CY 2023 Real World Testing Plan for Theoria Medical

Executive Summary

This is the real world test plan for CY 2023 for Theoria Medical certified EHR solution, ChartEasy™. 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.

As ONC has stated in its rule, "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." We have worked toward this objective in designing our test plan and its subsequent real world testing measurements and metrics.

This document builds toward the final testing measurements and metrics we will use to evaluate our product interoperability within production settings. Within each use case, we document our testing methodology for the measure/metric we plan to employ. We also include the associated ONC criteria, our justification for measurement selection, our expected outcomes from the testing, the care settings applied for this measure, and if applicable the number of clients to use in our real world testing.

We have included our timeline and milestones for completing the real world testing in CY 2023, and information about compliance with the Standards Version Advancement Process updates.

A table of contents is provided for 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: Andrew McUsic

Authorized Representative Signature: 

October 31, 2022

DATE

General Information

Plan Report ID Number: ChartEasy-RWT-2023

Developer Name: Theoria Medical, PLLC

Product Name(s): ChartEasy™

Version Numbers(s): 1.1

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

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

- 15.04.04.3091.Char.01.00.1.211108
- https://chpl.healthit.gov/#/listing/10712

Developer Real World Testing Page URL: https://theoriamedical.com/ehr-certificate

Timeline and Milestones for Real World Testing CY 2023

- 2Q-3Q 2023. During the 2nd and 3rd quarter of CY 2023, the real world testing with clinician users will be scheduled and performed. 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 CY 2023 RWT Test Report to ONC-ACB.

Standards Version Advancement Process (SVAP) Updates

For CY 2023, we are not planning to make any version updates on approved standards through the SVAP process. We plan on implementing USCDI v1 in our C-CDAs and API support before the end of 2022, but we have not finalized an exact date for rollout.

Standard (and version)	N/A
Updated certification criteria and associated product	N/A
Health IT Module CHPL ID	N/A
Method used for standard update	N/A
Date of ONC-ACB notification	N/A
Date of customer notification (SVAP only)	N/A
Conformance measure	N/A
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 evaluated, 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.

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 a minimum of 3 months

Measurement Justification

This measure will provide a numeric value to indicate both 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 our 3rd party HISP, EMR Direct Interoperability Engine, 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.

This test will also examine our interface with our 3rd party HISP, EMR Direct Interoperability Engine. A successful and working integration with our HISP will be evident by the ability to exchange C-CDA messages.

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

ChartEasy is designed solely for our own internal use within our Theoria Medical practices. We target the ambulatory care setting and have designed our RWT measure use cases to align with the workflow activities of our clinical team.

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.

The interval for this measure will be a minimum of 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.

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RWT Measure #3. 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 a minimum of 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.

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RWT Measure #4. Compliance of QRDA Cat III with CVU+ Tool

Associated Criteria: 315(c)(1)-(c)(3)

Testing Methodology: Compliance and Tool

Measurement Description

This measure is tracking compliance of the EHR Module criteria functionality of creating a QRDA Cat III and verify its compliance with the CVU+ tool.

Measurement Justification

Currently, our Theoria Medical practice is not submitting clinical quality measures through our eCQM functionality, but we can verify it is still compliant through using a CMS simulated evaluation. We will create a QRDA Cat III file that will be validated against compliance using the Cypress Validation Utility Calculation Check (CVU+) or the CMS QualityNet application. This measure will provide assurance of compliance to the EHR Module criteria, specifically ability to calculate electronic clinical quality measures (eCQMs) and create a valid QRDA Category III (Cat III) file containing the calculation results.

Because CQM criteria, 315(c)(1)-(c)(3), all work collectively together in the eCQM functionality of the EHR Module, this measurement is used for all three. This measure will also allow us to get our integration with our 3rd party relied upon software eCQM application, Dynamic Health IT-CQM Solution.

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 both do the eCQM calculations as well as create the QRDA Cat III result file used for CMS submission. The QRDA Cat III will be validated against the CVU+ to confirm no errors. 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.

As we use 3rd party relied upon software eCQM application, Dynamic Health IT-CQM Solution, our test will verify its integration and working status. We expect CQM Solution successfully produce the QRDA Cat III file for us to validate and test.

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RWT Measure #5. Number of Different applications/3rd Party Systems using our FHIR API

Associated Criteria: 315(g)(7)-(g)(9) (and eventually (g)(10))

Testing Methodology: Reporting/Logging and Survey/User Reported

Measurement Description

This is a survey measure to determine how many different systems or applications are connecting to our EHR via the FHIR API.

Measurement Justification

This measure will count how many 3rd party systems or applications are integrated and using our EHR's API interface. API capabilities are an important component of the modern health IT system, and utilization of API resources will help improve patient care and care coordination, and this measure will indicate how our FHIR server is working in production.

Measurement Expected Outcome

The measurement will provide a count of FHIR application 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.

The answer will provide insight into how both patients and clinicians view the use and value of this interoperability feature.

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