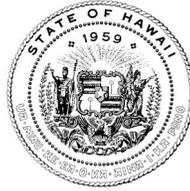


DAVID Y. IGE
GOVERNOR



DOUGLAS MURDOCK
CHIEF INFORMATION
OFFICER

OFFICE OF ENTERPRISE TECHNOLOGY SERVICES

P.O. BOX 119, HONOLULU, HAWAII 96810-0119
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ETS.HAWAII.GOV

October 28, 2021

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

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

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

Pursuant to HRS section 27-43.6, which requires the Chief Information Officer to submit applicable independent verification and validation (IV&V) reports to the Legislature within ten days of receiving the report, please find attached the report the Office of Enterprise Technology Services received for the State's Employer-Union Health Benefits Trust Fund Benefits Administration System project.

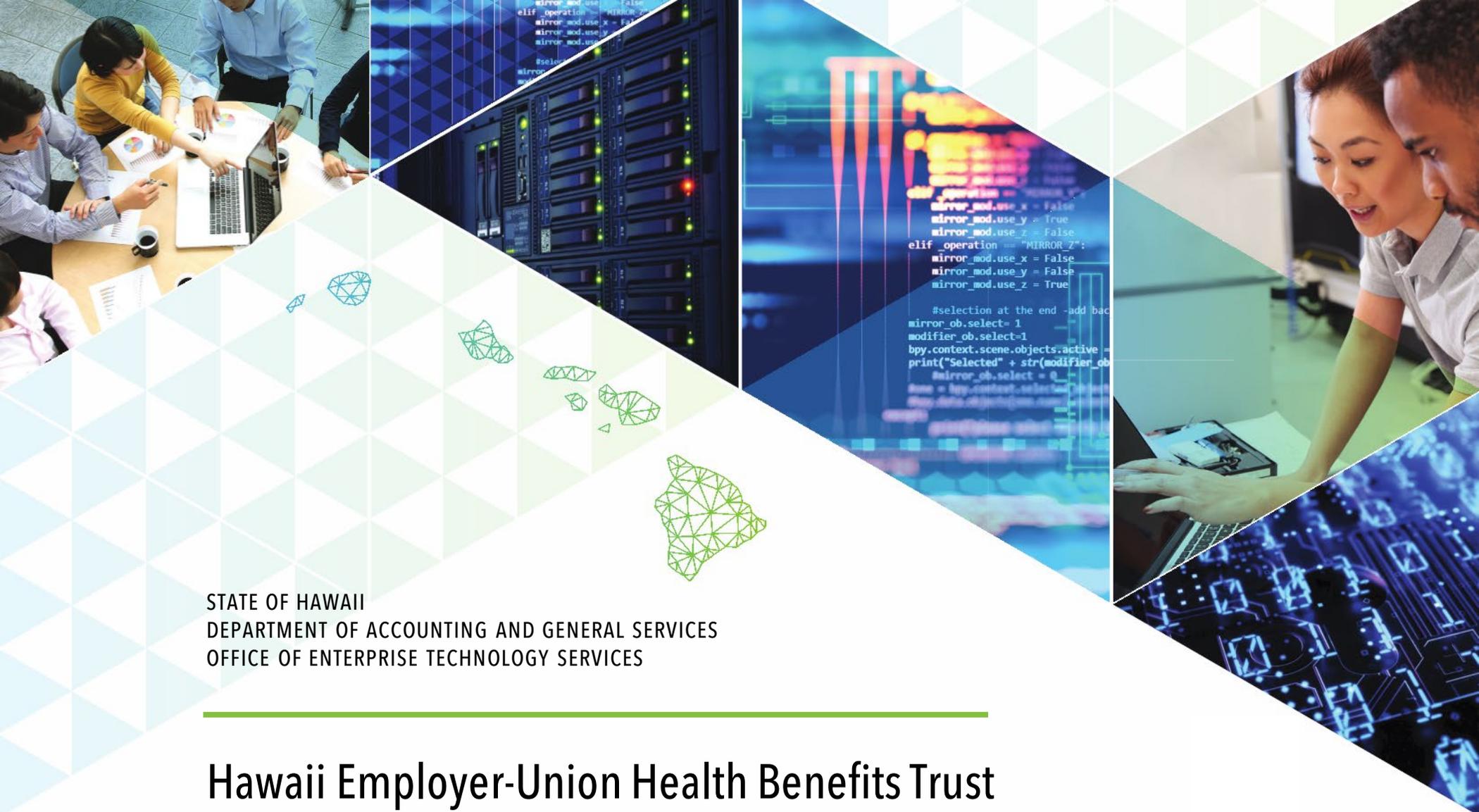
In accordance with HRS section 93-16, this report may be viewed electronically at <http://ets.hawaii.gov> (see "Reports").

Sincerely,


Douglas Murdock (Oct 29, 2021 08:36 HST)

DOUGLAS MURDOCK
Chief Information Officer
State of Hawai'i

Attachment (1)



STATE OF HAWAII
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
OFFICE OF ENTERPRISE TECHNOLOGY SERVICES

Hawaii Employer-Union Health Benefits Trust Fund Benefits Administration System (BAS)

MONTHLY IV&V STATUS & MILESTONE REPORT

August 27, 2021 | Version 1.1

REPORT FINALIZED

October 5, 2021



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Document History

| DATE | DESCRIPTION | AUTHOR | VERSION |
|----------|--|---------------|---------|
| 09/07/21 | Monthly IV&V Status Report Draft created | Julia Okinaka | 0.0 |
| 09/23/21 | Monthly IV&V Status Report finalized with clarification of IV&V activities for the month of August on page 3. No comments submitted in Appendix F. | Julia Okinaka | 1.0 |
| 10/05/21 | Removed specific security reference on page 11 and in Appendix E. | Julia Okinaka | 1.1 |
| | | | |
| | | | |



EXECUTIVE SUMMARY

BACKGROUND

The State of Hawaii (State), Employer-Union Health Benefits Trust Fund (EUTF) contracted Morneau Shepell Limited (now formally called LifeWorks) with their Ariel EAS technology solution for the Health Benefits Administration System Modernization Project (BAS Project) on June 1, 2020. On May 17, 2021, Morneau Shepell officially changed its company name to LifeWorks. EUTF also contracted Segal to provide project management, business process reengineering (BPR), organizational change management (OCM), and quality management. Segal's subcontractor, ICON Consulting (ICON), is responsible for data consulting and conversion.

The Office of Enterprise Technology Services (ETS) contracted Accuity LLP (Accuity) to provide Independent Verification and Validation (IV&V) services for the EUTF BAS Project. The goal of IV&V is to increase the probability of project success. The benefits of IV&V include identification of high-risk areas early and actionable recommendations.

Following IV&V's Initial Assessment Report, Monthly IV&V Status Reports are issued to update and evaluate continual project progress and performance. Pre and Post Go-Live Implementation Milestone Reports will be issued prior to and after the deployment/completion of major project milestones.

The project has an incremental delivery method spread over four segments, and each segment consists of two to three intervals. The project is currently in build and configuration for Segment 4 with the execution of the final two intervals underway. The focus of our IV&V activities for this report included the completion of a two-month review of BPR, and the beginning of a two-month in-depth assessment of governance effectiveness, and deployment and operations.

The IV&V Dashboard on the following two pages provides a quick visual and narrative snapshot of both the project status and project assessment as of August 27, 2021. Refer to Appendix A: IV&V Criticality and Severity Ratings for an explanation of the ratings and Appendix E: Prior Findings Log for prior report findings.

CONTINUOUS IMPROVEMENT

*"You never
fail until you
stop trying."*

- Albert Einstein

PROJECT ASSESSMENT

AS OF AUGUST 27, 2021

SUMMARY RATINGS

OVERALL RATING



Deficiencies were observed that merit attention and remediation in a timely manner.

PROGRAM GOVERNANCE



PROJECT MANAGEMENT



TECHNOLOGY

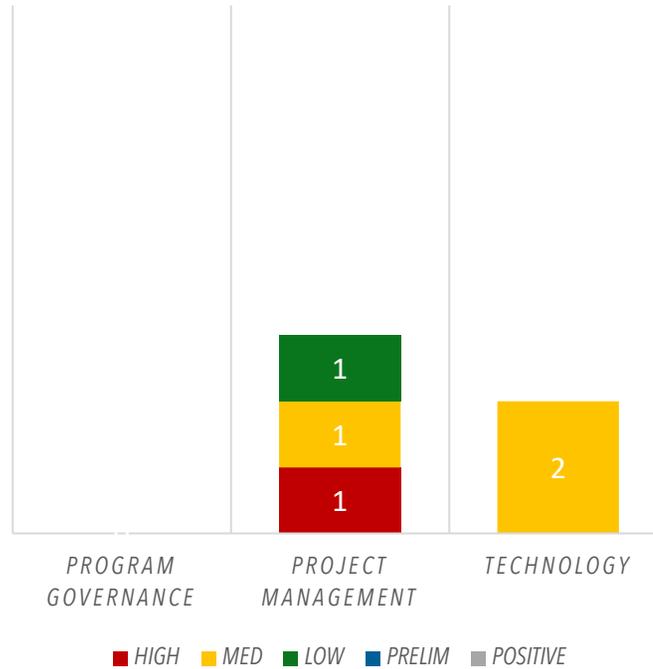


CRITICALITY RATINGS



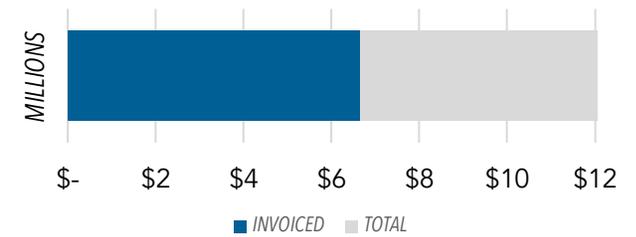
5 OPEN FINDINGS

SEVERITY RATINGS BY ASSESSMENT AREA



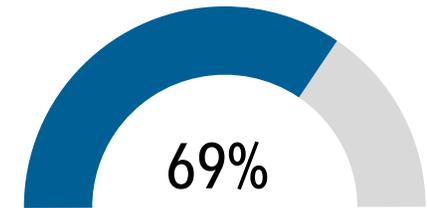
5 OPEN RECOMMENDATIONS

PROJECT BUDGET *



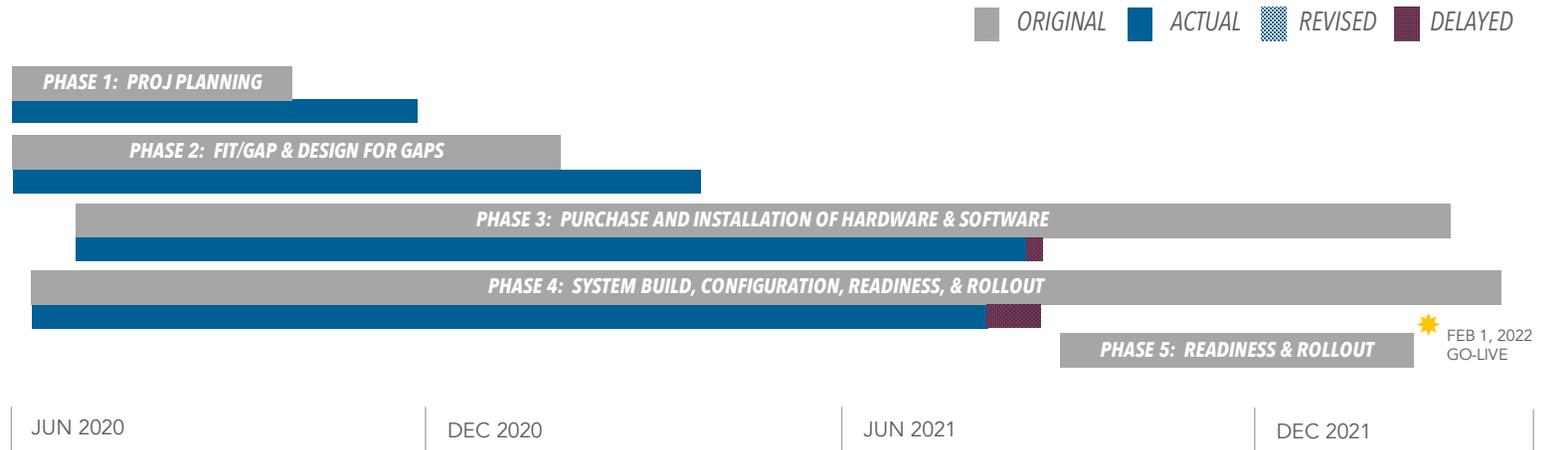
*Only includes contracts.

PROJECT PROGRESS **



** IV&V unable to verify %.

PROJECT TIMELINE



FEB 1, 2022 GO-LIVE

ASSESSMENT AREA & RATINGS SUMMARY

AS OF AUGUST 27, 2021

| JUN | JUL | AUG | IV&V ASSESSMENT AREA | IV&V OBSERVATIONS |
|---|---|---|---------------------------|--|
|  |  |  | <i>Overall</i> | <p>With five months remaining until Go-Live, the project team is working diligently to improve the effectiveness of communication, risk management, and workstream coordination. Weekly, recurring meetings of project workstreams are facilitating frequent communications and active oversight of major project activities.</p> <p>Project Schedule: The project is in build and configuration for Segment 4, which consists of the final two intervals (8 and 9). Although the completion of Interval 8 is a month delayed, LifeWorks expects to complete the remaining required functionality for Segment 4 timely with no impact to the overall timeline. Any additional project postponements may jeopardize the February 2022 Go-Live (Refer to finding 2021.02.PM01).</p> <p>Project Costs: Project contract costs invoiced to-date approximated \$6,655,000. As system requirements and functionality are deferred, milestone payments should be closely monitored.</p> <p>Quality: Quality and project metrics are reported and discussed for management review and risk assessment.</p> |
|  |  |  | <i>Program Governance</i> | <p>Overall program governance is working effectively. As we enter the final phases of the project, active involvement in the coming months is critical. The project increased its reporting frequency to the EUTF Board with project status updates in June, July, and August.</p> |
|  |  |  | <i>Project Management</i> | <p>The project faces continued delays in build and configuration, LifeWorks internal testing, interval demonstrations, data conversion, security remediation, and employer meetings. Project leadership made notable effort to improve its handling and communication of project risks and roadblocks for more timely discussion and decision-making (Refer to finding 2021.07.PM01). To mitigate timeline concerns, the project continues to add resources, as needed, split travel for key resources, and increase frequency of meetings to review tasks falling behind schedule. The change champion network continues to meet regularly and provide feedback to the project team. Planning for training and communication commenced to help EUTF members, employers, and carriers prepare for changes associated with the new Ariel BAS.</p> |
|  |  |  | <i>Technology</i> | <p>Segments 2 and 3 UAT are in progress with defects being actively managed for resolution. The next six weeks for build, configuration, and data conversion are critical. It is essential that LifeWorks completes all development and internal testing for remaining and deferred requirements by Segment 4 training scheduled for late October. Although EUTF and Vitech delivered billing records in August, the time to review, refine, and test the billing extracts is very compressed. The project is on track for the conversion of historical documents and images. Detailed plans for transition, deployment, and cutover activities were developed including the schedule for Data Cycle 3, billing, payroll, parallel testing, and black-out periods. The remediation of security vulnerabilities for the Azure environments continue to slip and the risk of not being addressed may impact the loading of additional benefits administration data required for other project workstreams (Refer to finding 2021.04.IT02). This risk was escalated to LifeWorks senior management for requested remediation in October to prevent downstream project impacts. Carrier interface configuration and testing is underway and employer meetings are scheduled to begin in September.</p> |

FINDINGS AND RECOMMENDATIONS BY ASSESSMENT AREA



OVERALL RATING

The overall rating is assigned based on the criticality ratings of the IV&V Assessment Categories and the severity ratings of any underlying findings (see Appendix A: IV&V Criticality and Severity Ratings). The tables below summarize the criticality ratings for each IV&V Assessment Category in each of the three major IV&V Assessment Areas. The criticality rating for eight IV&V Assessment Categories are solid green. Four IV&V Assessment Categories improved from the prior report quality management and testing, risk, and communications management.

AT-A-GLANCE

IMPROVED RISK MANAGEMENT
processes

ACTIVE OVERSIGHT
of major project activities

Schedule and pace of intervals still
CAUTIOUS AREAS

| JUN | JUL | AUG | PROGRAM GOVERNANCE |
|-----|-----|-----|---|
| G | G | G | Governance Effectiveness |
| G | G | G | Benefits Realization |
| JUN | JUL | AUG | TECHNOLOGY |
| Y | Y | Y | System Software, Hardware, and Integrations |
| Y | ↓ | ↓ | Data Conversion |
| Y | ↓ | ↑ | Quality Management and Testing |
| G | G | G | Configuration Management |
| ↓ | ↓ | ↓ | Security |
| NA | G | G | Deployment and Operations |

| JUN | JUL | AUG | PROJECT MANAGEMENT |
|-----|-----|-----|---|
| Y | ↓ | ↑ | Project Organization and Management |
| ↓ | ↓ | ↓ | Requirements Management |
| R | R | R | Cost, Schedule, and Resource Management |
| ↓ | Y | ↑ | Risk Management |
| G | ↓ | G | Communications Management |
| G | G | G | Organizational Change Management (OCM) |
| G | G | G | Business Process Reengineering (BPR) |
| G | G | G | Training and Knowledge Transfer |

PROGRAM GOVERNANCE

Governance Effectiveness

Benefits Realization



PROGRAM GOVERNANCE

| JUN | JUL | AUG | IV&V ASSESSMENT CATEGORY | IV&V OBSERVATION | FINDINGS | | |
|-----|-----|-----|--------------------------|---|----------|------|--------|
| | | | | | NEW | OPEN | CLOSED |
| G | G | G | Governance Effectiveness | Overall program governance is working effectively. As we enter the final phases of the project, active involvement in the coming months is critical. The project increased its reporting frequency to the EUTF Board with project status updates in June, July, and August. | 0 | 0 | 0 |
| G | G | G | Benefits Realization | Quality and project metrics are reported and discussed for management review and risk assessment. Lifeworks improved the quality of system demonstrations raising confidence in the Ariel system (Refer to finding 2021.01.IT01). | 0 | 0 | 0 |

PROJECT MANAGEMENT

Project Organization and Management

Requirements Management

Cost, Schedule, and Resource Management

Risk Management

Communications Management

Organizational Change Management

Business Process Reengineering

Training and Knowledge Transfer



PROJECT MANAGEMENT

| | JUN | JUL | AUG | IV&V ASSESSMENT CATEGORY | IV&V OBSERVATION | FINDINGS | | |
|--|-----|-----|-----|---|--|----------|------|--------|
| | | | | | | NEW | OPEN | CLOSED |
| | Y | ↓ | ↑ | Project Organization and Management | With five months remaining until Go-Live, the project team is working diligently to improve the effectiveness of communication, risk management, and workstream coordination. Weekly recurring meetings of project workstreams are facilitating frequent communications and active oversight of major project activities. | 0 | 1 | 3 |
| | ↓ | ↓ | ↓ | Requirements Management | Requirements and their movement through the various interval and segment status levels are actively being monitored and reported on weekly during Weekly Project Team Status meetings. Acceptance criteria continues to be developed for requirements tagged in Interval 8 and 9. Furthermore, preliminary requirement satisfaction is reviewed after each interval demonstration of system functionality. | 0 | 0 | 0 |
| | R | R | R | Cost, Schedule, and Resource Management | Project contract costs invoiced to-date approximated \$6,655,000. The project is in build and configuration for Segment 4, which consists of the final two intervals (8 and 9). Although the completion of Interval 8 is a month delayed, LifeWorks expects to complete the remaining required functionality for Segment 4 timely with no impact to the overall timeline. Any additional project postponements may jeopardize the February 2022 Go-Live (Refer to finding 2021.02.PM01). The project faces continued delays in other activities including internal testing, interval demonstrations, data conversion, security remediation, and employer meetings. | 0 | 1 | 0 |

PROJECT MANAGEMENT

Project Organization and Management

Requirements Management

Cost, Schedule, and Resource Management

Risk Management

Communications Management

Organizational Change Management

Business Process Reengineering

Training and Knowledge Transfer

| | JUN | JUL | AUG | IV&V ASSESSMENT CATEGORY | IV&V OBSERVATION | FINDINGS | | |
|--|-----|-----|-----|--|---|----------|------|--------|
| | | | | | | NEW | OPEN | CLOSED |
| | | | | Risk Management | LifeWorks made notable effort to proactively identify and communicate potential project delays, risks, and issues in August (Refer to finding 2021.07.PM01). The project faces continued delays and challenges in various project activities. To address these challenges, project leadership is improving its handling and communication of project risks for more timely discussion and decision-making. | 0 | 1 | 0 |
| | | | | Communications Management | Internal project communications improves each month through the encouragement of open dialogue and recurring meetings addressing pressing project matters. With strong support from the Segal Project Manager, the change champion network continues to meet regularly and provide feedback to the project team. Planning for training and communication commenced to help EUTF members, employers, and carriers prepare for changes associated with the new Ariel BAS. | 0 | 0 | 0 |
| | | | | Organizational Change Management (OCM) | The Change Champion meetings are continuing and resulting in constructive feedback that is shared with the project team by the Segal Project Manager. | 0 | 0 | 0 |
| | | | | Business Process Reengineering (BPR) | A new LifeWorks Sr. BA/Training Resource was added June 7, 2021, to support FSB with change management and Standard Operating Procedures (SOPs). A draft SOP for billing and payroll processes was provided and reviewed with EUTF, including a process overview, process timeline, and detailed steps. LifeWorks plans on developing additional SOPs to assist in the improvement of FSB processes. | 0 | 0 | 0 |
| | | | | Training and Knowledge Transfer | LifeWorks subject matter experts were onsite to provide Segment 3 training. Initial feedback was positive regarding the training materials, delivery, and job relevance. Segment 4 training materials will be delivered at the end of September. | 0 | 0 | 0 |

TECHNOLOGY

System Software, Hardware, and Integrations

Data Conversion

Quality Management and Testing

Configuration Management

Security

Deployment and Operations



TECHNOLOGY

| JUN | JUL | AUG | IV&V ASSESSMENT CATEGORY | IV&V OBSERVATION | FINDINGS | | |
|-----|-----|-----|---|---|----------|------|--------|
| | | | | | NEW | OPEN | CLOSED |
| Y | Y | Y | System Software, Hardware, and Integrations | The project is in build and configuration for Segment 4, which consists of the final two intervals (8 and 9). The completion of Interval 8 is a month delayed, and the development of Interval 9 is underway. It is essential that LifeWorks completes all development for remaining and deferred requirements by Segment 4 training scheduled for late October. Carrier interface configuration and testing is underway and employer meetings are scheduled to begin in September. | 0 | 0 | 1 |
| Y | Y↓ | Y↓ | Data Conversion | EUTF and Vitech worked closely with LifeWorks this month to provide the pending billing records that were challenged by the complexities of the data and reliance on a third-party vendor. Although EUTF and Vitech delivered billing records in August, the time to review, refine, and test the billing extracts is very compressed. The project is on track for the conversion of historical documents and images. The data derivation document is still pending approval by EUTF. | 0 | 1 | 0 |
| Y | Y↓ | Y↑ | Quality Management and Testing | Parts of Segment 2 UAT were postponed and merged with Segment 3 UAT. Segments 2 and 3 UAT are in progress with defects being actively managed for resolution. | 0 | 0 | 2 |

TECHNOLOGY

System Software,
Hardware, and
Integrations

Data Conversion

Quality Management
and Testing

Configuration
Management

Security

Deployment and
Operations

| JUN | JUL | AUG | IV&V ASSESSMENT CATEGORY | IV&V OBSERVATION | FINDINGS | | |
|-----|-----|-----|-----------------------------|--|----------|------|--------|
| | | | | | NEW | OPEN | CLOSED |
| G | G | G | Configuration Management | No significant updates from the prior report. | 0 | 0 | 0 |
| G | G | G | Security | The remediation of security vulnerabilities for the Azure environments continue to slip and the risk of not being addressed may impact the loading of additional benefits administration data required for other project workstreams (Refer to finding 2021.04.IT02). A security vulnerability targeted for full remediation will be resolved for the Member Portal only by August 31, 2021. However, due to an incorrectly logged ticket, the security vulnerability was not resolved for the Admin, Employer, and Carrier Portals by the same target date. This vulnerability for the remaining portals and two other vulnerabilities are pending scope and work estimates to meet baseline security requirements. They are escalated to LifeWorks' senior management team for resolution prior to October 18, 2021. | 0 | 1 | 0 |
| NA | G | G | Deployment and Operations | A 3-day workshop was conducted in early August and detailed plans for transition, deployment, and cutover activities were developed including the schedule for Data Cycle 3, billing, payroll, parallel testing, and black-out periods. | 0 | 0 | 0 |

Appendix A: IV&V Criticality and Severity Ratings

IV&V CRITICALITY AND SEVERITY RATINGS

Criticality and severity ratings provide insight on where significant deficiencies are observed and immediate remediation or risk mitigation is required. Criticality ratings are assigned to the overall project as well as each IV&V Assessment Area and IV&V Assessment Category. Severity ratings are assigned to each risk or issue identified.

Criticality Rating

The criticality ratings are assessed based on consideration of the severity ratings of each related risk and issue within the respective IV&V Assessment Area and IV&V Assessment Category, the overall impact of the related findings to the success of the project, and the urgency of and length of time to implement remediation or risk mitigation strategies. Arrows indicate trends in the project assessment from the prior report and take into consideration areas of increasing risk and approaching timeline. Up arrows indicate adequate improvements or progress made. Down arrows indicate a decline, inadequate progress, or incomplete resolution of previously identified findings. No arrow indicates there was neither improving nor declining progress from the prior report.

TERMS

RISK

An event that has not happened yet.

ISSUE

An event that is already occurring or has already happened.



A **RED**, high criticality rating is assigned when significant severe deficiencies were observed and immediate remediation or risk mitigation is required.



A **YELLOW**, medium criticality rating is assigned when deficiencies were observed that merit attention. Remediation or risk mitigation should be performed in a timely manner.



A **GREEN**, low criticality rating is assigned when the activity is on track and minimal deficiencies were observed. Some oversight may be needed to ensure the risk stays low and the activity remains on track.



A **GRAY** rating is assigned when the category being assessed has incomplete information available for a conclusive observation and recommendation or is not applicable at the time of the IV&V review.

TERMS

POSITIVE
Celebrates high performance or project successes.

PRELIMINARY CONCERN
Potential risk requiring further analysis.

Severity Rating

Once risks are identified and characterized, Accuity will examine project conditions to determine the probability of the risk being identified and the impact to the project, if the risk is realized. We know that a risk is in the future, so we must provide the probability and impact to determine if the risk has a Risk Severity, such as Severity 1 (High), Severity 2 (Moderate), or Severity 3 (Low).

While a risk is an event that has not happened yet, an issue is something that is already occurring or has already happened. Accuity will examine project conditions and business impact to determine if the issue has an Issue Severity, such as Severity 1 (High/Critical Impact/System Down), Severity 2 (Moderate/Significant Impact), or Severity 3 (Low/Normal/Minor Impact/Informational).

Findings that are positive or preliminary concerns are not assigned a severity rating.



SEVERITY 1: High/Critical level



SEVERITY 2: Moderate level



SEVERITY 3: Low level

Appendix B: Industry Standards and Best Practices

| STANDARD | DESCRIPTION |
|-----------------------|---|
| ADA | Americans with Disabilities Act |
| ADKAR® | Prosci ADKAR: Awareness, Desire, Knowledge, Ability, and Reinforcement |
| BABOK® v3 | Business Analyst Body of Knowledge |
| DAMA-DMBOK® v2 | DAMA International's Guide to the Data Management Body of Knowledge |
| HIPAA | Health Insurance Portability and Accountability Act of 1996 |
| MARS-E v2.0 | CMS Minimum Acceptable Risk Standards for Exchanges – Exchange Reference Architecture Supplement |
| MITA v3.0 | Medicaid Information Technology Architecture |
| PMBOK® v7 | Project Management Institute (PMI) Project Management Body of Knowledge |
| SWEBOK v3 | Guide to the Software Engineering Body of Knowledge |
| TOGAF® v9.2 | The Open Group Architecture Framework Standard |
| COBIT® 2019 Framework | Control Objectives for Information and Related Technologies Framework |
| IEEE 828-2012 | Institute of Electrical and Electronics Engineers (IEEE) Standard for Configuration Management in Systems and Software Engineering |
| IEEE 1062-2015 | IEEE Recommended Practice for Software Acquisition |
| IEEE 1012-2016 | IEEE Standard for System, Software, and Hardware Verification and Validation |
| IEEE 730-2014 | IEEE Standard for Software Quality Assurance Processes |
| ISO 9001:2015 | International Organization for Standardization (ISO) Quality Management Systems – Requirements |
| ISO/IEC 25010:2011 | ISO/International Electrotechnical Commission (IEC) Systems and Software Engineering – Systems and Software Quality Requirements and Evaluation (SQuaRE) – System and Software Quality Models |
| ISO/IEC 16085:2006 | ISO/IEC Systems and Software Engineering – Life Cycle Processes – Risk Management |

| STANDARD | DESCRIPTION |
|-------------------|---|
| IEEE 16326-2019 | ISO/IEC/IEEE International Standard – Systems and Software Engineering – Life Cycle Processes – Project Management |
| IEEE 29148-2018 | ISO/IEC/IEEE International Standard – Systems and Software Engineering – Life Cycle Processes – Requirements Engineering |
| IEEE 15288-2015 | ISO/IEC/IEEE International Standard – Systems and Software Engineering – System Life Cycle Processes |
| IEEE 12207-2017 | ISO/IEC/IEEE International Standard – Systems and Software Engineering – Software Life Cycle Processes |
| IEEE 24748-1-2018 | ISO/IEC/IEEE International Standard – Systems and Software Engineering – Life Cycle Management – Part 1: Guidelines for Life Cycle Management |
| IEEE 24748-2-2018 | ISO/IEC/IEEE International Standard – Systems and Software Engineering – Life Cycle Management – Part 2: Guidelines for the Application of ISO/IEC/IEEE 15288 (System Life Cycle Processes) |
| IEEE 24748-3-2012 | IEEE Guide: Adoption of ISO/IEC TR 24748-3:2011, Systems and Software Engineering – Life Cycle Management – Part 3: Guide to the Application of ISO/IEC 12207 (Software Life Cycle Processes) |
| IEEE 14764-2006 | ISO/IEC/IEEE International Standard for Software Engineering – Software Life Cycle Processes – Maintenance |
| IEEE 15289-2019 | ISO/IEC/IEEE International Standard – Systems and Software Engineering – Content of Life Cycle Information Items (Documentation) |
| IEEE 24765-2017 | ISO/IEC/IEEE International Standard – Systems and Software Engineering – Vocabulary |
| IEEE 26511-2018 | ISO/IEC/IEEE International Standard – Systems and Software Engineering – Requirements for Managers of Information for Users of Systems, Software, and Services |
| IEEE 23026-2015 | ISO/IEC/IEEE International Standard – Systems and Software Engineering – Engineering and Management of Websites for Systems, Software, and Services Information |
| IEEE 42010-2011 | ISO/IEC/IEEE International Standard – Systems and Software Engineering – Architecture Description |
| IEEE 29119-1-2013 | ISO/IEC/IEEE International Standard – Software and Systems Engineering – Software Testing – Part 1: Concepts and Definitions |
| IEEE 29119-2-2013 | ISO/IEC/IEEE International Standard – Software and Systems Engineering – Software Testing – Part 2: Test Processes |
| IEEE 29119-3-2013 | ISO/IEC/IEEE International Standard – Software and Systems Engineering – Software Testing – Part 3: Test Documentation |
| IEEE 29119-4-2015 | ISO/IEC/IEEE International Standard – Software and Systems Engineering – Software Testing – Part 4: Test Techniques |

| STANDARD | DESCRIPTION |
|-----------------------------------|---|
| IEEE 1484.13.1-2012 | IEEE Standard for Learning Technology – Conceptual Model for Resource Aggregation for Learning, Education, and Training |
| ISO/IEC TR 20000-11:2015 | ISO/IEC Information Technology – Service Management – Part 11: Guidance on the Relationship Between ISO/IEC 20000-1:2011 and Service Management Frameworks: ITIL® |
| ISO/IEC 27002:2013 | Information Technology – Security Techniques – Code of Practice for Information Security Controls |
| SAML v2.0 | Security Assertion Markup Language v2.0 |
| SoaML v1.0.1 | Service Oriented Architecture Modeling Language |
| CMMI-DEV v1.3 | Capability Maturity Model Integration for Development |
| FIPS 199 | Federal Information Processing Standard (FIPS) Publication 199, Standards for Security Categorization of Federal Information and Information Systems |
| FIPS 200 | FIPS Publication 200, Minimum Security Requirements for Federal Information and Information Systems |
| NIST 800-53 Rev 5 | National Institute of Standards and Technology (NIST) Security and Privacy Controls for Federal Information Systems and Organizations |
| NIST Cybersecurity Framework v1.1 | NIST Framework for Improving Critical Infrastructure Cybersecurity |
| LSS | Lean Six Sigma |

Appendix C: IV&V Monthly Status

MAIN IV&V ACTIVITIES AND ACCOMPLISHMENTS

| MAIN IV&V ACTIVITIES AND ACCOMPLISHMENTS |
|--|
| Participated in Hawaii EUTF project management, data conversion, technical, and joint stand-up meetings |
| Attended Segment 3 Training sessions |
| Participated in 3-day workshop to plan for transition, deployment, and cutover activities |
| Attended Segment 8 Demonstrations |
| Reviewed vulnerability scan and penetration test results, including subsequent remediation plans |
| Finalized July Monthly IV&V Status and Milestone Report and submitted Draft August 2021 Monthly IV&V Status Report |

KEY UPCOMING IV&V DELIVERABLES

| KEY IV&V DELIVERABLES | DRAFT DUE DATE | DRAFT SUBMITTED | FINAL SUBMITTED |
|--|----------------|-----------------|-----------------|
| August 2021 Monthly IV&V Status Report | 09/07/21 | 09/07/21 | 10/05/21 |

PRIOR IV&V APPROVED DELIVERABLES

| DELIVERABLE | AS OF DATE | APPROVED DATE |
|---|------------|---------------|
| IV&V Project Management Plan (IVVP) | N/A | 07/22/20 |
| Initial Assessment Report | 06/26/20 | 07/29/20 |
| July 2020 Monthly IV&V Status Report | 07/24/20 | 08/20/20 |
| August 2020 Monthly IV&V Status Report | 08/25/20 | 09/25/20 |
| September 2020 Monthly IV&V Status Report | 09/25/20 | 10/19/20 |

PRIOR IV&V APPROVED DELIVERABLES (CONTINUED)

| DELIVERABLE | AS OF DATE | APPROVED DATE |
|---|------------|---------------|
| October 2020 Monthly IV&V Status Report | 10/27/20 | 11/25/20 |
| November 2020 Monthly IV&V Status Report | 11/25/20 | 12/14/20 |
| December 2020 Monthly IV&V Status Report | 12/22/20 | 02/02/21 |
| January 2021 Monthly IV&V Status Report | 01/26/21 | 02/25/21 |
| February 2021 Monthly IV&V Status Report | 02/23/21 | 03/31/21 |
| March 2021 Monthly IV&V Status Report | 03/23/21 | 04/28/21 |
| April 2021 Monthly IV&V Status and Milestone Report | 04/27/21 | 06/04/21 |
| May 2021 Monthly IV&V Status and Milestone Report | 05/26/21 | 06/28/21 |
| June 2021 Monthly IV&V Status Report | 06/23/21 | 07/26/21 |
| July 2021 Monthly IV&V Status Report | 07/27/21 | 08/31/21 |

Appendix D: Interviews, Meetings, and Documents

INTERVIEWS

| DATE | INTERVIEWEE |
|------|-------------|
| - | None |

MEETINGS

| DATE | MEETING DESCRIPTION |
|----------|--|
| 07/28/21 | EUTF Training Module 2 AM - Member & Admin Portal |
| 07/28/21 | EUTF Documents and Images Conversion Requirements Meeting |
| 07/28/21 | EUTF Training Module 2 PM - Member & Admin Portal |
| 07/29/21 | EUTF Training Module 3 AM - Admin Portal, Inbound Interfaces, Expert Doc |
| 07/29/21 | EUTF Joint PM Touchpoint |
| 07/29/21 | EUTF Training Module 3 PM - Admin Portal, Inbound Interfaces, Expert Doc |
| 07/30/21 | Meeting to discuss Billing Records |
| 08/02/21 | EUTF - Joint PM Touchpoint |
| 08/02/21 | EUTF Transition Workshop at EUTF |
| 08/03/21 | EUTF Carrier Meeting - HDS - LifeWorks |
| 08/03/21 | EUTF - Joint Weekly Project Team Meeting |
| 08/03/21 | EUTF Transition Workshop at EUTF |
| 08/04/21 | EUTF - Data Conversion - Billing Data Check-in |
| 08/04/21 | EUTF Carrier Meeting - Kaiser - LifeWorks |

MEETINGS (CONTINUED)

| DATE | MEETING DESCRIPTION |
|----------|---|
| 08/04/21 | EUTF - Biweekly Technical Meeting |
| 08/04/21 | EUTF Transition Workshop at EUTF |
| 08/05/21 | EUTF - Joint Stand-up Meeting |
| 08/05/21 | EUTF - Joint PM Touchpoint |
| 08/05/21 | EUTF - Data Conversion Touchbase |
| 08/09/21 | EUTF - UAT Defect Status and Review |
| 08/10/21 | EUTF Carrier Meeting - HMA-LifeWorks |
| 08/10/21 | EUTF - Joint Weekly Project Team Meeting |
| 08/12/21 | EUTF - Joint Stand-up Meeting |
| 08/12/21 | EUTF - Transition & Joint PM Touchpoint |
| 08/13/21 | August IV&V Update meeting |
| 08/13/21 | EUTF Demo - Interval 8 - XpertDoc, Reports, & Workflow |
| 08/14/21 | EUTF Training Module 4 AM - Employer Portal & Portal Security |
| 08/14/21 | EUTF - Joint PM Touchpoint |
| 08/14/21 | EUTF - Joint Weekly Project Team Meeting |
| 08/14/21 | EUTF Training Module 4 PM - Employer Portal & Portal Security |
| 08/14/21 | EUTF - UAT Defect Status and Review |
| 08/17/21 | EUTF Carrier Meeting - HDS - LifeWorks |
| 08/17/21 | EUTF - Joint Weekly Project Team Meeting |
| 08/17/21 | EUTF - iPERF Results |

MEETINGS (CONTINUED)

| DATE | MEETING DESCRIPTION |
|----------|---|
| 08/18/21 | Monthly Meeting with IV&V and PMs |
| 08/18/21 | EUTF Carrier Meeting - Kaiser - LifeWorks |
| 08/18/21 | EUTF - Biweekly Technical Meeting |
| 08/23/21 | EUTF/ICON/MS Data Conversion Weekly Meeting |
| 08/23/21 | EUTF - Joint PM Touchpoint |
| 08/23/21 | EUTF - UAT Defect Status and Review |
| 08/24/21 | EUTF Board of Trustees Meeting |
| 08/24/21 | EUTF - Joint Weekly Project Team Meeting |
| 08/25/21 | EUTF Demo - Interval 8 - Continued Housekeeping Items |
| 08/26/21 | EUTF Carrier Meeting - Humana-LifeWorks |
| 08/26/21 | EUTF - Joint Stand-up Meeting |
| 08/26/21 | EUTF - Transition & Joint PM Touchpoint |

DOCUMENTS

| TYPE | DOCUMENT |
|--------------------------|---|
| Morneau Shepell Proposal | EUTF BAS RFP 20-002 - Morneau Shepell BAFO Response to BAS Project Oral Presentation Demo Question Requests - FINAL |
| Request for Proposal | State of Hawaii EUTF BAS RFP No. RFP-20-001 for Project Management and Consulting Services (Release Date 09/25/19) |
| Segal Proposal | BAFO for RFP No. RFP-20-001 for Project Management and Consulting Services (Effective 03/16/20) |
| Request for Proposal | State of Hawaii ETS RFP-19-010 EUTF BAS IV&V |
| Accuity Proposal | Accuity LLP EUTF IVV Proposal RFP-19-010 FINAL |
| Contract | Morneau Shepell Limited Contract (effective 06/01/20) |
| Contract | Segal Company Contract (effective 06/01/20) |
| Contract | Accuity Contract (effective 06/01/20) |
| Budget | New BAS Budget Worksheet |
| Project Management | Hawaii EUTF Morneau Shepell Project Kick-Off – FINAL (06/04/20) |
| Project Management | EUTF – Weekly Project Team Status – 2021-08-03 |
| Project Management | EUTF – Weekly Project Team Status – 2021-08-10 |
| Project Management | EUTF – Weekly Project Team Status – 2021-08-17 |
| Project Management | EUTF – Weekly Project Team Status – 2021-08-24 |
| Project Management | 20210731 Segal Monthly Status Report |
| Project Management | 20210809 Segal EUTF Status Report |
| Project Management | 20210816 Segal EUTF Status Report |
| Project Management | 20210823 Segal EUTF Status Report |
| Project Management | 20210728 Segal EUTF Status Report |
| Project Management | Hawaii EUTF_ICON Status Report – Week Ending 07 30 2021 |
| Project Management | Hawaii EUTF_ICON Status Report – Week Ending 08 06 2021 |

DOCUMENTS (CONTINUED)

| TYPE | DOCUMENT |
|--------------------|--|
| Project Management | Hawaii EUTF_ICON Status Report – Week Ending 08 13 2021 |
| Project Management | Hawaii EUTF_ICON Status Report – Week Ending 08 20 2021 |
| Project Management | Hawaii EUTF_ICON Status Report – Week Ending 08 27 2021 |
| Risk and Issues | EUTF – CRAIDL Log |
| Schedule | Hawaii (EUTF) – BAS Work Plan |
| Discovery Session | EUTF – Client RTM |
| Deliverable | Hawaii EUTF – BAS Implementation - Charter, Scope, and Management Plan |
| Deliverable | EUTF Quality Management Plan_2020.10.14 |
| Deliverable | Ariel EAS Security Plan – EUTF |
| Deliverable | Patch_Deployment_Process_v1.16-EN |
| Deliverable | Vulnerability Management_v1.09b |
| Security | Security-Ongoing-Report-Vulnerabilities_v1.00.docx |
| Security | Security Assessment Report-EUTF_v1.04.docx |
| Security | 2021-07-22-ap-eutf-bat.uat.hroffice.com-Detailed-Scan-Report |
| Security | 2021-07-22-ee-eutf-bat.uat.hroffice.com-Detailed-Scan-Report |
| Security | 2021-07-22-ap-eutf-cfg.uat.hroffice.com-Detailed-Scan-Report |
| Security | 2021-07-22-ap-eutf-trn.uat.hroffice.com-Detailed-Scan-Report |
| Security | 202-07-22-ee-eutf-cfg.uat.hroffice.com-Detailed-Scan-Report |
| Security | 2021-07-22-ee-eutf-trn.uat.hroffice.com-Detailed-Scan-Report |
| Security | EUTF-Scan Host-List |
| Transition | 20210802 Transition Agenda |
| Transition | Transition Calendar |

DOCUMENTS (CONTINUED)

| TYPE | DOCUMENT |
|----------------|--|
| Testing | EUTF – UAT Testing Strategy – Segment 3 |
| Testing | EUTF – Segment 3 – MS Test Plan – Additional Tests |
| Training | EUTF – Training Strategy – Segment 3 |
| Training / SOP | EUTF Standard Operating Procedures - Billing – Payroll, Active Employer, Employer (Active/Retiree), Retiree, and Carrier Premium Invoicing |
| Training | Segment 3 Training Survey Results |



Appendix E: Prior Findings Log

Appendix E: Prior Findings Log

| ASSESSMENT CATEGORY | FINDING ID | TYPE | ORIGINAL SEVERITY | CURRENT SEVERITY | FINDING | ANALYSIS | RECOMMENDATION ID | RECOMMENDATION | SUPPLEMENTAL RECOMMENDATION | FINDING STATUS | FINDING STATUS UPDATE | CLOSED DATE | CLOSURE REASON |
|-------------------------------------|--------------|-------|-------------------|------------------|---|---|-------------------|---|---|----------------|---|-------------|----------------|
| Risk Management | 2021.07.PM01 | Issue | High | Moderate | Current risk management processes to identify, communicate, and escalate risks are ineffective resulting in the inability to take timely corrective action. | The UAT Testing Strategy for Segment 2 states that the successful completion of the internal LifeWorks segment testing is an entry criteria to maximize the effectiveness of EUTF UAT; however, EUTF started UAT prior to the completion of Lifeworks' system testing. The purpose of segment testing is to ensure that Ariel is working as intended and any identified defects are addressed prior to the solution being delivered. LifeWorks segment testing is over one month behind its target completion date of April 29, 2021, with 54 requirements still pending segment testing. Without completing Segment 2 testing, Segment 2 functionality was not validated leading to the increased risk of design and functionality issues. | 2021.07.PM01.R1 | Increase the rigor and leadership of managing risk management processes. | <ul style="list-style-type: none"> Reinforce that open and transparent discussions of risks and issues is healthy and critical for overall project success. Involve EUTF early in the decision-making and selection of risk response strategies. Conduct recurring internal meetings with workstream leads and clearly define their responsibilities in identifying, escalating, and conducting root cause analysis of new and existing risks. Actively communicate the risks and impacts of not meeting project milestones and deadlines so project members clearly understand how to prioritize their workloads and hold their teams accountable for completing tasks. | Open | <p>08/27/21: Acuity decreased the severity rating from Level 3 (High) to Level 2 (Moderate) as LifeWorks made notable effort to proactively identify and communicate potential project delays, risks, and issues in August. Project leadership is improving its handling and communication of project risks for more timely discussion and decision-making. The LifeWorks PM and Deputy PM have started to effectively ask questions and discuss the impacts of not meeting project milestones.</p> <p>IV&V will continue to assess the effectiveness of risk and communication management.</p> | | |
| Project Organization and Management | 2021.04.PM01 | Risk | Moderate | Low | Need for greater coordination and control of project information, resources, tasks, and lessons learned to ensure project quality and performance. | LifeWorks has a dedicated team that includes various leads and groups with different functional area responsibilities including requirements management, build/configuration, data conversion, training, and testing. The leads and SMEs of these functional teams work together and often attend cross-functional meetings; however, as the project progresses it is becoming more apparent that there needs to be improved coordination and control of workstreams to regularly assess and ensure the quality and performance of each work stream's output. These functional teams are not only accountable for their own work streams but are accountable to each other for properly sharing information, finishing their tasks timely, and openly sharing feedback and lessons learned to improve the team's overall project delivery. | 2021.04.PM01.R1 | Clarify roles and responsibilities for key tasks and milestones in each workstream. | <ul style="list-style-type: none"> Review project plans and hold project team members accountable for their specific responsibilities under each workstream. Incorporate clear and detailed procedures for roles and responsibilities related to the execution of agile-like Segment activities and Go/No-Go Criteria. | Open | <p>05/26/21: This was originally reported in the April 2021 IV&V Monthly Report as a preliminary concern but is upgraded to a risk in May 2021. Despite additional resources added for QA, configuration, and project management, the project has continued schedule delays and miscommunication regarding UAT. A project Lessons Learned Log has been populated with feedback from surveys, change champions, and other observations; however, it has not been discussed as a team to prioritize and agree on how to implement improvements.</p> <p>06/23/21: The coordination of data conversion and carrier activities improved as those workstreams were assigned to the LifeWorks Deputy PM. Segal is also supporting EUTF data conversion activities. IV&V will continue to monitor the communication and control of all other project workstreams.</p> <p>07/27/21: Although the project culture is collaborative, current project management practices could be improved in areas including cost and schedule management, risk management, and communications management. It is unclear how project leads are being held accountable for timelines and actively managing their workstreams.</p> <p>08/27/21: Acuity decreased the severity rating from Level 2 (Moderate) to Level 1 (Low) as project leads are more actively managing their areas of responsibility. Weekly recurring meetings of project workstreams are facilitating active oversight of major project activities. Better project tracking tools have also been implemented.</p> <p>IV&V will continue to assess project management activities.</p> | | |
| Data Conversion | 2021.04.IT01 | Risk | Moderate | Moderate | Need to improve the management of data conversion activities and coordination of all parties with data conversion responsibilities. | The successful and complete migration of data is critical to a successful project and requires strong cross-functional team communication and coordination of all data conversion resources. The overall status of data conversion is unclear and there is a need to improve the management of data conversion activities and coordination of responsible parties. Data Conversion Cycle 1 results were not formally approved and although Data Conversion Cycle 2 is in progress, it is unclear if they are on track to meet Data Conversion Cycle 2 objectives or completion by May 10, 2021. Furthermore, the data reconciliation process proposed by ICON is still pending finalization. The UAT environment penetration and vulnerability scan results are still pending remediation, which may delay the loading of Data Conversion Cycle 2 data. | 2021.04.IT01.R1 | Appoint a dedicated Data Conversion Management Lead. | <ul style="list-style-type: none"> Appoint a dedicated Data Conversion Management Lead to actively manage all aspects of the data conversion effort including coordination of LifeWorks, ICON, and EUTF data conversion activities. Assign this lead the responsibility of providing weekly data conversion status reports with metrics that report on the status and health of data conversion activities. Develop a formalized Data Conversion acceptance process for the remaining cycles with defined acceptance criteria. | Open | <p>05/26/21: Data Conversion Cycle 2 nears completion but is experiencing data derivation challenges related to employee status. An additional LifeWorks project manager resource was added to support the coordination of data conversion activities. Segal has also communicated plans to add support to managing data conversion activities. The importance of coordinating data conversion work was evident again when Segment 2 UAT was delayed due to these issues with data conversion impacting the availability of the UAT environment.</p> <p>06/23/21: The LifeWorks Deputy PM was assigned to be the lead coordinator for data conversion. Segal is also playing a larger role in supporting EUTF data conversion activities. Data conversion activities are being tracked and managed through a log. A data conversion dashboard to show the overall status is still pending.</p> <p>07/27/21: The project faces continued schedule delays in data conversion, specifically for billing records. Although sample billing data extracts were provided, EUTF and Vitech are still struggling to provide billing records to LifeWorks, which may also impact the project timeline.</p> <p>08/27/21: Although EUTF and Vitech delivered billing records in August, the time to review, refine, and test the billing extracts is very compressed. A formalized Data Conversion acceptance process for Data Cycle 2 and 3 was not developed. The coordination of data conversion has improved, however, still remains a cautious area that needs strong oversight.</p> <p>IV&V will continue to assess the management of data conversion activities.</p> | | |

| ASSESSMENT CATEGORY | FINDING ID | TYPE | ORIGINAL SEVERITY | CURRENT SEVERITY | FINDING | ANALYSIS | RECOMMENDATION ID | RECOMMENDATION | SUPPLEMENTAL RECOMMENDATION | FINDING STATUS | FINDING STATUS UPDATE | CLOSED DATE | CLOSURE REASON |
|---|--------------|-------|-------------------|------------------|--|---|-------------------|---|--|----------------|--|-------------|----------------|
| Security | 2021.04.IT02 | Issue | Moderate | Moderate | LifeWorks is not following their patch deployment and vulnerability management policies and procedures for remediation in the non-production environments. | LifeWorks's Vulnerability Management Program v1.09b outlines their practices to perform monthly network vulnerability and penetration scans. Based on the scans, system administrators schedule a time to fix vulnerabilities based on the overall risk rating with critical and high risks addressed as quickly as possible in an ad-hoc fashion. The initial vulnerability and penetration test scans were completed on March 4, 2021, and MS drafted a Security Assessment Report which included recommended remediations. LifeWorks has subsequently missed multiple dates to complete remediation with the original target date of March 24, 2021. | 2021.04.IT02.R1 | LifeWorks align project practices with their patch deployment and vulnerability management policies and procedures. | When the project is unable to follow their vulnerability management policies and procedures, LifeWorks should follow standard risk management best practices including client escalation and risk acceptance processes. | Open | <p>05/26/21: Acuity decreased the severity rating from Level 2 (Moderate) to Level 1 (Low) as LifeWorks worked diligently to address security concerns and is now following their patch and vulnerability management policies and procedures. Interim remediation controls were put in place, and full vulnerability remediation is scheduled for completion by August 2021. Bi-monthly technical meetings have been implemented to discuss security concerns on a more regular basis.</p> <p>06/23/21: LifeWorks is running and providing monthly security scans. Interim remediation controls were put in place and LifeWorks is targeting to complete remediation of security vulnerabilities by August 2021.</p> <p>07/27/21: Two of the three remaining security vulnerabilities targeted for completion by August 2021 are delayed and under assessment with one still targeted for remediation before the end of next month.</p> <p>08/27/21: The security rating increased from Level 1 (Low) to (Moderate) as the remediation of outstanding security vulnerabilities for the Azure environments continued to slip and the potential downstream project impacts become more critical due to the fast approaching Go-Live. Due to an incorrectly logged ticket, the security vulnerability was not resolved for the Admin, Employer, and Carrier Portals by the agreed target date.</p> <p>IV&V will continue to the remediation of security vulnerabilities and the impact on the project timeline.</p> | | |
| Cost, Schedule, and Resource Management | 2021.02.PM01 | Issue | Moderate | High | Current schedule delays may impact the overall project timeline. | <p>LifeWorks has schedule management processes in place to report and track schedule variances. Furthermore, the project already proactively identified and actively reports on project risks related to the pace of intervals, insufficient time, and resources available to build and configure all EUTF requirements, and concern that complex functions and features are not being built early enough to allow for sufficient testing and quality reviews. However, even with these schedule management processes in place, the project continues to experience delays which may impact the overall project timeline and rigid Go-Live date of February 1, 2022:</p> <ul style="list-style-type: none"> The project is experiencing some delays including build and configuration for Interval 4, data conversion, environment set up, and LifeWorks Segment 1 testing. Requirements tagged to specific intervals continue to be deferred to later intervals. Although the deferral of project requirements were expected in earlier intervals as LifeWorks gained a clearer understanding of EUTF needs and expectations, requirements tagged to Interval 4 continue to be tagged to later intervals. The RTM requirements related to reports, communications, data interfaces, and workflows have not been fully identified and assigned to intervals so the level of effort for the overall schedule cannot be planned at this time. Data conversion for certain records continues to be delayed due to the complexity of the billing data and reliance on the current EUTF BAS Vendor to assist with extraction and correction to data extracts; and need for EUTF resources to map and resolve data extraction issues. <p>Greater attention and rigor to schedule delays is needed to ensure that schedule delays do not impact the overall project timeline and success of the project.</p> | 2021.02.PM01.R1 | Increase schedule management control activities. | <ul style="list-style-type: none"> Increase the rigor related to task and schedule delays including root cause analysis, discussions of mitigation plans, and reviews of mitigation tasks effectiveness to ensure schedule delays are timely addressed. Regularly reassess and readjust the project schedule estimates and assumptions. Consider all options for mitigating risk including adding resources, performing work in parallel, redistributing work in future development intervals, and reprioritizing remaining work. | Open | <p>03/23/21: LifeWorks made some progress in addressing certain project delays and trying to move up requirements earlier to address risks related to the pace of intervals and balance of functionality. However, other activities are slipping including training and testing activities for Segment 2. It is too early to determine if requirements tagged to Interval 5 will be completed as planned or if a significant number will need to be deferred. More formalized processes need to be performed to ensure schedule delays are timely identified and addressed.</p> <p>04/27/21: LifeWorks has begun to make improvements in schedule management; however, the project continues to have numerous delays outlined in the April 2021 IV&V Monthly Status and Milestone Report. For the delay of XpertDoc, LifeWorks presented a mitigation plan including adding three additional QA resources to get back on track for Interval 5 and Segment 2 UAT. LifeWorks has begun to highlight late activities in the weekly status report. More formalized schedule management control activities are still needed across project workstreams.</p> <p>05/26/21: Despite additional resources added for QA, configuration, and project management, the project has continued schedule delays in data conversion, testing, interval demonstrations, deferred requirements, and carrier interfaces. LifeWorks should work to understand why delays continue to occur despite more resources being added.</p> <p>06/23/21: The project schedule and pace of build and configuration is a cautious area and the project team is actively monitoring progress towards getting the project back on track by July 23, 2021, in time for Segment 3 training and user acceptance testing (UAT). Project leadership agreed that any build and configure postponements after July 23, 2021 will impact the overall timeline.</p> <p>07/27/21: This was originally reported in the February 2021 IV&V Monthly Report as a risk but is upgraded to an issue in July 2021 to reflect the growing concern of project delays. Despite ongoing project delays a root cause analysis has not been performed and it is unclear if project schedule estimates are realistic or achievable.</p> <p>08/27/21: The completion of Interval 8 is a month delayed. The next six weeks for build, configuration, and data conversion is critical. It is essential that LifeWorks completes all development and internal testing for remaining and deferred requirements by Segment 4 training scheduled for late October. Project schedules are being regularly assessed and adjusted; however, there is very little slack or flexibility left in the schedule to accommodate any additional delays.</p> <p>IV&V will continue to assess these schedule management control activities.</p> | | |

| ASSESSMENT CATEGORY | FINDING ID | TYPE | ORIGINAL SEVERITY | CURRENT SEVERITY | FINDING | ANALYSIS | RECOMMENDATION ID | RECOMMENDATION | SUPPLEMENTAL RECOMMENDATION | FINDING STATUS | FINDING STATUS UPDATE | CLOSED DATE | CLOSURE REASON |
|---|--------------|----------|-------------------|------------------|---|--|-------------------|--|--|----------------|--|-------------|--|
| Quality Management and Testing | 2021.05.IT01 | Risk | Moderate | Moderate | Segment 2 testing by LifeWorks is not following the UAT Testing Strategy which may impact overall system quality and the effective execution of UAT. | The UAT Testing Strategy for Segment 2 states that the successful completion of the internal LifeWorks segment testing is an entry criteria to maximize the effectiveness of EUTF UAT; however, EUTF started UAT prior to the completion of Lifeworks' system testing. The purpose of segment testing is to ensure that Ariel is working as intended and any identified defects are addressed prior to the solution being delivered. LifeWorks segment testing is over one month behind its target completion date of April 29, 2021, with 54 requirements still pending segment testing. Without completing Segment 2 testing, Segment 2 functionality was not validated leading to the increased risk of design and functionality issues. | 2021.05.IT01.R1 | Lifeworks to align segment testing execution to UAT Testing Strategy. | <ul style="list-style-type: none"> LifeWorks and EUTF should work together to evaluate the risks associated with not following UAT Testing Strategy against the need to adhere to the project timeline. Develop and commit to realistic timelines to address project execution issues considering the availability of LifeWorks and EUTF resources. | Closed | <p>06/23/21: Segment 2 testing by LifeWorks was completed after user acceptance testing (UAT) was in progress. The Segment 3 UAT Testing Strategy was provided which also includes the completion of Internal MS segment testing as an entry criteria to UAT. LifeWorks stated that additional resource and schedule adjustments have been made to get the project back on track by July 23, 2021, in time for Segment 3 training and UAT.</p> <p>07/27/21: After initial delays and challenges, Segment 2 UAT commenced; however, parts of Segment 2 UAT were postponed and merged with Segment 3 UAT. LifeWorks' internal testing was delayed for Segment 3 and was not completed prior to Segment 3 training for EUTF UAT staff. Incomplete and rushed testing by LifeWorks could result in quality issues and more defects identified during UAT.</p> <p>08/27/21: After Segment 2 was postponed, Segment 2 and Segment 3 UAT commenced simultaneously. The UAT is in progress and defects are being actively reported and managed for resolution.</p> | 8/27/2021 | Closed as Segment 2 testing has begun and the number of defects identified is reasonable and the severity level are non-critical. |
| Quality Management and Testing | 2021.01.IT01 | Risk | Moderate | Moderate | Insufficient testing and quality processes may impact the effectiveness of system demonstrations, and client confidence and satisfaction. | Periodic system demonstrations are one method for LifeWorks to share what functionality has been completed during the current interval. The requirements being demonstrated should be completely configured, tested, documented, and reviewed in advance of the system demonstration. If done successfully, system demonstrations not only help verify requirements and design, but also build confidence and customer satisfaction. The following problems were observed with the system demonstrations: <ul style="list-style-type: none"> Interval 1 and 2 functionalities were demonstrated through a combination of slideshows and live system walkthroughs. Based on feedback received from EUTF, Interval 3 functionalities were demonstrated in the live system; however, there were multiple system errors and problems with prepared sample transactions and data. Inability to show completeness of configuration to meet 100% of completed interval requirements. Testing and quality processes did not identify the issues encountered during the system demonstrations. Lack of a formal process to record incidents and problems during the demonstration, identify root causes, and track their resolution. The inability to clearly track issues to resolution in a timely manner may negatively impact client confidence. | 2021.01.IT01.R1 | Evaluate testing and quality processes. | <ul style="list-style-type: none"> Use quality assurances processes to analyze results and issues to identify the root cause, improve tracking of issues to system functionality/requirements, make appropriate corrective actions, and record lessons learned. LifeWorks should review the demonstration results including anomalies encountered and identify follow-up actions. The project team should conduct a project retrospective after each interval demonstration to facilitate practical steps for improvement and promote improved stakeholder buy-in and confidence. | Closed | <p>02/23/21 and 03/23/21: LifeWorks discussed the challenges associated with the system demonstrations at the February and March Steering Committee meetings. A more formalized analysis needs to be conducted to identify the root causes and track the issues to ensure appropriate corrective actions are taken. The risk has been added to the project risk log for tracking and monitoring.</p> <p>04/27/21 and 05/26/21: LifeWorks started to capture follow-up items and issues in a log to facilitate the tracking and resolution of items. Although the project is doing a better job of tracking items to be redemonstrated, the root causes are not being identified to prevent future errors or challenges.</p> <p>06/23/21 and 07/21/21: The project documents lesson learned in a log and tracks demonstration follow-up items in bi-weekly Joint Stand-up meetings. IV&V has seen some improvement in the tracking of issues, defects, and follow-up items; however, due to delayed and rushed LifeWorks segment testing, quality is still a concern. Project retrospectives are not conducted after each interval.</p> <p>08/27/21: LifeWorks continued to provide system demonstrations after each interval. The number of bugs and defects initially encountered during early demonstrations was greatly reduced. When issues were encountered, LifeWorks explained the reasoning which helped promote stakeholder confidence in the system.</p> | 8/27/2021 | Closed because the quality of demonstrations has improved and any resulting follow-up items are addressed during Joint Stand-up meetings in a methodical manner. |
| System Software, Hardware, and Integrations | 2020.11.IT01 | Positive | N/A | N/A | The LifeWorks technology team's flexibility and collaboration demonstrates their commitment to be a trusted partner to EUTF to build a robust solution that fits EUTF requirements. | The LifeWorks technology team: <ul style="list-style-type: none"> Works collaboratively with EUTF to understand the technical requirements, answer questions, and adjust the solution to find the best fit for EUTF Demonstrates a willingness to be transparent and openly share LifeWorks' IT practices, policies, standards, and personnel roles and responsibilities to develop, maintain, secure, operate, and support the system Provides documentation and ongoing clarification of the Ariel BAS solution's infrastructure, security, and disaster recovery architecture Through the involvement of key IT resources, shows commitment to the overall success of the project and being a trusted partner with the State of Hawaii This approach has helped EUTF gain comfort with the LifeWorks-managed Azure environment and how the solution aligns with EUTF's security, availability, system operations, and confidentiality requirements. | N/A | N/A for positive findings. | N/A for positive findings. | Closed | N/A | 12/22/2020 | Closed as this is a positive finding. |
| Project Organization and Management | 2020.08.PM01 | Risk | Low | Low | The COVID-19 pandemic may impact project schedule, resources, and costs. | The COVID-19 pandemic creates uncertainty with rapidly evolving government responses and restrictions and changing circumstances. The following a summary of the related events and facts: <ul style="list-style-type: none"> A second stay-at-home/work-at-home order went into effect August 27, 2020 for Honolulu City and County and will last for at least 14 days. EUTF employees are deemed essential. All key EUTF project employees will have the ability and equipment to work from home in the event of an office closure by the end of September. All project contractors already work remotely effectively. The State is reviewing budgets and positions to make significant changes due to anticipated revenue shortfalls. The State also implemented a hiring freeze and is contemplating furloughs or salary cuts for State workers. EUTF has several open positions that could play essential roles on the project. EUTF's request to fill these positions is pending. The project timeline and go-live dates do not have much room to be extended due to the annual benefit plan enrollment season. Any delays that postpone go-live beyond the enrollment season could impact project costs. | 2020.08.PM01.R1 | Formulate processes for how to respond to COVID-19 impacts to the project. | <ul style="list-style-type: none"> EUTF, project contractors, and subcontractors should timely complete a back-up resources matrix including a list of key project resources, their key primary functions, and potential backup resources in case of their inability to work. Assess COVID-19 direct and indirect impacts to the project and prepare contingency plans for possible scenarios. Ensure all key EUTF project team members have the necessary access, equipment, and technology to work remotely effectively. | Closed | <p>9/25/20: The COVID-19 finding has been partially mitigated by ensuring all key EUTF project team members have computers and access to work remotely and additional headcount approved to support the project and operations. Project tools and practices such as a joint project SharePoint site and regular, recurring meetings also help the teams work effectively together from remote locations. The project contractors agreed to develop back-up resource matrices.</p> <p>10/27/20: EUTF, LifeWorks, Segal, and ICON worked together to identify back-up resources for each key project team member to ensure resource continuity.</p> | 10/27/2020 | Closed as all recommendations were adequately addressed. A COVID-19 risk has been added to the project's risk log so direct and indirect COVID-19 related impacts will be continuously assessed. |

| ASSESSMENT CATEGORY | FINDING ID | TYPE | ORIGINAL SEVERITY | CURRENT SEVERITY | FINDING | ANALYSIS | RECOMMENDATION ID | RECOMMENDATION | SUPPLEMENTAL RECOMMENDATION | FINDING STATUS | FINDING STATUS UPDATE | CLOSED DATE | CLOSURE REASON |
|-------------------------------------|--------------|----------|-------------------|------------------|---|---|-------------------|---|---|----------------|--|-------------|---|
| Project Organization and Management | 2020.07.PM02 | Risk | Moderate | Moderate | Segal's contract contains responsibilities and deliverables beyond oversight of LifeWorks, including OCM, BPR, and quality management. Segal's project deliverables, schedule, and processes have yet to be formally documented and scheduled, which could impact the execution of Segal, ICON, and EUTF responsibilities and activities. | <p>Segal was contracted to provide various project management, OCM, BPR, data conversion, and quality management services for EUTF. Segal is effectively monitoring and reviewing LifeWorks activities and deliverables but does not yet have a schedule for ICON's and their own independent deliverables for this project. Segal established a dashboard and regularly submits reports to EUTF; however, thus far, these reports focus mainly on LifeWorks and do not include sufficient updates regarding Segal and ICON's own activities, progress, and risks. Additionally, Segal's processes in the areas of schedule, resource, cost, and quality management are still being developed and documented.</p> <p>Segal's deliverables include a BPR and OCM plan. Segal prepared a presentation, developed a tracking tool, and held a workshop to explain their BPR and OCM methodology, however, we are not aware of whether a formally documented plan or schedule of BPR and OCM tasks and resources has been prepared and delivered to EUTF for review. Further discussion of purpose and expectations for this deliverable is still needed.</p> <p>ICON is responsible for data cleansing and data conversion activities. The project team identified two risks and one issue and are experiencing some delays related to data conversion. Clarifying ICON deliverables, schedule, processes, and reporting may help to prevent further issues and delays.</p> <p>Possible root causes or contributing factors are an aggressive project pace and competing priorities. Both the Segal Project Manager and the EUTF Project Manager are extremely hard-working and may not have adequate time to participate in on-going Discovery Sessions and perform all of the required project management tasks. EUTF and Segal will need to work together to establish appropriate project management processes and clarify the priority of deliverables and schedules.</p> <p>Although this finding is reported under the Project Organization and Management IV&V Assessment Category, this finding also impacts the criticality ratings for the Cost, Schedule, and Resource Management; OCM; BPR; Data Conversion; and Quality Management and Testing categories.</p> | 2020.07.PM02.R1 | Clarify Segal and ICON deliverables. | <ul style="list-style-type: none"> Clarify purpose, content, and expectations of each of the contracted deliverables. Consider whether contracted deliverables still make sense based on project needs. | Closed | <p>08/25/20: Segal and ICON made good progress on clarifying deliverables and project activities related to their responsibilities. EUTF, Segal, and IV&V started monthly check-in meetings and discussed Segal's "just-in-time" approach to OCM and BPR. The EUTF PM confirmed approval of this approach with preliminary activities occurring before OCM and BPR plans are formalized. ICON clarified their Data Quality Check Point (DQCP) process and preliminary results from defined business rules. Accuity closed recommendation 2020.07.PM02.R1 as IV&V received sufficient clarification of Segal and ICON deliverables.</p> <p>Segal provided a deliverables schedule and ICON provided a work plan tracking the status of tasks. Segal provided a high level deliverable project schedule with duration, status, start and finish dates, and resources. The specific resources and tasks were not identified for key activities such as OCM and BPR; however, Segal noted that they would develop more detailed plans based on resource availability and bandwidth starting in December 2020. Other EUTF tasks are currently tracked in the RTM, Segal's Dashboard, and independently by EUTF project team members. Accuity closed recommendation 2020.07.PM02.R2 as IV&V received sufficient clarification of Segal and ICON's schedules for this stage of the project.</p> <p>More clarity was provided for key processes on OCM, quality, data validation, and migration. Segal delivered a draft Quality Management Plan on 8/25/20 and scheduled a test planning meeting in September. ICON held a meeting to review their DQCP process and provided a high level DQCP Validation Consolidation process summary. Accuity will continue to evaluate the formalization of processes including BPR and quality management.</p> <p>09/25/20: Quality processes and metrics are well-defined and communicated through the draft Quality Management Plan. BPR activities continued through meetings, Fit Gap sessions, and solution demonstrations. Data migration and cleansing processes were more clearly defined through the draft Data Migration Plan, weekly data conversion meetings and DQCP / Validation meetings.</p> | 9/25/2020 | Closed as the Segal and ICON deliverables, activities and schedules have been clarified and approved by EUTF. In addition, key processes were defined and communicated through meetings, plans and metrics. Segal and ICON's status and activities are included in reports to the Joint Steering Committee. |
| | | | | | | | 2020.07.PM02.R2 | Develop a project schedule to manage Segal, ICON, and EUTF tasks. | <ul style="list-style-type: none"> Provide the appropriate detail of tasks, durations, due dates, milestones, and deliverables for various parties. | | | | |
| | | | | | | | 2020.07.PM02.R3 | Develop and clarify Segal, ICON, and EUTF processes. | <ul style="list-style-type: none"> Key processes include resource and schedule management, cost management, BPR, OCM, quality management, data cleansing, and data conversion. Consider including Segal, ICON, and EUTF's status and metrics in existing reports and dashboards. Consider including Segal, ICON, and EUTF status and activities in recurring project management meetings to promote even greater project cohesion. | | | | |
| Project Organization and Management | 2020.07.PM01 | Positive | N/A | N/A | The project team continues to work collaboratively and support a culture of open communication and continuous improvement amongst all parties. | <p>The project team members have:</p> <ul style="list-style-type: none"> Encouraged EUTF SMEs to openly discuss areas of confusion and request for improvements to working sessions. Listened to feedback from project team members and timely implemented improvements to project processes (e.g., including incorporating solution demonstrations and introducing project team members). Openly discussed possible solutions to address areas of concern. Continue to proactively ask for feedback after meetings and working sessions. Openly discussed project risks and issues with all project team members. <p>This approach has helped team members to build a high level of comfort with each other and has contributed to a smoother execution of the planning phase of the project.</p> | N/A | N/A for positive findings. | N/A for positive findings. | Closed | N/A | 8/25/2020 | Closed as this is a positive finding. |



Appendix F: Comment Log on Draft Report

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| Hawaii EUTF BAS Project: IV&V Document Comment Log | | | | |
|---|--------|---|--------------------------|--------------------|
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| ID # | Page # | Comment | Commenter's Organization | Accuity Resolution |
| 1 | | No Hawaii EUTF or ETS Comments. | | |
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