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February 21, 2024

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 <http://ets.hawaii.gov> (see "Reports").

Sincerely,

  
Douglas Murdock (Feb 21, 2024 12:27 HST)

Douglas Murdock  
Chief Information Officer  
State of Hawai'i

Attachments (2)



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

*IV&V Report for the period of  
January 1 – January 31, 2024*

*Submitted: February 15, 2024*

# Agenda

Executive Summary

IV&V Findings & Recommendations

Appendices

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



# Executive Summary

R4.4 was deployed on 01/25/2024. Five (5) post-production bugs (severity: 2 critical, 1 high, 1 medium, 1 TBD) have been encountered, which the SI vendor and BHA are currently analyzing. R4.4 regression testing was done partly manually and automated.

Three (3) new findings were opened. Due to ongoing deployment processes and technical execution issues, the Project may continue to encounter defects and challenges. #39 was opened regarding several post-production bugs that were encountered in the Phase 4 release 4.4. #40 was opened regarding the lack of a formal process for development, review, and approval of test scenarios, test cases, and test results by relevant stakeholders. #41 was opened due to the need for separate, dedicated backlog review meetings.

As of the January reporting period, System Integrator (SI) vendor and IV&V contracts are fully executed.

The Fast Healthcare Interoperability Resources (FHIR) project is continuing to progress as planned. The SI vendor and Microsoft (MS) are currently working on the authentication work, converting the data, and testing. The team is on track to deploy in Release 4.5.

Nov	Dec	Jan	Category	IV&V Observations
G	G	Y	<b>Sprint Planning</b>	Product Backlog reviews are being performed during the design and/or weekly issues meetings, rather than in a structured, dedicated meeting. This category moved from green to yellow in the January reporting period.
G	G	G	<b>User Story (US) Validation</b>	There are no active findings in the User Story (US) Validation category which remains Green (low criticality) for the January reporting period. IV&V will continue to monitor the US development and validation process in upcoming reporting periods.



# Executive Summary

Nov	Dec	Jan	Category	IV&V Observations
Y	Y	R	<b>Test Practice Validation</b>	<p>Tricentis coaching sessions and coding of the automation testing is ongoing. R4.4 regression testing was done partly manually and automated. R4.4 was deployed on 01/25/2024. Five (5) post-production bugs (severity: 2 critical, 1 high, 1 medium, 1 TBD) have been encountered. The status of completion of automated regression test scripts is now provided in the weekly program status report. IV&amp;V will monitor and review the automated regression test results and determine whether the procedural concern has been addressed.</p> <p>During the January reporting period, a new finding was identified regarding inadequate state-side participation in the testing process and the lack of a formal process for the development, review, and approval of test scenarios, test cases, and test results by relevant stakeholders. This category moved from yellow to red in the January reporting period.</p>
Y	Y	R	<b>Release / Deployment Planning</b>	<p>R4.4 was deployed on 01/25/2024. Five (5) post-production bugs (severity: 2 critical, 1 high, 1 medium, 1 TBD) have been encountered, and the SI vendor and BHA are currently conducting a root cause analysis. IV&amp;V will monitor the progress.</p> <p>During the January reporting period, a new finding was opened regarding several post-production bugs that were encountered in the Phase 4 release 4.4. Due to ongoing deployment processes and technical execution issues, the Project may continue to encounter defects and challenges. This category moved from yellow to red in the January reporting period.</p>
G	G	G	<b>OJT and KT Sessions</b>	<p>This category remains Green (low criticality) for the January reporting period with no active findings.</p>
G	G	G	<b>Targeted KT</b>	<p>This category remains Green (low criticality) for the January reporting period. IV&amp;V will continue to monitor.</p>



# Executive Summary

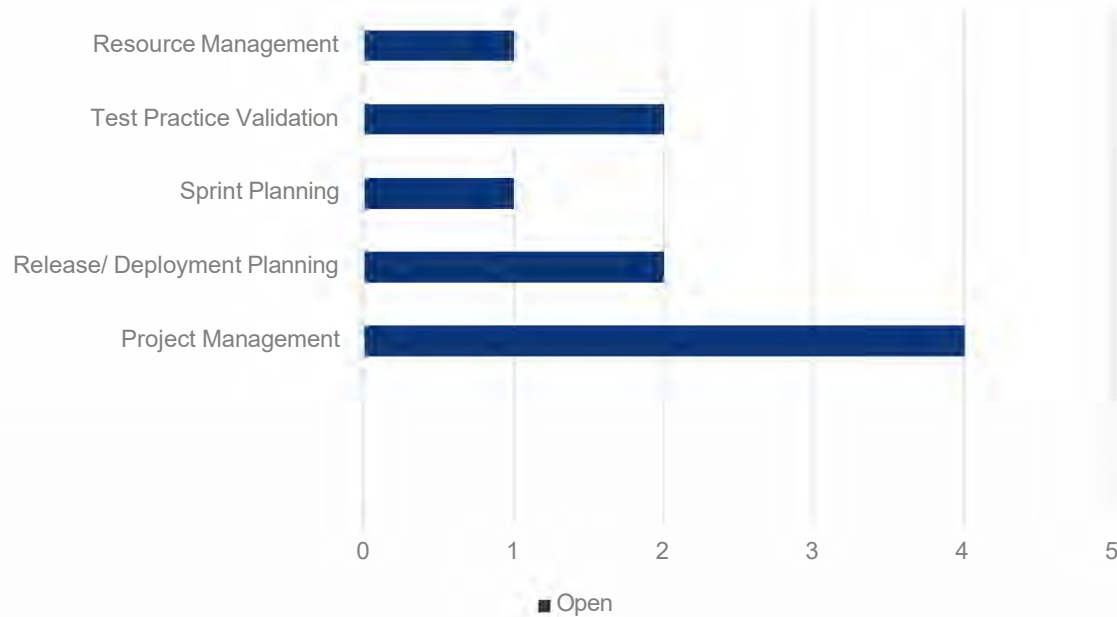
Nov	Dec	Jan	Category	IV&V Observations
G	G	G	<b>Project Performance Metrics</b>	There are no project performance metrics to report for this reporting period. IV&V will keep the criticality rating for this category a Green (low criticality) and will continue monitoring this category.
G	G	G	<b>Organizational Maturity Assessment (OMA)</b>	This category remains Green for the January reporting period. There are no outstanding findings in this category, and IV&V will continue to monitor.
R	R	R	<b>Project Management</b>	<p>While Golden Record (GR) Mid-sprint deployment (MSD) was deployed on 12/21/2023, however there does not appear to be a common understanding among stakeholders around the GR functionality development and deployment.</p> <p>The Analytics project start has been delayed due to a delay in executing the Data Sharing Agreement between the Developmental Disabilities Division (DDD) and the MedQuest Division (MQD).</p> <p>The SI vendor and IV&amp;V contracts have been fully executed.</p>
R	R	R	<b>Resource Management</b>	As an update to Finding #34, There continue to be significant project resource shortages, as reflected in IAPDU #6.



# Executive Summary

*As of the January 2024 reporting period, two (2) findings were closed, and two (2) new findings were opened. The ten open findings are updated – five (5) High Issues, three Medium Issues, one (1) Medium Risk, and one (1) Preliminary Concern spread across the Release/Deployment Planning, Test Practice Validation, Sprint Planning, and Project Management and Resource Management assessment areas.*

Open Risks/ Issues by Category/Priority



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



# IV&V Findings & Recommendations

## Sprint Planning

#	Key Findings	Criticality Rating
31	<p><b>Medium Risk:</b> Lack of regular Sprint reviews and sprint demos will likely lead to misalignments between delivered work and stakeholder needs.</p> <p><b>Finding Update:</b> The vendor to schedule demonstrations of new functionality/features as part of Sprint Reviews going forward.</p>	

Recommendations	Status
<ul style="list-style-type: none"><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 style="list-style-type: none"><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 style="list-style-type: none"><li>Foster active participation from users and stakeholders during both Sprint Reviews and Sprint Demos. Emphasize the value of iterative feedback to guide development and ensure that user needs are consistently met.</li></ul>	Open



# IV&V Findings & Recommendations


## Sprint Planning (Cont'd)

Recommendations	Status
<ul style="list-style-type: none"><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
<ul style="list-style-type: none"><li>Create a stakeholder register to identify all stakeholders. List their identification, assessment, and classification. Review the register regularly to plan appropriate stakeholder engagement.</li></ul>	Open
<ul style="list-style-type: none"><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



# IV&V Findings & Recommendations


## Sprint Planning

#	Key Findings	Criticality Rating
41	<p><b>Medium Risk:</b> Absence of separate dedicated product backlog review meetings can pose several challenges for a project team</p> <p><b>Finding Update:</b> Currently, product backlog reviews are done during design meeting and/or weekly issues meetings. This can lead to, e.g., scattered focus, limited stakeholder engagement, difficulty in managing complexity and delayed decision making. The Product backlog review is a more structured meeting specifically dedicated to reviewing the entire backlog, making adjustments, and ensuring its readiness for upcoming sprints. The product backlog review is typically conducted as a separate meeting. The purpose of keeping it separate is to focus specifically on the backlog items, their priorities, and any necessary adjustments to ensure alignment with the product vision and stakeholder needs. It typically occurs periodically, e.g., once per sprint or at regular intervals, to ensure the backlog remains up-to-date, prioritized, and aligned with the project's goals.</p>	
Recommendations		Status
<ul style="list-style-type: none"><li>IVV recommends scheduling separate dedicated product backlog review meetings (during sprints) where all relevant stakeholders are invited to review the product backlog and scheduled at the appropriate time(s) such that there is sufficient time to plan the design, development, and implementation (DDI) of the next release(s).</li></ul>		New



# IV&V Findings & Recommendations

## Test Practice Validation


#	Key Findings	Criticality Rating
2	<p><b>Medium Issue:</b> As a result of automated regression testing not being comprehensively performed, production releases are breaking and/or deprecating existing functionality in the production environment.</p> <p><b>Finding Update:</b> Tricentis coaching sessions and coding of the automated testing are ongoing. R4.4 regression testing was done partly manually and automated. R4.4 was deployed on 01/25/2024, five (5) post-production bugs (severity: 2 critical, 1 high, 1 medium, 1 TBD) have been encountered. The status of completion of automated regression test scripts is now provided by BHA in the weekly program status report; however, estimated completion dates are not provided. IV&amp;V will monitor and review the automated regression testing results and status reporting.</p>	

Recommendations	Status
<ul style="list-style-type: none"> <li>Having board(s) in Azure DevOps or a document on SharePoint that provides information about the status of regression testing automation, to facilitate visibility and transparency to BHA project personnel and stakeholders.</li> </ul>	Open
<ul style="list-style-type: none"> <li>Schedule priorities should be reevaluated by distributing the work according to the resource bandwidth. This will ensure that the schedule is not impacted and that the work is done efficiently between regression testing and GR.</li> </ul>	In progress
<ul style="list-style-type: none"> <li>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.</li> </ul>	In progress
<ul style="list-style-type: none"> <li>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.</li> </ul>	



# IV&V Findings & Recommendations


## Test Practice Validation

#	Key Findings	Criticality Rating
40	<p><b>New High Issue:</b> Improvements to the testing process are needed to ensure adequate state-side participation and comprehensive testing of new functionality prior to production deployment.</p> <p><b>Finding Update:</b> When testing user stories 34564 and 34756 on 1/31/24, the test tasks did not reflect the real use cases to give stakeholders adequate confidence that the user story could be tested.</p>	
Recommendations		Status
<ul style="list-style-type: none"><li>Identify stakeholders (output is stakeholder register) and develop a RACI matrix for testing.</li></ul>		Open
<ul style="list-style-type: none"><li>Review the overall testing process and implement any needed improvements identified.</li></ul>		Open



# IV&V Findings & Recommendations

## Release / Deployment Planning (cont'd)

#	Key Findings	Criticality Rating
32	<p><b>Medium Issue:</b> Golden Record (GR) project delays are likely to delay the implementation of future features and functionality.</p> <p><b>Finding Update:</b> While GR Mid-sprint Deployment (MSD) was deployed on 12/21/2023, stakeholders across the project appear to have different understandings of where GR stands. IV&amp;V sent an email on 01/31/2024 recommending stakeholders have a good common understanding of the GR functionality development (including, related regression testing) and deployment, and the common understanding and plans are communicated to all stakeholders. The plan is to discuss and resolve the issue so that a common statement of understanding can be provided to all stakeholders. This finding was changed from a Risk to an Issue.</p>	

Recommendations	Status
<ul style="list-style-type: none"> <li>Identify stakeholders (output is stakeholder register) and develop a RACI matrix for GR.</li> </ul>	Open
<ul style="list-style-type: none"> <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>	In Progress



# IV&V Findings & Recommendations

## Release / Deployment Planning (cont'd)


Recommendations	Status
<ul style="list-style-type: none"><li>Identify the objective of implementing GR production data use, benefits, current gaps in design, effort estimates, resource commitments, and impact of having/not having GR.</li></ul>	In Progress
<ul style="list-style-type: none"><li>Analyze the impact on the future functionalities and assess the implications if this strategic change is needed.</li></ul>	In Progress
<ul style="list-style-type: none"><li>GR working sessions should be resumed until there is clarity on remaining work to be completed, timeline for completion, etc.</li></ul>	New





# IV&V Findings & Recommendations

## Release / Deployment Planning (cont'd)

#	Key Findings	Criticality Rating
39	<p><b>New High Issue:</b> Due to on-going deployment processes and technical execution issues, the Project may continue to encounter defects and challenges, e.g., when releases are in production or in meeting projected timelines for production and non-production deployments.</p> <p><b>Finding Update:</b> R4.4 was deployed on 01/25/2024. Five (5) post-production bugs (severity: 2 critical, 1 high, 1 medium, 1 TBD) have been encountered, which the SI vendor and BHA are currently analyzing. At least one of these bugs is deployment-related. IV&amp;V will monitor the progress.</p>	

Recommendations	Status
<ul style="list-style-type: none"> <li>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.</li> </ul>	New
<ul style="list-style-type: none"> <li>As appropriate, consult with RSM on best practices that BHA could employ to support deployment.</li> </ul>	New
<ul style="list-style-type: none"> <li>Request the assistance of the RSM Solution Architect in reviewing and correcting issues associated with the consistency of 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>	New
<ul style="list-style-type: none"> <li>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.</li> </ul>	New



# IV&V Findings & Recommendations


## Release / Deployment Planning (cont'd)

Recommendations	Status
<ul style="list-style-type: none"> <li>The Project Team should consider evaluating potential changes to improve/enhance existing processes and communications to address current release/deployment shortfalls.</li> </ul>	New
<ul style="list-style-type: none"> <li>IV&amp;V recommends performing an RCA in collaboration with RSM for the continued concerns surrounding environment differences.</li> </ul>	New
<ul style="list-style-type: none"> <li>IV&amp;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.</li> </ul>	New
<ul style="list-style-type: none"> <li>Look at implementing 'hard' code freeze dates as well as test environment deployment dates to ensure that testing and deployment activities are not rushed.</li> </ul>	New
<ul style="list-style-type: none"> <li>Ensure an operational and fully functional test environment is available to effectively conduct end-to-end regression testing prior to deploying a release to production.</li> </ul>	New
<ul style="list-style-type: none"> <li>Develop a plan to institutionalize the execution of "Smoke Testing" for promotions to non-production and production environments. This will help to ensure that all components needed to test have been properly deployed prior to the actual execution of test activities.</li> </ul>	Open



# IV&V Findings & Recommendations


## Project Management

#	Key Findings	Criticality Rating
14	<p><b>High Issue:</b> Due to multiple quality concerns, the Project may continue to face impactful system defects.</p> <p><b>Finding Update:</b> R4.4 was deployed on 01/25/2024. Five (5) post-production bugs (severity: 2 critical, 1 high, 1 medium, 1 TBD) have been encountered, which the SI vendor and BHA are currently analyzing. IV&amp;V will monitor the progress. Priority was changed from Medium to High.</p>	

Recommendations	Status
<ul style="list-style-type: none"> <li>Evaluate existing project staff skills and experience level to ensure they meet BHA support requirements.</li> </ul>	In Progress
<ul style="list-style-type: none"> <li>Perform CAMHD revenue neutrality fiscal balance testing on a quarterly basis to ensure revenues are as expected.</li> </ul>	In Progress
<ul style="list-style-type: none"> <li>Assign dedicated resources to provide oversight and monitoring of CAMHD Fiscal Processes, depending on new staff availability.</li> </ul>	Open
<ul style="list-style-type: none"> <li>Monitor implemented IV&amp;V recommendations for effectiveness.</li> </ul>	In Progress

# IV&V Findings & Recommendations

## Project Management (cont'd)

#	Key Findings	Criticality Rating
33	<p><b>Medium Issue:</b> Performance bottlenecks with the INSPIRE production environment may result in low productivity and poor user experience.</p> <p><b>Finding Update:</b> IV&amp;V to discuss the criteria for selecting upcoming release(s) for performance testing (as part of planning performance test) with BHA so planning can commence.</p>	

Recommendations	Status
• Conduct load and performance testing for each release with significant new features/functionality.	Open
• 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

# IV&V Findings & Recommendations

## Project Management (cont'd)


#	Key Findings	Criticality Rating
35	<p><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.</p> <p><b>Finding Update:</b> RSM and BHA are standardizing (an ongoing process) the tags used in Azure DevOps and their usage and are cleaning up the Azure DevOps environment. E.g., the five (5) R4.4 post-production bugs are tagged "Post Go-Live Bug." IV&amp;V will monitor the progress.</p>	N/A

Recommendations	Status
<ul style="list-style-type: none"> <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 style="list-style-type: none"> <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 style="list-style-type: none"> <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 style="list-style-type: none"> <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
<ul style="list-style-type: none"> <li>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.</li> </ul>	Open



# IV&V Findings & Recommendations


## Project Management (cont'd)

#	Key Findings	Criticality Rating
36	<p><b>High Issue:</b> Lack of a comprehensive project schedule could lead to missed tasks, project delays, and cost overruns.</p> <p><b>Finding Update:</b> Delays in executing the Data Sharing Agreement (DSA) contract between the DDD and the MQD. The Department of Human Services (DHS) has delayed the commencement of the Analytics project. IV&amp;V has yet to see a comprehensive project schedule for the Analytics module. The priority has changed from Medium to High.</p>	
Recommendations		Status
<ul style="list-style-type: none"> <li>Establish a clear project schedule management plan that outlines roles, responsibilities, and accountability for schedule adherence.</li> </ul>		Open
<ul style="list-style-type: none"> <li>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.</li> </ul>		Open
<ul style="list-style-type: none"> <li>Implement regular schedule reviews and updates to ensure alignment with project objectives and milestones.</li> </ul>		Open



# IV&V Findings & Recommendations


## Project Management (cont'd)

#	Key Findings	Criticality Rating
37	<p><b>Closed High Issue:</b> RSM has been working without an executed contract since the expiration of the original contract</p> <p><b>Finding Update:</b> The SI vendor contract has been fully executed. Finding closed.</p>	
Recommendations		Status
<ul style="list-style-type: none"> <li>Until an executed contract is available, a draft version of the contract should be made available to BHA and SI to manage ongoing work.</li> </ul>		Closed



# IV&V Findings & Recommendations

## Project Management (cont'd)


#	Key Findings	Criticality Rating
38	<p><b>Closed High Issue:</b> Public Consulting Group (PCG) has been working without an executed contract.</p> <p><b>Finding Update:</b> The PCG IV&amp;V contract has been fully executed. Finding closed.</p>	
Recommendations		Status
<ul style="list-style-type: none"> <li>Until an executed contract is available, a draft version of the contract should be made available to BHA and SI to manage ongoing work.</li> </ul>		Closed





# IV&V Findings & Recommendations

## Resource Management

#	Key Findings	Criticality Rating
34	<p><b>High Issue:</b> A shortage of Behavioral Health Administration (BHA) project resources could lead to reduced productivity and project delays.</p> <p><b>Finding Update:</b> There continue to be significant project resource shortages, as reflected in IAPDU #6. This finding was changed from a Risk to an Issue.</p>	

Recommendations	Status
<ul style="list-style-type: none"> <li>BHA should explore options for offloading project team members' daily responsibilities to other staff.</li> </ul>	Open
<ul style="list-style-type: none"> <li>BHA should work quickly to backfill vacated project team member positions.</li> </ul>	Open
<ul style="list-style-type: none"> <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
<ul style="list-style-type: none"> <li>BHA should explore the use of contractors to fill open project positions.</li> </ul>	New



# IV&V Findings & Recommendations

## Project Performance Metrics

Metric	Description	IV&V Observations	IV&V Updates								
<b>Velocity</b>	<ul style="list-style-type: none"> <li>Review and validate the velocity data as reported by the project</li> <li>Verify the project is on pace to hit the total target number of US/USP</li> </ul>	<p><b>December</b> – Velocity was estimated at 240 USPs for R4.4, 149 R4.4 USPs were promoted to production on 01/25/24.</p>	<p>Velocity Metric Trends:</p> <table border="1"> <thead> <tr> <th data-bbox="1298 582 1412 678">Release</th> <th data-bbox="1418 582 1591 678">Planned Velocity</th> <th data-bbox="1597 582 1696 678">Actual Velocity</th> <th data-bbox="1702 582 1843 678">Percentage Attained</th> </tr> </thead> <tbody> <tr> <td data-bbox="1298 682 1412 872">R4.4</td> <td data-bbox="1418 682 1591 872">240 (+5 USPs for Maui Wildfire Communication )</td> <td data-bbox="1597 682 1696 872">149 (+5 USPs for Maui Wildfire Communication)</td> <td data-bbox="1702 682 1843 872">62%</td> </tr> </tbody> </table>	Release	Planned Velocity	Actual Velocity	Percentage Attained	R4.4	240 (+5 USPs for Maui Wildfire Communication )	149 (+5 USPs for Maui Wildfire Communication)	62%
Release	Planned Velocity	Actual Velocity	Percentage Attained								
R4.4	240 (+5 USPs for Maui Wildfire Communication )	149 (+5 USPs for Maui Wildfire Communication)	62%								



# IV&V Findings & Recommendations

## Project Performance Metrics (cont'd.)

Metric	Description	IV&V Observations	IV&V Updates
<b>Defect Metrics</b>	<p>Understand and track the following:</p> <ul style="list-style-type: none"> <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>	<p><b>December</b> - Velocity was estimated at 240 USPs (excluding 5 USPs for Maui Wildfire Communication) for R4.4, 149 R4.4. USPs were promoted to production (+5 USPs for Maui Wildfire Communication) on 01/25/24.</p> <p>74% of the USPs were associated with planned user stories and requests.</p> <p>26% of the total USPs were associated with defects encountered during the release effort or pulled from the backlog.</p>	<p>The defect percentage for January was 26% which is above the target range of 20% or less of all USPs promoted to production.</p>



# 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
	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.
	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 January 2024 reporting period:

1. Daily Scrum Meetings
2. Daily Design Meetings
3. Twice Weekly RSM Issues Meeting
4. Weekly BHA-ITS Program Status Meeting
5. Bi-Weekly Check-in: CAMHD
6. Bi-Weekly Check-in: DDD
7. IV&V Draft IV&V Status Review Meeting with DOH
8. IV&V Draft IV&V Status Review Meeting with RSM and DOH
9. DOH BHA IT Solution Project – Steering Committee

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

1. Daily Scrum Notes
2. Twice Weekly Issues Meeting Notes
3. Weekly BHA-ITS Program Status Report

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



Document







# Appendix C: Project Trends

# Appendix C

## Project Trends

Process Area	Apr	May	Jun	July	August	September	October	November	December	January
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										
Resource Management										
<b>Total Open Findings</b>										
Issue - high	9	6	4	5	11	11	11	10	10	11
Issue - medium	1	1	0	0	2	2	2	2	2	5
Issue - low	4	3	4	3	5	5	5	4	4	4
Risk - high	2	1	0	0	0	0	0	0	0	0
Risk - medium	0	0	0	0	0	0	0	0	1	0
Risk - low	1	1	0	1	2	2	2	2	1	1
Preliminary Concern	0	0	0	0	0	0	0	0	0	0
Preliminary Concern	1	0	0	1	2	2	2	2	2	1





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Id	Finding	Finding Statement	Analysis and Significance	Recommendation	Finding Update	Category	Type	Priority	Status	Closed Date	Identified Date	Owner
2	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.	<p>1. Having board(s) in Azure DevOps or a document on SharePoint that provides information about the status of regression testing automation, to facilitate visibility and transparency to BHA project personnel and stakeholders.</p> <p>2. IV&amp;V recommends reevaluating the schedule priorities by distributing the work according to the resource bandwidth. This will ensure that the schedule is not impacted and that the work is done efficiently between regression testing and Golden Record (GR).</p> <p>3. 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.</p> <p>IV&amp;V recommends DDD and CAMHD to develop a common and consistent approach across divisions for performing regression testing.</p> <p>4. 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.</p> <p>Updating the regression test scripts to ensure consistency with system configuration.</p> <p>Modifying release schedules to allow for regression testing timeframes</p> <p>Planning releases by functionality type to avoid unnecessary repetitive work being performed in any given section of the solution.</p> <p>Performing regression testing after every release, or possibly every other release, or potentially tying regression tests to full solution upgrade releases. In addition, consider alternating the DDD and CAMHD scripts every other release.</p> <p>Modifying regression test scripts to start AFTER case creation, limiting the time it takes to execute.</p>	<p>01/31/2024 - Tricentis coaching sessions and coding of the automated testing are ongoing. R4.4 regression testing was done partly manually and automated. R4.4 was deployed on 01/25/2024, five (5) post-production bugs (severity: 2 critical, 1 high, 1 medium, 1 TBD) have been encountered. The status of completion of automated regression test scripts is now provided in the weekly program status report, however estimated completion dates are not provided. BHA has started reporting the progress and status of automated regression testing. IV&amp;V will monitor and review the automated regression testing results and status reporting.</p> <p>12/31/2023 - Tricentis coaching sessions and coding of the automation is ongoing. Golden Record (GR) mid-sprint deployment (MSD) went live on 12/21/2023 - GR MSD regression testing was not performed, end to end GR regression testing will be executed when the full GR functionality is implemented. The procedural concern is yet to be addressed.</p> <p>11/30/2023 - 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&amp;V will monitor and review the overall automated regression coaching and testing progress. The procedural concern is yet to be addressed.</p> <p>10/31/2023 - Tricentis coaching sessions are ongoing. Coding of the automation is ongoing; R4.3 regression testing is being done partly manually and automated. IV&amp;V will monitor and review the automated regression testing results and determine whether the procedural concern has been addressed.</p> <p>09/30/2023- The Tricentis coaching kicked off on September 18th, 2023. The meeting was attended by personnel from CAMHD, DDD,</p>	Test Practice Validation	Issue	Medium	Open		12/31/2019	Gautam Gulvady
14	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 balance of Release 3.10 and validate that enhanced quality processes, including industry standard regression testing, continue for Agile Release 3.11 forward. Finally, IV&V reviewed and provided feedback on the Help Desk and Semantic Layer design documents per request and found that both documents lacked design details.	The identified quality issues have negatively affected DOH billing processes and DOH has stated these are the most impactful defects discovered to date.	<p>Evaluate existing project staff skills and experience level to ensure they meet BHA support requirements.</p> <p>Perform revenue neutrality fiscal balance testing on a quarterly basis to ensure revenues are as expected.</p> <p>Assign dedicated resources to provide oversight of CAMHD Fiscal Processes.</p> <p>Monitor implemented improvements for effectiveness.</p> <p>IV&amp;V recommends performing an RCA in collaboration with RSM after all future release deployments for continual quality improvement.</p> <p>BHA and RSM to collaborate on the necessary revisions to the submitted design deliverables to increase level of detail and quality.</p> <p>Perform typical project testing including System Integration, User Acceptance, Performance, and Regression Testing.</p> <p>Dedicate sufficient time in between releases for BHA and RSM to execute/implement RCA correction actions to reduce the volume of unplanned rework.</p>	<p>Evaluate existing project staff skills and experience level to ensure they meet BHA support requirements.</p> <p>Perform revenue neutrality fiscal balance testing on a quarterly basis to ensure revenues are as expected.</p> <p>Assign dedicated resources to provide oversight of CAMHD Fiscal Processes.</p> <p>Monitor implemented improvements for effectiveness.</p> <p>IV&amp;V recommends performing an RCA in collaboration with RSM after all future release deployments for continual quality improvement.</p> <p>BHA and RSM to collaborate on the necessary revisions to the submitted design deliverables to increase level of detail and quality.</p> <p>Perform typical project testing including System Integration, User Acceptance, Performance, and Regression Testing.</p> <p>Dedicate sufficient time in between releases for BHA and RSM to execute/implement RCA correction actions to reduce the volume of unplanned rework.</p>	Project Management	Issue	High	Open		9/30/2020	Gautam Gulvady

Id	Finding	Finding Statement	Analysis and Significance	Recommendation	Finding Update	Category	Type	Priority	Status	Closed Date	Identified Date	Owner
31	Lack of regular Sprint reviews and sprint demos will likely lead to misalignments between delivered work and stakeholder needs.	Earlier in the project, end-of-sprint demos that were conducted. Sprint reviews/demos help to bring alignment across the team and stakeholders. They are essential building blocks for better software and teams. Sprint demos /reviews showcase the main functionality to stakeholders and incorporate their feedback. Currently, the project has joint testing involving the SI and BHA personnel. Per Agile Best practices, IV&V believes having Sprint demos/reviews during a sprint helps clarify and validate design prior to testing, steer the team in the right direction and help avoid big mistakes. This would also allow the testing team to focus solely on testing, which is beneficial.	Based on Agile Best Practices, Sprint Demos or reviews occur during a sprint, with the development team, scrum master, and product owner.  Sprint reviews/demos are crucial in bringing alignment across the team and stakeholders. It is a great opportunity for the product owner, stakeholders, and the team to review what's being delivered and receive feedback. This way, the team can gauge responses and make observations earlier during development, and not later during testing. Celebrating the team's accomplishments is also an essential part of these demos. Moreover, they are invaluable in steering the team in the right direction and avoiding big mistakes. It's interesting to note that the Sprint demo could bring to light bugs such as R4.1 bug 34055 on the Portal, where the checkbox is on the left of the text.	According to Agile Best Practices, IV&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.  1. 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.  2. Foster active participation from users and stakeholders during both Sprint Reviews and Sprint Demos. Emphasize the value of iterative feedback to guide development and ensure that user needs are consistently met.  3. 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.  4. Create a stakeholder register to identify all stakeholders. List their identification, assessment, and classification. Review the register regularly to plan appropriate stakeholder engagement.  5. 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	01/31/2024 - The vendor to schedule demonstrations of new functionality/features as part of Sprint Reviews going forward.  12/31/2023 - The vendor and BHA have a product backlog review process in place. IV&V will review the product backlog (living artifact), observe the product backlog review process and will monitor future Sprint reviews.  11/30/2023 - 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. This was changed from a Preliminary Concern to a Medium-priority Risk.  10/31/2023 - The vendor has confirmed that they will provide demonstrations of new functionality/features as part of Sprint Reviews going forward. In parallel, joint testing of bugs/user stories continues. IV&V will work with BHA and the vendor to understand the product backlog review process.  09/30/2023 - RSM conducted some demos during the emergency wildfire-related communications for the email and SMS tools. The System Integrator (SI) Contract review and discussions are underway to refine processes and establish measurements for this. Discussions are in progress to refine processes and establish measurements for this category.  08/31/2023 - As per Agile Best Practices, it is important to have sprint reviews/demos in order to align the team and stakeholders and to improve both software and teams. Currently, the project has joint testing involving the SI and BHA personnel. IV&V believes that having Sprint demos/reviews during a sprint can help to clarify and validate the design before testing, steer the team in the right direction, and avoid issues. This would also allow the testing team to	Sprint Planning	Risk	Medium	Open		7/26/2023	Gautam Gulvady
32	The Golden Record (GR) project continues to be delayed.	Due to issues with the Golden Record (GR) solution, the project may experience delays and a shift in focus from critical functionality. The GR is a crucial element that affects several user stories dependent on it. The deployment of the GR has been postponed to 08/19/2023, resulting in the transfer of approximately 150 story points into R4.2 and subsequent releases. However, it is unclear which releases will include the GR-related user stories	GR implementation has been delayed several times. As a result, GR is impacting the INSPIRE release schedule. E.g., Mid-sprint deployment (MSD) has been postponed multiple times. BHA reviewing original requirements and evaluating if BHA needs to revisit the design.	1. Identify stakeholders (output is stakeholder register) and develop a RACI matrix for GR.  2. Recommend that BHA works with IV&V to assess GR critical issues to assist in determining the path forward.  3. Prior to implementation of the GR, 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.  4. Identify the objective of implementing GR, benefits, current gaps in design, effort estimates, resource commitments, and impact of having/not having GR.  5. Analyze the impact on future functionalities and assess the implications if this strategic change is needed.  6. GR working sessions should be resumed until there is clarity on remaining work to be completed, timeline for completion, etc.	01/31/2024 - While Golden Record (GR) Midsprint Deployment (MSD) was deployed on 12/21/2023, stakeholders across the project appear to have different understandings of where GR stands. IV&V sent an email on 01/31/2024 recommending stakeholders have a good common understanding of the Golden Record (GR) functionality development (including, related regression testing) and deployment, and the common understanding and plans are communicated to all stakeholders. The plan is to discuss and resolve the issue, e.g., during resumed GR working session meetings, so a common statement of understanding can be provided to all stakeholders. This finding was changed from a Risk to an Issue.  12/31/2023 - Golden Record (GR) Midsprint deployment (MSD) went live on 12/21/2023. RSM and BHA finalizing the GR readiness checklist and SOPs in order for GR production data to be used. CAMHD and DDD to review the audit report currently available to determine if it meets BHA's needs. IV&V will continue to monitor open issues and attend meetings and will provide any recommendations in the next reporting period.  11/30/2023 - GR production data use continues to be delayed. 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 to 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.  10/31/2023 - GR production data use continues to be delayed. Per the weekly issues meeting and R4.3 Release Notes, it was discussed that 12 GR items will be included in R4.3. The mock migration is planned for the first week of November. Currently, RSM and BHA are	Release/Deployment Planning	Issue	Medium	Open		7/10/2023	Gautam Gulvady

Id	Finding	Finding Statement	Analysis and Significance	Recommendation	Finding Update	Category	Type	Priority	Status	Closed Date	Identified Date	Owner
33	Performance bottlenecks with the INSPIRE production environment may result in low productivity and poor user experience.	Performance issues have been identified that have the potential to impact the system's functionality, user experience, and the overall reliability of the system. These performance issues warrant immediate attention and resolution.	Developmental Disability Division (DDD) personnel are encountering performance issues with re-assigning cases, and opening the DDD – Contact Notes (Fiscal View – Complete) view. CAMHD has not reported performance issues.	<ol style="list-style-type: none"> <li>1. Conduct load and performance testing for each release that has significant new features/functionality.</li> <li>2. Create a plan for comprehensive performance testing and address any performance bottlenecks.</li> <li>3. Have the benchmark assessments done annually and implementation of Azure App Insights for Power Platform.</li> </ol>	<p>01/31/2024 - IV&amp;V to discuss the criteria for selecting upcoming release(s) for performance testing (as part of planning performance test) with BHA so planning can commence.</p> <p>12/31/2023 - IV&amp;V to discuss performance test planning with BHA for upcoming release(s) with significant new features/functionality.</p> <p>11/30/2023 - IV&amp;V has discussed the next steps with BHA (see updated recommendation #1).</p> <p>10/31/2023 - The IV&amp;V review of the draft vendor contract indicates that the vendor is accountable for conducting load and performance testing of INSPIRE. IV&amp;V will discuss the next steps with BHA and provide recommendations in the next reporting period.</p> <p>09/30/2023 - The SI vendor draft contract is currently under review by IV&amp;V, while the terms of the new contract are currently being finalized. IV&amp;V will determine whether the contractor is responsible for addressing performance issues under the draft contract terms.</p> <p>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&amp;V Review at this time. It is to be determined whether the Contractor is responsible for addressing performance issues under the new contract terms.</p>	Project Management	Issue	Medium	Open		8/18/2023	Gautam Gulvady
34	Shortage of Behavioral Health Administration (BHA) project resources could lead to reduced productivity and project delays.	Key BHA project resources have reported constraints on how much time they can devote to the project. The departure of the Child and Adolescent Mental Health Division (CAMHD) System Management Office Manager and CAMHD Inspire Project Lead could further impact the project if DOH cannot acquire suitable resources. The lack of capacity of the DOH test script developer has slowed DOH's automated test script development.	If BHA is unable to fully staff the project and their existing resources continue to be constrained, the project could experience a reduction in productivity and project delays.	<ol style="list-style-type: none"> <li>1. BHA should explore options for offloading project team members' daily responsibilities to other staff.</li> <li>2. BHA should work quickly to backfill vacated project team member positions.</li> <li>3. 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> <li>4. BHA should explore the use of contractors to fill open project positions.</li> <li>5. Identify stakeholders and develop a RACI matrix for testing.</li> </ol>	<p>01/31/2024 - There continue to be significant project resource shortages, as reflected in IAPDU #6. This finding was changed from a Risk to an Issue.</p> <p>12/31/2023 - During the Steering committee meeting on 12/12/2023, DDD representative communicated since the three positions were not included in the budget, DDD to submit a variance for an IT position.</p> <p>11/30/2023 - 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.</p> <p>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.</p> <p>09/30/2023 - BHA is in the process of evaluating the potential need for additional BHA resources. IV&amp;V will monitor and update the</p>	Resource Management	Issue	High	Open		8/18/2023	Michael Fors

Id	Finding	Finding Statement	Analysis and Significance	Recommendation	Finding Update	Category	Type	Priority	Status	Closed Date	Identified Date	Owner
35	Lack of an ongoing cleanup process may lead to clutter and reduce Azure DevOps effectiveness in supporting the INSPIRE project management and tracking needs.	R3.33 work started, and the SI vendor was working with BHA on the Statement of Work (SOW). BHA made the decision not to implement R3.33 and moved on to the next big phase of work, starting with R4.1. Project team members will see some references to R3.33 in Azure DevOps, which are incorrect and should be updated to R4.1, or an appropriate future release. There is still cleanup happening for items that are in the parking lot, which may state R3.33 until those items are assigned to a release.	A cleaned-up Azure DevOps environment would enable the team and stakeholders to accurately track and report defects and user stories, e.g., "n" number of post-production defects in Rm.n to be implemented in R.x.y, monitor and measure the team's effectiveness (trending as improvements, e.g., fewer post-production bugs from previous releases), and to maintain tool's effectiveness in supporting project management needs.	<ol style="list-style-type: none"> <li>1. 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> <li>2. 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> <li>3. 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> <li>4. 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> <li>5. 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.</li> </ol>	<p>01/31/2024 - 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. E.g., the four (4) R4.4 post-production bugs are tagged "Post Go-Live Bug". IV&amp;V will monitor the progress.</p> <p>12/31/2023 - 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. The tags will be used from R4.4 onwards. This should help optimize the workflow and make it more streamlined. IV&amp;V will continue to monitor the usage of tags and the cleanup process.</p> <p>11/30/2023 - 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&amp;V will continue to monitor the usage of tags and the cleanup process.</p> <p>10/31/2023 - RSM and BHA are collaborating to standardize the tags used in Azure DevOps and their usage, to clean up the Azure DevOps environment. This should help optimize the workflow and make it more streamlined. IV&amp;V will monitor the cleanup process during the next reporting period.</p> <p>09/30/2023 - There are still some instances in Azure DevOps (AD) where post-production bugs are not tagged with the correct production release. For example, 33899, 33887, 33901, and 33935 have not been cleaned up (33731 is an example where the production release is tagged correctly). Discussions are in progress for the clean-up activities, and we will update the findings in the following month.</p>	Project Management		N/A	Open		8/2/2023	Gautam Gulvady
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.	<ol style="list-style-type: none"> <li>1. Establish a clear project schedule management plan that outlines roles, responsibilities, and accountability for schedule adherence.</li> <li>2. 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.</li> <li>3. Implement regular schedule reviews and updates to ensure alignment with project objectives and milestones.</li> </ol>	<p>01/31/2024 - Delays in executing the Data Sharing Agreement (DSA) contract between the DDD and the MQD. The Department of Human Services (DHS) has delayed the commencement of the Analytics project. IV&amp;V has yet to see a comprehensive project schedule for the Analytics module. The priority has changed from Medium to High.</p> <p>12/31/2023 - IV&amp;V reviewed the vendor's final proposal regarding an approach to maintaining a complete project schedule, which doesn't appear to describe an alternate approach to maintaining a project schedule as requested by the RFP. The vendor has communicated they will provide a complete project schedule for the Analytics module.</p> <p>11/30/2023 - The vendor has communicated that they provided their approach to maintaining a complete project schedule, in their proposal. IV&amp;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.</p> <p>10/31/2023 - Per the IV&amp;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&amp;I and M&amp;O phases of the project. IV&amp;V will discuss the next steps with BHA and provide recommendations in the next reporting period.</p> <p>09/30/2023 - IV&amp;V received the modifications to the original contract and is in the process of review to determine SI vendor contractual obligations.</p> <p>08/31/2023 - Project work is ongoing without a project schedule in place. Some current project work is considered Maintenance and</p>	Project Management	Issue	High	Open		8/29/2023	Gautam Gulvady

Id	Finding	Finding Statement	Analysis and Significance	Recommendation	Finding Update	Category	Type	Priority	Status	Closed Date	Identified Date	Owner
39	Due to on-going deployment processes and technical execution issues, the Project may continue to encounter defects and challenges, e.g., when releases are in production or in meeting projected timelines for production and non-production deployments.	Several post-production bugs have been encountered in the Phase 4 release, R4.4.	Regarding the bug, "Human Services Research Institute (HSRI) flow is failing in production" (bug# 34886 <a href="https://dev.azure.com/DOH/DOH%20BHA%20INSPIRE/_workitems/edit/34886">https://dev.azure.com/DOH/DOH%20BHA%20INSPIRE/_workitems/edit/34886</a> ), what is in development and deployed is vastly different from what was deployed to production.  The root cause for these errors is currently being investigated.  Repeatable documented release and deployment and resources experienced with deployments will help ensure that mistakes are minimized, and that functionality is not mistakenly deprecated when deployments take place.	1. 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.  2. As appropriate, consult with RSM on best practices that BHA could employ to support deployment.  3. Request the assistance of the RSM Solution Architect in reviewing and correcting issues associated with the consistency of 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.  4. 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.  5. The Project Team should consider evaluating potential changes to improve/enhance existing processes and communications to address current release/deployment shortfalls.  6. IV&V recommends performing an RCA in collaboration with RSM for the continued concerns surrounding environment differences.  7. 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.  8. 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	01/31/2024 - R4.4 was deployed on 01/25/2024. Five (5) post-production bugs (severity: 2 critical, 1 high, 1 medium, 1 TBD) have been encountered, which the SI vendor and BHA are currently analyzing. At least one of these bugs is deployment-related. IV&V will monitor the progress.	Release/Deployment Planning	Issue	High	Open		1/25/2024	Gautam Gulvady
40	Improvements to the testing process are needed to ensure comprehensive testing of new functionality prior to production deployment.	There is a limited understanding of the testing processes and the roles and responsibilities of those involved in the process. There is no formal process for the development, review, and approval of test scenarios, test cases, and test results to ensure adequate participation and approval from state staff.	When testing user stories 34564 and 34756 on 1/31/24, the test tasks did not reflect the real use cases to give stakeholders adequate confidence that the user story could be tested. As a result, time was expended by testing resources, testing was inadequate, and a user story may have been deemed to meet functionality when it did not.	1. Identify stakeholders (output is stakeholder register) and develop a RACI matrix for testing.  2. Review the overall testing process and implement any needed improvements identified.	01/31/2024 - When testing user stories 34564 and 34756 on 1/31/24, the test tasks did not reflect the real use cases to give stakeholders adequate confidence that the user story could be tested.	Test Practice Validation	Issue	High	Open		1/31/2024	Gautam Gulvady
41	Absence of separate, dedicated product backlog review meetings can pose several challenges for a project team.	Currently, product backlog reviews are done during design meeting and/or weekly issues meetings. This can lead to, e.g., scattered focus, limited stakeholder engagement, difficulty in managing complexity and delayed decision making.	A product backlog review is an essential part of agile project management, particularly in Scrum. It's a collaborative meeting where the Scrum team, including the Product Owner, Scrum Master, and development team members, inspect and adapt the product backlog.  The product backlog review is a Scrum important ceremony that helps keep the backlog relevant, up-to-date, and aligned with the project's goals and priorities. Here's a summary of what typically happens during a product backlog review: 1. Inspecting Backlog Items: The team reviews the items on the product backlog. This involves discussing each item, understanding its priority, value, and acceptance criteria. 2. Ensuring Clarity: The team ensures that each backlog item is clear and well-understood. Any ambiguities or uncertainties are clarified at this stage. 3. Estimation: Estimation of backlog items may occur during the review. The team may use techniques like story points or relative sizing to estimate the effort required for each item. 4. Re-prioritization: Based on new insights, changes in requirements, or stakeholder feedback, the team may need to re-prioritize items in the backlog. 5. Removing or Adding Items: Items that are no longer relevant or necessary may be removed from the backlog. New items that emerge or are identified as important may be added. 6. Refinement: Backlog refinement may also occur during the review. This involves breaking down large items into smaller, more manageable ones, or adding more detail to items as needed. 7. Collaboration: The review is a collaborative effort involving the entire Scrum team. It's an opportunity for open discussion and sharing of ideas to ensure everyone is aligned on the goals and priorities.	IVV recommends scheduling separate dedicated product backlog review meetings (during sprints) where all relevant stakeholders are invited to review the product backlog and scheduled at the appropriate time(s) such that there is sufficient time to plan the design, development, and implementation (DDI) of the next release(s).	01/31/2024 - Currently, product backlog reviews are done during design meetings and/or weekly issues meetings. The Product backlog review is a more structured meeting specifically dedicated to reviewing the entire backlog, making adjustments, and ensuring its readiness for upcoming sprints. The product backlog review is typically conducted as a separate meeting. The purpose of keeping it separate is to focus specifically on the backlog items, their priorities, and any necessary adjustments to ensure alignment with the product vision and stakeholder needs. It typically occurs periodically, e.g., once per sprint or at regular intervals, to ensure the backlog remains up-to-date, prioritized, and aligned with the project's goals.	Sprint Planning	Risk	Medium	Open		1/26/2024	Gautam Gulvady