STATE OF RHODE ISLAND
UNIFIED HEALTH INFRASTRUCTURE PROJECT

**UAT SUMMARY REPORT
PHASE 2 CYCLE 3 AND CYCLE 4
SEPTEMBER 2016**

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1. INTRODUCTION

The Rhode Island Unified Health Infrastructure Project (RI UHIP) was implemented in two phases.

Phase 1 consisted of providing an online marketplace named HealthSource RI (HSRI) for individuals, families, and small businesses to compare and enroll in health insurance coverage and gain access to tax credits, reduced cost sharing, and public programs.

Phase 2 consisted of sun-setting InRhodes, the legacy eligibility determination system, and developing an eligibility system known as RIBridges to integrate with HSRI. The integrated eligibility system (HIX/IES) provides one-stop shopping for its consumers by allowing them to streamline their eligibility processes for Medicaid and other human service programs.

Integration of the HSRI and RIBridges required testing and collaboration by multiple agencies, including the Department of Human Services (DHS), Executive Office of Health and Human Services (EOHHS), and HSRI.

1.1   Purpose of the Report

The purpose of this document is to provide the project and executive management team with a summary of the User Acceptance Test (UAT) results for Cycle 3 and Cycle 4. This report provides information related to the progress, issues, and risks encountered during the UAT cycles.

1.2   Scope of the Report

This report includes information on the results of UAT testing activities for Cycle 3 and Cycle 4 for the functionality to be executed in each cycle.

Cycle 3 consisted of functionality to test benefits management, mass benefit replacement for Supplemental Nutrition Assistance Program (SNAP), Disaster SNAP, Abled-bodied Adults Without Dependents (ABAWD), Child Care Assistance Program (CCAP) Portal, Split Issuance, Interfaces, Front Office, Rhode Island Works (RIW), and Quality Control with emphasis having been placed on the functionality needed to enter Pilot.

Cycle 4 consisted of functionality to test Auto Renewal, Application Changes, Worker Portal, Customer Portal, Income Redesign, MAGI OPA, Medicaid Hierarchy, Special Enrollment for first time applicants, Small Business Health Options Program (SHOP), PNIA, and TNIA batches.

1.3   Testing Tools

JAMA Contour is the requirements management tool used to execute, record, and store test cases. It also serves as the requirements traceability management (RTM) software tool to document requirements and associated elements such as defects and bi-directional traceability.

JIRA is the defect management tool where all defects are triaged and managed to closure.

2. INTERNET BROWSERS

Testing throughout Phase 1 was conducted in multiple browsers to ensure functionality worked across the various internet browsers. Testing was conducted in the following browsers:

➢ Internet Explorer 8

➢ Internet Explorer 9

➢ Internet Explorer 10

➢ Internet Explorer 11

➢ Google Chrome

➢ Mozilla Firefox

Testing was not conducted on any mobile devices, nor was testing executed used the Safari browser due to tester inexperience.

Throughout Phase 2, testing was executed primarily in Internet Explorer 11; in some instances when errors were encountered, Google Chrome was used.

3. EXECUTIVE SUMMARY

Cycle 3 – DHS/EOHHS

Cycle 3 consisted solely of DHS performing UAT on human services programs and interfaces required for the entry into Pilot (i.e., Department of Labor and Training, (DLT), Financial Information System (FIS)). Initially, DHS was executing identified scripts on behalf of EOHHS, but due to script quality and lack of experience with the EOHHS programs, script execution could not be performed. Functionality that were program specific, related to MMIS transactions, and Medicaid Hierarchy were moved to Cycle 4, in addition to interfaces that were not identified as priority 1 (P1).

A number of defects that were associated with Cycle 3 test scripts were deferred to Cycle 4 at the request of the State due to the need for the UAT TT (time travel) environment to be available for other higher prioritized testing. These included test scripts and defects associated with functionality related to ABAWD and Split Issuance. Defects that could not be addressed within the timeframe allotted for Cycle 3 were also placed in an interim 'queue' to be addressed and reported separately from Cycle 4. This resulted in 74 defects being removed from Cycle 3, of which 63 have been resolved. However, as of the date of this report, six (6) are pending a possible change request, three (3) remains in a rejected status, (one) 1 remains in development, and one (1) is ready for test.

Cycle 4 – DHS, EOHHS, and HSRI

Cycle 4 was a combined effort on behalf of all three (3) agencies. This cycle of UAT included interacting with various trading partners to send and receive data (e.g. 834 EDI transaction) and to continue testing those interfaces identified as P1. Testing of Notices was performed to verify that the triggers would generate the correct Notice. The State also identified a number of Notices that would be generated in both English and Spanish, these Notices were generated to verify that the correct verbiage as well as translation was captured. In addition, testing also included correct alignment and stuffing within the envelopes. However, due to issues with verbiage and clarifications needed by the State, testing of Notices were moved out of Cycle 4 and addressed separately.

Although limited, testing of converted data was performed by DHS employees only, under the guidance of protecting personally identifiable information (PII). Protocols were put in place to ensure that only designated employees were able to access and test. Numerous issues were encountered that limited the depth of testing that could be performed (e.g. name mismatch).

Cycle 4 exited with a number of defects remaining in some form of 'open' status. Please refer to Section 6 of this report for further details.

4. OVERVIEW

4.1   Description of UAT

Testing for UAT for Cycle 3 and Cycle 4 covered the following:

➢ Functional Testing – Ensured that all business functions performed as defined within the business requirements and design documentation. It comprised the majority of the UAT effort using two levels of business definition: test scenarios and test scripts.

➢ End-to-End Testing – Included testing the end-to-end business flow with real world scenarios that test interactions with various interfaces (i.e. DOH, DLT, SWICA, NFP, FDSH, etc.).

➢ Regression Testing – Included the re-execution of a select set of functional test cases to ensure that additional changes made to the application, after initial functional testing was executed, did not introduce any new issues.

➢ Ad hoc Testing – Helped ensure the thoroughness of all the testing efforts. It was useful in determining the effectiveness of the test cases and required knowledge, skills, and familiarity with the system.

➢ Interface Testing – Performed to evaluate whether systems or components pass data and control correctly to one another, also to verify if all the interactions between the modules are working properly and errors are handled correctly.

4.2   Functionality Not Fully Tested

The below functionality was either not tested or only partially tested.

➢ MPP

➢ ABAWD

➢ Split Issuance

➢ Medicaid Hierarchy

➢ Combo Cases/End to End

➢ GPA

  ✓ Refugee Program and Burial

  ✓ Hardship and Bridge

➢ LTSS

➢ Disaster SNAP

➢ RiteShare

➢ Interfaces

➢ Roles and Security

➢ Conversion

4.3   Archived Test Cases

A total of 1252 test cases were archived out of the Cycle 4 testing plan; the case breakdown by status is as follows:

➢ Not Run – 705

➢ Failed – 329

➢ Blocked – 216

➢ Passed – 2

4.4   Test Case and Defect Reconciliation

Reconciling defects and test cases is imperative in providing an accurate picture of what issues have been resolved. However, the pass/failure rate for Cycle 3 and Cycle 4 are skewed due to the below issues.

➢ Test cases were failed with no defect logged. This raises the question if the issue was ever brought to the attention of the DDI vendor and if a fix was provided.

➢ Failed test cases that have defects that have been retested, fixed, and closed; however, test cases remain in a failed status.

➢ Blocked test cases with fixed defects remain blocked; however, defects have been retested and closed.

➢ Defects were cancelled when they should have been closed and vice versa.

5. TEST CASE EXECUTION RESULTS

This section contains summaries of UAT execution results for Cycle 3 and Cycle 4. For reasons stated in Section 4, these results are only approximations.

- ➢ UAT Execution Results by Test Group
- ➢ UAT Execution Results by Functionality

Table 1 – All Cycle 3 Execution Results by Test Group

Test Group	Total	Passed	Failed	Blocked	In Progress	Not Run	% Passed
Interfaces Test Group	270	63	6	5	10	0	23%
Cycle 3 Test Group	160	144	8	1	1	0	90%
Regression Test Group	93	91	1	1	0	0	98%
EOHHS Test Group	82	19	9	0	8	0	23%
Total	**523**	**298**	**15**	**7**	**11**	**0**	**57%**

Table 2 – DHS Cycle 3 Execution Results by Functionality

DHS Functionality	Total Cases	Passed	Failed	Blocked	In Progress	Not Run	Total Executed
Mass Benefit Replacement	25	24	1	0	0	0	25
Split Issuance	18	14	1	0	3	0	18
Disaster SNAP	12	12	0	0	0	0	12
ABAWD	46	38	6	1	1	0	45
FIS	5	3	1	1	0	0	4
DLT	54	46	3	0	1	0	50
Cycle 3 Total	**160**	**137**	**12**	**2**	**5**	**0**	**154**
SNAP	27	27	0	0	0	0	27
CCAP	10	10	0	0	0	0	10
RIW	47	47	0	0	0	0	47
QC - SNAP	9	7	1	1	0	0	8

DHS Functionality	Total Cases	Passed	Failed	Blocked	In Progress	Not Run	Total Executed
Regression Total	93	91	1	1	0	0	92
Grand Total	**253**	**228**	**13**	**3**	**5**	**0**	**246**

Table 3 – EOHHS Cycle 3 Execution Results by Functionality

EOHHS Functionality	Total Cases	Passed	Failed	Blocked	In Progress	Not Run	Total Executed
Breast & Cervical Cancer	7	1	1	0	0	5	2
Drug Court	18	17	1	0	0	0	18
Early Intervention (EI)	13	0	0	0	0	0	0
Katie Beckett	10	0	2	0	5	0	7
RiteShare	26	0	3	0	2	0	5
QC - MA	5	0	1	0	1	0	2
MPP	3	1	1	0	0	0	2
EOHHS Total	**82**	**19**	**9**	**0**	**8**	**5**	**36**

* Interfaces were originally scheduled for Cycle 3, however, they were moved to Cycle 4

Table 4 – All Cycle 4 Execution Results by Test Group

All Test Group	Total	Passed	Failed	Blocked	In Progress	Not Run	% Passed
DHS Test Group	656	437	90	106	23	0	67%
EOHHS Test Group	248	206	28	14	0	0	83%
HSRI Test Group	1072	837	164	71	0	0	78%
Interfaces Test Group	142	70	30	35	7	0	49%
Grand Total	**2118**	**1550**	**312**	**226**	**30**	**0**	**73%**

Table 5 – DHS Cycle 4 Execution Results by Functionality

DHS Functionality	Total Cases	Passed	Failed	Blocked	In Progress	Not Run	Total Executed
Alien	1	1	0	0	0	0	1
CCAP	98	84	1	12	1	0	86
CCRU	47	47	0	0	0	0	47
Client Portal	14	13	1	0	0	0	14
Combo	36	26	2	8	0	0	28
DCYF CCAP	8	0	0	8	0	0	8
DCYF MA	28	20	5	1	2	0	27
EARR	1	1	0	0	0	0	1
GPA	6	3	0	3	0	0	3
Income Redesign	12	12	0	0	0	0	12
Interim Reporting	41	34	3	2	2	0	41
LIHEAP	13	13	0	0	0	0	13
Notices	54	25	7	15	7	0	39
Office Maintenance	23	11	2	9	1	0	14
QC	15	10	1	2	2	0	13
RCA	9	8	1	0	0	0	9
RIW	85	52	11	22	0	0	63
Roles	71	23	44	2	2	0	69
Redetermination	34	9	6	14	5	0	20
Self Service	20	16	3	1	0	0	19
SNAP	19	19	0	0	0	0	19
Transitional CCAP	21	10	3	7	1	0	14
DHS Total	**656**	**437**	**90**	**106**	**23**	**0**	**560**

Table 6 – EOHHS Cycle 4 Execution Results by Functionality

EOHHS Programs	Total Cases	Passed	Failed	Blocked	In Progress	Not Run	Total Executed
Breast & Cervical Cancer	13	12	1	0	0	5	13
Cat Needy	34	34	0	0	0	0	34
Chaffee	3	3	0	0	0	0	3
E2E	25	23	1	1	0	0	24
EMER	6	3	1	2	0	0	4
HCBS	17	17	0	0	0	0	17
Katie Beckett	12	12	0	0	0	0	12
LTSS	42	42	0	0	0	0	42
MA Hierarchy	33	19	14	0	0	0	33
Med Needy	13	13	0	0	0	0	13
MPP	11	11	0	0	0	0	11
Q1	3	2	0	1	0	0	2
QMB	6	6	0	0	0	0	6
Renewal	4	0	0	4	0	0	0
RiteShare	15	1	9	5	0	0	10
Sherlock	5	2	2	1	0	0	4
SLMB	6	6	0	0	0	0	6
EOHHS Total	**248**	**206**	**28**	**14**	**0**	**5**	**234**

Table 7 – HSRI Cycle 4 Execution Results by Functionality

HSRI Functionality	Total Cases	Passed	Failed	Blocked	In Progress	Not Run	Total Executed
Acct Maint/Dashboard	27	25	2	0	0	0	27
Age Out	53	44	9	0	0	0	53
Aid Cat Codes	27	20	5	2	0	0	25
APTC	80	67	7	6	0	0	74

HSRI Functionality	Total Cases	Passed	Failed	Blocked	In Progress	Not Run	Total Executed
Batch MVB	66	34	14	18	0	0	48
CX Pregnancy	19	9	6	4	0	0	15
Eligibility Changes	129	108	18	3	0	0	126
FPL	4	4	0	0	0	0	4
FTR	15	11	4	0	0	0	15
HOH Renewal	46	41	5	0	0	0	46
Income Redesign	31	30	1	0	0	0	31
Med Term Notice	30	26	4	0	0	0	30
OPA	117	103	10	4	0	0	113
PEV	23	20	3	0	0	0	23
PNIA Batch	6	6	0	0	0	0	6
Renewals	2	0	0	2	0	0	0
Retro Enrollment	15	10	2	3	0	0	12
SEP	107	100	7	0	0	0	107
SHOP	48	31	2	15	0	0	33
SSB	7	7	0	0	0	0	7
TNIA Batch	27	24	2	1	0	0	26
Retest - Aid Codes	5	0	5	0	0	0	5
Retest - CX Pregnancy	1	0	0	1	0	0	0
Retest - Income Redesign	32	29	3	0	0	0	32
Retest - PEV	68	28	28	12	0	0	56
Retest - Retro Enrollment	10	7	3	0	0	0	10
Retest - SEP	77	53	24	0	0	0	77
HSRI Total	**1072**	**837**	**164**	**71**	**0**	**0**	**1001**

Table 8 – Interfaces Cycle 4 Execution Results by Functionality

Interfaces Functionality	Total Cases	Passed	Failed	Blocked	In Progress	Not Run	Total Executed
BOA	5	0	5	0	0	0	5
CSE	39	31	3	1	4	0	38
DCYF INF	37	7	11	19	0	0	18
FIS EBT	4	4	0	0	0	0	4
Santander	13	6	5	0	2	0	13
SSA	33	12	5	15	1	0	18
DiRad	10	10	0	0	0	0	10
Welligent	1	0	1	0	0	0	1
Interfaces Total	**142**	**70**	**30**	**35**	**7**	**0**	**107**

6. DEFECT REPORTING

6.1   UAT Defect Reporting

Defects were reviewed and triaged throughout the testing day, and daily triage calls were conducted. Defects that could not be addressed within the timeframe allocated for Cycle 3 and Cycle 4 UAT were deferred to Extended Regression, Release 7.1, or a future M&O release. The list of defects remaining 'open' is embedded below.

Cycle 'open' defects.xlsx

6.1.1   Cycle 4 Rejected Defects

The high number of rejected defects is evidence of the quality of code fixes coming out of SIT and the lack of sufficient smoke testing prior to being deployed into UAT.

Oftentimes, defects that were previously fixed reoccurred in later testing. In total, 126 defect fixes (approximately 13% of the total fixes) were rejected during Cycle 4.

➢ 69 were rejected once

➢ 45 were rejected 2 times

➢ 6 were rejected 3 times

➢ 5 were rejected 4 times

➢ 1 was rejected 5 times

6.1.2   UAT Deferred Defects

This section contains summaries of deferred defects that were identified at the time of UAT exit.

Table 9 - Deferred Defects by Severity

UAT Cycle	Severity 1- Critical	Severity 2- High	Severity 3- Medium	Severity 4- Low	Total
Cycle 3	0	8	6	1	15*
Cycle 3 into 4	0	0	1	0	1
Cycle 4	0	17	7	1	25
Grand Total	**0**	**25**	**14**	**2**	**41**

*It should be noted that 12 of the 15 defects from Cycle 3 were resolved prior to the exit of Cycle 4.

The comprehensive list of deferred UAT defects is embedded below.

Cycle 3and4 Deferred
Defects.xlsx

6.1.3   Defects by Root Cause

This section contains summaries of closed defects sorted by severity. The table below lists the root causes identified for all closed defects logged and the overall percentage for each.

Table 10 – Cycle 3 Defects by Root Cause

Root Cause	Severity 1 - Critical	Severity 2 - High	Severity 3 - Medium	Severity 4 - Low	Total	Percentage
Coding Incorrect	8	50	17	6	81	51.6%
Functional Specification	0	8	4	3	15	9.6%
Environment Issue	4	7	1	0	12	7.6%
Configuration Issue	4	5	1	0	10	6.4%
Code Inefficient	2	5	1	1	9	5.7%
Not Reproducible	0	4	2	0	6	3.8%
Invalid Defect	1	3	1	0	5	3.0%
None Identified	0	3	1	1	5	3.2%
Requirement Incorrect	1	1	2	0	4	2.5%
Change Request	0	0	3	0	3	1.9%
Coding Not Done	0	2	0	1	3	1.9%
Duplicate	0	0	1	0	1	0.6%
Limitation of Technology or Tools	1	0	0	0	1	0.6%
Requirement Not Defined	0	1	0	0	1	0.6%
User Issue	0	1	0	0	1	0.6%
Total	**21**	**90**	**34**	**12**	**157**	**100%**

➢ Total of 87 defects were deemed invalid or duplicate and were cancelled.

Table 11 – Cycle 4 Defects by Root Cause

Root Cause	Severity 1 - Critical	Severity 2 - High	Severity 3 - Medium	Severity 4 - Low	Total	Percentage
Coding Incorrect	31	375	133	14	553	45.9%
Functional Specification	6	79	13	3	101	8.4%
Invalid Defect	4	70	22	3	99	8.2%
Not Reproducible	5	53	31	2	91	7.5%
Code Inefficient	3	55	22	3	83	6.9%
Configuration Issue	5	39	10	2	56	4.6%
Environment Issue	10	34	7	0	51	4.2%
Test Error	3	25	9	0	37	3.1%
Coding Not Done	1	25	9	1	36	3.0%
User Issue	2	20	3	1	26	2.2%
Data Migration	2	15	2	0	19	1.6%
Duplicate	1	10	1	0	12	1.0%
Query Inefficient	0	9	2	0	11	0.9%
Existing production Issue	0	6	3	0	9	0.7%
Code Merge	0	3	2	0	5	0.4%
Limitation of Technology or Tools	0	2	2	0	4	0.3%
Unable to Determine	0	3	1	0	4	0.3%
Change Request	0	3	0	0	3	0.2%
Technical Design/Data Model	1	2	0	0	3	0.2%
Requirement Not Defined	0	2	0	0	2	0.2%
Requirement Incorrect	0	1	0	0	1	0.1%
Total	**74**	**831**	**272**	**29**	**1206**	**100%**

➤ Total of 245 defects were deemed invalid or duplicate and were cancelled

7. ISSUES ENCOUNTERED

Over the course of UAT, numerous issues were encountered that hindered the productivity. These issues should be mitigated to facilitate process improvements and assist in creating repeatable processes to improve the delivery and overall outcome of releases. The issues are categorized into the following groups:

➢ Test Cases

  ✓ DHS/EOHHS provided poorly written test cases causing testers to fail cases and log defects for the following:

    • Not matching the design of the application
    • Not providing data input

  ✓ Did not provide expected results for testers to be able to validate the outcome.

  ✓ Test scripts did not contain data input, relying on users to enter/make-up data as they executed the test case, therefore, not allowing for test cases to build upon the other.

  ✓ Scripts were written that required steps to have been executed and/or jobs ran prior to the script being executed. Prerequisite cases and jobs were not established or executed.

  ✓ Testers were deviating from test script in order to pass test case.

  ✓ Scripts were not written to a level where anyone could execute them; thus requiring specific resources/SMEs.

➢ Reports and Notices

  ✓ HP Extreme licensing issue caused intermittent issues in viewing Notices in all environments.

  ✓ Problems identified with EBT cards caused the original exit of Cycle 3 to be delayed.

  ✓ Notices were not generated correctly.

  ✓ Notices were not present in either Portal.

➢ System Availability/Issues

  ✓ The server was down several times during testing due to bandwidth, account log out, etc.

  ✓ HSRI UAT TT environment calendar date was moved despite the request to keep the environment date the same.

  ✓ VPN issues impacted users' access to the system.

  ✓ DHS user roles continuously deactivated.

  ✓ Inflation factor tables were not set up correctly in the UAT environments causing SHOP segments to fail.

  ✓ Test cases were lost and had to be recovered.

  ✓ CCAP provider portal system dates were not in sync with the TT requests.

  ✓ Hotel bandwidth caused issues with the VPN.

  ✓ MVB Batch ran all day preventing time travel.

- ✓ System slowness and page load time.

- ✓ Data sync issues identified in week 1 continued to reoccur throughout UAT.

- ✓ Sync issues experienced between JAMA and JIRA.

➤ Roles/Permissions

- ✓ Inconsistencies were found between the permissions matrix and the actual access for some of the roles.

- ✓ User role access was changing day-to-day.

➤ Staffing/Productivity

- ✓ Inconsistent staff from day to day.

- ✓ Staff not familiar with the functionality.

- ✓ Lack of SME and leadership support from the business units to assist testers.

8. UAT RESULTS MAPPED TO EXIT CRITERIA

The following table identifies the final status of the UAT exit criteria.

Table 12 – Cycle 3 Results Mapped To Exit Criteria

#	Item/Objective	Status (Met or Not Met)	Comments	Criteria Met (Yes or No)
1	Test cases have been executed and passed (or deferred to a future release, if approved by State).	Met	There are 19 cases that are deferred for functionality that will be available in Cycle 4.	Yes
2	Severity 1-Critical or Priority 1-Critical work requests have been resolved and tested.	Met	There are no open Severity 1-Critical or Priority 1-Critical defects.	Yes
3	Mutually-agreed Severity 2-High or Priority 2-High work requests which were not resolved during testing have been reviewed and deferred by the State (i.e., the State has agreed that it is acceptable to deploy with these work requests outstanding). In cases where the State does not agree to defer, these Severity 2-High or Priority 2-High work requests will be resolved prior to release. The State and Deloitte will collaborate to identify potential quality or schedule risks and implement appropriate mitigation strategies if necessary.	Met	All Severity 2-High or Priority 2-High work requests are resolved or have been deferred to Cycle 4 testing. There are 8 Severity 2-High defects deferred.	Yes
4	The State has validated and signed off on UHIP functionality delivered during this release.	Met	There was no formal sign off; however, verbal agreement was obtained during the UAT Exit meeting.	Yes

Table 13 – Cycle 4 Results Mapped To Exit Criteria

#	Item/Objective	Status (Met or Not Met)	Comments	Criteria Met (Yes or No)
1	Test cases have been executed and passed (or deferred to a future release, if approved by State).	Met	All test cases were executed (312 cases failed; 226 blocked).	Yes
2	Severity 1-Critical or Priority 1-Critical work requests have been resolved and tested.	Met	2 critical defects remained (1 on hold and 1 deferred).	Yes
3	Mutually-agreed Severity 2-High or Priority 2-High work requests which were not resolved during testing have been reviewed and deferred by the State (i.e., the State has agreed that it is acceptable to deploy with these work requests outstanding). In cases where the State does not agree to defer, these Severity 2-High or Priority 2-High work requests will be resolved prior to release. The State and Deloitte will collaborate to identify potential quality or schedule risks and implement appropriate mitigation strategies if necessary.	Met	Deloitte has provided interim workarounds for deferred defects. It is the State's expectation to not go-live with any high or critical defects.	Yes
4	The State has validated and signed off on UHIP functionality delivered during this release.	Met	There was no formal sign off; however, verbal agreement to was obtained during the UAT Exit meeting.	Yes

9. RECOMMENDATIONS

In order to improve the results of future UAT efforts, CSG makes the recommendations below.

9.1 Test Scenario Development

The State should be an active partner in developing and documenting real-life scenarios that will enable the creation of test cases that fully support end-to-end testing of the functionality. This input is vital to successful test case execution and provides assurance from the business and technical side of test coverage.

9.2 Test Case Review

Deloitte should be required to implement policies and procedures for writing effective test cases to the extent that anyone is able to determine exactly what was executed within SIT. The State should require both Deloitte and KPMG to review and develop test scenarios and cases with the State in advance of SIT and UAT.

The State should require Deloitte to develop and implement risk mitigation strategies to improve the quality of SIT and provide thorough regression testing as well as automated regression. In addition, the State needs to be more involved in the UAT test case creation process. This will ensure UAT efforts are comprehensive and meet the State's expectations.

9.3 Triage Meeting

In addition to the daily triage calls, conduct a weekly deep dive meeting to ensure that all the stakeholders are on the same page with a complete understanding and full agreement of the defect descriptions, defect statuses, and defect resolutions.

9.4 Best Practices

CSG recommends the following best practices to ensure the success of UAT efforts.

- Require SIT to exit before entering UAT (UAT and SIT should not run simultaneously).
- Adhere to SIT entrance and exit checklists.
- Joint review of SIT exit criteria and UAT entrance criteria.
- The SIT exit process is always followed to ensure decisions are visible and understood.
- Thoroughly discuss UAT timelines and plans early in the release scheduling process.
- Clearly define the scope of the functionality to be tested within UAT.
- Test end-to-end business flows and avoid fragmented system integration tests.
- Test the system with real world scenarios and data.
- Think as an unknown user to the system.
- Perform usability and Section 508 Compliance (Accessibility) testing.
- Thoroughly discuss and review the total impact of moving a release into Production.

➢ Known issues identified as 'existing production behavior' should be provided to the State and UAT Team prior to the start of UAT.

9.5 Defect Resolution

CSG recommends the following to ensure all defects are properly addressed after UAT ends.

➢ Develop a plan of action to ensure all medium and low defects are properly addressed.

➢ An impact analysis should be conducted prior to any agreement to defer a defect.

➢ Develop a written and agreed upon plan to document how and when all deferred defects will be addressed.

➢ Ensure that all defects identified as change request(s) are properly documented with a UHIP ID within JIRA.