REAL WORLD TESTING RESULTS REPORT 2023

REPORT OVERVIEW

Under the ONC Health IT Certification Program (Certification Program), health IT developers are required to conduct Real World Testing of their certified health IT (45 CFR 170.405). Health IT developers must submit results annually to address the Real World Testing of eligible products as outlined in their previous year's Real World Testing plan(s). If adjustments to approaches are made throughout Real World Testing, the health IT developer should reflect these adjustments in their Real World Testing results report. ONC expects that the results report will include a list of these changes, the reasons for them, and how intended outcomes were more efficiently met as a result.

CPSI is proud to offer a product which is certified under the Office of the National Coordinator for Health Information Technology certification program. This document summarizes CPSI's real world testing results for the Centriq EHR product for the 2023 calendar year, which measure the real world usage of certified capabilities focused on interoperability and health information exchange. As stated by ONC, "the objective of real-world testing is to verify the extent to which certified health IT deployed in operational production settings is demonstrating continued compliance to certification criteria and functioning with the intended use cases as part of the overall maintenance of a health IT's certification." With this goal in mind, we have designed our real world testing plan and its metrics to provide measurable evidence of our product's interoperability and conformance to previously certified criteria, in alignment with the stated intent of the Real World Testing Condition and Maintenance of Certification.

GENERAL INFORMATION

Plan Report ID Number: [For ONC-Authorized Certification Body use only]

Developer Name: CPSI (Computer Programs and Systems), Inc.

Product Name(s): Centriq EHR

Version Number(s): 15

Certified Health IT Product List (CHPL) ID(s): 15.04.04.3104.Cent.EH.02.1.220817

Developer Real World Testing Page URL: https://www.cpsi.com/resources/real-world-testing

CHANGES TO ORIGINAL PLAN

Summary of Change (Summarize each element that changed between the plan and actual execution of Real World Testing)	**Reason** (Describe the reason this change occurred)	**Impact** (Describe what impact this change had on the execution of your Real World Testing activities)
Metrics were collected for criterion 170.315 (f)(3), which were not included in the test plan.	There was some utilization of this certified capability by our client base, so metrics were collected to reflect that.	
Three metrics were collected for criterion 170.315 (f)(5) instead of a single metric.	There was some adoption of the bi-directional eCR within the client base, as mandated by the IPPS rule, which allowed for additional data to be collected.	

SUMMARY OF TESTING METHODS AND KEY FINDINGS

This report's testing methods focused on capturing and documenting the number of instances that certified capability is successfully utilized in the real world, where results were derived from a 3-fold approach to testing: adoption rate, summative testing, and interactive testing. Adoption rates were used to determine if/when certified capability is being used in the real world and to help identify differences in care settings. Summative assessments were used to measure which certified actions were performed within a given time period. Summative data was gathered by running reports and examining audit logs from within the certified health IT module to help demonstrate the frequency of actions within the given time frame, and where possible, whether those actions were successful or unsuccessful. Most metrics were gathered over a time interval of 90 days, to ensure sufficient time to gauge and measure interoperability, but this time frame also reflects the reporting periods typically required for compliance with federal incentive programs. We chose the methodology of tracking actual production data in order to reflect the real world use of certified capabilities in the provision of healthcare, in alignment with the Office of the National Coordinator for Health IT's (ONC) intent and purpose of Real World Testing. Please note, production activity data was aggregated across the customer base and there is no usage of protected health information (PHI) as defined under HIPAA during the collection or analysis of the real world test data and results. Interactive testing was used to demonstrate conformance to requirements where the adoption rate of a given certified capability is zero.

This report's findings demonstrate ongoing conformity to certified criteria by providing quantified evidence of the active utilization of certified capabilities across all care settings for which the certified Health IT module is marketed. It is important to note that most care settings have the certified criteria deployed in them, but not all criteria are used with the same frequency in all settings. The outcomes in this report confirm that certified capabilities are deployed effectively in live settings for clinicians to use at their discretion in the delivery of healthcare. All recorded summative metrics provide verification that the certified capabilities have been implemented successfully by our client base, and that the certified Health IT module is being actively utilized in real world production environments in the exchange of data and provision of healthcare as intended. These measurements reflect the interoperability and overall success of required certified capabilities in the real world, in alignment with ONC's stated intent and purpose of Real World Testing.

When production data was not available due to low or zero adoption, interactive testing was leveraged to evaluate the certified Health IT's compliance to the criteria requirements and to provide confirmation that interoperability features are functioning as previously certified. Visual inspection was used to confirm the certified capabilities are functioning as intended, confirming these interoperability features are available and can be deployed and utilized in production if clients elect to use them.

As expected, utilization rates differed for distinct criteria and care settings, but testing results established that certified capabilities are readily available and effective. All results in this report have been compared to Real World Test results from the previous year, in order to evaluate whether certified capabilities are being used effectively from year to year. Consistent utilization over time indicates that certified Health IT is deployed successfully and is continuing to function as intended and previously certified.

STANDARDS UPDATES (INCLUDING STANDARDS VERSION ADVANCEMENT PROCESS-SVAP AND USCDI)

Centriq EHR has been updated to USCDI v1 specifications to conform to Cures Update criteria which utilize USCDI. Centriq EHR has not been updated to any voluntary standards as part of the Standards Version Advancement Process (SVAP).

CARE SETTINGS

The following care settings were tested:

- Critical Access Hospitals
- Prospective Payment System Hospitals

METRICS AND OUTCOMES

For each measurement/metric, the following elements will be described below:

- ✓ Description of the measurement/metric or interactive test plan
- ✓ Associated certification criteria
- ✓ Relied Upon Software (if applicable)
- ✓ Outcomes
- ✓ Challenges Encountered (if applicable)

SUMMATIVE ASSESSMENT RESULTS

TRANSITIONS OF CARE

- Associated Criterion – 170.315(b)(1)
- Measurements/Metrics – Over a 90-day period:
    1) Number of CCDAs created
    2) Number of CCDAs sent via edge protocols
    3) Number of CCDAs received via edge protocols
- Relied Upon Software: Updox
- Outcomes

  Critical Access Hospitals (CAH):
  1) Number of CCDAs created: 231
  2) Number of CCDAs sent via edge protocols: 119
  3) Number of CCDAs received via edge protocols: 5

  Prospective Payment System (PPS) Hospitals:
  1) Number of CCDAs created: 903
  2) Number of CCDAs sent via edge protocols: 517
  3) Number of CCDAs received via edge protocols: 109

This criterion requires the ability of a certified Health IT module to create CCDAs according to specified standards and vocabulary code sets, as well as send and receive CCDAs via edge protocols. Results show success in every care setting by providing a numeric value indicating how frequently CCDAs are created, sent, and received, thus demonstrating successful interoperability in a real world setting. Although usage varied from different settings, successful exchange of data across all care settings confirms the certified capabilities are available, effective, and being actively utilized.

The differences in volume and utilization rates between care settings likely reflect different usage of their EHR systems to suit their unique needs and workflows. Overall, the results showed low utilization and high success rate, which met our expectation. The observed decline in volume across all care settings is due to a decrease in the number of facilities utilizing Centriq EHR. CPSI continues to transition clients away from this product and therefore volume is expected to decline.

CLINICAL INFORMATION RECONCILIATION AND INCORPORATION

- Associated Criterion – 170.315(b)(2)
- Measurement/Metrics - Over a 90-day period:
  1) Number of times a user reconciled medication list data from a received CCDA
  2) Number of times a user reconciled allergies and intolerance list data from a received CCDA
  3) Number of times a user reconciled problem list data from a received CCDA
- Outcomes
  Critical Access Hospitals (CAH):
  1) Number of times a user reconciled medication list data from a received CCDA: 10
  2) Number of times a user reconciled allergies and intolerance list data from a received CCDA: 10
  3) Number of times a user reconciled problem list data from a received CCDA: 10

  Prospective Payment System (PPS) Hospitals:
  1) Number of times a user reconciled medication list data from a received CCDA: 107
  2) Number of times a user reconciled allergies and intolerance list data from a received CCDA: 107
  3) Number of times a user reconciled problem list data from a received CCDA: 103

This criterion requires the ability of a certified Health IT module to take a CCDA received via an outside system and match it to the correct patient; reconcile the medication, allergy, and problem lists; and then incorporate the lists into the patient record. Results show success in every care setting by providing a numeric value indicating how frequently received CCDAs are reconciled and incorporated into the patient record, thus demonstrating successful interoperability in a real-world setting. Although usage of this interoperability feature varied from different settings, this does indicate successful exchange of data across all care settings, providing assurance of the certified Health IT's interoperability in production, which confirms the certified capabilities are available, effective, and being actively utilized.

The differences in volume and utilization rates between care settings likely reflect different usage of their EHR systems to suit their unique needs and workflows. Overall, the results showed low utilization and high success rate, which met our expectation. The observed

decline in volume across all care settings is due to a decrease in the number of facilities utilizing Centriq EHR. CPSI continues to transition clients away from this product and therefore volume is expected to decline.

ELECTRONIC PRESCRIBING

- Associated Criterion – 170.315(b)(3)
- Measurement/Metrics - Over a 90-day period:
  1) Number of prescriptions created
  2) Number of prescriptions changed
  3) Number of prescriptions canceled
  4) Number of prescriptions renewed
- Relied Upon Software: DrFirst EPCS
- Outcomes

  Critical Access Hospitals (CAH):

  1) Number of prescriptions created: 8,121
  2) Number of prescriptions changed: 9,247
  3) Number prescriptions canceled: 144
  4) Number of prescriptions renewed: 5,816

  Prospective Payment System Hospitals (PPS):

  1) Number of prescriptions created: 58,494
  2) Number of prescriptions changed: 61,676
  3) Number prescriptions canceled: 1,565
  4) Number of prescriptions renewed: 34,710

This criterion requires the ability of a certified Health IT module to perform prescription-related electronic transactions (eRx) using required standards. Results show success in every care setting by providing a numeric value indicating how frequently electronic prescriptions are created, changed, canceled, or renewed. The volume of transactions provides confirmation of the certified Health IT's conformance to the 170.315(b)(3) criterion, and demonstrates that certified capabilities are working as expected in all care settings in the provision of care for patients in the real world.

The differences in volume and utilization rates between care settings likely reflect different usage of their EHR systems to suit their unique needs and workflows. Overall, the results showed moderate utilization and high success rate, which met our expectation. The observed decline in volume across all care settings is due to a decrease in the number of facilities utilizing Centriq EHR. CPSI continues to transition clients away from this product and therefore volume is expected to decline.

DATA EXPORT

- Associated Criterion – 170.315(b)(6)
- Measurement/Metric - Over a 90-day period:
  1) Number of times a data export was performed, whether for a single patient, multiple patients, or for all patients
- Outcomes
  Critical Access Hospitals (CAH):
  1) Number of times a data export was performed, whether for a single patient, multiple patients, or for all patients: 0

  Prospective Payment System Hospitals (PPS):
  1) Number of times a data export was performed, whether for a single patient, multiple patients, or for all patients: 0

This criterion requires the ability of a certified Health IT module to export a summary of a patient's record in CCDA format according to specified standards and vocabulary code sets. Results show success in every care setting by providing a numeric value indicating the frequency that data exports are being performed. Regardless of how frequently this interoperability feature is being used, the results demonstrate compliance to the underlying ONC criteria by showing the certified health IT module can create and export conformant records, which can be used in means of health IT interoperability as needed.

The lack of usage during the testing period is likely a reflection of the limited number of facilities using the certified Health IT module, and may also indicate that utilization of the certified capability is simply not needed on a frequent basis. The observed decline in volume across all care settings is due to a decrease in the number of facilities utilizing Centriq EHR. CPSI continues to transition clients away from this product and therefore volume is expected to remain at zero.

TRANSMISSION TO IMMUNIZATION REGISTRIES

- Associated Criterion – 170.315(f)(1)
- Measurement/Metric - Over 3 separate unique 10-day periods within a 90-day window:
    1) Number of immunization records submitted to the immunization record
- Outcomes
    1) Number of immunization records submitted to the immunization record
        - Small Facilities: 2,291
        - Medium Facilities: 2,658
        - Large Facilities: 16,587

This criterion requires the ability of a certified Health IT module to transmit immunization data to a registry using a specified format. Results show success in every care setting by providing a numeric value indicating how frequently immunization messages are successfully sent from the EHR Module to an immunization registry. These measurements indicate compliance to the underlying ONC criteria by showing the certified health IT module can create and send standards-conformant immunization messages, confirming successful interoperability of patient immunization data to an immunization registry.

The contrasts in volume are likely to reflect the varying facility sizes which utilize the certified capabilities. Lower volume in smaller facilities and higher volume in larger facilities is generally expected, although variability in seasons (i.e., cold, flu, pandemic, etc.) and facility initiatives such as health fairs can all affect the volume of messages transmitted to public health agencies. Therefore, it is understood that there will be fluctuations in the transmission rates regardless of facility size.

Overall, the results showed low utilization and high success rate, which met our expectation. The observed decline in volume across all care settings is due to a decrease in the number of facilities utilizing Centriq EHR. CPSI continues to transition clients away from this product and therefore volume is expected to decline.

TRANSMISSION TO PUBLIC HEALTH AGENCIES – SYNDROMIC SURVEILLANCE

- Associated Criterion – 170.315(f)(2)
- Measurement/Metric - Over 3 separate unique 10-day periods within a 90-day window:
    1) Number of syndromic surveillance events created and submitted
- Outcomes
    1) Number of syndromic surveillance events created and submitted
        - Small Facilities: 7,939
        - Medium Facilities: 1,192
        - Large Facilities: 24,575

This criterion requires the ability of a certified Health IT module to transmit syndrome-based public health surveillance data to a registry using a specified format. Results show success in every care setting by providing a numeric value indicating how frequently syndromic surveillance events are created and submitted from the EHR Module to a public health registry. These measurements indicate compliance to the underlying ONC criteria by showing the certified health IT module can create and send standards-conformant syndromic surveillance messages, confirming successful interoperability with a public health registry.

The contrasts in volume are likely to reflect the varying facility sizes which utilize the certified capabilities. Lower volume in smaller facilities and higher volume in larger facilities is generally expected, although variability in seasons (i.e., cold, flu, pandemic, etc.) and facility initiatives such as health fairs can all affect the volume of messages transmitted to public health agencies. Therefore, it is understood that there will be fluctuations in the transmission rates regardless of facility size.

Overall, the results showed low utilization and high success rate, which met our expectation. The observed decline in volume across all care settings is due to a decrease in the number of facilities utilizing Centriq EHR. CPSI continues to transition clients away from this product and therefore volume is expected to decline.

TRANSMISSION TO PUBLIC HEALTH AGENCIES – REPORTABLE LABORATORY TESTS AND VALUE/RESULTS

- Associated Criterion – 170.315(f)(3)
- Measurement/Metric - Over 3 separate unique 10-day periods within a 90-day window:
- Number of reportable laboratory results created and submitted
- Outcomes
    1) Number of reportable laboratory results created and submitted
        - Small Facilities: 46
        - Medium Facilities: 32
        - Large Facilities: 11,381

This criterion requires the ability of a certified Health IT module to transmit reportable laboratory tests and values/results to a registry using a specified format. Results show success in every care setting by providing a numeric value indicating how frequently reportable laboratory results are created and submitted from the EHR Module to a public health registry. These measurements indicate compliance to the underlying ONC criteria by showing the certified health IT module can create and send standards-conformant reportable laboratory results messages, confirming successful interoperability with a public health registry.

The contrasts in volume are likely to reflect the varying facility sizes which utilize the certified capabilities. Lower volume in smaller facilities and higher volume in larger facilities is generally expected, although variability in seasons (i.e., cold, flu, pandemic, etc.) and facility initiatives such as health fairs can all affect the volume of messages transmitted to public health agencies. Therefore, it is understood that there will be fluctuations in the transmission rates regardless of facility size.

Overall, the results showed low utilization and high success rate, which met our expectation. The observed decline in volume across all care settings is due to a decrease in the number of facilities utilizing Centriq EHR. CPSI continues to transition clients away from this product and therefore volume is expected to decline.

TRANSMISSION TO PUBLIC HEALTH AGENCIES – ELECTRONIC CASE REPORTING

- Associated criterion – 170.315(f)(5)
- Measurement/Metric – Over a 90-day period:
  - Number of patients reviewed by eCR
  - Number of reports generated and sent to the CDC (AIMS)
  - Number of response reports received from the CDC
- Outcomes
  - Number of patients reviewed by eCR: 6,121
  - Number of reports generated and sent to the CDC (AIMS): 973
  - Number of response reports received from the CDC: 153

This criterion requires the ability of a certified Health IT module to identify which encounters may be reportable and then generate an electronic case report for transmission to a registry using a specified format. Results show success by providing a numeric value indicating how frequently patients are reviewed by eCR and how frequently response reports are received back to the EHR, demonstrating successful transmissions from production environments to public health agencies. These measurements indicate compliance by showing the certified health IT module can create and send standards-conformant electronic case reporting messages, confirming successful interoperability with a public health registry.

Due to the limited adoption in the client base, the totals have not been broken down into facility size groups like the other public health criteria, but we present a simple sum of all participating facilities' data. At the time of data collection, only one facility was utilizing the certified capabilities, which does not allow for comparisons to be made for contrasting volumes in different care settings or facility sizes.

Overall, the results aligned with our expectation of low utilization and high success rate. These numeric results will be used to establish a historical baseline for usage, which will be compared to real world testing results in subsequent years. CPSI continues to transition clients away from this product and therefore it is unknown whether to expect increased or decreased volume in the next calendar year.

TRANSMISSION TO CANCER REGISTRIES

- Associated criterion – 170.315(f)(4)
- Interactive Test Plan - CPSI will create 3 different Oncology patients and their representative data in their production system. These test patients will include a test patient with a cancer diagnosis with no treatment, as well as 2 patients with a cancer diagnosis with different prescribed treatments.
  CPSI will walk through the Centriq EHR system, mimicking the intended workflow of an Oncology clinician and use the manual generation feature to generate 3 Cancer CDA documents, then use visual inspection to confirm the documents include the expected content for each patient and uses SNOMED and LOINC value sets per the required standard.
- Outcome – As expected, the Cancer CDA documents were generated for each patient, and visual inspection confirmed the documents contained the expected data and code value sets.

This criterion requires the ability of a certified Health IT module to transmit cancer case information to a registry using a specified format. Results in interactive testing show success by utilizing visual inspection to generate 3 Cancer CDA documents including the correct value sets. These measurements indicate compliance to the underlying ONC criteria by showing the certified health IT module can create and send standards-conformant cancer registry data records if needed to a public health registry, confirming this interoperability feature is available for deployment in a production environment, and ready to be configured and deployed to a customer system, should any users elect to begin using it.

TRANSMISSION TO PUBLIC HEALTH AGENCIES – HEALTH CARE SURVEYS

- Associated criterion – 170.315(f)(7)
- Interactive Test Plan - CPSI will create 3 test patients, representing 2 Outpatient settings and 1 Urgent Care provider, and their representative data in the production system. CPSI will create health care survey documents and manually download the Health care Survey documents. CPSI will use the NIST healthcare surveys Release 1.2 validator found here: https://cda-validation.nist.gov/cda-validation/muNHCS12.html to confirm that the documents conform to expected standards.
- Outcome – Three health care Survey documents were created, representing 3 different patients. The document files successfully passed the validator, which met the expected outcome.

This criterion requires the certified Health IT module to create health care survey data for electronic transmission to a public health agency which conform to CDA specifications. Our interactive test demonstrates real world interoperability by verifying the certified Health IT's ability to create a Health Care survey document in accordance with the criterion, and confirms the certified capability is available for deployment in a client production environment and ready to be configured if any clients elect to begin using this feature for public health reporting.

KEY MILESTONES

Key Milestone	Care Setting	Date/Timeframe
Scheduling and logistics	• Critical Access Hospitals • Prospective Payment System Hospitals	90-days
Data collection	• Critical Access Hospitals • Prospective Payment System Hospitals	90-days
Review and collate data	• Critical Access Hospitals • Prospective Payment System Hospitals	90-days
Writing report	• Critical Access Hospitals • Prospective Payment System Hospitals	90-days

ATTESTATION

This Real World Testing Results report is complete with all required elements, including measures that address all certification criteria and care settings. All information in this report is up to date and fully addresses the Health IT Developer's Real World Testing requirements.

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