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November 17, 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 <http://ets.hawaii.gov> (see "Reports").

Sincerely,

  
Douglas Murdock (Nov 17, 2023 16:04 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  
October 1 – October 31, 2023*

*Final submitted: November 14, 2023*

# Agenda

Executive Summary

IV&V Findings & Recommendations

Appendices

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



# Executive Summary

*There were no deployments in October 2023, but significant progress has been made in resolving most of the Golden Record (GR) issues during issue meetings and per the R4.3 release report. The Behavioral Health Administration (BHA) and RSM are currently coordinating to create a readiness Checklists, and IV&V is actively monitoring 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.*

*In addition, PCG has sent a signed version of their contract along with the certificates of insurance to the Department of Hawaii (DOH) BHA Developmental Disabilities Division (DDD) procurement and contracts division, and the execution of the contract is currently underway. Also, PCG completed the review of the RSM draft contract and scheduled a walkthrough with BHA in the first week of November. More updates to the findings related to the schedule and performance testing will be updated accordingly with IV&V recommendations in the upcoming reports.*

*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 and got approval from BHA to proceed with the development.*

*There were no new findings for the month of October, however, the issues related to GR, the IV&V contract, and the SI contract, and a risk related to the shortage of BHA resources and schedule have been updated under the Project Management category.*

| Aug | Sep | Oct | Category                          | IV&V Observations   |
|-----|-----|-----|-----------------------------------|---|
| Y   | Y   | Y   | <b>Sprint Planning</b>            | 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. Joint testing of bugs and user stories will continue, which will help in identifying and resolving any issues. IV&V is working closely with BHA and the vendor to better understand the product backlog review process and improve the overall development process. Although the category remained yellow throughout October, IV&V will provide updates in the next month's report, which will help keep track of progress and identify areas for further improvement. |
| 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 October reporting period. IV&V will continue to monitor the US development and validation process in upcoming reporting periods.  |



# Executive Summary

| Aug | Sep | Oct | Category                             | IV&V Observations   |
|-----|-----|-----|--------------------------------------|---|
| Y   | Y   | Y   | <b>Test Practice Validation</b>      | Tricentis coaching sessions are ongoing to improve the automation process. Automation coding is progressing well, and R4.3 regression testing is being carried out using a combination of manual and automated approaches. IV&V will monitor the meetings to ensure that all procedural concerns are addressed. This category remains Yellow (medium criticality) for the October reporting period.   |
| Y   | Y   | Y   | <b>Release / Deployment Planning</b> | R4.3 is progressing well. Hard code was frozen on 10/24/23 and go-live is planned for 11/09/23. A high-priority R4.2 post-production bug will be deployed with R4.3. IV&V will monitor for quality.<br><br>GR production data use is delayed, and a new implementation date is yet to be determined. Discussions are underway to establish a date. BHA and RSM are currently working on the finalization of the readiness checklists. This category remains Yellow (medium criticality) for the October reporting period. |
| G   | G   | G   | <b>OJT and KT Sessions</b>           | This category remains Green (low criticality) for the October reporting period with no active findings.   |
| G   | G   | G   | <b>Targeted KT</b>                   | This category remains Green (low criticality) for the October reporting period. IV&V will continue to monitor.  |



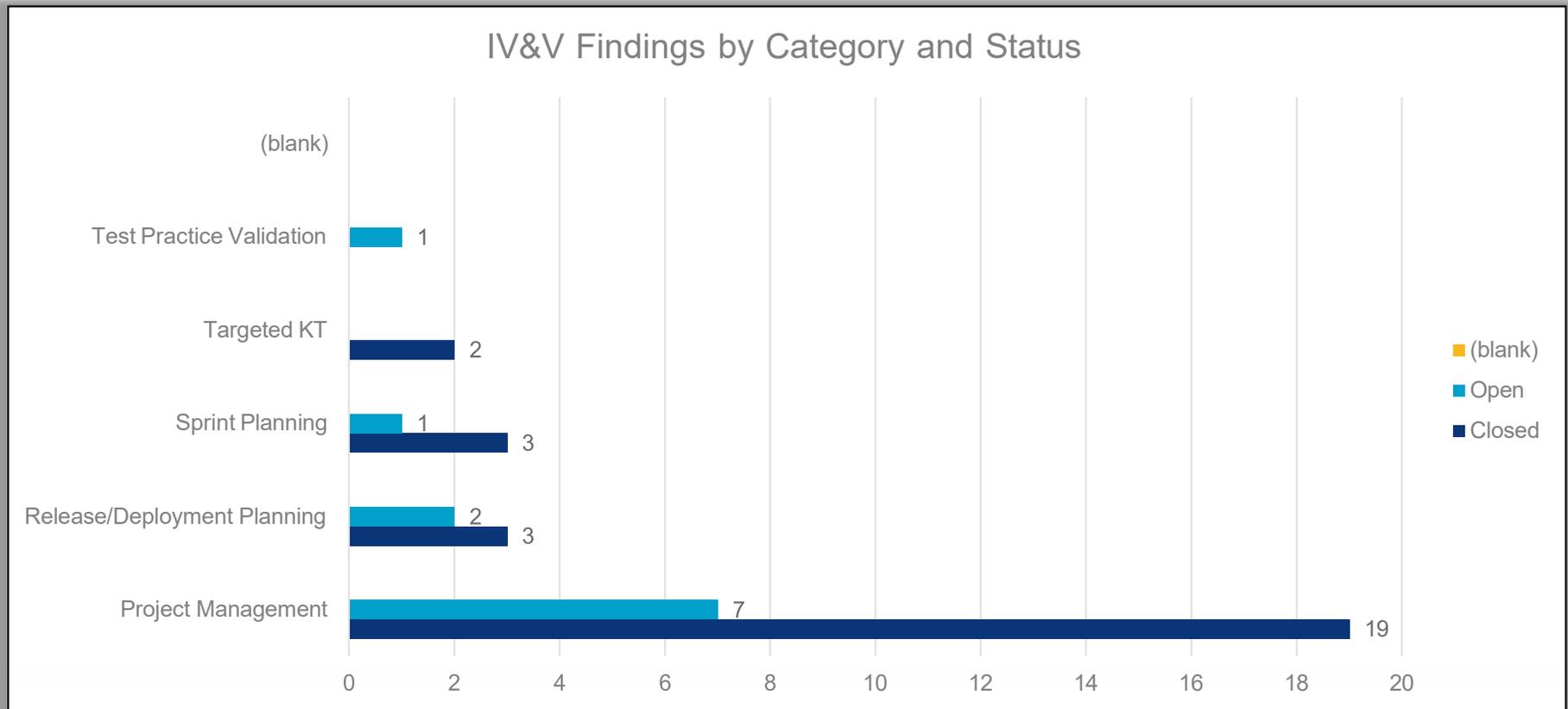
# Executive Summary

| Aug | Sep | Oct | Category  | IV&V Observations   |
|-----|-----|-----|---|---|
| G   | G   | G   | <b>Project Performance Metrics</b>              | There are no project performance metrics to report for October. IV&V will keep the criticality rating for this category a Green (low criticality) and will continue monitoring this category.   |
| Y   | Y   | Y   | <b>Organizational Maturity Assessment (OMA)</b> | This category remains Yellow (medium criticality) for the October reporting period. IV&V will continue to monitor.  |
| Y   | R   | R   | <b>Project Management</b>                       | <p>The GR production data use has been delayed. However, significant progress has been made in resolving most Golden Record (GR) issues per the issue meetings and the R4.3 release report. BHA and RSM are coordinating to create a readiness checklist and SOPs, and IV&amp;V is actively monitoring open issues to provide recommendations in the upcoming reporting period. To avoid impacting the overall schedule, IV&amp;V recommends having a designated deployment date.</p> <p>Currently, 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 execution is underway. Also, PCG completed the review of the RSM draft contract and scheduled a walkthrough with BHA for the first week of November. More updates to the findings related to the schedule and performance testing will be updated accordingly with IV&amp;V recommendations in the upcoming reports.</p> |



# Executive Summary

As of the October 2023 reporting period, there were no new findings, however, a total of eleven (11) open findings are updated – two High Issues, five Medium Issues, two Medium Risks, and two Preliminary Concerns spread across the Release/Deployment Planning, Test Practice Validation, Sprint Planning, and Project Management assessment areas.



The background is a solid blue color with several decorative elements. On the left side, there are several overlapping rounded rectangles and squares in various shades of blue, some with white outlines. On the right side, there are fewer, more isolated shapes, including a large rounded rectangle and several smaller squares, some with white outlines and some with solid blue fill.

# **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



# IV&V Findings & Recommendations

## Sprint Planning

| #  | Key Findings   | Criticality Rating |
|----|--|--------------------|
| 31 | <p><b>Preliminary Concern:</b> Lack of regular Sprint reviews and sprint demos will likely lead to misalignments between delivered work and stakeholder needs.</p> <p><b>October Finding Update:</b> 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&amp;V will work with BHA and the vendor to understand the product backlog review process.</p> | N/A                |

| 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

## Test Practice Validation

| # | Key Findings   | Criticality Rating  |
|---|--|---|
| 2 | <p><b>Medium Issue:</b> As a result of regression testing not being consistently performed, production releases are breaking and/or deprecating existing functionality in the production environment.</p> <p><b>October Finding Update:</b> 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> |  |

| 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> | Open        |
| <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 |



# IV&V Findings & Recommendations

## Release / Deployment Planning

| #   | Key Findings   | Criticality Rating  |
|---|--|---|
| 18  | <p><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.</p> <p><b>October Finding Update:</b> No deployments took place in October 2023. R4.3 is set to go live on 11/09/23, along with a high-priority R4.2 post-production bug. The Golden Record (GR) production data use is delayed, but progress has been made in resolving many issues. 12 GR items may be included in R4.3, depending on testing results. IV&amp;V will monitor R4.3 deployment quality.</p> |  |
| Recommendations   |  | Status  |
| <ul style="list-style-type: none"> <li>Recommend that BHA works with IV&amp;V to assess GR critical issues to assist in determining the path forward.</li> </ul>  |  | In Progress   |
| <ul style="list-style-type: none"> <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>   |  | In Progress   |
| <ul style="list-style-type: none"> <li>Consult on a regular basis with Microsoft and RSM on best practices that BHA could employ to support deployment.</li> </ul>  |  | In Progress   |
| <ul style="list-style-type: none"> <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> |  | In Progress   |



# IV&V Findings & Recommendations

## Release / Deployment Planning (cont'd)

| Recommendations   | Status      |
|---|-------------|
| <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>   | In Progress |
| <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>  | In Progress |
| <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>   | In Progress |
| <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> | In Progress |



# IV&V Findings & Recommendations

## Release / Deployment Planning (cont'd)

| #  | Key Findings  | Criticality Rating  |
|----|---|---|
| 32 | <p><b>Medium Risk:</b> Golden Record (GR) project delays are likely to delay the implementation of future features and functionality.</p> <p><b>October Finding Update:</b> 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 developing the GR readiness checklist and SOPs. IV&amp;V will continue to monitor the open issues and attend meetings and will provide any recommendations in the next reporting period.</p> |  |

| Recommendations  | Status      |
|--|-------------|
| <ul style="list-style-type: none"> <li>Recommend that BHA works with IV&amp;V to assess GR critical issues to assist in determining the path forward.</li> </ul>   | In Progress |
| <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 |
| <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 |

# IV&V Findings & Recommendations

## Project Management

| #  | Key Findings  | Criticality Rating  |
|----|---|---|
| 14 | <p><b>Medium Issue:</b> Due to multiple quality concerns, the Project may continue to face impactful system defects.</p> <p><b>October Finding Update:</b> R4.3 development is progressing well. Hard code was frozen on 10/24/23 and go-live is planned for 11/09/23. A high-priority R4.2 post-production bug will be deployed with R4.3. IV&amp;V will monitor R4.3 for quality.</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>October Finding Update:</b> 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> |  |

| Recommendations   | Status |
|---|--------|
| <ul style="list-style-type: none"> <li>• Create a plan for comprehensive performance testing and address any performance bottlenecks.</li> </ul>              | Open   |
| <ul style="list-style-type: none"> <li>• Have the benchmark assessments done annually and implementation of Azure App Insights for Power Platform.</li> </ul> | Open   |



# IV&V Findings & Recommendations

## Project Management (cont'd)

| #  | Key Findings   | Criticality Rating |
|----|--|--------------------|
| 34 | <p><b>Medium Risk:</b> A shortage of Behavioral Health Administration (BHA) project resources could lead to reduced productivity and project delays.</p> <p><b>October Finding Update:</b> 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> | M                  |

| 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   |

# 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>October Finding Update:</b> 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> | 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>Medium Issue:</b> Lack of a comprehensive project schedule could lead to missed tasks, project delays, and cost overruns.</p> <p><b>October Finding Update:</b> Per the IV&amp;V review of the draft vendor contract, 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> | M                  |

| 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>High Issue:</b> RSM has been working without an executed contract since the expiration of the original contract</p> <p><b>October Finding Update:</b> BHA is awaiting the signed contract and certificate of insurance from RSM. The execution of the contract is in progress, and IV&amp;V will update the finding in the next reporting period.</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 in order to manage on-going work.</li> </ul> |   | Completed   |



# IV&V Findings & Recommendations

## Project Management (cont'd)

| #  | Key Findings  | Criticality Rating  |
|--|---|---|
| 38   | <p><b>High Issue:</b> Public Consulting Group (PCG) has been working without an executed contract.</p> <p><b>October Finding Update:</b> 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&amp;V will update the finding in the next reporting period.</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 IV&amp;V in order to manage ongoing work.</li> </ul> |   | Completed   |



# 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>October</b> –There were no deployments in the month of October.</p> | <p>Velocity Metric Trends:</p> <p>N/A</p> |

# IV&V Findings & Recommendations

## Project Performance Metrics (cont'd.)

| Metric                | Description   |  | 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>October</b> - There were no deployments in the month of October.</p> | N/A          |



# Appendix A: IV&V Rating Scales

# Appendix A

## IV&V Rating Scales

*This appendix provides the details of each finding and recommendation identified by IV&V. Project stakeholders are encouraged to review the findings and recommendations log details as needed.*

- See Findings and Recommendations Log (provided under separate cover)
- IV&V Assessment Category Rating Definitions

G

The assessment category is under control and the current scope can be delivered within the current schedule.  
The assessment category's risks and issues have been identified, and mitigation activities are effective. The overall impact of risk and issues is minimal.  
The assessment category is proceeding according to plan (< 30 days late).

Y

The assessment category is under control but also actively addressing resource, schedule or scope challenges that have arisen. There is a clear plan to get back on track.  
The assessment category's risk and/or issues have been identified, and further mitigation is required to facilitate forward progress. The known impact of potential risks and known issues are likely to jeopardize the assessment category.  
Schedule issues are emerging (> 30 days but < 60 days late).  
Project Leadership attention is required to ensure the assessment category is under control.

R

The assessment category is not under control as there are serious problems with resources, schedule, or scope. A plan to get back on track is needed.  
The assessment category's risks and issues pose significant challenges and require immediate mitigation and/or escalation. The project's ability to complete critical tasks and/or meet the project's objectives is compromised and is preventing the project from progressing forward.  
Significant schedule issues exist (> 60 days late). Milestone and task completion dates will need to be re-planned.  
Executive management and/or project sponsorship attention is required to bring the assessment category under control.

# Appendix A

## Finding Criticality Ratings

| Criticality Rating  | Definition   |
|---|--|
|  | 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

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

### Meetings attended during the October 2023 reporting period:

1. Daily Scrum Meetings (selected)
2. Twice Weekly RSM Issues Meeting
3. Weekly BHA-ITS Project Status Meeting
4. Bi-Weekly Check-in: CAMHD
5. Bi-Weekly Check-in: DDD
6. IV&V Draft IV&V Status Review Meeting with DOH
7. IV&V Draft IV&V Status Review Meeting with RSM and DOH
8. DOH BHA IT Solution Project – Steering Committee 2023
9. IV&V Hand-off Meeting
10. CAMHD Testing Meeting

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

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

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



Document





# Appendix C

## Project Trends

| Trend: Overall Project Health   |          |           |           |          |          |          |          |           |           |           |
|---------------------------------|----------|-----------|-----------|----------|----------|----------|----------|-----------|-----------|-----------|
| Process Area                    |          |           |           |          |          |          |          |           |           |           |
|                                 | Jan      | Feb       | Mar       | Apr      | May      | Jun      | July     | August    | September | October   |
| User Story Validation           | Green    | Green     | Green     | Green    | Green    | Green    | Green    | Green     | Green     | Green     |
| Test Practice Validation        | Yellow   | Yellow    | Yellow    | Yellow   | Yellow   | Yellow   | Yellow   | Yellow    | Yellow    | Yellow    |
| Sprint Planning                 | Green    | Green     | Green     | Green    | Green    | Green    | Yellow   | Yellow    | Yellow    | Yellow    |
| Release / Deployment Planning   | Red      | Yellow    | Yellow    | Yellow   | Yellow   | Yellow   | Yellow   | Yellow    | Yellow    | Yellow    |
| OJT and KT Sessions             | Green    | Green     | Green     | Green    | Green    | Green    | Green    | Green     | Green     | Green     |
| Targeted KT                     | Green    | Green     | Green     | Green    | Green    | Green    | Green    | Green     | Green     | Green     |
| Project Performance Metrics     | Green    | Green     | Green     | Green    | Green    | Green    | Green    | Green     | Green     | Green     |
| Organizational Maturity Metrics | Green    | Green     | Yellow    | Yellow   | Yellow   | Yellow   | Yellow   | Yellow    | Yellow    | Yellow    |
| General Project Management      | Red      | Red       | Red       | Red      | Red      | Yellow   | Yellow   | Red       | Red       | Red       |
|                                 |          |           |           |          |          |          |          |           |           |           |
| <b>Total Open Findings</b>      | <b>8</b> | <b>10</b> | <b>10</b> | <b>9</b> | <b>6</b> | <b>4</b> | <b>5</b> | <b>11</b> | <b>11</b> | <b>11</b> |
| Issue - high                    | 3        | 2         | 2         | 1        | 1        | 0        | 0        | 2         | 2         | 2         |
| Issue - medium                  | 2        | 3         | 3         | 4        | 3        | 4        | 3        | 5         | 5         | 5         |
| Issue - low                     | 3        | 3         | 3         | 2        | 1        | 0        | 0        | 0         | 0         | 0         |
| Risk - high                     | 0        | 2         | 1         | 0        | 0        | 0        | 0        | 0         | 0         | 0         |
| Risk - medium                   | 0        | 0         | 0         | 1        | 1        | 0        | 1        | 2         | 2         | 2         |
| Risk - low                      | 0        | 0         | 0         | 0        | 0        | 0        | 0        | 0         | 0         | 0         |
| Preliminary Concern             | 0        | 0         | 1         | 1        | 0        | 0        | 1        | 2         | 2         | 2         |





**Solutions that Matter**

| ID   | Date Identified | Finding   | Finding Statement   | Supporting Analysis  | PCG Recommendation   | Finding Update   | Process Area             | Finding Type | Priority | Status | Risk Owner     | Closure Reason |
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| 2.00 | 12/31/2019      | As a result of regression testing not being consistently performed, production releases are breaking and/or deprecating existing functionality in the production environment. | R3.3 introduced a defect that deprecated features in production specific to Integrated Support and Life Trajectory functionality. DDD has informed IV&V that there are other examples of functionality being deprecated after a release, some of which are still being investigated. As of this report, IV&V has not evaluated the project's root cause analysis (RCA) process used to determine why such functionality was deprecated but will discuss further with BHA in January 2020. | Thorough vetting and validation of regression test cases is necessary to prevent both defects and the deprecation of production functionality when a release is pushed live. When defects occur in production, the project should follow a defined and repeatable process for determining the root cause of the problem. | 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.<br><br>IV&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).<br><br>Pursue and complete additional formal training in AzureDevOps and Tricentis for test automation at the earliest | 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&V will monitor and review the automated regression testing results and determine whether the procedural concern has been addressed.<br><br>09/30/2023- The Tricentis coaching kicked off on September 18th, 2023. The meeting was attended by personnel from CAMHD, DDD, Tricentis, IV&V, and RSM. The coaching sessions are scheduled between October 2023- and November 2023. and the test case development was planned through May 2024. IV&V will | Test Practice Validation | Issue        | Medium   | Open   | Gautam Gulvady |                |

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| 14.00 | 9/30/2020 | Due to multiple quality concerns, the project may continue to face impactful system defects. | System defects identified in August that affected claims were due to multi-faceted quality issues were individually addressed during this reporting period. IV&V notes that there is one remaining defect still being evaluated that affects a limited number of claims. Overall, the Project Team has responded with a commitment to increase project quality and is in the process of identifying improvements to associated testing processes. These currently include: Performing Revenue Neutrality Testing to ensure expected revenue streams are largely unchanged from one period to the next. | The identified quality issues have negatively affected DOH billing processes and DOH has stated these are the most impactful defects discovered to date. | Evaluate existing project staff skills and experience level to ensure they meet BHA support requirements. Perform revenue neutrality fiscal balance testing on a quarterly basis to ensure revenues are as expected. Assign dedicated resources to provide oversight of CAMHD Fiscal Processes. Monitor implemented improvements for effectiveness. IV&V recommends performing an RCA in collaboration with RSM after all future release deployments for continual quality improvement. BHA and RSM to collaborate on the necessary revisions to the submitted design | 10/31/2023 - R4.3 development is progressing well. Hard code was frozen on 10/24/23 and go-live is planned for 11/09/23. A high-priority R4.2 post-production bug will be deployed with R4.3. IV&V will monitor R4.3 for quality.<br><br>09/30/2023 - R4.2 was deployed on 9/14/23, and the delivery quality was positively received. There was also a post-production defect from R4.1 that was also deployed with R4.2. As of now, there is only one high-priority R4.2 post-production bug that has been fixed and is pending approval by BHA. IV&V will monitor R4.3 for any quality concerns<br>08/31/2023 - There were | Project Management | Issue | Medium | Open | Gautam Gulvady |  |
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| 18.00 | 12/31/2020 | Due to on-going deployment processes and technical execution issues, the Project may continue to encounter defects and challenges in meeting projected timelines for production and non-production deployments. | There have been several defects pushed to production with Phase 3 releases. Some of the defects introduced to production have been narrowed down to environmental promotional activities. In these instances, the DEV and TEST environments were not in sync with the production environment (missing business rules, missing components, missing dependencies, etc.). IVV is aware that DOH staff shadowed RSM staff for all deployment releases during Phase 2 with RSM providing instruction and DOH staff physically executing the tasks and activities via keyboard. For Phase 3, it is unclear whether a complete, up to date, and documented deployment | Repeatable documented release and deployment will help ensure that mistakes are minimized, and that functionality is not mistakenly deprecated when deployments take place. | Recommend that BHA works with IV&V to assess GR critical issues to assist in determining the path forward. Ensure there are adequate and qualified resources to support the current deployment processes. This may require the support from RSM resources to provide assistance and knowledge transfer for some of the more complex deployment components. Work in collaboration with RSM to establish a transition plan for DOH to assume all deployment activities to ensure complete ownership of these processes. This should assist with consistency in approach and execution going forward. As appropriate, consult | 10/31/2023 - No deployments took place in October 2023. R4.3 is set to go live on 11/09/23, along with a high-priority R4.2 post-production bug. The Golden Record (GR) production data use is delayed, but progress has been made in resolving many issues. 12 GR items may be included in R4.3, depending on testing results. IV&V will monitor R4.3 deployment quality.<br><br>09/30/2023 - R4.2 was deployed on 09/14/23 with no deployment issues. The Golden Record (GR) deployment has been postponed, and a new deployment date has not yet been determined, as the BHA identified more critical issues during the testing. | Release/Deployment Planning | Issue | Medium | Open | Gautam Gulavady |  |
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| 31.00 | 7/26/2023 | 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 | Based on Agile Best Practices, Sprint Demoes 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, | 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.<br>2. Strengthen the collaboration between development teams and stakeholders by | 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.<br><br>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 | Sprint Planning | Preliminary Concern | N/A | Open | Gautam Gulvady |
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| 32.00 | 7/10/2023 | 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 implementaion 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. | <p>Recommend that BHA works with IV&amp;V to assess GR critical issues to assist in determining the path forward.</p> <p>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.</p> <p>Identify the objective of implementing GR, benefits, current gaps in design, effort estimates, resource commitments, and impact of having/not having GR.</p> <p>Analyze the impact on the future functionalities and assess the implications if</p> | <p>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 developing the GR readiness checklist and SOPs. IV&amp;V will continue to monitor the open issues and attend meetings and will provide any recommendations in the next reporting period.</p> <p>09/30/2023 - Golden Record issues have been identified during the BHA UAT testing. Due to this, BHA feels that additional</p> | Release/Deployment Planning | Risk | Medium | Open | Gautam Gulvady |  |
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| 33.00 | 8/18/2023 | 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. | Create a plan for comprehensive performance testing and address any performance bottlenecks. Have the benchmark assessments done annually and implementation of Azure App Insights for Power Platform. | <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</p> | Project Management | Issue | Medium | Open | Gautam Gulavady |  |
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| 34.00 | 8/18/2023 | 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> </ol> | 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 | Project Management | Risk | Medium | Open | Michael Fors |  |
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| 35.00 | 8/2/2023 | 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 Rx.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. | 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.<br>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.<br>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 | 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&V will monitor the cleanup process during the next reporting period.<br><br>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). | Project Management | Preliminary Concern | N/A | Open | Gautam Gulavady |
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| 36.00 | 8/29/2023 | 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. | <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</p> | Project Management | Issue | Medium | Open | Gautam Gulavady |  |
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| 37.00 | 8/29/2023 | 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. | <p>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&amp;V will update the finding in the next reporting period.</p> <p>09/30/2023 - BHA provided the SI vendor draft contract to RSM, and IV&amp;V. BHA is awaiting the insurance certificate to be provided by RSM. PCG is currently reviewing the SI vendor draft contract.</p> <p>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</p> | Project Management | Issue | High | Open | Gautam Gulavady |  |
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| 38.00 | 8/29/2023 | Public Consulting group (PCG) is working without an executed contract. | Delays in executing the PCG contract could potentially lead to a halt in ongoing work and a risk to monitoring of the project activities. | IV&V continues to observe and participate in project meetings, review project documentation, and submit monthly status reports. | Until an executed contract is available, a draft version of the contract should be made available to BHA and IV&V in order to manage on-going work. | <p>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&amp;V will update the finding in the next reporting period.</p> <p>09/30/2023 - BHA provided the draft contract to IV&amp;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.</p> | Project Management | Issue | High | Open | Gautam Gulavady |  |
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