

### OFFICE OF ENTERPRISE TECHNOLOGY SERVICES

P.O. BOX 119, HONOLULU, HAWAI'I 96810-0119 Ph: (808) 586-6000 | Fax: (808) 586-1922 FTS HAWAII GOV

December 18, 2023

The Honorable Ronald D. Kouchi President of the Senate and Members of the Senate Thirty-Second State Legislature State Capitol, Room 409 Honolulu, Hawai'i 96813 The Honorable Scott K. Saiki Speaker and Members of the House of Representatives Thirty-Second State Legislature State Capitol, Room 431 Honolulu, Hawai'i 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 Hawai'i, Department of Health, BHA Integrated Case Management System Project.

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

Sincerely,

Douglas Murdock (Dec 18, 2023 09:29 HST)

Douglas Murdock Chief Information Officer State of Hawai'i

Attachments (2)



### Hawaii BHA Integrated Case Management System Project – Phase 4

Final IV&V Report for the period of

November 1 – November 30, 2023

Final submitted: December 14, 2023



### **Agenda**

**Executive Summary IV&V Findings & Recommendations** 

### **Appendices**

- A Rating Scales
- B Inputs
- C Project Trends





R4.3 was deployed on 11/09/2023, and no outstanding post-production defects were identified. However, the Golden Record (GR) production data and GR deployment to address identified issues continue to be delayed, and efforts are underway to do a GR Mid Sprint Deployment (MSD). Mock migration was completed in early November 2023. Currently, RSM and Behavioral Health Administration (BHA) are finalizing the GR readiness checklist, and Standard Operating Procedures (SOPs) and IV&V are actively monitoring the open issues to provide recommendations in the upcoming reporting period. To avoid impacting the overall schedule, IV&V recommends having a designated date for GR production data use and resolution of defects.

Public Consulting Group (PCG) has sent the signed version of the contract along with the certificates of insurance to the Department of Hawaii (DOH)) procurement and contracts division, and the approval is still underway. PCG completed the review of the RSM draft contract and conducted a walkthrough with the BHA in the first week of November. IV&V also reviewed the vendor response to the most recent vendor Request for Proposal (RFP). Based on the contract review, PCG recommends conducting load and performance testing for each release containing significant new features/functionality.

There has been an improvement in the Fast Healthcare Interoperability Resources (FHIR) project, as the System integrator (SI) vendor and Microsoft (MS) are currently working on the authentication work, converting the data, and testing.

There were no new findings for the month of November. However, a medium issue related to the deployment process (finding #18) was closed, and the issues related to GR, the IV&V contract, the SI contract, and schedule have been updated under the Project Management category. A risk related to the shortage of BHA resources was updated under the Resource Management category.

Sep	Oct	Nov	Category	IV&V Observations	
Y	Y	G	Sprint Planning	RSM has confirmed that any new features or functionality will undergo Sprint reviews or demos, enabling stakeholders to give valuable feedback and optimize the product. As an update, the vendor and BHA have implemented a process for reviewing the product backlog. IV&V will observe this process and monitor future Sprint reviews to ensure alignment with stakeholders' needs. The category changed from yellow to green in the November 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 November reporting period. IV&V will continue to monitor the US development and validation process in upcoming reporting periods.	

Sep	Oct	Nov	Category	IV&V Observations
Y	Y	Y	Test Practice Validation	Tricentis coaching sessions and coding of the automation are ongoing. R4.3 regression testing was completed in part manually and in part automated. R4.3 went live on 11/09/23 as planned. IV&V will monitor and review the overall automated regression coaching and testing progress. The procedural concern is yet to be addressed. This category remains Yellow (medium criticality) for the November reporting period.
			Release /	R4.3 was deployed on 11/09/23 as planned. No post-production defects or deployment issues were identified. IV&V closed finding #18 related to the deployment processes under this category. IV&V will monitor for quality.
Y	Y	Y	Deployment Planning	Golden Record (GR) production data and GR deployment to address identified issues continue to be delayed, and efforts are underway to do a GR Mid Sprint Deployment (MSD). Mock migration was completed in early November 2023. RSM and BHA are finalizing the readiness checklists. IV&V will monitor and attend meetings for quality and provide recommendations in the next reporting period. This category remains Yellow for November.
G	G	G	OJT and KT Sessions	This category remains Green (low criticality) for the November reporting period with no active findings.
G	G	G	Targeted KT	This category remains Green (low criticality) for the November reporting period. IV&V will continue to monitor.



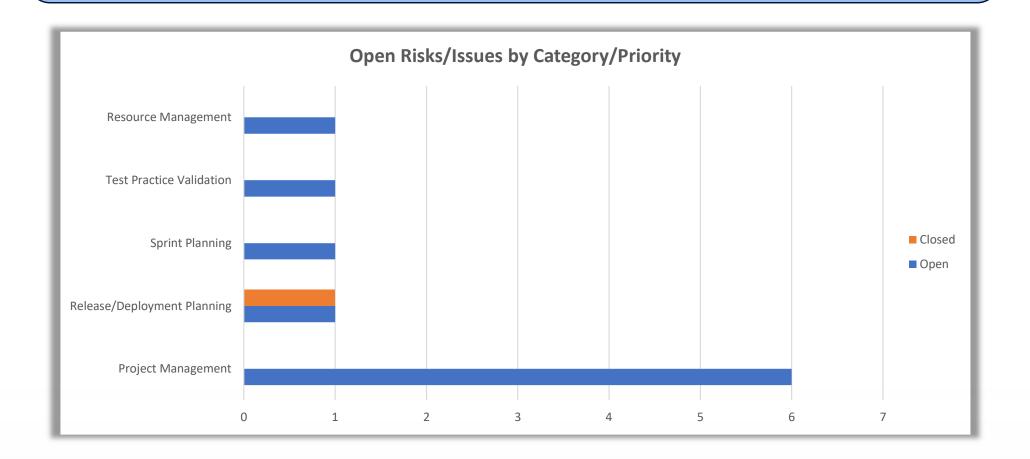
Sep	Oct	Nov	Category	IV&V Observations	
G	G	G	Project Performance Metrics	There are no project performance metrics to report for November. IV&V will keep the criticality rating for this category a Green (low criticality) and will continue monitoring this category.	
Y	Y	G	Organizational Maturity Assessment (OMA)	This category moved from Yellow (medium criticality) to Green for the November reporting period. There are no outstanding findings in this category, and IV&V will continue to monitor.	
				Golden Record (GR) production data and GR deployment to address identified issues continue to be delayed, and efforts are underway to do a GR Mid Sprint Deployment (MSD). Mock migration was completed in early November 2023. RSM and BHA are finalizing the readiness checklists. IV&V will monitor and attend meetings for quality and provide recommendations in the next reporting period.	
Y	R	R	Project Management	PCG has sent a signed version of their contract along with the certificates of insurance to the DDD procurement and contracts division, and the contract approval is underway. PCG completed the review of the RSM draft contract and conducted a walkthrough with the BHA in the first week of November. IV&V also reviewed the vendor response to the most recent vendor Request for Proposal (RFP). Based on the contract review, PCG recommends conducting load and performance testing for each release with significant new features/functionality. The category remained red for the November reporting period.	



Sep	Oct	Nov	Category	IV&V Observations
Y	Y	R	Resource Management	DDD took proactive steps to address the IT shortages by creating three position descriptions along with justifications. However, the positions were not approved. DDD will continue to explore other options and find a solution to address the IT shortages. The Healthcare System Management Office (HSMO) Chief's position was cancelled after it was opened. A Band B System Architecture resource is now filling that role temporarily, in addition to executing his own duties. This category has been escalated to red for the November reporting period. IV&V will continue to monitor.



As of the November 2023 reporting period, there were no new findings. However, one finding, #18, related to the deployment processes under the Release and Deployment category, was closed. The other ten open findings are updated – two High Issues, four Medium Issues, two Medium Risks, and two Preliminary Concerns spread across the Release/Deployment Planning, Test Practice Validation, Sprint Planning, and Project Management and Resource Management assessment areas.





### **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 Transition (KT) Sessions
- Targeted Knowledge Transition (KT)
- Project Performance Metrics
- Organizational Maturity Assessment
- Project Management
- Resource Management



### **Sprint Planning**

#	Key Findings	Criticality Rating
31	Preliminary Concern: Lack of regular Sprint reviews and sprint demos will likely lead to misalignments between delivered work and stakeholder needs.  November Finding Update: The vendor and BHA have a product backlog review process in place. IV&V will observe the product backlog review process and will monitor future Sprint reviews.	N/A

Recommendations	Status
<ul> <li>According to Agile Best Practices, IV&amp;V recommends including Sprint reviews and demos in future releases (R4.2 and onwards) with all relevant stakeholders to assess the completion of user stories, review important metrics and outcomes, and confirm if the Sprint goal has been achieved. This approach would also help ensure the backlog is prioritized and well-prepared for the next Sprint. These are some recommendations for project alignment, stakeholder engagement, quality assurance, transparency, and the incorporation of user feedback.</li> </ul>	In Progress
<ul> <li>Strengthen the collaboration between development teams and stakeholders by enhancing communication channels. Regularly validate project objectives and ensure that sprint deliverables remain consistent with stakeholder requirements.</li> </ul>	In Progress
<ul> <li>Foster active participation from users and stakeholders during both Sprint Reviews and Sprint Demos.</li> <li>Emphasize the value of iterative feedback to guide development and ensure that user needs are consistently met.</li> </ul>	Open



### **Sprint Planning (Cont'd)**

Recommendations	Status
<ul> <li>Establish standardized communication protocols for both Sprint Reviews and Sprint Demos. Encourage teams to deliver concise and informative progress reports, including achievements, challenges, and future plans. This will enhance stakeholder engagement and project transparency.</li> </ul>	In Progress
Create a stakeholder register to identify all stakeholders. List their identification, assessment, and classification. Review the register regularly to plan appropriate stakeholder engagement.	Open
<ul> <li>Institute a structured documentation process for both activities. Document key decisions, action items, and insights from each session to ensure accountability and to support ongoing process improvement.</li> </ul>	Open



### **Test Practice Validation**

#	Key Findings	Criticality Rating
2	Medium Issue: As a result of automated regression testing not being comprehensively performed, production releases are breaking and/or deprecating existing functionality in the production environment.  November Finding Update: Due to time restrictions, part of regression testing is being done manually. Tricentis coaching sessions and coding of the automation is ongoing. R4.3 regression testing was completed in part manually and in part automated. R4.3 went live on 11/09/23 as planned. IV&V will monitor and review the overall automated regression coaching and testing progress. The procedural concern is vet to be addressed.	M
Recor	nmendations	Status
regi	ring board(s) in Azure DevOps or a document on SharePoint that provides information about the status of ression testing automation, to facilitate visibility and transparency to BHA project personnel and teholders.	Open
will	edule priorities should be reevaluated by distributing the work according to the resource bandwidth. This ensure that the schedule is not impacted and that the work is done efficiently between regression testing GR.	Open
	sue and complete additional formal training in AzureDevOps and Tricentis for test automation at the iest possible juncture and complete efforts to automate the 2 primary regression test scripts.	In progress



### **Release / Deployment Planning**

#	Key Findings	Criticality Rating
18	<b>Medium Issue:</b> 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. <b>November Finding Update:</b> R4.3 went live on 11/09/23 as planned. There were no deployment issues. Finding closed.	M

Recommendations	Status
Recommend that BHA works with IV&V to assess GR critical issues to assist in determining the path forward.	Closed
<ul> <li>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.</li> </ul>	Closed
Consult on a regular basis with Microsoft and RSM on best practices that BHA could employ to support deployment.	Closed
<ul> <li>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.</li> </ul>	Closed



### Release / Deployment Planning (cont'd)

Recommendations	
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.	Closed
The Project Team should consider evaluating potential changes to improve/enhance existing processes and communications to address current release/deployment shortfalls.	Closed
IV&V recommends performing an RCA in collaboration with RSM for the continued concerns surrounding environment differences.	Closed
• 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.	Closed

### Release / Deployment Planning (cont'd)

#	Key Findings	Criticality Rating	
32	Medium Risk: Golden Record (GR) project delays are likely to delay the implementation of future features and functionality.  November Finding Update: GR production data use and GR deployment to address identified issues continue to be delayed, and efforts are underway to do a GR Mid Sprint Deployment (MSD). Mock migration was completed in early November 2023. Per the daily scrum meetings and weekly issues meetings, BHA is testing the 12 GR items. Currently, RSM and BHA are finalizing the GR readiness checklist and SOPs. CAMHD and DDD will review the audit report currently available to determine if it meets BHA's needs. IV&V will continue to monitor the open issues and attend meetings and will provide any recommendations in the next reporting period.	M	
Reco	Recommendations		
• R	ecommend that BHA works with IV&V to assess GR critical issues to assist in determining the path forward.	In Progress	
CC	<ul> <li>Prior to implementation of the GR production data use, needed updates to the consent form should be confirmed and completed, policies/procedures for all users should be confirmed, and all open defects should be resolved.</li> </ul>		
	entify the objective of implementing GR production data use, benefits, current gaps in design, effort stimates, resource commitments, and impact of having/not having GR.	In Progress	
• Aı	nalyze the impact on the future functionalities and assess the implications if this strategic change is needed.	In Progress	

### **Project Management**

#	Key Findings	Criticality Rating
	<b>Medium Issue:</b> Due to multiple quality concerns, the Project may continue to face impactful system defects.	
14	<b>November Finding Update:</b> R4.3 went live on 11/09/23 as planned. A high-priority R4.2 post-production fix was deployed with R4.3. There are currently no R4.3 post-production bugs. IV&V will monitor R4.3 for quality.	M

Recommendations	Status
Evaluate existing project staff skills and experience level to ensure they meet BHA support requirements.	In Progress
<ul> <li>Perform CAMHD revenue neutrality fiscal balance testing on a quarterly basis to ensure revenues are as expected.</li> </ul>	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



#	Key Findings	Criticality Rating
	<b>Medium Issue:</b> Performance bottlenecks with the INSPIRE production environment may result in low productivity and poor user experience.	
33	<b>November Finding Update:</b> IV&V has discussed the next steps with BHA (see updated recommendation #1).	M

Recommendations	Status
Conduct load and performance testing for each release with significant new features/functionality.	New
Create a plan for comprehensive performance testing and address any performance bottlenecks	Open
Have the benchmark assessments done annually and implementation of Azure App Insights for Power Platform.	Open



#	Key Findings	Criticality Rating
	<b>Preliminary Concern:</b> Lack of an ongoing cleanup process may lead to clutter and reduce Azure DevOps effectiveness in supporting the INSPIRE project management and tracking needs.	
35	<b>November Finding Update:</b> RSM and BHA are standardizing (on-going process) the tags used in Azure DevOps and their usage and are cleaning up the Azure DevOps environment. This should help optimize the workflow and make it more streamlined. IV&V will continue to monitor the usage of tags and the cleanup process.	N/A

Recommendations	Status
<ul> <li>DevOps cleanup is an ongoing process. The usage and configuration of the Azure DevOps (AD) environment should be regularly monitored to prevent clutter and maintain its effectiveness in supporting the INSPIRE project management and tracking needs.</li> </ul>	In Progress
<ul> <li>Configuration Review: Evaluate the Azure DevOps (AD) configuration settings. Ensure workflows, issue types, custom fields, and other settings are aligned with the project's needs and industry best practices.</li> </ul>	In Progress
<ul> <li>Optimize Boards and Filters: Review the boards, filters, and tags in Azure DevOps (AD) to ensure they accurately reflect the status of work, and they are designed to facilitate efficient tracking and collaboration. This will help streamline and make it easier to find relevant information.</li> </ul>	In Progress
<ul> <li>User Training and Best Practices: Provide training to Azure DevOps (AD) users to ensure they are using the tool effectively. Share best practices for issue creation, workflow management, and collaboration.</li> </ul>	Open
• Establish a plan for regular maintenance of Azure DevOps (AD). Regularly review and clean up old issues, adjust workflows as needed, and ensure that configurations remain aligned with evolving needs.	Open



#	Key Findings	Criticality Rating
	<b>Medium Issue:</b> Lack of a comprehensive project schedule could lead to missed tasks, project delays, and cost overruns.	
36	<b>November Finding Update:</b> The vendor has communicated that they provided their approach to maintaining a complete project schedule, in their proposal. IV&V reviewed the vendor's proposal, which doesn't appear to describe an alternate approach to maintaining a project schedule as requested by the Request for Proposal (RFP).	M

Recommendations	Status
• Establish a clear project schedule management plan that outlines roles, responsibilities, and accountability for schedule adherence.	Open
• Create and baseline a comprehensive project schedule in MS project, Smartsheet, or a similar tool, containing tasks for both SI vendor and State, task dependencies, and resourcing.	Open
Implement regular schedule reviews and updates to ensure alignment with project objectives and milestones.	Open



#	Key Findings	Criticality Rating
37	High Issue: RSM has been working without an executed contract since the expiration of the original contract  November Finding Update: No update	H

Recommendations	Status
• Until an executed contract is available, a draft version of the contract should be made available to BHA and SI	Completed
in order to manage on-going work.	Completed



#	Key Findings	Criticality Rating
38	<b>High Issue:</b> Public Consulting Group (PCG) has been working without an executed contract. <b>November Finding Update:</b> The final execution of the PCG contract is not yet complete.	H

Recommendations	Status
The contract execution by HI DOH BHA DDD should be completed as soon as possible.	New

### **Resource Management**

#	Key Findings	Criticality Rating
	<b>High Risk:</b> A shortage of Behavioral Health Administration (BHA) project resources could lead to reduced productivity and project delays.	
34	<b>November Finding Update:</b> DDD took proactive steps to address the IT shortages by creating three position descriptions along with justifications. However, the positions were not approved. DDD will continue to explore other options and find a solution to address the IT shortages. The Healthcare System Management Office (HSMO) Chief's position was cancelled after it was opened. A Band B System Architecture resource is now filling that role temporarily, in addition to executing his own duties. The reporting hierarchy of resources that previously reported to the HSMO Chief is also unclear.	H

Recommendations	Status
BHA should explore options for offloading project team members' daily responsibilities to other staff.	Open
BHA should work quickly to backfill vacated project team member positions.	Open
<ul> <li>BHA should identify tasks and duties that they can ask the SI to assume, as permitted by the contract, which are presently being handled by BHA members.</li> </ul>	Open



### **Project Performance Metrics**

Metric	Description	IV&V Observations		IV&V Updates  Velocity Metric Trends:							
			Velocity Metric Trends:								
Velocity  the velocity reported project  Verify the on pace total target	the velocity data as reported by the project  • Verify the project is	<b>November –</b> Velocity was estimated at 85, including one R4.2 post-production bug. 124 USPs were promoted to production on 11/09/23 for R4.3.	Release R4.3	Planned Velocity 85	Actual Velocity	Percentage Attained					
	on pace to hit the total target number of US/USP										

### **Project Performance Metrics (cont'd.)**

Metric	Description		IV&V Updates
Defect Metrics	<ul> <li>Understand and track the following:</li> <li>Defects by category (bug fixes)</li> <li>USPs assigned to defects in a release vs. USPs assigned to planned US in a release</li> </ul>	November - Velocity was estimated at 85, including one R4.2 post-production bug. A total of 124 USPs were promoted to production on 11/09/23 for R4.3.  92% of the USPs were associated with planned user stories and requests.  8% of the total USPs were associated with defects encountered during the release effort or pulled from the backlog.	The defect percentage for November was 8% which is under the target range of 20% or less of all USPs promoted to production.

# **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

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).

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.

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.



Y

### **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.
	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 November 2023 reporting period:

- 1. Daily Scrum Meetings (selected)
- Twice Weekly RSM Issues Meeting
- 3. Weekly BHA-ITS Project Status Meeting
- 4. Bi-Weekly Check-in: CAMHD
- 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
- 9. IV&V Hand-off Meeting
- 10. CAMHD Testing Meeting

### Eclipse IV&V® Base Standards and Checklists

### Artifacts reviewed during the November 2023 reporting period:

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





# **Appendix C: Project Trends**

## **Appendix C Project Trends**

Dun A										
Process Area	Feb	Mar	Apr	May	Jun	July	August	September	October	November
User Story Validation										
<b>Test Practice Validation</b>										
Sprint Planning										
Release / Deployment Planning										
OJT and KT Sessions										
Targeted KT										
Project Performance Metrics										
Organizational Maturity Metrics										
General Project Management										
Resource Management										
Total Open Findings	10	10	9	6	4	5	11	11	11	10
Issue - high	2	2	1	1	0	0	2	2	2	2
Issue - medium	3	3	4	3	4	3	5	5	5	4
Issue - low	3	3	2	1	0	0	0	0	0	0
Risk - high	2	1	0	0	0	0	0	0	0	0
Risk - medium	0	0	1	1	0	1	2	2	2	2
Risk - low	0	0	0	0	0	0	0	0	0	0
Preliminary Concern	0	1	1	0	0	1	2	2	2	2



**Solutions that Matter** 

Id	Finding	Finding Statement	Analysis and Significance	Recommendation	Finding Update	Category	Туре	Priority	Status (	Closed Date	Identified Date	Owner
2	As a result of regression testing not being	R3.3 introduced a defect that deprecated features in	Thorough vetting and validation of regression test cases is	Having board(s) in Azure DevOps or a	11/30/2023 - Tricentis coaching sessions and	Test Practice	Issue	Medium	Open		12/31/2019	Gautam
	consistently performed, production releases	production specific to Integrated Support and Life Trajectory	necessary to prevent both defects and the deprecation of	document on SharePoint that provides	coding of the automation is ongoing. R4.3	Validation						Gulvady
	are breaking and/or deprecating existing	functionality. DDD has informed IV&V that there are other	production functionality when a release is pushed live. When	information about the status of regression	regression testing was completed in part							
	functionality in the production environment.	examples of functionality being deprecated after a release,	defects occur in production, the project should follow a defined	testing automation, to facilitate visibility	manually and in part automated. R4.3 went live							
		some of which are still being investigated. As of this report,	and repeatable process for determining the root cause of the	and transparency to BHA project	on 11/09/23 as planned. IV&V will monitor and							
		IV&V has not evaluated the project's root cause analysis	problem.	personnel and stakeholders.	review the overall automated regression							
		(RCA) process used to determine why such functionality was			coaching and testing progress. The procedural							
		deprecated but will discuss further with BHA in January 2020.		IV&V recommends reevaluating the	concern is yet to be addressed.							
				schedule priorities by distributing the								
				work according to the resource	10/31/2023 - Tricentis coaching sessions are							
				bandwidth. This will ensure that the	ongoing. Coding of the automation is ongoing;							
				schedule is not impacted and that the	R4.3 regression testing is being done partly							
				work is done efficiently between	manually and automated. IV&V will monitor							
				regression testing and Golden Record	and review the automated regression testing							
				(GR).	results and determine whether the procedural							
					concern has been addressed.							
				Pursue and complete additional formal								
				training in AzureDevOps and Tricentis for	09/30/2023- The Tricentis coaching kicked off							
				test automation at the earliest possible	on September 18th, 2023. The meeting was							
				juncture and complete efforts to automate	attended by personnel from CAMHD, DDD,							
				the 2 primary regression test scripts.	Tricentis, IV&V, and RSM. The coaching							
				IV&V recommends DDD and CAMHD to	sessions are scheduled between October 2023-							
				develop a common and consistent	and November 2023. and the test case							
				approach across divisions for performing	development was planned through May 2024.							
				regression testing.	IV&V will monitor to verify whether the							
					procedural concern is addressed.							
				timeframes are adequate and if not, add								
				more time to the pre-production								
				regression test efforts for all release	08/31/2023 - : Procedural concern – The							
				deployments.	Project team awaiting updates from BHA about							
				Updating the regression test scripts to	the status of regression testing automation.							
				ensure consistency with system	Currently, only one CAMHD resource knows							
				configuration.	the status of regression testing automation,							
			I .	Modifying release schedules to allow for	and the project team is dependent on receiving	1	1	1	1			1

Id	Finding	Finding Statement	Analysis and Significance	Recommendation	Finding Update	Category	Туре	Priority	Status	Closed Date	Identified Date	e Owner
4		,	The identified quality issues have negatively affected DOH	Evaluate existing project staff skills and	11/30/2023 - R4.3 went live on 11/09/23 as	Project Management	Issue	Medium	Open		9/30/2020	Gautam
	may continue to face impactful system		billing processes and DOH has stated these are the most	· ·	planned. A high-priority R4.2 post-production							Gulvady
	defects.	addressed during this reporting period. IV&V notes that there	impactful defects discovered to date.	support requirements.	fix was deployed with R4.3. There are currently							
		is one remaining defect still being evaluated that affects a		Perform revenue neutrality fiscal balance	no R4.3 post-production bugs. IV&V will							
		limited number of claims. Overall, the Project Team has		testing on a quarterly basis to ensure	monitor R4.3 for quality.							
		responded with a commitment to increase project quality and		revenues are as expected.								
		is in the process of identifying improvements to associated		Assign dedicated resources to provide	10/31/2023 - R4.3 development is progressing							
		testing processes. These currently include:Performing		oversight of CAMHD Fiscal Processes.	well. Hard code was frozen on 10/24/23 and go	-						
		Revenue Neutrality Testing to ensure expected revenue		Monitor implemented improvements for	live is planned for 11/09/23. A high-priority							
		streams are largely unchanged from one period to the next.		effectiveness.	R4.2 post-production bug will be deployed with							
		Conducting System Integration Testing, User Acceptance		IV&V recommends performing an RCA in	R4.3. IV&V will monitor R4.3 for quality.							
		Testing, Performance Testing, and Regression Testing for		collaboration with RSM after all future								
		Release 3.10. IV&V will continue to monitor the testing		release deployments for continual quality	09/30/2023 - R4.2 was deployed on 9/14/23,							
		efforts throughout the balance of Release 3.10 and validate		improvement.	and the delivery quality was positively							
		that enhanced quality processes, including industry standard		BHA and RSM to collaborate on the	received. There was also a post-production							
		regression testing, continue for Agile Release 3.11 forward.		necessary revisions to the submitted	defect from R4.1 that was also deployed with							
		Finally, IV&V reviewed and provided feedback on the Help		design deliverables to increase level of	R4.2. As of now, there is only one high-priority							
		Desk and Semantic Layer design documents per request and		detail and quality.	R4.2 post-production bug that has been fixed							
		found that both documents lacked design details.		Perform typical project testing including	and is pending approval by BHA. IV&V will							
				System Integration, User Acceptance,	monitor R4.3 for any quality concerns							
				Performance, and Regression Testing.	08/31/2023 - There were no deployments in							
				Dedicate sufficient time in between	August 2023. The SI vendor continued to work							
				releases for BHA and RSM to	on one high-priority R4.1 post-production bug.							
				execute/implement RCA correction	The Golden Record (GR) deployment has been							
				actions to reduce the volume of	postponed and date is yet to be determined							
				unplanned rework.	since the BHA identified more issues during the							
					testing.							
					07/31/2023 - The R4.1 deployment in July had							
					positive results for delivery quality. R4.1 results							
					in only one high-priority post-production bug							
					and the root cause analysis (RCA) is in							
					progress. The defect is due to a design error							
					from Human Services Research Institute (HSPI)				1	l	1	1

Id	Finding	Finding Statement	Analysis and Significance	Recommendation	Finding Update	Category	Туре	Priority	Status	Closed Date	Identified Date	Owner
18	Due to on-going deployment processes and	There have been several defects pushed to production with	Repeatable documented release and deployment will help		11/30/2023 - R4.3 went live on 11/09/23 as	Release/Deployment	Issue	Medium	Closed	11/30/2023	12/31/2020	Gautam
	technical execution issues, the Project may	Phase 3 releases. Some of the defects introduced to	ensure that mistakes are minimized, and that functionality is		planned. There were no deployment issues.	Planning						Gulvady
	continue to encounter defects and	production have been narrowed down to environmental	not mistakenly deprecated when deployments take place.		Finding closed.							
	challenges in meeting projected timelines	promotional activities. In these instances, the DEV and TEST		Ensure there are adequate and qualified								
	for production and non-production	environments were not in sync with the production		resources to support the current	10/31/2023 - No deployments took place in							
	deployments.	environment (missing business rules, missing components,			October 2023. R4.3 is set to go live on							
		missing dependencies, etc.). IVV is aware that DOH staff		the support from RSM resources to	11/09/23, along with a high-priority R4.2 post-							
		shadowed RSM staff for all deployment releases during Phase		l	production bug. The Golden Record (GR)							
		2 with RSM providing instruction and DOH staff physically		for some of the more complex	production data use is delayed, but progress							
		executing the tasks and activities via keyboard. For Phase 3, it			has been made in resolving many issues. 12 GR							
		is unclear whether a complete, up to date, and documented		Work in collaboration with RSM to	items may be included in R4.3, depending on							
		deployment script, or deployment notes, are being utilized by		establish a transition plan for DOH to	testing results. IV&V will monitor R4.3							
		BHA for deployment activities.		assume all deployment activities to ensure	deployment quality.							
				complete ownership of these processes.								
				This should assist with consistency in	09/30/2023 - R4.2 was deployed on 09/14/23							
				approach and execution going forward.	with no deployment issues. The Golden Record							
				As appropriate, consult with RSM on best	(GR) deployment has been postponed, and a							
				practices that BHA could employ to	new deployment date has not yet been							
				support deployment.	determined, as the BHA identified more critical							
				Request the assistance of the RSM	issues during the testing.							
				Solution Architect in reviewing and								
				correcting issues associated with								
				consistency of the configurations across	08/31/2023 - There were no deployments in							
				environments, ensuring that the test	August. The GR deployment has been							
				environment is capable of testing ALL	postponed (date to be determined) and was							
				functions of any given release without the	not deployed in August 2023 as planned							
				need for using multiple test environments.								
				Request the assistance of the RSM	07/31/2023 - There were no deployment errors							
				Solution Architect in review of deployment	identified for R4.1. While the deployment							
				scripts as a double check for accuracy and	issues have been fewer with the last few							
				completeness prior to commencing	releases, this is still an area of concern for							
				deployment activities.	IV&V. IV&V will continue to monitor this	ĺ					1	
				The Project Team should consider	medium exposure project issue.							
				evaluating notential changes to	, , , , , , , , , , , , , , , , , , , ,	1			1		1	1

Id	Finding	Finding Statement	Analysis and Significance	Recommendation	Finding Update	Category	Туре	Priority	Status	Closed Date	Identified Date	Owner
									_			
1	Lack of regular Sprint reviews and sprint		Based on Agile Best Practices, Sprint Demoes or reviews occur	According to Agile Best Practices, IV&V	11/30/2023 - The vendor and BHA have a	Sprint Planning	Preliminary	N/A	Open		7/26/2023	Gautam
	demos will likely lead to misalignments		during a sprint, with the development team, scrum master, and		product backlog review process in place. IV&V		Concern					Gulvady
	between delivered work and stakeholder	across the team and stakeholders. They are essential building	product owner.	demos in future releases (R4.2 and	will observe the product backlog review							
	needs	blocks for better software and teams. Sprint demos /reviews		1	process and will monitor future Sprint reviews.							
		· ·	Sprint reviews/demos are crucial in bringing alignment across	assess the completion of user stories,								
			the team and stakeholders. It is a great opportunity for the	review important metrics and outcomes,	10/31/2023 - The vendor has confirmed that							
			product owner, stakeholders, and the team to review what's	and confirm if the Sprint goal has been	they will provide demonstrations of new							
		practices, IV&V believes having Sprint demos/reviews during	=		functionality/features as part of Sprint Reviews							
		a sprint helps clarify and validate design prior to testing, steer		<b>5</b> ,	going forward. In parallel, joint testing of							
			development, and not later during testing. Celebrating the	1: '	bugs/user stories continues. IV&V will work							
		,	team's accomplishments is also an essential part of these	some recommendations for project	with BHA and the vendor to understand the							
		testing, which is beneficial.	demos. Moreover, they are invaluable in steering the team in	alignment, stakeholder engagement,	product backlog review process.							
			the right direction and avoiding big mistakes. It's interesting to	quality assurance, transparency, and the								
			note that the Sprint demo could bring to light bugs such as R4.1	incorporation of user feedback.	09/30/2023 - RSM conducted some demos							
			bug 34055 on the Portal, where the checkbox is on the left of	2. Strengthen the collaboration between	during the emergency wildfire-related							
			the text.	development teams and stakeholders by	communications for the email and SMS tools.							
				enhancing communication channels.	The System Integrator (SI) Contract review and							
				Regularly validate project objectives and	discussions are underway to refine processes							
				ensure that sprint deliverables remain	and establish measurements for this.							
				consistent with stakeholder requirements.	Discussions are in progress to refine processes							
				3. Foster active participation from users	and establish measurements for this category.							
				and stakeholders during both Sprint								
				Reviews and Sprint Demos. Emphasize the	08/31/2023 - As per Agile Best Practices, it is							
				value of iterative feedback to guide	important to have sprint reviews/demos in							
				development and ensure that user needs	order to align the team and stakeholders and							
				are consistently met.	to improve both software and teams.							
				4.Establish standardized communication	Currently, the project has joint testing involving							
				protocols for both Sprint Reviews and	the SI and BHA personnel. IV&V believes that							
				15	having Sprint demos/reviews during a sprint		1					
				=	can help to clarify and validate the design							
					before testing, steer the team in the right							
					direction, and avoid issues. This would also		1					
				engagement and project transparency.	allow the testing team to focus solely on							
				5 Create a stakeholder register to identify				1				1

Id	Finding	Finding Statement	Analysis and Significance	Recommendation	Finding Update	Category	Туре	Priority	Status	Closed Date	Identified Date	Owner
2		Due to issues with the Golden Record (GR) solution, the			11/30/2023 - GR production data use continues		Risk	Medium	Open		7/10/2023	Gautam
	be delayed	project may experience delays and a shift in focus from	GR is impacting the INSPIRE release schedule. E.g., Mid-sprint		to be delayed. Mock migration was completed	Planning						Gulvady
		critical functionality. The GR is a crucial element that affects		determining the path forward.	in early November 2023. Per the daily scrum							
		several user stories dependent on it. The deployment of the	reviewing original requirements and evaluating if BHA needs to		meetings and weekly issues meetings, BHA is							
		GR has been postponed to 08/19/2023, resulting in the	revisit the design.		testing the 12 GR items. Currently, RSM and							
		transfer of approximately 150 story points into R4.2 and			BHA are finalizing the GR readiness checklist							
		subsequent releases. However, it is unclear which releases			and SOPs. CAMHD and DDD to review the audit							
		will include the GR-related user stories			report currently available to determine if it							
				confirmed, and all open defects should be								
				resolved.	monitor the open issues and attend meetings							
					and will provide any recommendations in the							
					next reporting period.							
				Identify the objective of implementing GR,								
				benefits, current gaps in design, effort	10/31/2023 - GR production data use continues							
					to be delayed. Per the weekly issues meeting							
				impact of having/not having GR.	and R4.3 Release Notes, it was discussed that							
				Analyze the impact on the future	12 GR items will be included in R4.3. The mock							
				functionalities and assess the implications	migration is planned for the first week of							
				if this strategic change is needed.	November. Currently, RSM and BHA are							
					developing the GR readiness checklist and							
					SOPs. IV&V will continue to monitor the open							
					issues and attend meetings and will provide							
					any recommendations in the next reporting							
					period.							
					09/30/2023 - Golden Record issues have been							
					identified during the BHA UAT testing. Due to							
					this, BHA feels that additional testing is							
					required to resolve all issues before							
					deployment. Discussions are in progress to							
					establish an appropriate deployment date for							
					co						1	
					un.						1	
					08/31/2022 - The GP P4 1 Mid Sprint		ı	1				1

Id	Finding	Finding Statement	Analysis and Significance	Recommendation	Finding Update	Category	Туре	Priority	Status	Closed Date	Identified Dat	e Owner
3	Performance bottlenecks with the INSPIRE	Performance issues have been identified that have the	Developmental Disability Division (DDD) personnel are		11/30/2023 - IV&V has discussed the next steps	Project Management	Issue	Medium	Open		8/18/2023	Gautam
	production environment may result in low	potential to impact the system's functionality, user	encountering performance issues with re-assigning cases, and		with BHA (see updated recommendation #1).							Gulvady
	productivity and poor user experience.	experience, and the overall reliability of the system. These	opening the DDD – Contact Notes (Fiscal View – Complete)	features/functionality.								
		performance issues warrant immediate attention and	view. CAMHD has not reported performance issues.		10/31/2023 - The IV&V review of the draft							
		resolution.		2. Create a plan for comprehensive	vendor contract indicates that the vendor is							
				performance testing and address any	accountable for conducting load and							
					performance testing of INSPIRE. IV&V will							
					discuss the next steps with BHA and provide							
					recommendations in the next reporting period.							
				annually and implementation of Azure App								
				Insights for Power Platform.	09/30/2023 - The SI vendor draft contract is							
					currently under review by IV&V, while the							
					terms of the new contract are currently being							
					finalized. IV&V will determine whether the							
					contractor is responsible for addressing							
					performance issues under the draft contract							
					terms.							
					08/31/2023 - The Microsoft (MS) Cloud							
					Architect team conducted a Benchmark							
					assessment of the MS Dynamics 365 system							
					and executed performance and load tests in							
					May 2023 (?) on R3.1 in the System Integration							
					Test (SIT) environment. CAMHD provided 20							
					test scenarios that covered certain							
					transactions. DDD personnel were not involved							
					in this testing. The original solution delivery							
					contract states that the Contractor shall							
					address performance bottlenecks of its							
					solutions. The terms of the new contract are							
					currently being finalized, and the contract is							
					not available for IV&V Review at this time. It is						1	
					to be determined whether the Contractor is							
					responsible for addressing performance issues	ĺ	1	1	1			1

Id	Finding	Finding Statement	Analysis and Significance	Recommendation	Finding Update	Category	Туре	Priority	Status	Closed Date	Identified Date	e Owner
34	Shortage of Behavioral Health	Key BHA project resources have reported constraints on how	If BHA is upable to fully staff the project and their existing	BHA should explore options for	11/30/2023 - DDD took proactive steps to	Resource	Risk	High	Open		8/18/2023	Michael Fo
04	Administration (BHA) project resources		resources continue to be constrained, the project could	offloading project team members' daily	address the IT shortages by creating three	Management	NISK	nigii	Open		0/10/2023	Wilchael FO
	could lead to reduced productivity and	the Child and Adolescent Mental Health Division (CAMHD)	experience a reduction in productivity and project delays.	responsibilities to other staff	position descriptions along with justifications.	ividilageillelli						
	project delays.	System Management Office Manager and CAMHD Inspire	experience a reduction in productivity and project delays.	BHA should work quickly to backfill	However, the positions were not approved.							
	project delays.	Project Lead could further impact the project if DOH cannot		vacated project team member positions.	DDD will continue to explore other options and							
		acquire suitable resources. The lack of capacity of the DOH		BHA should identify tasks and duties	find a solution to address the IT shortages. The							
		test script developer has slowed DOH's automated test script		that they can ask the SI to assume, as	Healthcare System Management Office							
		development.		permitted by the contract, which are	(HSMO) Chief's position was cancelled after it							
				presently being handled by BHA members.	. was opened. A Band B System Architecture							
					resource is now filling that role temporarily, in							
					addition to executing his own duties. The							
					reporting hierarchy of resources that							
					previously reported to the HSMO Chief is also							
					unclear.							
					10/31/2023 - With the departure of the BHA							
					INSPIRE Child and Adolescent Mental Health							
					Division (CAMHD), System Management Office							
					Manager, and CAMHD Inspire Project Lead, the							
					BHA has temporarily assigned many of its							
					responsibilities to the BHA Inspire Solutions							
					Architect. With these added responsibilities,							
					the Solution Architect could become							
					overwhelmed and be unable to effectively							
					meet their project responsibilities. Current							
					projections are that this resource will likely							
					play both roles for at least 2-3 months. If BHA							
					is unable to address its resource shortage soon							
					this could have a negative impact on the	'						
					project, including slowed productivity and							
					project delays.							
					09/30/2023 - BHA is in the process of							
					evaluating the potential peed for additional							

Id	Finding	Finding Statement	Analysis and Significance	Recommendation	Finding Update	Category	Туре	Priority	Status C	losed Date	<b>Identified Date</b>	Owner
35	Lack of an ongoing cleanup process may lead	R3.33 work started, and the SI vendor was working with BHA	A cleaned-up Azure DevOps environment would enable the	DevOps cleanup is an ongoing process.	11/30/2023 - RSM and BHA are standardizing	Project Management	Preliminary	N/A	Open		8/2/2023	Gautam
	to clutter and reduce Azure DevOps	on the Statement of Work (SOW). BHA made the decision not	team and stakeholders to accurately track and report defects	The usage and configuration of the Azure	(on-going process) the tags used in Azure		Concern					Gulvady
	effectiveness in supporting the INSPIRE	to implement R3.33 and moved on to the next big phase of	and user stories, e.g., "n" number of post-production defects in	DevOps (AD) environment should be	DevOps and their usage, and are cleaning up							
	project management and tracking needs	work, starting with R4.1. Project team members will see some	Rm.n to be implemented in Rx.y, monitor and measure the	regularly monitored to prevent clutter and	the Azure DevOps environment. This should							
		references to R3.33 in Azure DevOps, which are incorrect and	team's effectiveness (trending as improvements, e.g., fewer	maintain its effectiveness in supporting	help optimize the workflow and make it more							
		should be updated to R4.1, or an appropriate future release.	post-production bugs from previous releases), and to maintain	the INSPIRE project management and	streamlined. IV&V will continue to monitor the							
		There is still cleanup happening for items that are in the	tool's effectiveness in supporting project management needs.	tracking needs.	usage of tags and the cleanup process.							
		parking lot, which may state R3.33 until those items are		Configuration Review: Evaluate the Azure								
		assigned to a release.		DevOps (AD) configuration settings.	10/31/2023 - RSM and BHA are collaborating to							
				Ensure workflows, issue types, custom	standardize the tags used in Azure DevOps and							
				fields, and other settings are aligned with	their usage, to clean up the Azure DevOps							
				the project's needs and industry best	environment. This should help optimize the							
				practices.	workflow and make it more streamlined. IV&V							
					will monitor the cleanup process during the							
				boards, filters, and tags in Azure DevOps	next reporting period.							
				(AD) to ensure they accurately reflect the								
				status of work, and they are designed to	09/30/2023 - There are still some instances in							
				facilitate efficient tracking and	Azure DevOps (AD) where post-production							
				collaboration. This will help streamline and	bugs are not tagged with the correct							
				make it easier to find relevant	production release. For example, 33899, 33887,							
				information.	33901, and 33935 have not been cleaned up							
l				User Training and Best Practices: Provide	(33731 is an example where the production							
				training to Azure DevOps (AD) users to	release is tagged correctly). Discussions are in							
l				ensure they are using the tool effectively.	progress for the clean-up activities, and we will							
				Share best practices for issue creation,	update the findings in the following month.							
				workflow management, and collaboration.								
				Establish a plan for regular maintenance of								
				, . ,	08/31/2023: There are still some instances in							
l					Azure DevOps (AD) where post-production							
l					bugs are not tagged with the correct							
1				remain aligned with evolving needs.	production release.							
l												
l												

Id	Finding	Finding Statement	Analysis and Significance	Recommendation	Finding Update	Category	Туре	Priority	Status	Closed Date	<b>Identified Date</b>	Owner
36	Lack of a comprehensive project schedule could lead to missed tasks, project delays, and cost overruns	Project work is ongoing without a project schedule in place.  Some current project work is considered Maintenance and Operations, but there is new work to be completed as well.	Project work is ongoing without a project schedule in place. Some current project work is considered Maintenance and Operations, but there is new work to be completed as well.	Establish a clear project schedule management plan that outlines roles, responsibilities, and accountability for schedule adherence. Create and baseline a comprehensive project schedule in MS project, Smartsheet, or a similar tool, containing tasks for both SI vendor and State, task dependencies, and resourcing. Implement regular schedule reviews and updates to ensure alignment with project objectives and milestones.	11/30/2023 - The vendor has communicated that they provided their approach to maintaining a complete project schedule, in their proposal. IV&V reviewed the vendor's proposal, which doesn't appear to describe an alternate approach to maintaining a project schedule as requested by the RFP.  10/31/2023 - Per the IV&V review of the draft vendor contract draft, the vendor is required to maintain a complete project schedule using standard project management software, such as Microsoft Project, for the DD&I and M&O phases of the project. IV&V will discuss the next steps with BHA and provide recommendations in the next reporting period.  09/30/2023 - IV&V received the modifications to the original contract and is in the process of review to determine SI vendor contractual obligations.  08/31/2023 - Project work is ongoing without a project schedule in place. Some current project work is considered Maintenance and Operations, but there is new work to be completed as well.	Project Management	Issue	Medium	Open			Gulavady
37	RSM is working without an executed contract since the expiration of the original contract	Delays in executing the RSM contract could potentially lead to a halt in ongoing work and increase the risk of the project falling behind the planned schedule.	SI vendor may have to stop work if the new contract is not executed in the near future. The vendor is not able to invoice for work performed since the expiration of their original contract.	Until an executed contract is available, a draft version of the contract should be made available to BHA and SI to manage ongoing work.	11/30/2023 - No update.  10/31/2023 - BHA is awaiting the signed contract and certificate of insurance from RSM. The execution of the contract is in progress, and IV&V will update the finding in the next reporting period.  09/30/2023 - BHA provided the SI vendor draft contract to RSM, and IV&V. BHA is awaiting the insurance certificate to be provided by RSM. PCG is currently reviewing the SI vendor draft contract.  08/31/2023 - There is a risk that the SI vendor may have to stop work if the new contract is not executed in the near future. The vendor is not able to invoice for work performed since the expiration of their original contract.	Project Management	Issue	High	Open			Gautam Gulavady

	Id	Finding	Finding Statement	Analysis and Significance	Recommendation	Finding Update	Category	Туре	Priority	Status	Closed Date	Identified Date	Owner
3			to a halt in ongoing work and a risk to monitoring of the	reports.	made available to BHA and IV&V in order to manage on-going work.	11/30/2023 - The final execution of the PCG contract is not yet complete.  10/31/2023 - PCG mailed a signed version of their contract, including the certificates of insurance, to the Hawaii DOH BHA DDD procurement and contracts division. The execution of the contract is in progress, and IV&V will update the finding in the next reporting period.  09/30/2023 - BHA provided the draft contract to IV&V. BHA has requested a certificate of insurance update from PCG. PCG is working with our insurer on the requested update, and it will be provided to BHA as soon as the update is complete.	Project Management	Issue	High	Open			Gautam Gulvady
									+				<del>                                     </del>
E													
F													<del></del>