to face impactful system defects.	System defects identified in August that affected claims were due to multi-faceted quality issues were individually addressed during this reporting period. IV&V notes that there is one remaining defect still being evaluated that affects a limited number of claims. Overall, the Project Team has responded with a commitment to increase project quality and is in the process of identifying improvements to associated testing processes. These currently include: Performing Revenue Neutrality Testing to ensure expected revenue streams are largely unchanged from one period to the next. Conducting System Integration Testing, User Acceptance Testing, Performance Testing, and Regression Testing for	The identified quality issues have negatively affected DOH billing processes and DOH has stated these are the most impactful defects discovered to date.	To address quality issues, the Project should continue to pursue and/or consider: 1) Perform revenue neutrality fiscal balance testing on a quarterly basis to ensure revenues are as expected. 2) Performing typical project testing including System Integration, User Acceptance, Performance, and Regression Testing. 3) Assigning a dedicated resource to provide oversight of CAMHD Fiscal Processes. 4) BHA and RSM to collaborate on the necessary revisions to the submitted design deliverables to increase level of detail and quality - Completed 5) Monitor implemented improvements for effectiveness. - In Progress 6) Evaluate existing project staff skills and experience level to ensure they meet BHA support requirements - Open 7) IV&V recommends performing an RCA in collaboration with RSM after all future release deployments for continual quality improvement. NEW	04/30/2021 - BHA has commenced mitigation efforts to address the highest priority RCA items resulting from the R3.12 defects. Although the entire list has not yet been prioritized, specific action is being taken to update the existing deployment standard checklist to address issues found with deployments. Further, BHA is pursuing Microsoft (MS) User Group Membership in a local or nearby chapter and has reached-out to ETS to see if there are existing subscriptions that can be leveraged. Participating in a MS User Group would benefit BHA as it would be an excellent resource for networking with other users to help resolve system challenges quickly and for staying on top of D365 current events. The Project Team updated the DevOps Tool to include an RCA Category and Description fields for tracking future RCA information. To continue RCA efforts moving forward, a debrief of post-production deployments for future releases will be discussed at the Thursday Issues Meeting following a release deployment to production. IV&V notes that BHA is still working with Microsoft to schedule time to commence the	Project Management	Issue	High	Open		D Macdonald

16.000	10/5/2020	Usage of Semantics and IDM for development and ongoing maintenance of the system requires BHA to take a proactive approach to support of these tools.	The project noted its intent to obtain more targeted knowledge transfer of both the Semantics Reporting and IDM tools. IV&V will continue to monitor this concern.			01/31/2021 - The project has made great strides addressing this concern. A Semantics Layer KT session was conducted on 1/29/21 and multiple IDM and Semantic Layer sessions has been scheduled in February. IV&V is closing this finding as we no longer view this item as a concern. 12/31/2020 - IV&V is aware that an overview of the Semantics Layer KT session was held on 12/16/20. The planning effort will result in additional Semantic Layer and IDM KT sessions in the coming months. IV&V will continue to monitor this finding. 11/30/2020 - The project conducted two high-level overview sessions of the Semantic Layer Reporting tools during November. One session was focused on the overall Semantic Layer, and the second session was focused on Semantic Layer Security. Additional targeted Knowledge Transfer sessions on the Semantic Layer tools will need to be provided by RSM; however, these have not been scheduled. IV&V will continue to monitor this finding. 10/31/2020 - The project intends to obtain more targeted knowledge transfer for both the Semantics Reporting and IDM tools and will be planning and scheduling these sessions with	Targeted KT	Concern		Closed	The project has made good progress establishing and initial execution of the IDM and Semantics Layer KT plan.	D Macdonald
17.000	10/27/2020	The bandwidth of CAMHD Leadership is being hampered by planning tasks and activities for assessing project expansion to other divisions.	CAMHD has been provided with an approval to commence planning efforts for expansion of the project for ADAD and AMHD & HSH. CAMHD Leadership currently spends 25% of their available time dedicated to this planning effort.	CAMDH Leadership participation in key activities could be significantly hindered by the flood of activities that could occur as the department assesses expansion of this project to the balance of divisions.	IV&V recommends CAMHD look for opportunities to augment the management staffing for planning Phase 4 and M&O work.	04/30/2021 - CAMHD Leadership time spent on efforts outside of the INSPIRE Project continued to increase during early April but has decreased at the end of the month. Approximately 60-70% of Leadership time was spent on Phase 4 Planning, COVID Remediation, and the new Vaccine Registration application efforts. The CAMHD level of effort is anticipated to decrease to approximately 20% in May as DOH has hired a Project Manager in April who will be dedicated to the Vaccine Registration Project, instead of BHA resources IV&V will continue to monitor this finding. 03/31/2021 - CAMHD Leadership time spent on efforts outside of the INSPIRE Project continued to increase during March. More than 50% of Leadership time is spent on Phase 4 Planning and COVID Remediation efforts. The level of dedication to this effort is likely to continue to increase in the coming months. IV&V has raised the priority of this finding from Low to Medium and will continue to monitor moving forward. 02/28/2021 - CAMHD Leadership continued to spend upwards of 1/3 of available time in the planning effort for Phase 4 of the Project,	Project Management	Risk	Medium	Open		D Macdonald

18.000	11/30/2020	Due to consistent technical issues requiring escalation to Microsoft, some project efforts are being delayed.	The IDM and Semantic layer efforts have experienced several delays attributable to issues escalated to Microsoft. The issues have ranged from administrative / communication (entering issues into the Commercial support instance vs the Government Cloud support instance), to several key technical issues requiring assistance to resolve. To date, these support needs have added over a month to the IDM and Semantic Layer project schedules.		IV&V recommends the project to continue to monitor the status of outstanding Microsoft tickets and to escalate the priority of these tickets as deemed necessary.	04/30/2021 - BHA continues to work with Microsoft on technical issues as they arise in the Government Community Cloud (GCC) instance. The issue with fields being locked has been resolved, however, a new MS ticket was opened to address workflows and business rules being disabled after a solution upgrade was applied. This issue has put a halt to all solution aware CRM development and code promotion work. This issue has delayed the R3.15 production release by at least a week. IV&V will continue to monitor this finding. 03/31/2021 - BHA continues to work with Microsoft on technical issues as they arise in the Government Community Cloud (GCC) instance. The issue with fields being locked is still outstanding. IV&V will continue to monitor this finding. 02/28/2021 - BHA continues to work with Microsoft on technical issues as they arise in the Government Community Cloud (GCC) instance. IV&V will continue to monitor this finding. 01/31/2020 - While most of the Microsoft issues were fixed, the 'first 10 rows', the 'multi-select options', and 'unmanaged layer on the Case entity' issues are partially outstanding	Release/Deployment Planning	Issue	High	Open		D Macdonald
19.000	12/31/2020	Due to on-going deployment processes and technical execution issues, the project may continue to encounter defects and challenges in meeting projected timelines for production and non-production deployments.	There have been several defects pushed to production with Phase 3 releases. Some of the defects introduced to production have been narrowed down to environmental promotional activities. In these instances, the DEV and TEST environments were not in sync with the production environment (missing business rules, missing components, missing dependencies, etc.). IVV is aware that DOH staff shadowed RSM staff for all deployment releases during Phase 2 with RSM providing instruction and DOH staff physically executing the tasks and activities via keyboard. For Phase 3, it is unclear whether a complete, up to date, and documented deployment script, or deployment notes, are being	Repeatable documented release and deployment will help ensure that mistakes are minimized, and that functionality is not mistakenly deprecated when deployments take place.	Develop a plan to institutionalize the execution of "Smoke Testing" for promotions to non-production and production environments. This will help to ensure that all components needed to test have been properly deployed prior to the actual execution of test activities. Work in collaboration with RSM to establish a plan for DOH to assume all deployment activities to ensure complete ownership of these processes. This should assist with consistency in approach and execution going forward. As appropriate, consult with RSM on best practices that BHA could employ to support deployment. Look at implementing 'hard' code freeze dates as well as test environment deployment dates to ensure that testing and deployment activities are not rushed. COMPLETED Request the assistance of the RSM Solution Architect in reviewing and correcting issues associated with consistency of the configurations across environments, ensuring that the test environment is capable of testing ALL	04/30/2021 - The R3.12 Root Cause Analysis (RCA) effort completed in March resulted in several recommendations for increasing the quality of deployments. One of the high priority items resulting from the RCA was to update the deployment checklists and provide a secondary review prior to executing a deployment. A task was assigned to a member of the Technical Team to update the checklists. IV&V will continue to monitor this finding. 03/31/2021 - R3.13 was promoted to production on 3/14/2021. The R3.12 Root Cause Analysis (RCA) effort was completed in March resulting in several recommendations (some of which were in alignment with IV&V recommendations as listed below) for increasing the quality of deployments. Resulting action plans were expected to be finalized and prioritized by the end of March, however the prioritization effort has been pushed to April due to resource constraints. Initial efforts may include providing more details in the SharePoint and deployment checklists coupled with a secondary review process. BHA is considering the procurement of a tool(s) to aid with deployments/releases. This includes the administrative software tool	Release/Deployment Planning	Issue	High	Open		D Macdonald

20.000	3/28/2021	The pending RSM contract expiration will require BHA to perform transition of the D365 solution to the State prior to contract end.	The RSM contract for Phase 3 is currently planned to complete in September 2021. BHA will need a transition plan to ensure that it has all knowledge transfer and is fully capable of managing all aspects of supporting and maintaining the D365 solution without vendor support until at least the Phase 4 expansion effort is procured and initiated. The Phase 4 effort is currently expected to commence late in the 4th quarter of 2021, or early in the first quarter of 2022. The Phase 4 procurement scope is planned to include additional DD&I activities, as well as M&O support activities.	DOH needs to be in a position to completely stand on its own without the assistance of vendor support by fall of 2021. If DOH is not in a position to solely take on the development of user stories, testing, regression testing, deployment, and the support and maintenance of the entire system, there is a risk that environment stability may be challenged.	Work hand in hand with RSM to ensure that DOH has the knowledge, skills, and capabilities to perform all aspects of the project prior to September 2021. If the knowledge transfer takes more time than planned, consider developing, testing, and promoting less releases in the summer months as the transition off of vendor support approaches.	04/30/2021 - The RSM contract amendment is still pending approval. This amendment will extend the DD&I effort (Mod 5) to the end of December 2021 and will also provide M&O services (Mod 6) through May 2022. Mod 5 is expected to be approved in May 2021. This will delay the near-term need for a Transition Plan until first quarter 2022. IV&V will continue to monitor this finding.	Project Management	Concern		Open	The RSM contract amendment was executed during April, alleviating the near-term need for a Transition Plan. This amendment extended the DD&I effort to the end of December 2021, and will provide M&O services through May 2022. IV&V will re-visit this subject 4-5 months prior to the new contract expiration date.	Vic Dudoit
21.000	4/30/2021	The DDD Project Manager will be on leave and unavailable to the project starting in May.	The DDD Project Manager performs most of the project duties on behalf of DDD and her absence may cause an increased level of risk to the project. DDD has commenced planning efforts and has assigned staff to backfill her, although they are currently assigned to other project tasks and activities. IV&V will continue to monitor this preliminary concern.	The DDD Project Manager is critical to all daily project interactions affecting DDD from a functional and managerial perspective. If her duties are not re-assigned to capable staff prior to her planned absence, DDD will be in a challenged position to effectively contribute to at least the next several releases.	Ensure that the highest priority items are re-assigned to other staff within DDD prior to the DDD PM's planned absence, considering their existing workload and other assignments.		Project Management	Concern		Open		Darren