JOSH GREEN, M.D.
GOVERNOR

DOUGLAS MURDOCK
CHIEF INFORMATION OFFICER

DEPT. COMM. NO. 257

OFFICE OF ENTERPRISE TECHNOLOGY SERVICES

P.O. BOX 119, HONOLULU, HAWAIʻI 96810-0119
Ph: (808) 586-6000 | Fax: (808) 586-1922
ETS.HAWAII.GOV

July 19, 2023

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

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

Aloha Senate 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 Hawaiʻi, Department of Health, 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 (Jul 19, 2023 13:54 HST)

Douglas Murdock
Chief Information Officer
State of Hawaiʻi

Attachments (2)

Hawaii BHA Integrated Case Management System Project – *Phase 3-4*

Final IV&V Report for the period of

June 1 – June 30, 2023

Final submitted: July 14th, 2023

PUBLIC CONSULTING GROUP

Solutions that Matter

Agenda

Executive Summary

IV&V Findings & Recommendations

Appendices

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

Executive Summary

There were no production deployments in June. The planned mid-sprint Golden Record components deployment continued to be delayed and is planned for mid-July. The Project performed Root Cause Analysis (RCA) for the nine R3.32 post-production defects in June as they continued to focus on the remaining 'Big Boulder' functionality. Transition to the new IV&V team also occurred in June. The Project received formal CMS approval for the SI and IV&V RFPs, and the ADAD (Inspire Plus) IAPD.

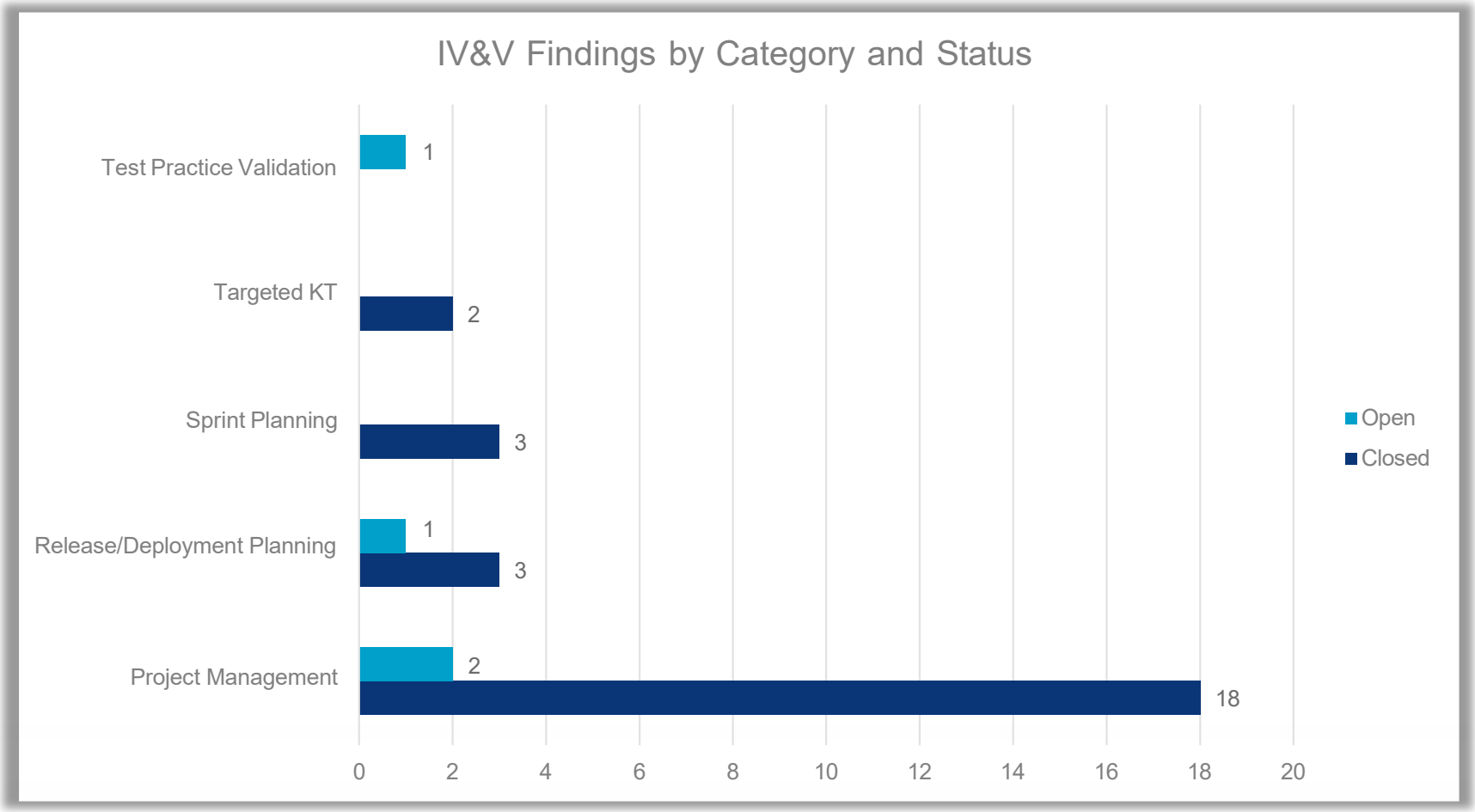
Apr	May	Jun	Category	IV&V Observations
G	G	G	**Sprint Planning**	There are no active findings in the Sprint Planning category which remains Green (low criticality) for the June reporting period.
G	G	G	**User Story (US) Validation**	There are no active findings in the User Story (US) Validation category which remains Green (low criticality) for the June reporting period. IV&V will continue to monitor the US development and validation process in upcoming reporting periods.
Y	Y	Y	**Test Practice Validation**	BHA has procured the necessary licenses for continued Tricentis support. The Project is expected to continue the automation of regression test scripts in late July. This category remains Yellow (medium criticality) for the June reporting period.
Y	Y	Y	**Release / Deployment Planning**	There was one deployment-related issue for R3.32 per the last RCA session. Defined/documented roles and responsibilities for deployment support remain outstanding. IV&V will continue to monitor this category moving forward.

Executive Summary

Apr	May	Jun	Category	IV&V Observations
G	G	G	**OJT and KT Sessions**	This category remains Green (low criticality) for the June reporting period with no active findings.
G	G	G	**Targeted KT**	This category remains Green (low criticality) for the June reporting period. IV&V will continue to monitor.
G	G	G	**Project Performance Metrics**	There are no project performance metrics to report for June. IV&V will keep the criticality rating for this category a Green (low criticality) and will continue to monitor this category moving forward.
Y	Y	Y	**Organizational Maturity Assessment (OMA)**	This category remains Yellow (medium criticality) for the June reporting period. IV&V will continue to monitor.
R	R	Y	**Project Management**	Quality continues to remain a concern for IV&V as there were several high and medium criticality production defects for R3.32. IV&V closed the pending CMS Approval finding and reduced the “Big Boulder” initiatives finding criticality from a high issue to a medium issue. As a result of the positive updates made in this category, IV&V has reduced the criticality to Yellow (medium criticality) for the June reporting period.

Executive Summary

As of the June 2023 reporting period, there are a total of four (4) open findings – four Medium Issues spread across the 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 verifies and validates 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

Test Practice Validation

#	Key Findings	Criticality Rating
2	**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**. Full use of automated regression testing capabilities continued to be delayed in June. BHA has purchased both the required licenses and the needed coaching sessions from Tricentis to help ensure success. RSM assigned a staff member in mid-June to perform research on the toolset to assimilate with the environment, and to implement this solution for DDD. The timeline for developing the DDD portion of this is expected to commence in late July and will run through October. Detailed plans are being finalized. IV&V will continue to monitor this medium criticality finding.	M

Recommendations	Status
• Pursue and complete additional formal training in AzureDevOps and Tricentis for test automation at the earliest possible juncture and complete efforts to automate the 2 primary regression test scripts.	In progress
• Developing a common and consistent regression testing approach across DDD and CAMHD.	Completed
• Determining if current regression testing timeframes are adequate and if not, add more time to the pre-production regression test efforts for all release deployments.	Completed

IV&V Findings & Recommendations

Test Practice Validation (cont'd)

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
• Performing regression testing after every release, or possibly every other release, or potentially tying regression tests to FSU 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
• Implementing 'hard' code freeze dates as well as test environment deployment dates to ensure that testing and deployment activities are not rushed.	Completed
• Modifying the deployment scripts based on information gained from previous release deployments.	Completed

IV&V Findings & Recommendations

Test Practice Validation (cont'd)

Recommendations	Status
• 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
• Performing an RCA in collaboration with RSM for the continued concerns with regression testing efforts.	Completed

IV&V Findings & Recommendations

Release / Deployment Planning

#	Key Findings	Criticality Rating
18	**Medium 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.** A deployment error was highlighted as the root cause for one of the post R3.32 production release defects. While the deployment issues have been fewer with the last few releases, this is still an area of concern for IV&V. IV&V will continue to monitor this medium exposure project issue.	M

Recommendations	Status
• Ensure there are adequate and qualified resources to support the current deployment processes. This may require support from RSM resources to provide assistance and knowledge transfer for some of the more complex deployment components.	In Progress
• Consult on a regular basis with Microsoft and RSM on best practices that BHA could employ to support deployment.	In Progress

IV&V Findings & Recommendations

Release / Deployment Planning (cont'd)

Recommendations	Status
• 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
• 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
• Implementing 'hard' code freeze dates as well as test environment deployment dates to ensure that testing and deployment activities are not rushed.	Completed
• Ensuring 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
• Working 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.	Completed

IV&V Findings & Recommendations

Release / Deployment Planning (cont'd)

Recommendations	Status
• Developing 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.	Completed
• Determining an improved manner for managing DOH environments to avoid an error-prone process of 'cherry picking' what is and what is not ready for deployment. (As a result of how the current development environment is being managed, 'cherry picking' components to deploy will continue to occur. This recommendation is closed.)	Closed

IV&V Findings & Recommendations

Project Management

#	Key Findings	Criticality Rating
14	**Medium Issue - Due to multiple quality concerns, the Project may continue to face impactful system defects.** R3.32 resulted in nine post-production defects with three critical and two high priority defects. Of the nine defects, two were caused by environmental discrepancies, two attributed to design errors, two caused by documentation issues, one related to a process issue, and one due to a deployment issue. One defect is pending a root cause. IV&V will continue to monitor this medium exposure issue.	M

Recommendations	Status
• Evaluate existing project staff skills and experience level to ensure they meet BHA support requirements.	In Progress
• Perform CAMHD revenue neutrality fiscal balance testing on a quarterly basis to ensure revenues are as expected.	In Progress
• Assign dedicated resources to provide oversight and monitoring of CAMHD Fiscal Processes, depending on new staff availability.	Open
• Monitor implemented IV&V recommendations for effectiveness.	In Progress

IV&V Findings & Recommendations

Project Management (cont'd)

Recommendations	Status
• Performing an RCA in collaboration with RSM after all future release deployments for continual quality improvement.	Completed
• Collaborating (DDD and CAMHD) on the necessary revisions to the submitted design deliverables to increase level of detail and quality.	Completed
• Performing typical project testing including System Integration, User Acceptance, Performance, and Regression Testing.	Completed
• Dedicating sufficient time in between releases for BHA and RSM to execute/implement RCA correction actions to reduce the volume of unplanned rework.	Completed

IV&V Findings & Recommendations

Project Management (cont'd)

#	Key Findings	Criticality Rating
22	***Change from High Issue to Medium Issue*** **- The project schedules for 'big boulder' functionality development are slipping.** The last of the Big Boulders continued to be the primary focus for the Project during June. Both the FHIR and Provider API initiatives are now expected to be completed in R4.1. The mid-sprint deployment to promote Golden Record (GR) components that was originally scheduled for mid May has been delayed several times and is now anticipated in mid July. The delays are intended to reduce potential risks. Processes are being determined and developed across the four BHA divisions, to help ensure that the GR functionality is used in a similar fashion for all of BHA. Because there are just three big rock items left to complete, and all are currently in progress, IV&V is lowering this finding to a Medium exposure, and we will continue to monitor moving forward.	M

Recommendations	Status
• Strive for ongoing velocity metric of a minimum of 120 user story points in any given release.	In Progress
• Identify the reason(s) for the lower-than-expected R3.27, R3.28, and R3.29 velocity to determine if corrective actions need to take place.	Completed
• Extend the current DDI timeframe to allow for the completion of 'big boulder' interfaces functionality development.	Completed
• Adding resources to support the development of "big boulder' interfaces functionality.	Completed

IV&V Findings & Recommendations

Project Management (cont'd)

#	Key Findings	Criticality Rating
29	***Closed Medium Risk*** **- RFP(s) for Project Expansion and M&O Have Not Been Approved by CMS.** CMS has provided BHA a formal approval on the ADAD (Inspire Plus) IAPD and the SI and IV&V RFPs. As a result of the CMS approvals, IV&V is closing this risk.	M

Recommendations	Status
• Continue to escalate RFP approvals with DHS.	***Completed***
• Seek approval for extending the existing contract if feasible.	***Completed***

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	**June –** There were no production releases in June to report velocity performance metrics.	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	**June** – There were no production releases in June to report defect performance metrics.	N/A

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

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

Meetings attended during the June 2023 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. IV&V Draft IV&V Status Review Meeting with DOH
7. IV&V Draft IV&V Status Review Meeting with RSM and DOH
8. DOH BHA IT Solution Project – Steering Committee 2023

Artifacts reviewed during the June 2023 reporting period:

1. Daily Scrum Notes (selected)
2. Twice Weekly Issues Meeting Notes (selected)

Eclipse IV&V® Base Standards and Checklists

Document

Appendix C
Project Trends

Trend: Overall Project Health										
Process Area	2022/2023									
	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
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	**11**	**10**	**10**	**10**	**8**	**10**	**10**	**9**	**6**	**4**
Issue - high	4	5	4	3	3	2	2	1	1	0
Issue - medium	5	4	5	4	2	3	3	4	3	4
Issue - low	0	1	1	3	3	3	3	2	1	0
Risk - high	1	0	0	0	0	2	1	0	0	0
Risk - medium	0	0	0	0	0	0	0	1	1	0
Risk - low	0	0	0	0	0	0	0	0	0	0
Preliminary Concern	1	0	0	0	0	0	1	1	0	0

Solutions that Matter

ID	Date Identified	Finding	Finding Statement	Supporting Analysis	PCG Recommendation	Finding Update	Process Area	Finding Type	Priority	Status	Risk Owner	Closure Reason
1.00	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 4Additionally, 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 are tagged to features, as well as the realignment of project development and	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	Preliminary Concern	N/A	Closed	Ramesh, Vijaya (PCG)	Due to multiple new items being tracked at a more granular level, this item has been closed.

2.00	12/31/2019	As a result of regression testing not being consistently performed, production releases are breaking and/or 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.	Pursue and complete additional formal training in AzureDevOps and Tricentis for test automation at the earliest possible juncture and complete efforts to automate the 2 primary regression test scripts. IV&V recommends DDD and CAMHD to develop a common and consistent approach across divisions for performing regression testing. 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. Updating the regression test scripts to ensure consistency with system configuration. Modifying release	6/30/2023 - Full use of automated regression testing capabilities continued to be delayed in June. BHA has purchased both the required licenses and the needed coaching sessions from Tricentis to help ensure success. RSM assigned a staff member in mid-June to perform research on the toolset to assimilate with the environment, and to implement this solution for DDD. The timeline for developing the DDD portion of this is expected to commence in late July and will run through October. Detailed plans are being finalized. IV&V will continue to monitor this medium criticality finding. 05/31/2023 - Full use of automated regression testing capabilities continued to be delayed in May. BHA has received an approval to renew the Tricentis license renewals and coaching services. BHA will complete this effort with a mix	Test Practice Validation	Issue	Medium	Open	Gautam Gulvady	

3.00	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 2019IV&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 - CompletedIV&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	Targeted KT	Risk	Low	Closed	Darren Macdonald	RSM has successfully held several KT sessions for this technology and functionality, and DOH staff have stated that it was well received.

4.00	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 utilized by BHA for deployment activities.	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	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	Release/Deployment Planning	Issue	Medium	Closed	Darren Macdonald	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.
5.00	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 2020IV&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	Preliminary Concern	N/A	Closed	Ramesh, Vijaya (PCG)	Definition of Done completed and socialized.

6.00	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	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.	Project Management	Risk	Low	Closed	Darren Macdonald	The project has demonstrated they are consistently grooming the backlog.

7.00	1/31/2020	The BHA Technical Team bandwidth may not be adequate 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.	BHA needs, and should pursue, additional Knowledge Transfer sessions on the updated Calculator 3.0 solution 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.	01/31/2023 - Two more RSM team members joined the Project during January. IV&V has deemed the technical staff member levels to be sufficient for the project needs, and as a result, we are closing this finding. 12/31/2022 - One additional RSM team member was added in December to meet the demands of the larger-size release plans in releases R3.28 - R3.30. In addition, two more RSM team members are joining the Project in January. IV&V has deemed the staff levels to be sufficient and as a result, we are reducing the criticality rating for this finding to a "Low". IV&V will continue to monitor this finding. 11/30/2022 - Additional RSM team members joined the Project in November to meet the demands of the larger-size release plans. IV&V has reduced the criticality of this issue to a Medium priority.	Sprint Planning	Issue	Low	Closed	Darren Macdonald	
8.00	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	Preliminary Concern	N/A	Closed	Ramesh, Vijaya (PCG)	Product Roadmap aligned with Definition of Done

9.00	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. MSTeams/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	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	Project Management	Risk	Low	Closed	Darren Macdonald	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.
10.00	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.	Sprint Planning	Preliminary Concern	N/A	Closed	Darren Macdonald	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.

11.00	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	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	Project Management	Risk	N/A	Closed	Darren Macdonald	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.

12.00	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 BHA escalate the pending Security Assessment approval if possible. IV&V recommends DOH consider limiting the volume of environments with PII/PHI data and access necessary to support development work, which should help minimize this risk. 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 minimizing and/or masking PHI/PII data in designated non-production	05/31/2023 - As part of R3.22, RSM utilized an updated design for the scrambling of PII and PHI data in non-production environments. The solution is working as designed and expected. As such, IV&V is closing this finding. 04/30/2023 - The Project continues to research the best options for protecting PII/PHI data in non-production environments as the previous approach did not yield the results expected. The issues identified in March continue to be investigated as time permits. IV&V will continue to monitor the results of this effort in May for any positive updates or unplanned concerns. 03/31/2023 - Validation of work items needed for PII/PHI remediation in the non-production environment(s) continued during March. The Project Team encountered unexpected data formatting	Project Management	Issue	Medium	Closed	Darren Macdonald	

13.00	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	Release/Deployment Planning	Risk	N/A	Closed	Darren Macdonald	Finding has been resolved.

14.00	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 Release 3.10. IV&V will continue to monitor the testing efforts throughout the	The identified quality issues have negatively affected DOH billing processes and DOH has stated these are the most impactful defects discovered to date.	Evaluate existing project staff skills and experience level to ensure they meet BHA support requirements. Perform revenue neutrality fiscal balance testing on a quarterly basis to ensure revenues are as expected. Assign dedicated resources to provide oversight of CAMHD Fiscal Processes. Monitor implemented improvements for effectiveness. IV&V recommends performing an RCA in collaboration with RSM after all future release deployments for continual quality improvement. BHA and RSM to collaborate on the necessary revisions to the submitted design	06/30/2023 - R3.32 resulted in nine post-production defects with three critical and two high priority defects. Of the nine defects, two were caused by environmental discrepancies, two attributed to design errors, two caused by documentation issues, one related to a process issue, and one due to a deployment issue. One defect is pending a root cause. IV&V will continue to monitor this medium exposure issue. 05/31/2023 - R3.32 was deployed to production on 05/25/2023 with eight (8) new medium and high priority defects identified after the production release. An RCA is planned to determine the cause of these defects in early June. The Project decided to push out the mid-sprint deployment for Golden Record functionality to the second week in June to allow for sufficient testing of the final solution. IV&V will continue	Project Management	Issue	Medium	Open	Gautam Gulvady	

15.00	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.	Default	Default	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	Targeted KT	Preliminary Concern	N/A	Closed	Darren Macdonald	The project has made good progress establishing and initial execution of the IDM and Semantics Layer KT plan.

16.00	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.	06/30/2021 - As anticipated, the CAMHD Leadership time dedicated to the Project has returned to normal and expected levels. As such, IV&V is closing this finding. 05/31/2021 - As anticipated, CAMHD Leadership time spent on efforts outside of the Inspire Project reduced during May. This level of effort decreased to approximately 10% of available time in May, largely for the planning of the Max/Inspire divisional expansion effort. As such, IV&V is reducing the priority of this finding from Medium to Low and will continue to monitor.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	Project Management	Risk	N/A	Closed	Darren Macdonald	CAMHD Leadership time dedicated to the project has returned to normal.

17.00	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.	Default	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.	08/31/2021 -The number of issues requiring assistance from Microsoft continues to remain limited, and as such, IV&V is closing this finding. 07/31/2021 - While the number of issues requiring assistance from Microsoft remains limited, interactions with Microsoft are increasing again due to the interface functionality planned for implementation in the current and remaining DD&I releases. The FHIR API interface has required multiple interactions with Microsoft that have resulted in unplanned schedule slippages for the FHIR API implementation. IV&V will continue to monitor this finding. 06/30/2021 - The number of issues requiring assistance from Microsoft continues to be low with only two known items open. As such, IV&V is reducing the priority of this finding to low and will continue to monitor.05/31/2021 - There is	Release/Deployment Planning	Issue	N/A	Closed	Darren Macdonald	The volume of interactions needed with Microsoft remains low and manageable. This condition is no longer impeding project progress.

18.00	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 utilized by BHA for deployment activities.	Repeatable documented release and deployment will help ensure that mistakes are minimized, and that functionality is not mistakenly deprecated when deployments take place.	Ensure there are adequate and qualified resources to support the current deployment processes. This may require the support from RSM resources to provide assistance and knowledge transfer for some of the more complex deployment components. 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. As appropriate, consult with RSM on best practices that BHA could employ to support deployment.	06/30/2023 - A deployment error was highlighted as the root cause for one of the post R3.32 production release defects. While the deployment issues have been fewer with the last few releases, this is still an area of concern for IV&V. IV&V will continue to monitor this medium exposure project issue. 05/31/2023 - A total of 420 USP's were deployed to production for R3.32 on 05/25/2023. There were eight (8) new medium and high priority defects identified after the production release. It is unclear if any of these defects were deployment related. A root cause analysis (RCA) is planned for R3.32 in early June. IV&V will continue to monitor this medium criticality finding. 04/30/2023 - There were eleven (11) defects identified post-deployment of R3.31. The root cause analysis of these issues identified three related to	Release/Deployment Planning	Issue	Medium	Open	Gautam Gulavady	
19.00	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.	05/31/2021 - Per CAMHD, the RSM contract amendments to extend the DD&I effort (Mod 5) to the end of December 2021 and also provide M&O services (Mod 6) through May 2022 were fully executed in May. IV&V is closing this preliminary concern. 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	Preliminary Concern	N/A	Closed	Vic Dudoit	The RSM amendments were fully executed in May 2021.

20.00	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.	1) IV&V recommends DDD to continue to look for opportunities to augment the existing technical staff in order to fully support current DDI project work.2) IV&V recommends DDD to consider augmenting their current PM/Business staff in order to allow their technical staff to focus on technical duties.	08/31/2021 - The DDD Project Manager returned from her absence, alleviating the DDD technical staff bandwidth/workload challenges. IV&V is closing this finding.07/31/2021 - The DDD technical staff continued to face bandwidth/workload challenges during the month of July. Fortunately, the DDD Project Manager is scheduled to return to work on 8/2/2021 allowing the technical staff to return fully to their technical responsibilities.06/30/2021 - The absence of the DDD Project Manager continues to cause bandwidth/workload challenges for DDD technical staff. Time available for typical DDD CRM assignments was limited in June due to this resource constraint. IV&V has promoted this finding from a Preliminary Concern to a Medium criticality issue and will continue to monitor. 05/31/2021 - The highest priority tasks and	Project Management	Issue	N/A	Closed	Darren Macdonald	The DDD Project Manager has returned from her leave, fully mitigating this issue.

21.00	6/30/2021	Unplanned rework may have an impact on delivering DDI Functionality by the end of the DDI period.	The continued volume of unplanned rework may have an impact on delivering planned DDI functionality with only 4 possible DDI releases remaining for completion.	Release defect metrics for unplanned rework has been 30-40% of the total USPs for the last few releases.	Reduce the amount of unplanned rework by continuing to focus on quality improvement measures. Strive for defect performance metric not to exceed 20% of all user story points in any given release.	05/31/2023 - The final defect percentage for R3.32 was determined to be 15% of the total USPs delivered, meeting the target of 20% or less. Based on the defect percentage meeting targets from previous releases, IV&V is closing this finding. 04/30/2023 - The final defect percentage for R3.31 was determined in April to be 16% of the total USPs delivered, meeting the target of 20% or less. IV&V will continue to monitor this low criticality finding. 03/31/2023 - The final defect percentage for R3.30 in March was determined to be 41% of the total USPs delivered as planned to reduce the number of defects in the backlog. IV&V will continue to monitor this low criticality finding. 02/28/2023 - The final defect percentage for R3.29 was determined in early February to	Project Management	Issue	Low	Closed	Darren Macdonald	

22.00	7/30/2021	The project schedules for 'big boulder' interface functionality development are slipping.	The FHIR interface and CAFAS interface are currently at risk of not making the planned R3.17 release. The Single Sign on components of the HHIE interface are also currently at risk of not making the planned R3.17 release, and the ADT/Labs components have already missed needed intermediate target dates for the planned R3.17 release. The Project will need to re-assess the planned implementation dates for these 'big boulder' interfaces, including identification of the timing needs by the business teams. At a minimum, the CAFAS and HHIE interfaces are needed by the program. IV&V also notes that there are several new high priority requests related to the DDD Provider Portal and 27 production flow jobs that need to be reviewed for replacement of older dataverse connectors that are	Weekly RSM Status Report	Strive for ongoing velocity metric of a minimum of 120 user story points in any given release. Identify the reason(s) for the lower-than-expected R3.27, R3.28, and R3.29 velocity to determine if corrective actions need to take place. Extend the current DDI timeframe to allow for the completion of 'big boulder' interfaces functionality development. BHA to add more resources to support the development of "big boulder' interfaces functionality.	06/30/2023 - The last of the Big Boulders continued to be the primary focus for the Project during June. Both the FHIR and Provider API initiatives are now expected to be completed in R4.1. The mid-sprint deployment to promote Golden Record (GR) components that was originally scheduled for mid May has been delayed several times and is now anticipated in mid July. The delays are intended to reduce potential risks. Processes are being determined and developed across the four BHA divisions, to help ensure that the GR functionality is used in a similar fashion for all of BHA. Because there are just three big rock items left to complete, and all are currently in progress, IV&V is lowering this finding to a Medium exposure, and we will continue to monitor moving forward. 05/31/2023 - The Project continued to re-align release	Project Management	Issue	Medium	Open	Gautam Gulvady	

23.00	7/31/2021	The current DDI period expires at the end of December 2021 which will require RSM to transition of the D365 solution to the State prior to contract end.	The current Project Staffing Model shows a planned reduction in RSM resources support starting in September 2021 through December 2021. Prior to this timeframe, BHA should commence the development of a transition plan to ensure the appropriate replacement State resources are identified/secured and the necessary knowledge transfer sessions are planned and executed with RSM. BHA will need to be sure they are ready to take on the development of user stories, testing, deployment, and the support and maintenance of the entire system by the end of the DDI period (December 2021).	Existing contractual agreements.	Obtain IAPDU approval from CMS.	02/28/2022 - The IAPDU was approved by Federal partners in early February, which extended the DD&I effort through October 2022. Transition from RSM will not be required until approximately August 2022. Based on the extended time being available for transition efforts, IV&V is closing this finding. 01/31/2022 - There were no substantive changes to this finding observed during January as BHA continues to pursue CMS Federal funding approval for extending DD&I through October 2022 followed by M&O through September 2024. IV&V will continue to monitor this finding until Federal funding approved. 12/31/2021 - There were no substantive changes to this finding observed during December as BHA continues to pursue CMS Federal funding approval for extending DD&I	Project Management	Issue	Low	Closed	Darren Macdonald	

24.00	10/29/2021	The R3.19 Solution Upgrade technical issues are delaying the implementation of the release and the ability for staff to develop and test code.	Solution upgrades are essential for keeping the system current in order to gain access to new features that enhance productivity, eliminate bottlenecks and govern sensitive information. The current R3.19 solution upgrade work efforts that includes patches for 5 releases (R3.15-R3.19) is causing technical issues. As a result, R3.19+ development and testing work is hampered until these technical issues are resolved.	Daily Scrum Reporting	Ensure there are adequate and qualified resources to support the current Solution Upgrade processes. This may require the support from RSM resources to provide assistance and knowledge transfer. As appropriate, consult with RSM on best practices that BHA could employ to support the Solution Upgrade.	11/30/2021 - R3.19 was promoted to production as an FSU on 11/14/2021 and access to the development and test environments was again restored. Because the solution upgrade was the first in five (5) releases, the deployment process took approximately 12 hours. This issue did have an impact both on the amount of DDI functionality (reduced) included in downstream releases and cost implications. IV&V has closed this finding, as it was alleviated by the R3.19 release on 11/14/2021. 10/31/2021 - Due to the current R3.19 Solution Upgrade technical issues, staff have been advised to stay out of the development and test environments until the issues have been resolved. As a result, development and testing for R3.19 and forward are affected by this issue. IV&V will continue to monitor this high priority	Project Management	Issue	High	Closed	Darren Macdonald	Technical issue resolved and were attributed to the following: • Import of solution taking 1-2 hours, timed out in PROD, so had to restore and then restart from a previous point in time backup • Errors are vague – sometimes indicating “failure” but actually successful • MS moving away from Classic UI which is changing the availability of some

25.00	6/30/2022	The lack of a formal project governance structure is impeding decision-making procedures and overall leadership cohesiveness.	The impact of poor project governance can lead to: • Untimely and/or uninformed decision-making • Project delays and overruns • Breakdown in communications and collaboration • An erosion of project team trust	The strategic goals and objectives of CAMHD and DDD differ but both divisions need equal and fair representation of how work is being prioritized and performed.	Establish a formal project governance structure to allow CAMHD, DDD, and other divisions to 1) have a single point of accountability, 2) ensure the right projects are approved, 3) outline roles, responsibility and relationships among project stakeholders, 4) provide issue management and resolution, and 5) help with information dissemination and transparent communication.	10/31/2022 - IV&V reviewed the approved BHA – INSPIRE Solution Program Charter sent by BHA in October and has determined this finding can be closed. 09/30/2022 - The Project Charter was signed and approved during September, which is the first step in enacting a formal governance process for the project. IV&V will continue to monitor the governance activities. 08/31/2022 - A Project Charter has been developed but it is unclear to IV&V when it will be approved by the Executive Steering Committee to commence activities related to formal Project Governance. 07/31/2022 - A Project Charter has been developed and is in process of review and approval by the Executive Steering Committee to commence activities related to formal Project Governance.	Project Management	Issue	Medium	Closed	Vic Dudoit	

26.00	7/31/2022	The inability for BHA staff to work remotely is decreasing productivity and causing morale issues amongst team members.	Project team members have reported decreased productivity and there is a strong likelihood of the Project losing team members due to their inability to work remotely. This is evidenced by a current Help Desk employee retiring early and citing this as the reason. The Department may consider granting remote work to improve productivity and help increase morale to help ensure the existing short-staffed issue is not further exacerbated.	Project team members have reported decreased productivity and there is a strong likelihood of the Project losing team members due to their inability to work remotely. This is evidenced by a current Help Desk employee retiring early and citing this as the reason.	IV&V recommends that DOH consider granting remote work to help retain existing staff and to attract new candidates for open positions.	05/31/2023 - The Departmental Executive Committee announced a work from home policy, where staff may request to work from home up to 3 days per week. As such, IV&V is closing this finding. 04/30/2023 - No changes were observed during April. The parameters for BHA staff to work remotely are still being finalized by the executive committee. 03/31/2023 - At the last departmental executive committee meeting, a draft memo was discussed outlining parameters for BHA staff to work remotely. The parameters are being finalized by the executive committee. IV&V will continue to monitor this low-exposure project issue. 02/28/2023 - Again, there were no changes to this finding identified in February. IV&V will continue to monitor this low exposure project issue. 01/31/2023 - Again, there were	Project Management	Issue	Low	Closed	Vic Dudoit	

27.00	8/31/2022	The current DDI period expires at the end of October 2022 which will require RSM to transition the D365 solution to the State prior to contract end.	Efforts to submit an IAPDU to pursue CMS Federal funding approval for extending DD&I through May 2023 have been stalled as a result of claims invoicing discrepancies.	DHS/MQD identified discrepancies with invoicing BHA claims which they are reconciling prior to the submission of an IAPDU.	DHS to obtain IAPU approval from CMS as soon as possible. DHS to reconcile current claims invoicing discrepancies. DHS to submit IAPDU using the newly released template as soon as possible.	04/30/2023 - The IAPDU (through Mod 8) was formally approved by CMS in early April. The Project and its vendors are no longer working at financial risk. IV&V is closing this high issue. 03/31/2023 - The IAPDU has still not been formally approved by CMS. The Project and its vendors are still working at financial risk with only 2 months remaining in the DD&I phase. IV&V will continue to monitor this high criticality finding. 02/28/2023 - Although the IAPDU was verbally approved by CMS, a formal response has not yet been provided. The Project and its vendors are still working at financial risk with only 3 months remaining in the DD&I phase. IV&V will continue to monitor this high criticality finding. 01/31/2023 - The IAPDU has been submitted to CMS for review and approval, however a	Project Management	Issue	High	Closed	Vic Dudoit	

28.00	9/30/2022	The DDD Product Owner resigned her position in September and will transition off the project in early October.	The absence of the current DDD Product Owner will cause major challenges for DDD as she wore multiple hats and is responsible for many aspects of the day-to-day work from both an administrative and business perspective.	DDD Product Owner announced her departure in September 2022 for early October. DDD Product Owner wears multiple hats supporting both business and administrative functions.	IV&V recommends a formal transition plan be fully defined and executed prior to the DDD Product Owner departure. IV&V recommends DDD seek (internal/external) multiple staff to replace the DDD Product Owner for each role served. IV&V recommends DDD consider soliciting contracted staff to fill the immediate gaps with the DDD Product Owner's departure.	01/31/2023 - The prior DDD Project Owner returned to the project in January 2023, which once again provides DDD with an active voice for user story prioritization as well as input on project concerns, risks, and issues. It is still assumed that all duties transitioned in October and November will be reviewed and re-evaluated to ensure that the DDD Product Owner's workload is not overloaded with non-project-related responsibilities. With the onboarding of an experienced Product Owner for DDD, IV&V is closing this finding. 12/31/2022 - DDD leadership announced the prior DDD Project Owner will return to the project in mid-to-late January 2023. This is viewed as highly positive and is certain to be a benefit to the Project. It is assumed that all duties transitioned in October and November will be reviewed and	Project Management	Issue	Low	Closed	Vic Dudoit	

29.00	2/28/2023	RFP(s) for Project Expansion and M&O Have Not Been Approved by CMS.	The RFP(s) for expansion of the solution and/or maintenance of the existing solution has been submitted but not approved by CMS.	With three months left on the DDI contract, the Project Expansion and M&O RFPs have not been approved by CMS.	Continue to escalate RFP approvals with DHS. Seek approval for extending the existing contract if feasible.	06/30/2023 - CMS has provided BHA a formal approval on the ADAD (Inspire Plus) IAPD and the SI and IV&V RFPs. As a result of the CMS approvals, IV&V is closing this risk. 05/31/2023 - CMS has notified BHA that the ADAD components included in IADPU #4 and the RFP should be removed until such time as another IAPDU is submitted and approved. BHA has awarded contracts for the Inspire DDI project. RSM was awarded the SI work and PCG was awarded the IV&V services. CMS approval of the contracts are pending. 04/30/2023 - The RFP for Project Expansion and M&O was released in early April, and the IAPDU was approved through Mod 8. Solution Integrator proposals for Project Expansion are expected in early May. Based on positive movement of these important project elements, IV&V has reduced the criticality	Project Management	Risk	Medium	Closed	Vic, Gautam Gulvady	

30.00	2/28/2023	The Project deliverables contractually required of RSM by the end of the DDI period are not clear	With three months left on the DDI contract, it is not clear what project deliverables are contractually required from RSM before the contract ends.	N/A	N/A	05/31/202 - BHA has awarded contracts for the INSPIRE DDI effort. The Project is finalizing the System, Security, and Architecture Blueprint documentation deliverables. IV&V is closing this preliminary concern finding. 04/30/2023 - RSM continued to work on documenting updates to the System, Security, Architecture Blueprint, and Knowledge Transfer deliverables which are expected to be submitted to BHA by the end of the DDI period. With a month left on the DDI contract, the Project needs to focus on preparing for all aspects of turnover and transition activities of the Inspire solution. 03/31/2023 - RSM reported in their last March status report the System, Security, Architecture Blueprint, and Knowledge Transfer documentation is on target for completion and submittal to	Project Management	Preliminary Concern	N/A	Closed	Vic Dudoit	