

Real World Testing Plan

Contents

| | |
|--|----|
| General Information | 3 |
| Overview | 3 |
| Justification for Real World Testing Approach | 3 |
| Standards Updates..... | 4 |
| Care Settings | 6 |
| Overall Expected Outcomes..... | 6 |
| Schedule of Key Milestones | 6 |
| Measures Used in Approach..... | 7 |
| Conformance to Transitions of care (170.315(b)(1)) (create) | 7 |
| Use Case 1 (Create patient data) | 7 |
| Conformance to Transitions of care (170.315(b)(1)) (send) | 8 |
| Use Case 2 (Send patient data via direct) | 8 |
| Measures Used in Approach..... | 8 |
| Conformance to Clinical Information Reconciliation and Incorporation (170.315(b)(2)) | 8 |
| Use Case 1 (Reconcile and incorporate patient data)..... | 8 |
| Use Case 2 (Reconcile vs import)..... | 9 |
| Measures Used in Approach..... | 10 |
| Conformance to Data export (170.315(b)(6))..... | 10 |
| Use Case 1 (Export patient data) | 10 |
| Measures Used in Approach..... | 11 |
| Conformance to Transitions of care (170.315(c)(1)) (enter data and export)..... | 11 |
| Use Case 1 (eCQM execution)..... | 11 |
| Conformance to CQMs – import and calculate (170.315(c)(1)(3)) (enter, export and create data files) | 11 |
| Use Case 2 (QRDA file exports) | 11 |
| Conformance to CQMs – import and calculate (170.315(c)(2)) (import and calculate)..... | 12 |
| Use Case 3 (Import and calculate) | 12 |
| Measures Used in Approach..... | 13 |
| Conformance to View, download, and transmit to 3 rd party (170.315(e)(1)) | 13 |
| Use Case 1 (Request, view, download, and transmit) | 13 |

Measures Used in Approach 14

- Conformance to Transmission to immunization registries (170.315(f)(1)) (create)..... 14
 - Use Case 1 (Enter and send immunization data to registry) 14
- Conformance to Transmission to immunization registries (170.315(f)(1)) (history/forecast only) 15
 - Use Case 2 (History/forecast) 15

Measures Used in Approach 15

- Conformance to Transmission to public health agencies – syndromic surveillance (170.315(f)(2)) (registration only) 15
 - Use Case 1 (Syndromic surveillance registration data)..... 15
- Conformance to Transmission to public health agencies – syndromic surveillance (170.315(f)(2)) (discharge only)..... 16
 - Use Case 2 (Syndromic surveillance discharge data)..... 16

Measures Used in Approach 17

- Conformance to Application access – patient selection (170.315(g)(7)(8)(9))..... 17
 - Use Case 1 (Query patient data) 17

Traceability Matrix 18

Attestation 19

General Information

Plan Report ID Number: SEV-RWTP-001

Developer Name: Conceptual Mindworks, Inc.

Product Name(s): Sevocity, Geriatrics Select EHR, Pain Care Select EHR, Surgery Select EHR, Healthpac EHR

Version Number(s): 12.0

Certified Health IT Product List (CHPL) ID(s):

15.04.04.2324.Sevo.12.00.1.171229

15.04.04.2324.Geri.GE.00.1.180418

15.04.04.2324.Pain.PA.00.1.180418

15.04.04.2324.Surg.SU.00.1.180418

15.04.04.2324.Heal.12.01.1.190131

Developer Real World Testing Page URL:

15.04.04.2324.Sevo.12.00.1.171229 <https://www.sevocity.com/resources/onc-certifications-rwt/>

15.04.04.2324.Surg.SU.00.1.180418 <https://surgeryselectehr.com/onc-certifications-rwt/>

15.04.04.2324.Geri.GE.00.1.180418 <https://geriatricsselectehr.com/onc-certifications-rwt/>

15.04.04.2324.Pain.PA.00.1.180418 <https://paincaresselectehr.com/onc-certifications-rwt/>

15.04.04.2324.Heal.12.01.1.190131 <https://www.sevocity.com/hp-onc-certification-rwt/>

Overview

As a condition and maintenance of certification under the Cures Act, Office of the National Coordinator (ONC) is requiring that Health IT vendors plan for and conduct real world testing with a focus on interoperability and data exchange. This test plan defines what will be tested, how it will be tested, and provides justification for the test approach and reasoning behind the selection of care settings, measures, and metrics. The purpose of real world testing is to demonstrate continued compliance to the certification criteria, to demonstrate that it is being used to exchange electronic health information in the intended care and practice settings, and that EHI is being received and used in the product.

Justification for Real World Testing Approach

To implement real world testing as a condition and maintenance of certification under the Cures Act, testing will focus on the use of Sevocity for interoperability and data exchange in a real-world clinical setting. Testing is limited to the following criteria:

- 170.315(b)(1) Transitions of care
- 170.315(b)(2) Clinical Information Reconciliation and Incorporation
- 170.315(b)(6) Data export
- 170.315(c)(1)(2)(3) Clinical quality measures (CQMs)
- 170.315(e)(1) View, download, and transmit to 3rd party

- 170.315(f)(1) Transmission to immunization registries
- 170.315(f)(2) Transmission to public health agencies – syndromic surveillance
- 170.315(g)(7)(8)(9) Application access

To accomplish real world testing, we chose to focus on our five main clinical settings of care, which include Family Practice, Specialist/Surgical, Geriatrics, Obstetrics & Gynecology, and Behavioral Health. Testing will be conducted with users of Sevocity, Geriatrics Select EHR, Pain Care Select EHR, Surgery Select EHR, and/or Healthpac EHR. All five Electronic Health Record (EHR) products are functionally equivalent and do not require all tests be executed on each one. The appropriate EHR will be used based on the clinical setting of care, user and use case to be performed. The Traceability Matrix section at the end of this document provides an overview of the testing to be performed for each of the clinical settings of care.

Standards Updates

| Standard | Version | Certification Criteria Affected |
|---|-------------------|---|
| Applicability Statement for Secure Health Transport | 1.3 May 2021 | 170.315(b)(1) |
| ONC Implementation Guide for Direct Edge Protocols | 1.1 June 25, 2014 | 170.315(b)(1) |
| IHE IT Infrastructure Technical Framework Volume 2b (ITI TF-2b), Transactions Part B - Sections 3.29 - 2.43, Revision 7.0 | August 10, 2010 | 170.315(b)(1) |
| HL7 Implementation Guide for CDA® Release 2: IHE Health Story Consolidation, DSTU Release 1.1 (US Realm) Draft Standard for Trial Use | July 2012 | 170.315(b)(1), 170.315(b)(2) |
| HL7 Implementation Guide for CDA® Release 2: Consolidated CDA Templates for Clinical Notes (US Realm), Draft Standard for Trial Use, Volume 1 - Introductory Material, Release 2.1 | August 2015 | 170.315(b)(1), 170.315(b)(2), 170.315(b)(6), 170.315(e)(1), 170.315(g)(9) |
| HL7 Implementation Guide for CDA® Release 2: Consolidated CDA Templates for Clinical Notes (US Realm), Draft Standard for Trial Use, Volume 2 - Templates and Supporting Material, Release 2.1 | August 2015 | 170.315(b)(1), 170.315(b)(2), 170.315(b)(6), 170.315(e)(1), 170.315(g)(9) |
| HL7® CDA R2 Implementation Guide: C-CDA Templates for | October 2019 | 170.315(b)(1), 170.315(b)(2), 170.315(e)(1), 170.315(g)(9) |

| | | |
|---|------------------------------|---|
| Clinical Notes R2.1 Companion Guide, Release 2-US Realm | | |
| CDC PHIN Messaging Guide for Syndromic Surveillance: Emergency Department, Urgent Care, Inpatient and Ambulatory Care Settings, Release 2.0 | April 21, 2015 | 170.315(f)(2) |
| Erratum to the CDC PHIN 2.0 Implementation Guide, August 2015; Erratum to the CDC PHIN 2.0 Messaging Guide, April 2015 Release for Syndromic Surveillance: Emergency Department, Urgent Care, Inpatient and Ambulatory Care Settings | April 2015 | 170.315(f)(2) |
| HL7 2.5.1 Implementation Guide for Immunization Messaging, Release 1.5 | October 1, 2014 | 170.315(f)(1) |
| HL7 Version 2.5.1 Implementation Guide for Immunization Messaging (Release 1.5) - Addendum | July 2015 | 170.315(f)(1) |
| HL7 CDA® R2 Implementation Guide: Quality Reporting Document Architecture - Category I (QRDA I); Release 1, DSTU Release 3 (US Realm), Volume 1 - Introductory Material | June 2015 | 170.315(c)(1), 170.315(c)(2) |
| HL7 CDA R2 Implementation Guide: Quality Reporting Document Architecture - Category I (QRDA I); Release 1, DSTU Release 3 (US Realm), Volume 2 - Templates and Supporting Material, June 2015 | June 2015 | 170.315(c)(1), 170.315(c)(2) |
| CMS Implementation Guide for Quality Reporting Document Architecture: Category III; Eligible Clinicians and Eligible Professionals Programs; Implementation Guide for 2020 | 4/30/2020, updated 8/13/2020 | 170.315(c)(3) |
| Web Content Accessibility Guidelines (WCAG) | 1.1 December 11, 2008 | 170.315 (e)(1) |
| International Health Terminology Standards Development Organisation (IHTSDO) Systematized Nomenclature of Medicine Clinical Terms (SNOMED CT®) U.S. Edition | September 2015 Release | 170.315(b)(1), 170.315(b)(2), 170.315(b)(6) |

| | | |
|--|---------------------------------------|---------------|
| ICD-10-CM | FY 2022 Release | 170.315(b)(6) |
| RxNorm | September 8, 2015 Full Release Update | 170.315(b)(2) |
| National Drug Code (NDC) Directory– Vaccine NDC Linker, updates through | August 17, 2015 | 170.315(f)(1) |
| HL7 Standard Code Set CVX— Vaccines Administered, updates through | August 17, 2015 | 170.315(f)(1) |

Care Settings

The five clinical settings of care that will be represented in real world testing are: Family Practice, Specialist/Surgical, Geriatrics, Obstetrics & Gynecology, and Behavioral Health. An analysis of all current customers was conducted to determine the clinical settings of care to be tested. The largest clinical setting categories represented by our customers are Family Practice and Specialist/Surgical. Geriatrics, while representing less than 4% of the customer base, is a focus of current and future marketing efforts and represents a predicted growth in market share. Although Pain Management is a marketed specialty set, the workflows being used by customers in this specialty fall into a subset of the Surgical setting of care and therefore was not included as a separate care setting to be tested.

| Category | % of Customers |
|------------------------------------|----------------|
| Behavioral Health | 4.83% |
| Family Practice | 47.39% |
| Geriatrics | 3.35% |
| Obstetrics & Gynecology | 8.18% |
| Specialist/Surgical | 31.04% |

Overall Expected Outcomes

Real World Testing will demonstrate that the Certified Electronic Health Record Technology (CEHRT) continues to be in compliance with 2015 edition certification criterion and is successfully being used in real world scenarios to exchange data with other providers. In an effort to prove successfulness, the metrics and measures detailed in this plan will be collected and analyzed. A success rate of 80% is expected for all metrics measuring success. An error rate of <20% is expected for all metrics measuring error rate. Success and error rates are used for actions that are completely under the control of the EHR. A 25% rejection rate is expected for all metrics measuring rejections. Rejections are considered for messages that are originating in the EHR and are being sent to another entity.

Schedule of Key Milestones

| Key Milestone | Timeframe |
|---------------|-----------|
|---------------|-----------|

| | |
|--|---|
| Identification and onboarding of Customers/Users | December 2021 March 2022 |
| Development of instructions, surveys, and feedback reporting mechanism | December 2021 February 2022 |
| Development of scripts/tools to gather data | November/December 2021 February 2022 |
| Begin collection of data | January 2022 April 2022 |
| Collect data and review | Quarterly, 2022 Quarterly beginning Q2, 2022 |
| Follow up with Users to discuss progress and any issues | Quarterly, 2022 Quarterly beginning Q2, 2022 |
| Final collection of all data for 2022 | January 2023 |
| Analysis of data and report creation | January 2023 |
| Submit Real World Testing Report to Drummond | February 2023 |

Measures Used in Approach

The following sections outline the measures that will be used to demonstrate conformance to 170.315(b)(1) Transitions of care certification criterion. Testing will focus on sending referrals and clinical summaries using direct messaging and verifying the successfulness of the message. Third party software is utilized for sending direct messages.

Conformance to Transitions of care (170.315(b)(1)) (create)

Use Case 1 (Create patient data)

This measure will test conformance to 170.315(b)(1) Transitions of care by tracking the number of times a CCD was created and tracking any errors encountered in the process.

Description of Measurement/Metric

The following measures will be taken during this test: Number of CCD files exported, and number of errors encountered. These measures will then be used to calculate the success rate of CCD creation.

Associated Certification Criteria

| Certification Criteria | Requirement |
|--|-------------------|
| 170.315(b)(1) Transitions of care | (iii)(A) - Create |

Justification

Tracking the number of Continuity of Care Document (CCD) files exported and the successfulness of the creation will demonstrate that Electronic Health Information (EHI) has the ability to create CCD files that can be shared between providers. Becoming aware of usage statistics will also help us determine what functionality may be currently under-utilized and needs promoting. This measure is applicable to all the care settings.

Testing Method

This measure will rely on error reporting and feedback from users.

Expected Outcomes

It is expected that the error rate is less than 20%.

Conformance to Transitions of care (170.315(b)(1)) (send)

Use Case 2 (Send patient data via direct)

This measure will test conformance to 170.315(b)(1) Transitions of care by tracking the number of Direct messages sent by CEHRT user in the form of referrals and clinical summaries and determining the success rate of those messages.

Description of Measurement/Metric

The following measures will be taken during this test: Number of referrals and clinical summaries sent through Direct Messaging (known as Provider-Patient Data Exchange (PPDX) in the EHR), number of direct messages that were successfully transmitted, and number of direct messages that were undeliverable. These measures will then be used to calculate the success rate of data transmission.

Associated Certification Criteria

| Certification Criteria | Requirement |
|--|---|
| 170.315(b)(1) Transitions of care | (i)(A) – Send Using Edge Protocol for IHE XDR profile for Limited Metadata Document Sources |

Justification

Tracking the number of direct messages sent with Continuity of Care Document (CCD) files attached and the successfulness of the transmissions will demonstrate that Electronic Health Information (EHI) is being shared between providers and is being sent securely. Becoming aware of usage statistics will also help us determine what functionality may be currently under-utilized and needs promoting. This measure is applicable to all care settings.

Testing Method

In addition to error reporting and feedback from users, reporting data will also be used to ensure successfulness of the direct message transmission.

Expected Outcomes

It is expected that the rate of success for direct message transmissions is 75%.

Measures Used in Approach

The following sections outline the measures that will be used to demonstrate conformance to 170.315(b)(2) Clinical Information Reconciliation and Incorporation certification criterion. Testing will focus on reconciling and importing incoming patient data and verifying the successfulness of the import and its usability.

Conformance to Clinical Information Reconciliation and Incorporation (170.315(b)(2))

Use Case 1 (Reconcile and incorporate patient data)

This measure will test conformance to 170.315(b)(2) Clinical Information Reconciliation and Incorporation by tracking the number of reconciliations done and error reports will be tracked.

Description of Measurement/Metric

The following measures will be taken during this test: Number of C-CDA reconciliations performed, number of errors reported. These measures will then be used to calculate the success rate of patient data reconciliation and incorporation.

Associated Certification Criteria

| Certification Criteria | Requirement |
|--|--|
| 170.315(b)(2) Clinical Information Reconciliation and Incorporation | (b)(2)(i) Support for CCDA Release 1.1. and 2.1 |
| | (b)(2)(ii) Patient match |
| | (b)(2)(iii)(A) Simultaneous display |
| | (b)(2)(iii)(B)-(D) Review, validate and incorporate patient medications, allergies, and problems |
| | (b)(2)(iv) CCDA creation of incorporated data |

Justification

Tracking the number of reconciliations performed will demonstrate that EHI is being shared between providers and is being reviewed and incorporated into the patient’s record. User feedback will include accuracy of incoming data being presented and user expectations being met. This measure is applicable to all clinical settings being tested.

Testing Method

This measure will rely on error reporting and feedback from users.

Expected Outcomes

It is expected that users experience less than 20% error rate.

Use Case 2 (Reconcile vs import)

This measure will test conformance to 170.315(b)(2) Clinical Information Reconciliation and Incorporation by tracking the number of reconciliations done in comparison to CCD files being imported and attached to the chart.

Description of Measurement/Metric

The following measures will be taken during this test: Number of CCD files reconciled, number of CCD files imported and attached.

Associated Certification Criteria

| Certification Criteria | Requirement |
|--|--|
| 170.315(b)(2) Clinical Information Reconciliation and Incorporation | (b)(2)(i) Support for CCDA Release 1.1. and 2.1 |
| | (b)(2)(ii) Patient match |
| | (b)(2)(iii)(A) Simultaneous display |
| | (b)(2)(iii)(B)-(D) Review, validate and incorporate patient medications, allergies, and problems |
| | (b)(2)(iv) CCDA creation of incorporated data |

Justification

Tracking the number of reconciliations performed and the method used to reconcile and incorporate data will demonstrate that EHI is being shared between providers, is being reviewed and incorporated into the patient’s record. Becoming aware of usage statistics on the methods being used will also help us determine what areas may need optimizing. This measure is applicable to all clinical settings being tested.

Testing Method

In addition to error reporting and feedback from users, log files or reporting data will be inspected to determine the method of incorporation (file import vs reconciliation process).

Expected Outcomes

This measure will be used to establish a benchmark of usage/adoption of CCD reconciliation, possibly leading to future training opportunities and/or product enhancements.

Measures Used in Approach

The following sections outline the measures that will be used to demonstrate conformance to 170.315(b)(6) Data export certification criterion. Testing will focus on data exports created and downloaded, verifying the successfulness of the export.

Conformance to Data export (170.315(b)(6))

Use Case 1 (Export patient data)

This measure will test conformance to 170.315(b)(6) Data export by tracking the number of exports done and error reports will be tracked.

Description of Measurement/Metric

The following measures will be taken during this test: Number of jobs created, number of jobs downloaded, number of errors reported. These measures will then be used to calculate the success rate of the exports.

Associated Certification Criteria

| Certification Criteria | Requirement |
|----------------------------------|--|
| 170.315(b)(6) Data export | (b)(6)(i)(A) Export parameters |
| | (b)(6)(i)(B) Limited access |
| | (b)(6)(ii) CCD-A creation based on parameters |
| | (b)(6)(iii)(A) Specific date and time |
| | (b)(6)(iii)(B) Real time, relative time and specific date/time exports |
| | (b)(6)(iv) Export location |

Justification

Tracking the number of exports performed will demonstrate that EHI is being exported and may be transmitted or shared with other entities such as Health Information Exchange (HIE)s and other registries. Tracking errors may lead to the discovery of improvements or optimizations based on the types of issues encountered during testing. This measure is applicable to all clinical settings.

Testing Method

Error reporting and feedback from users will be the main source of test data gathered for this measure.

Expected Outcomes

It is expected that users experience less than 20% error rate.

Measures Used in Approach

The following sections outline the measures that will be used to demonstrate conformance to 170.315(c)(1)(2)(3) Clinical quality measures (CQMs) certification criterion. Testing will focus on data entry, report creation and data files, verifying the successfulness of CMS submission.

Conformance to Transitions of care (170.315(c)(1)) (enter data and export)

Use Case 1 (eCQM execution)

This measure will test conformance to 170.315(c)(1) Clinical quality measures (CQMs) by tracking the use of eCQM reports and errors reported.

Description of Measurement/Metric

The following measures will be taken during this test: Number of report executions, reports being used, number of errors reported. These measures will then be used to calculate the success rate of report execution.

Associated Certification Criteria

| Certification Criteria | Requirement |
|---|------------------------|
| 170.315(c)(1) Clinical quality measures (CQMs) – record and export | (c)(1)(i) Manual entry |
| | (c)(1)(ii) Export |

Justification

Tracking the number of reports executed will demonstrate the manual entry and calculate features. Tracking which reports are being used will provide data that may lead to the discovery of improvements or optimizations based on the types of issues encountered during testing. The determination of clinical settings to be used will be based on usage of the reports.

Testing Method

In addition to error reporting and feedback from users, log files will be inspected to determine how many times reports are being executed and which reports are being executed.

Expected Outcomes

It is expected that users experience less than 20% error rate.

Conformance to CQMs – import and calculate (170.315(c)(1)(3)) (enter, export and create data files)

Use Case 2 (QRDA file exports)

This measure will test conformance to 170.315(c)(1)(3) Clinical quality measures (CQMs) by tracking the use of Quality Reporting Document Architecture (QRDA) export files and submission errors encountered.

Description of Measurement/Metric

The following measures will be taken during this test: Number of QRDA exports completed, number of CMS submissions, number of submission errors reported. Submission to CMS is done outside of the EHR, therefore error reporting will rely on user feedback only. These measures will then be used to calculate the success rate of the submissions.

Associated Certification Criteria

| Certification Criteria | Requirement |
|---|---|
| 170.315(c)(1) Clinical quality measures (CQMs) – record and export | (c)(1)(i) Manual entry |
| | (c)(1)(ii) Export |
| 170.315(c)(3) Clinical quality measures (CQMs) – report | (c)(3)(i) Report data files (Cat I and Cat III) |

Justification

Tracking the number of QRDA exports performed will demonstrate that report data and patient data is being created and likely submitted to CMS or exchanged with other entities. Tracking errors may lead to the discovery of improvements or optimizations based on the types of issues encountered during testing. The determination of clinical settings to be used will be based on usage of the reports and exports.

Testing Method

Error reporting, CMS rejections reported by users and feedback from users will be used in this test.

Expected Outcomes

It is expected that users experience less than 20% error rate creating the QRDA exports and 25% rejection rate from CMS.

Conformance to CQMs – import and calculate (170.315(c)(2)) (import and calculate)

Use Case 3 (Import and calculate)

Testing for this measure will be conducted using synthetic patient data in a test clinic on the Production system. This measure will test conformance to 170.315(c)(2) Clinical quality measures (CQMs).

Synthetic patient files will be imported and selected report(s) will be created based on that information.

Description of Measurement/Metric

The following measures will be taken during this test: Imports executed, number of errors reported. These measures will then be used to calculate the success rate of the import feature.

Associated Certification Criteria

| Certification Criteria | Requirement |
|--|-----------------------|
| 170.315(c)(2) Clinical quality measures (CQMs) – import and calculate | (c)(2)(i) Import data |
| | (c)(2)(ii) Calculate |

Justification

The import and calculate feature provided by the EHR is not currently being utilized by any users. Due to the nature of the import process, synthetic patient data and a test clinic will be used for this testing. This measure is applicable to all clinical settings but since the workflow for utilizing the import tool and create the reports is the same, it will not be measured for all.

Testing Method

Error reporting and feedback from users will be the only source of test data gathered for this measure.

Expected Outcomes

It is expected that users can successfully import data and execute reports based on that data.

Measures Used in Approach

The following sections outline the measures that will be used to demonstrate conformance to 170.315(e)(1) View, download, and transmit to 3rd party certification criterion. Testing will focus on the use of the portal by patients to obtain their health information. Patients can then view the data, download it for later use or transmit it directly from the portal via email or direct message. These measures will focus on the patient’s access to their health data and ability to transmit their own data.

Conformance to View, download, and transmit to 3rd party (170.315(e)(1))

Use Case 1 (Request, view, download, and transmit)

This measure will test conformance to 170.315(e)(1) View, download, and transmit to 3rd party by verifying that specific health data can be requested by the user, results are received for health data requested and can be downloaded in human readable or machine-readable formats.

Description of Measurement/Metric

The following measures will be taken during this test: Number of patients that have requested, viewed, and downloaded their health data, number of health summary files that have been transmitted and number of errors reported. These measures will then be used to calculate the success rate of receiving the data requested and successful download of the data.

Associated Certification Criteria

| Certification Criteria | Requirement |
|---|----------------------------|
| 170.315(e)(1) View, download, and transmit to 3rd party | (i) WCAG |
| | (i)(A) View |
| | (i)(B) Download |
| | (i)(C) Transmit |
| | (i)(D) Timeframe selection |

Justification

Tracking portal use of requesting health data, downloading the data, and then transmitting it will demonstrate the operation of this function by actual users. Increased use of the patient portal is desired and can be a very useful tool for patients and their providers. This measure is applicable to all clinical settings.

Testing Method

Usability questions and feedback will be requested from users. In addition to error reporting and feedback from users, log files will be inspected to determine how many times health data has been requested, and how many times it has been downloaded and/or transmitted.

Expected Outcomes

It is expected that users experience less than 20% error rate for returning results and less than 20% error rate for transmitting data from the patient portal.

Measures Used in Approach

The following sections outline the measures that will be used to demonstrate conformance to 170.315(f)(1) Transmission to immunization registries certification criterion. Testing will focus on the data being sent from the EHR to the immunization registries. This test should be performed with at least two different immunization registries. These measures will focus on the completeness and success of transmitting the data.

Conformance to Transmission to immunization registries (170.315(f)(1)) (create)

Use Case 1 (Enter and send immunization data to registry)

This measure will test conformance to 170.315(f)(1) Transmission to immunization registries by verifying that immunization data can be entered and successfully sent to an immunization registry.

Description of Measurement/Metric

The following measures will be taken during this test: Number of immunization registries we transmit to, number of clinics sending information to immunization registries, number of messages sent to the registry, number of messages rejected by the registry. These measures will then be used to calculate the rate of rejection.

Associated Certification Criteria

| Certification Criteria | Requirement |
|--|---------------------|
| 170.315(f)(1) Transmission to immunization registries | (i) Create messages |

Justification

Tracking immunization data being submitted to registries will demonstrate the operation of this function and verify that data is being accepted. Clinical settings that administer immunizations regularly and have immunization registry interfaces will be utilized for this measure.

Testing Method

In addition to error reporting and feedback from users, log files will be inspected to determine how many messages are being rejected by the registries.

Expected Outcomes

It is expected that users experience less than 25% rejection rate.

Conformance to Transmission to immunization registries (170.315(f)(1)) (history/forecast only)

Use Case 2 (History/forecast)

This measure will test conformance to 170.315(f)(1) Transmission to immunization registries by verifying that the history and forecast feature is successfully returning results.

Description of Measurement/Metric

The following measures will be taken during this test: Number of clinics with history and forecast enabled and set up, number of times the history and forecast feature has been used.

Associated Certification Criteria

| Certification Criteria | Requirement |
|--|---------------------------|
| 170.315(f)(1) Transmission to immunization registries | (ii) Forecast and history |

Justification

Tracking immunization forecast and history usage will demonstrate the operation of this function and verify that data is being returned and presented to the user. Clinical settings that administer immunizations regularly and have immunization registry interfaces will be utilized for this measure.

Testing Method

Error reporting and feedback from users will be used to determine successfulness. Log files will be inspected to determine how many times the history and forecast feature has been used by the entire user population for informational purposes.

Expected Outcomes

This measure will be used to establish a benchmark of usage/adoption of the history and forecast function, possibly leading to future training opportunities and/or product enhancements.

Measures Used in Approach

The following sections outline the measures that will be used to demonstrate conformance to 170.315(f)(2) Transmission to public health agencies – syndromic surveillance certification criterion. Testing will focus on the exchange of syndromic surveillance data.

Conformance to Transmission to public health agencies – syndromic surveillance (170.315(f)(2)) (registration only)

Use Case 1 (Syndromic surveillance registration data)

This measure will test conformance to 170.315(f)(2) Transmission to public health agencies – syndromic surveillance by tracking the creation of syndromic surveillance registration exports and error reports.

Description of Measurement/Metric

The following measures will be taken during this test: Number of syndromic surveillance registration exports, number of errors reported. These measures will then be used to calculate the success rate of the exports.

Associated Certification Criteria

| Certification Criteria | Requirement |
|--|------------------------------------|
| 170.315(f)(2) Transmission to public health agencies – syndromic surveillance | Create syndromic surveillance data |

Justification

The creation of syndromic surveillance data has not been utilized by any current users, therefore test data for a test patient will be used. Tracking the creation of syndromic surveillance exports will demonstrate that data is being exported and may be transmitted or shared with other entities to detect and monitor health events. This measure is applicable to all clinical settings but since the workflow for exporting syndromic surveillance data is the same and this feature is not currently utilized by any users, it will not be measured for all.

Testing Method

In addition to error reporting and feedback from users, log files will be inspected to determine if exports are being created by any users.

Expected Outcomes

It is expected that users experience a success rate of at least 80%.

Conformance to Transmission to public health agencies – syndromic surveillance (170.315(f)(2)) (discharge only)

Use Case 2 (Syndromic surveillance discharge data)

This measure will test conformance to 170.315(f)(2) Transmission to public health agencies – syndromic surveillance by tracking the creation of syndromic surveillance discharge exports and error.

Description of Measurement/Metric

The following measures will be taken during this test: Number of syndromic surveillance discharge exports, number of errors reported. These measures will then be used to calculate the success rate of the exports.

Associated Certification Criteria

| Certification Criteria | Requirement |
|--|------------------------------------|
| 170.315(f)(2) Transmission to public health agencies – syndromic surveillance | Create syndromic surveillance data |

Justification

The creation of syndromic surveillance data has not been utilized by any current users, therefore test data for a test patient will be used. Tracking the creation of syndromic surveillance exports will demonstrate that data is being exported and may be transmitted or shared with other entities to detect and monitor health events. This measure is applicable to all clinical settings but since the workflow for exporting syndromic surveillance data is the same and this feature is not currently utilized by any users, it will not be measured for all.

Testing Method

In addition to error reporting and feedback from users, log files will be inspected to determine if exports are being created by any users.

Expected Outcomes

It is expected that users experience a success rate of at least 80%.

Measures Used in Approach

The following sections outline the measures that will be used to demonstrate conformance to 170.315(g)(7)(8)(9) Application access certification criterion. Testing will focus on data exports created and downloaded, verifying the successfulness of the export.

Conformance to Application access – patient selection (170.315(g)(7)(8)(9))

Use Case 1 (Query patient data)

This measure will test conformance to 170.315(g)(7)(8)(9) Application access by tracking the number of data requests submitted, viewed or downloaded and error reports will be tracked.

Description of Measurement/Metric

The following measures will be taken during this test: Number of queries run, number of errors reported. These measures will then be used to calculate the success rate of the data requests.

Associated Certification Criteria

| Certification Criteria | Requirement |
|---|---------------------------|
| 170.315(g)(7) Application access – patient selection | (i) access |
| | (ii) documentation |
| 170.315(g)(8) Application access – data category request | (i) data category request |
| | (ii) documentation |
| 170.315(g)(9) Application access – all data request | (i) all data request |
| | (ii) documentation |

Justification

Tracking the number of data requests performed will demonstrate that EHI is being exported and may be gathered and used for reporting information back to the patient to improve overall health. This measure is applicable to all clinical settings but since the workflow for utilizing an Application Programming Interface (API) to obtain data is the same and this feature is not currently utilized by any users, it will not be measured for all. The test harness created for certification testing will be utilized for this testing, but the plan is for the data being gathered to be real patient data in a production clinic.

Testing Method

Error reporting and feedback from users will be the source of information for this measure.

Expected Outcomes

It is expected that users experience less than 20% error rate.

Traceability Matrix

| Use Case | Family Practice | Specialist/ Surgical | Geriatrics | OB/Gyn | Behavioral Health |
|--|-----------------|----------------------|------------|--------|-------------------|
| 170.315(b)(1) Transitions of care | | | | | |
| Create patient data | X | X | X | X | X |
| Send patient data via direct | X | X | X | X | X |
| 170.315(b)(2) Clinical information reconciliation and incorporation | | | | | |
| Reconcile and incorporate patient data | X | X | X | X | X |
| 170.315(b)(6) Data export | | | | | |
| Export patient data | X | X | X | X | X |
| 170.315(c)(1) Clinical quality measures (CQMs) — record and export, 170.315(c)(2) Clinical quality measures (CQMs) — import and calculate 170.315(c)(3) Clinical quality measures (CQMs) — report | | | | | |
| eCQM execution | X | X | X | X | No RWT |
| QRDA file export | X | X | X | X | No RWT |
| 170.315(e)(1) View, download, and transmit to 3rd party (View, download, transmit and view logs in the portal) | | | | | |
| Request, view, download, and transmit | X | X | X | X | X |
| View | X | X | X | X | X |
| 170.315(f)(1) Transmission to immunization registries | | | | | |
| Enter and send immunization data to registry | X | X | X | No RWT | No RWT |
| History and forecast | X | X | X | No RWT | No RWT |
| 170.315(f)(2) Transmission to public health agencies – syndromic surveillance | | | | | |
| Syndromic surveillance registration data | X | No RWT | No RWT | No RWT | No RWT |
| Syndromic surveillance discharge data | X | No RWT | No RWT | No RWT | No RWT |
| 170.315(g)(7) Application access – patient selection (API), 170.315(g)(8) Application access – data category request (API) 170.315(g)(9) Application access – all data request (API) | | | | | |
| Query patient data | X | No RWT | No RWT | No RWT | No RWT |

Attestation

Authorized Representative Name: Kim Rayfield

Authorized Representative Email: krayfield@sevocity.com

Authorized Representative Phone: 210-737-0777

Authorized Representative Signature: *Kim Rayfield*

Date: 11/09/2021