CY 2024 Real World Testing Plan for Pulse EHR

Executive Summary

This is the real world test plan for CY 2024 for our Pulse certified EHR solution. As with last year's plan, it provides the real world test measurements and metrics that meet the intent and objectives of ONC's Condition of Certification and Maintenance of Certification requirement for real world testing (§ 170.405 Real world testing). We believe these test methods will be appropriate and value in accessing certification criteria and interoperability of exchanging electronic health information (EHI) within the care and practice setting of customers.

We have included our timeline and milestones for completing the real world testing in CY 2024, and information about compliance with the USCDI v1 and SVAP updates.

A table of contents is provided later in the plan quick access to any document section, including the testing measurements and metrics found at the end of this document. Our signed attestation of compliance with the real world testing requirements is on the following page.

Developer Attestation

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

Authorized Representative Name: James Costa

Authorized Representative Signature:

October 20, 2023

General Information

Plan Report ID Number: Pulse-RWT-2024

Developer Name: Pulse Systems, Inc

Product Name(s): Pulse EHR

Version Numbers(s): 8.0

Certified Health IT Criteria: 315(b)(1)-(3), (b)(6), (c)(1), (f)(1), (f)(3), (g)(7), (9), (10), (h)(1)

Product List (CHPL) ID(s) and Link(s):

- 15.04.04.2837.Puls.08.01.1.221229
- https://chpl.healthit.gov/#/listing/11180

Developer Real World Testing Page URL: https://harrisambulatory.com/pulse-real-world-testing/

Timeline and Milestones for Real World Testing CY 2024

- 1Q-2024: Health IT system is fully enabled for use in real world testing.
- 3Q-2024. Begin making plans to collect data for RWT measures. If necessary, engage clients to ask for their support and participation in real world testing.
- 4Q-2024. During the last quarter of the year, the CY 2024 real world test plan will be completed according to ONC and ONC-ACB requirements and expectations. Test plan will be prepared for submission.

Standards Updates (SVAP and USCDI)

Currently, we are using all required 2015 Edition Cures Update standards. The RWT measures listed in this plan are based on those standards, and any SVAP updates are explicitly noted below. We are awaiting the updated requirements in the HTI-1 rule which has not yet been released. Based on the standards stipulated by this future ruling, we will update our standards and implementation guide as needed, and these changes may be captured in our CY 2024 RWT test results.

No SVAP update planned at this time.

Standard (and version)	N/A
Updated certification criteria and associated product	None
Health IT Module CHPL ID	TBD
Method used for standard update	N/A
Date of ONC-ACB notification	N/A
Date of customer notification (SVAP only)	N/A
Conformance measure	None
USCDI-updated certification criteria (and USCDI version)	N/A

Real World Testing Measurements

The measurements for our real world testing plan are described below. Each measurement contains:

- Associated ONC criteria
- Testing Methodology used
- Description of the measurement/metric
- Justification for the measurement/metric
- Expected outcomes in testing for the measurement/metric
- Number of client sites to use in testing (if applicable)
- Care settings which are targeted with the measurement/metric

In each measurement evaluate, we elaborate specifically on our justification for choosing this measure and the expected outcomes. All measurements were chosen to best evaluate compliance with the certification criteria and interoperability of exchanging electronic health information (EHI) within the certified EHR.

Testing Methodologies

For each measurement, a testing methodology is used. For our test plan, we use the following methodologies.

Reporting/Logging: This methodology uses the logging or reporting capabilities of the EHR to examine functionality performed in the system. A typical example of this is the measure reporting done for the automate measure calculation required in 315(g)(2), but it can also be aspects of the audit log or customized reports from the EHR. This methodology often provides historical measurement reports which can be accessed at different times of the year and evaluate interoperability of EHR functionality, and it can serve as a benchmark for evaluating real world testing over multiple time intervals.

Compliance and/or Tool: This methodology uses inspection to evaluate if EHR is compliant to the ONC criteria requirements. It can be done through 1-v-1 inspection testing or utilize various tools to measure or evaluate compliance and interoperability. If an EHR Module capabilities is not widely used in production by current users, compliance inspection can provide assurance criteria is working as previously certified.

Survey/User Reported: This methodology evaluates interoperability and compliance of EHR Module capabilities through feedback from users. ONC has recognized that self-testing can be a viable method for evaluation and compliance, and this methodology can provide insight into how clinicians employ and use a feature which reveals actual value and impact of interoperability of the EHR Module.

Care and Practice Settings Targeted

Our EHR is primarily targeted to general ambulatory practices with focuses on the family practice, internal medicine, and pediatrics specialties. Our measures were designed for these setting in mind. In each measure, we do also address the care settings targeted and note any necessary adjustment or specific factor to consider with this specific measure. For criteria that are not widely used by our customer base, we may test the respective measure in our own production-sandbox environment given lack of customer experience with the criteria functionality.

RWT Measure #1. Number of Transition of Care C-CDAs Successfully Sent

Associated Criteria: 315(b)(1), 315(h)(1)

Testing Methodology: Reporting/Logging

Measurement Description

This measure is tracking and counting how many C-CDAs are created and successfully sent from the EHR Module to a 3rd party via Direct messaging during a transition of care event over the course of a given interval.

We will capture this measure for a minimum of three (3) months.

Measurement Justification

This measure will provide a numeric value to indicate both the how often this interoperability feature is being used as well as its compliance to the requirement. An increment to this measure indicates that the EHR can create a C-CDA patient summary record, including ability to record all clinical data elements, and by sending the C-CDA patient summary record, the EHR demonstrates successful interoperability of an exchanged patient record with a 3rd party. This measurement shows support for Direct Edge protocol in connecting to a HISP for successful transmission.

Measurement Expected Outcome

The measurement will produce numeric results over a given interval. We will utilize various reports and audit logs, including Automated Measure (315.g.2) reports, to determine our measure count.

A successful measure increment indicates compliance to the underlying ONC criteria. It will show that the EHR can create the C-CDA patient summary record, including record required clinical data elements. In sending the C-CDA patient summary record, the EHR will demonstrate ability to confirm successful interoperability of an exchanged patient record with a 3rd party, including support for Direct Edge protocol in connecting to a HISP. Successfully completing this measure also implies users have a general understanding of the EHR functional operations for this EHR Module and an overall support for the user experience while not completing this measure may indicate lack of understanding or possibly lack of use or need for this functionality.

We will use the measure count to establish a historic baseline of expected interoperability use so it can be used in subsequent real world testing efforts.

Care Settings

We designed this measure to test the family practice, internal medicine, and pediatrics specialties that we support and target.

RWT Measure #2. Number of C-CDAs Received and/or Incorporated

Associated Criteria: 315(b)(2)

Testing Methodology: Reporting/Logging

Measurement Description

This measure is tracking and counting how many C-CDAs are successfully received and/or incorporated upon receipt from a 3rd party via Direct messaging during a transition of care event over the course of a given interval.

We will capture this measure for a minimum of three (3) months.

Measurement Justification

This measure will provide a numeric value to indicate both the how often this interoperability feature is being used as well as its compliance to the requirement. An increment to this measure indicates that the EHR can receive a C-CDA patient summary record, and by incorporating the C-CDA patient summary record, the EHR demonstrates successful interoperability of problems, medications, and medication allergies of patient record with a 3rd party. This measurement shows support for Direct Edge protocol in connecting to a HISP for successful transmission.

Measurement Expected Outcome

The measurement will produce numeric results over a given interval. We will utilize various reports and audit logs, including Automated Measure (315.g.2) reports, to determine our measure count.

A successful measure increment indicates compliance to the underlying ONC criteria. It will show that the EHR can create the EHR can receive a C-CDA patient summary record. In incorporating the C-CDA patient summary record, the EHR will demonstrate successful interoperability of problems, medications, and medication allergies of patient record with a 3rd party, including support for Direct Edge protocol in connecting to a HISP. Successfully completing this measure also implies users have a general understanding of the EHR functional operations for this EHR Module and an overall support for the user experience while not completing this measure may indicate lack of understanding or possibly lack of use or need for this functionality.

We will use the measure count to establish a historic baseline of expected interoperability use so it can be used in subsequent real world testing efforts.

Care Settings

We designed this measure to test the family practice, internal medicine, and pediatrics specialties that we support and target.

RWT Measure #3. Number of NewRx Prescriptions Messages Successfully Sent

Associated Criteria: 315(b)(3)

Testing Methodology: Reporting/Logging

Measurement Description

This measure is tracking and counting how many NewRx electronic prescriptions were created and successfully sent from the EHR Module to a pharmacy destination over the course of a given interval.

We will capture this measure for a minimum of three (3) months.

Measurement Justification

This measure will provide a numeric value to indicate both the how often this interoperability feature is being used as well as its compliance to the requirement. An increment to this measure indicates that the EHR can create a NewRx SCRIPT electronic prescription message and transmit it to a pharmacy, typically via the Surescripts Network.

Measurement Expected Outcome

The measurement will produce numeric results over a given interval. We will utilize various reports and audit logs, including Automated Measure (315.g.2) reports, to determine our measure count.

A successful measure increment indicates compliance to the underlying ONC criteria. It will show that the EHR can create the NewRx message and send over a production network, like the Surescripts Network, to a pharmacy. Successfully completing this measure also implies users have a general understanding of the EHR functional operations for this EHR Module and an overall support for the user experience while not completing this measure may indicate lack of understanding or possibly lack of use or need for this functionality.

We will use the measure count to establish a historic baseline of expected interoperability use so it can be used in subsequent real world testing efforts.

Care Settings

We designed this measure to test the family practice, internal medicine, and pediatrics specialties that we support and target.

RWT Measure #4. Number of CancelRx Prescriptions Messages Successfully Sent

Associated Criteria: 315(b)(3)

Testing Methodology: Reporting/Logging

Measurement Description

This measure is tracking and counting how many CancelRx electronic prescriptions were created and successfully sent from the EHR Module to a pharmacy destination over the course of a given interval.

We will capture this measure for a minimum of three (3) months.

Measurement Justification

This measure will provide a numeric value to indicate both the how often this interoperability feature is being used as well as its compliance to the requirement. An increment to this measure indicates that the EHR can create a CancelRx SCRIPT electronic prescription message and transmit it to a pharmacy, typically via the Surescripts Network.

Measurement Expected Outcome

The measurement will produce numeric results over a given interval. We will utilize various reports and audit logs to determine our measure count.

A successful measure increment indicates compliance to the underlying ONC criteria. It will show that the EHR can create the CancelRx message and send over a production network, like the Surescripts Network, to a pharmacy. Successfully completing this measure also implies users have a general understanding of the EHR functional operations for this EHR Module and an overall support for the user experience while not completing this measure may indicate lack of understanding or possibly lack of use or need for this functionality.

We will use the measure count to establish a historic baseline of expected interoperability use so it can be used in subsequent real world testing efforts.

Care Settings

We designed this measure to test the family practice, internal medicine, and pediatrics specialties that we support and target.

RWT Measure #5. Number of Patient Batch Exports Run

Associated Criteria: 315(b)(6)

Testing Methodology: Reporting/Logging

Measurement Description

This measure is tracking and counting how many batch exports of C-CDAs were successfully performed by the EHR Module over the course of a given interval.

We will capture this measure for a minimum of one (1) month.

Measurement Justification

This measure will provide a numeric value to indicate both the how often this interoperability feature is being used as well as its compliance to the requirement. An increment to this measure indicates that the EHR can create a batch export of multiple C-CDA patient summary records.

Measurement Expected Outcome

The measurement will produce numeric results over a given interval. We will utilize various reports and audit logs to determine our measure count.

A successful measure increment indicates compliance to the underlying ONC criteria. It will show that the EHR can create a batch export of multiple C-CDA patient summary records, which can be used in means of health IT interoperability. Successfully completing this measure also implies users have a general understanding of the EHR functional operations for this EHR Module and an overall support for the user experience while not completing this measure may indicate lack of understanding or possibly lack of use or need for this functionality.

We will use the measure count to establish a historic baseline of expected interoperability use so it can be used in subsequent real world testing efforts.

Care Settings

We designed this measure to test the family practice, internal medicine, and pediatrics specialties that we support and target.

RWT Measure #6. Number of Quality Measures Successfully Reported on to CMS

Associated Criteria: 315(c)(1)

Testing Methodology: Reporting/Logging

Measurement Description

This measure is tracking and counting how many eCQM quality measures were successfully reported on by the EHR Module to CMS over the course of a given interval.

The interval for this measure will be twelve (12) months.

Measurement Justification

This measure will provide a count and list of electronic clinical quality measures (eCQMs) which are calculated and submitted to CMS for a given program, like MIPS. Clinical quality measures are only used for the respective CMS programs and any production measures should utilize submission to CMS.

Measurement Expected Outcome

The measurement will a count and list of eCQMs submitted to CMS over a given interval. We will utilize various reports and audit logs to determine our measure count.

A successful measure submission indicates compliance to the underlying ONC criteria. It will show that the EHR can do calculations on the eCQM and that they are accepted by CMS. Successfully completing this measure also implies users have a general understanding of the EHR functional operations for this EHR Module and an overall support for the user experience while not completing this measure may indicate lack of understanding or possibly lack of use or need for this functionality.

We will use the measure result to establish a historic baseline of expected interoperability use so it can be used in subsequent real world testing efforts.

Care Settings

We designed this measure to test the family practice, internal medicine, and pediatrics specialties that we support and target.

RWT Measure #7. Engagement with IIS/Immunization Registries

Associated Criteria: 315(f)(1)

Testing Methodology: Reporting/Logging

Measurement Description

This measure is tracking and counting how many immunization registries are connected and engaged with bi-directional exchange capabilities with the EHR Module.

Measurement Justification

This measure will provide a numeric metric value of the number of IIS/immunization registries that have successful connections and interoperable engagements with the EHR as well as tracking any connectivity errors or downtime due to the EHR operations. We will utilize various reports and IIS transaction logs to determine our measure count. During the year, we will examine the log information for a minimum period of three (3) months to determine an appropriate sample of this measurement.

Measurement Expected Outcome

We expect any immunization registries to be able to successfully connect and exchange with the EHR and observing these connections will indicates compliance to the underlying ONC criteria. It will show that the EHR can create the HL7 immunization record, including ability to record the required clinical data elements. In sending the immunization message, the EHR will demonstrate ability to confirm successful interoperability of patient's immunization data to an IIS/immunization registry.

For connected IIS/immunization registries, we expect very few errors or downtime due to the EHR Module's functionality with a success rate of at least 95%.

We will use the measure count to establish a historic baseline of expected interoperability use so it can be used in subsequent real world testing efforts.

Care Settings

We designed this measure to test the family practice, internal medicine, and pediatrics specialties that we support and target.

RWT Measure #8. Engagement with Electronic Reportable Lab Registries

Associated Criteria: 315(f)(3)

Testing Methodology: Reporting/Logging

Measurement Description

This measure is tracking and counting how many electronic reportable lab registries are connected and engaged with bi-directional exchange capabilities with the EHR Module.

Measurement Justification

This measure will provide a numeric metric value of the number of electronic reportable lab registries that have successful connections and interoperable engagements with the EHR as well as tracking any connectivity errors or downtime due to the EHR operations. We will utilize various reports and transaction logs to determine our measure count. During the year, we will examine the log information for a minimum period of three (3) months to determine an appropriate sample of this measurement.

Measurement Expected Outcome

We expect any electronic reportable lab registries to be able to successfully connect and exchange with the EHR and observing these connections will indicates compliance to the underlying ONC criteria. It will show that the EHR can create the HL7 record, including ability to record the required clinical data elements. In sending the message, the EHR will demonstrate ability to confirm successful interoperability of patient's data to an electronic reportable lab registry.

For connected registries, we expect very few errors or downtime due to the EHR Module's functionality with a success rate of at least 95%.

We will use the measure count to establish a historic baseline of expected interoperability use so it can be used in subsequent real world testing efforts.

Care Settings

We designed this measure to test the family practice, internal medicine, and pediatrics specialties that we support and target.

RWT Measure #9. Compliance of C-CDA Creation and C-CDA Scorecard Average

Associated Criteria: 315(b)(1)

Testing Methodology: Compliance and Tool

Measurement Description

This measure is tracking compliance the EHR Module criteria functionality of creating a C-CDA and measuring its C-CDA Scorecard average.

Measurement Justification

This measure will provide assurance of compliance to the EHR Module criteria, specifically ability to create a C-CDA and evaluate it against the ONC C-CDA Scorecard tool. The C-CDA scorecard is designed for production use and measures how artifacts created by health IT compare against the HL7 C-CDA implementation guide and HL7 best practices.

The Scorecard will both indicate any C-CDA errors as well provide a numeric scoring result to indicate how well our C-CDA complies with certification requirements and supports interoperability within production setting.

To avoid disclosing PHI, we will only work with test patients from the actual production environment or an appropriately production-mirrored environments to best evaluate production capabilities available to end users.

Measurement Expected Outcome

The user will have the EHR create C-CDA from a patient record containing clinical data elements required in the criteria. We will run C-CDA through the Scorecard tool to obtain a result. We will also confirm the process and steps done by the user meet the criteria requirements of the EHR Module and works as expected in production as in a controlled test environment.

A high score from the Scorecard indicates strong support for interoperability, and a lower score indicates opportunity for improvement. We will use this measure to establish a historic baseline of expected interoperability use so it can be used in subsequent real world testing efforts.

Care Settings

We designed this measure to test the family practice, internal medicine, and pediatrics specialties that we support and target.

RWT Measure #10. Number of applications/3rd party systems using API capabilities

Associated Criteria: 315(g)(7), (g)(9)-(g)(10)

Testing Methodology: Reporting/Logging and Survey/Self-Test

Measurement Description

This measure will determine how many 3rd party systems or applications are integrated and using the EHR's FHIR API interface. This measure will allow us to verify our certified API is working with 3rd party applications to access USCDI patient data.

Measurement Justification

This measure will determine how many 3rd party systems or applications are integrated and using the EHR's FHIR API interface. This measure will allow us to verify our certified API is working with 3rd party applications to access USCDI patient data.

Measurement Expected Outcome

The measurement will provide a count of FHIR applications which have registered with our server for patient access as well as applications actively connecting to our FHIR server. We will utilize our FHIR API form which developers use to request API access as well as additional reports and audit logs to determine the number of API applications enabled for our system. We will also query clinician users to determine the API applications they have approved for use on their system.

Care Settings

We designed this measure to test the family practice, internal medicine, and pediatrics specialties that we support and target.