CY 2023 Real World Testing Plan for VieCure

Executive Summary

This is the real world test plan for CY 2023 for VieCure certified EHR solution. 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) to evaluate compliance with the certification criteria and interoperability of exchanging electronic health information (EHI) within the care and practice setting which it is targeted for use.

This is the real world test plan for CY 2023 for our certified VieCure EHR solution. It is virtually the same as last year's approved real world test plan with only minor alterations and updates.

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 2023, and information about compliance with the USCDI v1 and SVAP updates.

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.

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General Information

Plan Report ID Number: VieCure-RWT-2023

Developer Name: VieCure, Inc

Product Name(s): VieCure

Version Numbers(s): 3.2

Certified Health IT Criteria: 315(b)(1)-(3), (b)(6), (c)(1), (e)(1), (f)(2), (f)(5), (g)(7)-(9), (h)(1)

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

- 15.04.04.3066.VieC.03.01.1.210128
- https://chpl.healthit.gov/#/listing/10541

Developer Real World Testing Page URL: https://www.viecure.com/certifications-1

Timeline and Milestones for Real World Testing CY 2022

- 1Q-2023: Begin communication with clients to ask for their support and participation in real world testing. The goal is to have a sufficient number of clients committed for real world testing by the end of 1Q-2023.
- 2Q-3Q 2023. During the 2nd and 3rd quarter of CY 2023, the real world testing with clients will be scheduled and performed. It is expected that a preparatory call will be done with clients to prepare them for testing activities. Results will be documented in the test results section of the test methods and ultimately used to build the test report. If any non-compliances are observed, we will notify the ONC-ACB of the findings and make the necessary changes required.
- 4Q-2023. 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 before the end of the year.
- 1Q-2024. Submit RWT Test Report to ONC-ACB.

Standards Version Advancement Process (SVAP) Updates

Standard (and version)	All standards versions are those specified in USCDI v1.
Date of ONC-ACB notification (SVAP or USCDI)	N/A
Date of customer notification (SVAP only)	N/A
USCDI-updated certification criteria (and USCDI version)	None

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.

Number of Clients Sites

Within each measure, we note the minimum number of clients or client sites we plan to use for this measure evaluation. The numbers vary depending on the methodology as well as overall use of the associated EHR Module criteria by our users. 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.

Care and Practice Settings Targeted

Our EHR is primarily targeted to oncology practices, and our measures were designed for this setting in mind.

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.

The interval for this measure will be 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 exchange 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 We will also note any errors and document them accordingly, and as necessary, investigate and resolve any errors that are caused by the EHR.

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 and Number of Clients Site to Test

We designed this measure to test the oncology setting that we support and target. We will test a minimum of five (5) client providers.

RWT Measure #2. 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.

The interval for this measure will be 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 exchange 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. We will also note any errors and document them accordingly, and as necessary, investigate and resolve any errors that are caused by the EHR.

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 and Number of Clients to Test

We designed this measure to test the oncology setting that we support and target. We will test a minimum of five (5) client providers.

RWT Measure #3. Error Rate in Problem/Medication/Allergy Incorporation from C-CDA

Associated Criteria: 315(b)(2)

Testing Methodology: Reporting/Logging

Measurement Description

This measure metric is the error rate of the EHR Module incorporating problem/medication/allergy from C-CDAs into the respective patient records.

Measurement Justification

This measure will evaluate the ability of EHR to incorporate the problems, medications, and allergies values into the patient record from an external C-CDA. We will obtain an error rate of failures to properly reconcile any problems, medications, or allergies and report on this result to show level of interoperability of this criterion.

Incorporating external clinical data into the patient record is critical for patient care, and a high measurement will give assurance of this functionality.

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

Upon receipt of the C-CDA document, the EHR should allow the user to identify the correct patient and then incorporate the problems, medications, and medication allergies of this document into the patient record, and merge and reconcile the problems, medications, and medication allergies into their respective lists. 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.

We will use many different patient C-CDAs to test this capability and report on its success or errors. A success means all identified and selected problems, medications, and allergies could be reconciled into the patient's record while an error means at least one of the items failed to be fully reconciled into the EHR.

Care Settings and Number of Clients Site to Test

We designed this measure to test the oncology setting that we support and target. We will test either with one client practice or an internal resource in a production-type environment.

RWT Measure #4. Quality Measure Success Rate

Associated Criteria: 315(c)(1)

Testing Methodology: Reporting/Logging

Measurement Description

This measure is tracking the measure calculation of patients or episodes of care which meet the numerator criteria of the quality measures certified in the EHR as displayed in our system's CQM dashboard.

Measurement Justification

Currently, our users are not submitting QRDA Cat III from our EHR for the quality reporting, but they do rely on accurate results shown in their dashboard for various reporting needs. This measure will give us a percentage of patients or episodes of care which meet the measure requirements of the eCQM. For example, CMS68 percentage of success could be six (6) patients in numerator and eight (8) patients in denominator for a calculation of 75%. We will look to obtain measure results from all six (6) eCQMs we are certified on.

Measurement Expected Outcome

The user will use the EHR functions to both do the eCQM calculations and confirm they are displayed accurately in the visual dashboard. We will also confirm our other eCQM process are working properly per certification, steps done by the user meet the criteria requirements of the EHR Module, and it works as expected in production as in a controlled test environment.

Care Settings and Number of Clients Site to Test

We designed this measure to test the oncology setting that we support and target. We will test either with one client practice or an internal resource in a production-type environment.

RWT Measure #5. Number of Patients Given Access to Portal

Associated Criteria: 315(e)(1)

Testing Methodology: Reporting/Logging

Measurement Description

This measure is tracking and counting how many patients are given login access to their patient portal account over the course of a given interval.

The interval for this measure will be three (3) months.

Measurement Justification

This measure will provide a numeric value to indicate how often this interoperability feature is being used. An increment to this measure indicates that the EHR can supply patient health data to the patient portal and provide an account for the patient to use in accessing this data.

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 submit patient health data to the patient portal on a regular and consistent basis as well provide an account for the patient to use in accessing this data. 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 and Number of Clients Site to Test

We designed this measure to test the oncology setting that we support and target. We will test either with one client practice or an internal resource in a production-type environment.

RWT Measure #6. Syndromic Surveillance Error Rate

Associated Criteria: 315(f)(2)

Testing Methodology: Reporting/Logging

Measurement Description

This measure is recording the error rate in creating syndromic surveillance message.

Measurement Justification

This measure metric will be the error rate of syndromic surveillance messages. We will evaluate how many of the syndromic messages fail at the public registry or if a production site is unavailable, failure in production-mirrored test environment or test tool.

This error rate will reveal the level of interoperability to be expected with our syndromic surveillance messaging with a high rate indicative of real world interoperability.

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 use the EHR functions to document clinical data which produce a syndromic surveillance message typical to the user's workflow and clinical documentation. After completing the encounter, the EHR will create HL7 Syndromic Surveillance ADT message regarding the patient's diagnosis which would be sent to the public health registry or if unavailable a syndromic test tool.

Using an appropriate sample of syndromic messages, we will determine error rate by counting success and failures. A success is any syndromic message accepted by the public registry or tool without errors. A failure is any syndromic message rejected by the public registry or tool due to message errors.

Care Settings and Number of Clients Site to Test

We designed this measure to test the oncology setting that we support and target. We will test either with one client practice or an internal resource in a production-type environment.

RWT Measure #7. Electronic Case Message Error Rate

Associated Criteria: 315(f)(5)

Testing Methodology: Reporting/Logging

Measurement Description

This measure is recording the error rate in creating electronic case message.

Measurement Justification

This measure metric will be the error rate of electronic case messages. We will evaluate how many of the electronic case messages fail at the public registry or if a production site is unavailable, failure in production-mirrored test environment or test tool.

This error rate will reveal the level of interoperability to be expected with our electronic case messaging with a high rate indicative of real world interoperability.

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 use the EHR functions to document clinical data which produce an electronic case message typical to the user's workflow and clinical documentation. After completing the encounter, the EHR will create electronic case message regarding the patient's diagnosis which would be sent to the public health registry or if unavailable an electronic case test tool.

Using an appropriate sample of electronic case messages, we will determine error rate by counting success and failures. A success is any syndromic message accepted by the public registry or tool without errors. A failure is any syndromic message rejected by the public registry or tool due to message errors.

Care Settings and Number of Clients Site to Test

We designed this measure to test the oncology setting that we support and target. We will test either with one client practice or an internal resource in a production-type environment.

RWT Measure #8. Number of different applications/3rd party systems using API capabilities

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

Testing Methodology: Reporting/Logging

Measurement Description

This is a user reported measure to determine how many different systems or applications are connecting to the EHR via the API. It will give us a numeric metric associated with the different API client applications working with our EHR.

Measurement Justification

This measure will survey users to determine how many 3rd party systems or applications are integrated with or using the EHR's API interface. This will give a specific number of API applications which the user has registered for and approved access with their system. This will reveal the level of interoperability or interest in this feature at this time.

Measurement Expected Outcome

Through working with our users, we will determine how many different API applications have been registered and authorized to use our API functionality.

The answer will provide insight into how clinicians view both the use and value of this interoperability feature. For example, response may show that additional training is needed to better utilize the feature or that it is not currently utilized as currently designed. It will provide a benchmark for evaluate future surveys as well as to share insight into any new development for improvements or enhancements of the health IT system.

Care Settings and Number of Clients Site to Test

We designed this measure to test the oncology setting that we support and target. We will test either with one client practice or an internal resource in a production-type environment.