



# 2025 Real World Testing Plan

iMedicWare R8-V3

Lora Woltz

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## Revision History

The Revision History table below provides a record of all revisions made to this document throughout its life cycle. Updates are tracked by date the revisions were made, the version number, a brief description of the changes made and reason, as well as the name of the reviser and the approver.

| Effective Date | Version # | Change Description/ Reason | Created/Revised by | Reviewed by | Approved by |
|----------------|-----------|----------------------------|--------------------|-------------|-------------|
| 08/06/2024     | 2024.1    | Sightview Revision         | Lora Woltz         | Lora Woltz  | Lora Woltz  |
| 10.28.2024     | 2025.1    | 2025 Update                | Lora Woltz         | Lora Woltz  | Lora Woltz  |

## Product Information

| Product Information                          |                                          |
|----------------------------------------------|------------------------------------------|
| <b>Plan Report ID Number:</b>                | 2025RWTP_IMWvR8V3                        |
| <b>Developer Name</b>                        | iMedicWare, LLC                          |
| <b>Product Name</b>                          | iMedicWare                               |
| <b>Version Number(s)</b>                     | R8-V3                                    |
| <b>Certified Health IT</b>                   | ONC Certification Criteria for Health IT |
| <b>Product List CHPL ID</b>                  | 15.04.04.3207.iMed.R8.03.1.241024        |
| <b>Developer Real World Testing Page URL</b> | ONC Certification   Sightview            |

## Introduction

This test plan describes the testing approach and overall framework that will drive the testing of iMedicWare, LLC's ONC Certification Criteria for Health IT software modules in order to comply to the ONC Health IT Certification program's Real World Testing Conditions of Certification requirement described in § 170.405 Real World Testing Version 1.4.

This document introduces:

- The scope of applications under test w/ associated criterion subject to real world testing
- Justification for Real World Testing Approach

- The testing methods/methodologies that will be used to demonstrate real world interoperability and conformance to the full scope of the certifications requirements
- The care setting description and justification of the care setting
- SVAP description (as applicable)
- Key real world testing milestone schedule
- Description of expected outcomes
- Measurement / Metric detail
- Justification of the real world testing approach

This test plan version (2025.1) is associated with the testing to be conducted in **CY 2025**.

# 1 Scope

## 1.1.1 Applications in Scope

The following Sightview Software, LLC CEHRT software platforms are subject to the real-world testing procedures outlined in this test plan for criterion certified to that platform, and as listed on the Certified Health IT Product List, as of August 31, 2024.

| Platform   | Version | Criterion to be Tested                                          |
|------------|---------|-----------------------------------------------------------------|
| iMedicWare | R8-V3   | (b)(1), (b)(2), (b)(3), (b)(10), (c)(1), (e)(1), (g)(7), (g)(9) |

## 1.1.2 Criterion Detail

| §170.315 | Criterion Name                         | Criterion Description (includes, not limited to)                                                                                                                                                                                                                                                                                         |
|----------|----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (b)(1)   | Transitions of Care                    | Software must be able to create, send and receive transitions of care/ referral summaries via edge protocol; be able to detect valid and invalid transitions of care/referral summaries; display the data received in the transition of care/referral summary in human readable format; allow for the individual display of each section |
| (b)(2)   | Clinical Information and Incorporation | Software can properly match a received Transition of Care/Referral Summary to the correct patient; User can review, validate and incorporate a patient's medication list, allergies and problem list                                                                                                                                     |

|         |                                                  |                                                                                                                                                                                                                                                                                                                                                             |
|---------|--------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (b)(3)  | ePrescribing                                     | A user can send and receive the specified prescription transactions electronically per the NCPDP SCRIPT Standard Implementation Guide Version 2017071 and using RxNorm vocabulary codes.                                                                                                                                                                    |
| (b)(10) | EHI Export                                       | Software enables a user to timely create an export file(s) with all of a single patient's electronic health information stored at the time of certification; A user must be able to execute this capability at any time the user chooses and without subsequent developer assistance to operate. The export file is in an electronic and computable format. |
| (c)(1)  | Clinical Quality Measurement – record and Export | Software must be able to record all of the data that would be necessary to calculate each CQM that the technology is certified for; user must be able to export a data file at any time and without developer assistance                                                                                                                                    |
| (e)(1)  | View, Download and Transmit                      | Patient (and authorized representative) must be able to use internet based technology to view, download and transmit their health information to a 3rd party                                                                                                                                                                                                |
| (g)(7)  | Application Access – Patient Selection           | Software must be able to receive a request with sufficient information to uniquely identify a patient and return an ID or other token that can be used by an application to execute request for patient data; Documentation must be provided via publicly available hyperlink                                                                               |
| (g)(9)  | Application Access – All Data Request            | Software must respond to requests for patient data (based on ID or other token); return data in a summary record format ; respond to request for patient data associated with specific date and date range; Documentation must be provided via publicly available hyperlink                                                                                 |

**Table 1.1: Note that full regulation text is available on the [HealthIT.gov](https://www.healthit.gov) website for each criteria listed above.**

Only functionality that is specific to the performance of successfully completing a task related to the criterion listed in Table 1.1.2 will be included in the real world testing execution.

## 2 Justification for Real World Testing Approach

Sightview Software, LLC Certified Health IT Modules are sold only to the Ophthalmology / Optometry specialty care settings. The certified functionality under test works the same for each care setting therefore the Real-World Testing plan will be applied to the Ophthalmology specialty care setting for the purposes of providing Real World Testing Results.

iMedicWare Version R8-V3, hereafter may also be referred to as Health IT Module or CEHRT, supports multiple certification criteria:

- **170.315(b)(1) Transitions of Care**
- **170.315(b)(2) Clinical Information Reconciliation and Incorporation**
- **170.315(b)(3) Electronic Prescribing**
- **170.315(b)(10) EHI Export**
- **170.315(c)(1) Clinical Quality Measurement- Record and Export**
- **170.315(e)(1) View, Download and Transmit**
- **170.315(g)(7) Application Access – Patient Selection**
- **170.315(g)(9) Application Access – All Data Request**

The purpose of the system test is to demonstrate real world interoperability and conformance to the full scope of the platform's certification criterion's requirements and to evaluate the end-to-end system specifications and functionality related to specific certified criteria for the application under test (AUT). The system test will involve the external workings of the software from the user's perspective.

Scenario Testing can be used to best define the functionality related to the criteria to be tested. Use Case will represent the action(s) that are required to achieve the expected outcome of the test scenario. API testing will be used to test application programming interfaces where applicable. API testing is used to determine if the health IT's API meets expectations for functionality, reliability, performance and security. Therefore, iMedicWare, LLC will use Test Scenario, Use Case and API (where applicable) based system testing methodologies in parallel to conduct the system test on the fully integrated applications, including external peripherals (HISP) as applicable, to check how components interact with each other and with the system as a whole during interoperability related actions that are defined in § 170.140 Real World Testing Version 1.4.

The testing will be performed by the Product Compliance Officer with assistance by individual developers, subject matter experts or support team leads as

required. The measures chosen are meant to reflect performance that will best demonstrate interoperability in a real-world scenario as is outlined in this Real-World Testing Plan. In certain cases, synthetic patient data may be used for data entry simulation. All nonconformities must be documented, and a mediation strategy detailed for each nonconformity. All nonconformities must be reported to ONC within 30 days of discovery.

Verification of the created patient record export may require interaction with a system external to the organization (and with a different vendor).

### 3 Standards Updates

| Standard (and version)                                          | All Standards included in C-CDA R2.1 |
|-----------------------------------------------------------------|--------------------------------------|
| <b>Certification criteria</b>                                   | 170.315(b)(1) Transitions of Care    |
| <b>Health IT Module CHPL ID</b>                                 | 15.04.04.3207.iMed.R8.03.1.241024    |
| <b>Health IT Module Product ID</b>                              | 15.04.04.3207.iMed.R8.03.1.241024    |
| <b>Method used for standard update</b>                          | Minimum Standard Code Sets           |
| <b>Date of ONC-ACB notification</b>                             | Not Applicable                       |
| <b>Date of customer notification (SVAP only)</b>                | Not Applicable                       |
| <b>USCDI-updated certification criteria (and USCDI version)</b> | Version 1                            |

| Standard (and version)                           | All Standards included in C-CDA R2.1                                |
|--------------------------------------------------|---------------------------------------------------------------------|
| <b>Certification criteria</b>                    | 170.315(b)(2) Clinical Information Reconciliation and Incorporation |
| <b>Health IT Module CHPL ID</b>                  | 15.04.04.3207.iMed.R8.03.1.241024                                   |
| <b>Health IT Module Product ID</b>               | 15.04.04.3207.iMed.R8.03.1.241024                                   |
| <b>Method used for standard update</b>           | Minimum Standard Code Sets                                          |
| <b>Date of ONC-ACB notification</b>              | Not Applicable                                                      |
| <b>Date of customer notification (SVAP only)</b> | Not Applicable                                                      |

|                                                                 |           |
|-----------------------------------------------------------------|-----------|
| <b>USCDI-updated certification criteria (and USCDI version)</b> | Version 1 |
|-----------------------------------------------------------------|-----------|

| <b>Standard (and version)</b>                                   | <b>SCRIPT 2017071</b>             |
|-----------------------------------------------------------------|-----------------------------------|
| <b>Certification criteria</b>                                   | 170.315(b)(3) ePrescribing        |
| <b>Health IT Module CHPL ID</b>                                 | 15.04.04.3207.iMed.R8.03.1.241024 |
| <b>Health IT Module Product ID</b>                              | 15.04.04.3207.iMed.R8.03.1.241024 |
| <b>Method used for standard update</b>                          | Minimum Standard Code Sets        |
| <b>Date of ONC-ACB notification</b>                             | Not Applicable                    |
| <b>Date of customer notification (SVAP only)</b>                | Not Applicable                    |
| <b>USCDI-updated certification criteria (and USCDI version)</b> | N/A                               |

| <b>Standard (and version)</b>                                   | <b>All Standards included in C-CDA R2.1</b> |
|-----------------------------------------------------------------|---------------------------------------------|
| <b>Certification criteria</b>                                   | 170.315(b)(10) EHI Export                   |
| <b>Health IT Module CHPL ID</b>                                 | 15.04.04.3207.iMed.R8.03.1.241024           |
| <b>Health IT Module Product ID</b>                              | 15.04.04.3207.iMed.R8.03.1.241024           |
| <b>Method used for standard update</b>                          | Minimum Standard Code Sets                  |
| <b>Date of ONC-ACB notification</b>                             | Not Applicable                              |
| <b>Date of customer notification (SVAP only)</b>                | Not Applicable                              |
| <b>USCDI-updated certification criteria (and USCDI version)</b> | Version 1                                   |

| <b>Standard (and version)</b>      | <b>QRDA I STU 5.3 with errata</b>                              |
|------------------------------------|----------------------------------------------------------------|
| <b>Certification criteria</b>      | 170.315(c)(1) Clinical Quality Measurement - Record and Export |
| <b>Health IT Module CHPL ID</b>    | 15.04.04.3207.iMed.R8.03.1.241024                              |
| <b>Health IT Module Product ID</b> | 15.04.04.3207.iMed.R8.03.1.241024                              |

|                                                                 |                            |
|-----------------------------------------------------------------|----------------------------|
| <b>Method used for standard update</b>                          | Minimum Standard Code Sets |
| <b>Date of ONC-ACB notification</b>                             | Not Applicable             |
| <b>Date of customer notification (SVAP only)</b>                | Not Applicable             |
| <b>USCDI-updated certification criteria (and USCDI version)</b> | N/A                        |

| <b>Standard (and version)</b>                                   | <b>All Standards included in C-CDA R2.1</b> |
|-----------------------------------------------------------------|---------------------------------------------|
| <b>Certification criteria</b>                                   | 170.315(e)(1) View Download and Transmit    |
| <b>Health IT Module CHPL ID</b>                                 | 15.04.04.3207.iMed.R8.03.1.241024           |
| <b>Health IT Module Product ID</b>                              | 15.04.04.3207.iMed.R8.03.1.241024           |
| <b>Method used for standard update</b>                          | Minimum Standard Code Sets                  |
| <b>Date of ONC-ACB notification</b>                             | Not Applicable                              |
| <b>Date of customer notification (SVAP only)</b>                | Not Applicable                              |
| <b>USCDI-updated certification criteria (and USCDI version)</b> | Version 1                                   |

| <b>Standard (and version)</b>                                   | <b>All Standards included in C-CDA R2.1</b>          |
|-----------------------------------------------------------------|------------------------------------------------------|
| <b>Certification criteria</b>                                   | 170.315(g)(7) Application Access – Patient Selection |
| <b>Health IT Module CHPL ID</b>                                 | 15.04.04.3207.iMed.R8.03.1.241024                    |
| <b>Health IT Module Product ID</b>                              | 15.04.04.3207.iMed.R8.03.1.241024                    |
| <b>Method used for standard update</b>                          | Minimum Standard Code Sets                           |
| <b>Date of ONC-ACB notification</b>                             | Not Applicable                                       |
| <b>Date of customer notification (SVAP only)</b>                | Not Applicable                                       |
| <b>USCDI-updated certification criteria (and USCDI version)</b> | None                                                 |

| Standard (and version)                                   | All Standards included in C-CDA R2.1                |
|----------------------------------------------------------|-----------------------------------------------------|
| Certification criteria                                   | 170.315(g)(9) Application Access – All Data Request |
| Health IT Module CHPL ID                                 | 15.04.04.3207.iMed.R8.03.1.241024                   |
| Health IT Module Product ID                              | 15.04.04.3207.iMed.R8.03.1.241024                   |
| Method used for standard update                          | Minimum Standard Code Sets                          |
| Date of ONC-ACB notification                             | Not Applicable                                      |
| Date of customer notification (SVAP only)                | Not Applicable                                      |
| USCDI-updated certification criteria (and USCDI version) | Version 1                                           |

## 4 Care Settings

### 4.1 Settings of Care Description

All Sightview Software, LLC CEHRT platforms are considered to be an **Ambulatory Specialty Care Practice** type care setting for use in ophthalmology practices.

### 4.2 Settings of Care Justification

| Care Setting                                                     | Justification                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Ambulatory Specialty Care Practice – Ophthalmology and Optometry | iMedicWare, LLC provides CEHRT that supports healthcare professionals in ophthalmology and optometry in outpatient ambulatory environments only. Ophthalmology and optometry are considered to be specialized areas of medicine. The software allows users to perform a wide range of functions that focus on all aspects of the patient's eye examination. The software is not used in other types of settings of care. Since the patient base, exam type and documentation content of ophthalmologists encompass all and more aspects of patient care as optometry, all Real World Testing scenarios will be focused on the ophthalmology practice. |

## 5 Overall Expected Outcomes

RWT will demonstrate that the Health IT Module is conformant to the following certification criteria:

- 170.315(b)(1) Transitions of Care
- 170.315(b)(2) Clinical Information Reconciliation and Incorporation
- 170.315(b)(3) Electronic Prescribing
- 170.315(b)(10) EHI Export
- 170.315(c)(1) Clinical Quality Measurement- Record and Export
- 170.315(e)(1) View, Download and Transmit
- 170.315(g)(7) Application Access – Patient Selection
- 170.315(g)(9) Application Access – All Data Request

The Health IT Module is specifically marketed to ophthalmology and optometry practice settings. RWT will demonstrate that the Health IT Module exchanges EHI in the expected manner in ophthalmology care settings, specifically the interoperability related criteria of creating, sending, and receiving the CCDA, providing interoperability information to the patient and providing patient data on demand.

RWT will demonstrate that the Health IT Module supports Edge Protocol via SMTP transport

## 6 Key Milestones

| Key Milestone                                                                                                                  | Date / Timeframe |
|--------------------------------------------------------------------------------------------------------------------------------|------------------|
| Preparation of templates, instructions, forms, and schedules to be released to the platform's Subject Matter Experts as needed | 01/31/2025       |
| Test Environments Ready                                                                                                        | 03/31/2025       |
| Perform Real World Testing                                                                                                     | Q2, Q3, Q4 2025  |
| Interim Report status of scheduling and/or testing issues, successes, remediation needs, fixes, deviations from test plan etc. | 06/30/2025       |
| Soft deadline for testing completion                                                                                           | 09/31/2025       |
| Hard deadline for testing completion                                                                                           | 12/31/2025       |
| Detailed Test Data results submission                                                                                          | 01/15/2026       |
| Test Summary Report Finalized                                                                                                  | 01/31/2026       |
| Test Summary Report Submission to ACB                                                                                          | 02/15/2026       |

## 7 Measures Used

The CEHRT is certified to multiple criteria that must comply with Real World Testing requirements. The following outlines the measures and metrics chosen to best demonstrate interoperability and conformance to the certification criterion:

| Measurement/Metric                                                         | Description                                                                                                                              |
|----------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|
| <b>170.315(b)(1) Transitions of Care</b>                                   | (i)(A) Send transition of care/referral                                                                                                  |
|                                                                            | (i)(B) Receive transition of care/referral                                                                                               |
| <b>170.315(b)(2) Clinical Information Reconciliation and Incorporation</b> | (ii) Correct Patient – received transition of care/referral can be correctly matched to the specific patient                             |
|                                                                            | (iii) Reconciliation – user can review, validate, and incorporate a patient's medication list, allergies, and problems list              |
| <b>170.315(b)(3) Electronic Prescribing</b>                                | (ii)(A)(1)(a) Create and Send New Prescription                                                                                           |
| <b>170.315(b)(10) EHI Export</b>                                           | (i)(A) Enable a user to timely create an export file(s) with all of a single patient's electronic health information                     |
|                                                                            | (i)(B) user must be able to execute this capability at any time the user chooses and without subsequent developer assistance to operate. |
|                                                                            | (i)(D) Export is available in electronic and computable format                                                                           |
| <b>170.315(c)(1) Clinical Quality Measurement – create and export</b>      | (1)(i) record all data necessary to calculate CQMS for certification                                                                     |
|                                                                            | (1)(ii) export a data file formatted in accordance with the corresponding version of the QRDA standard                                   |
| <b>170.315(e)(1) View Download and Transmit</b>                            | (i)(A)(1) View ambulatory summary in human readable format in the patient portal                                                         |
| <b>170.315(g)(7) Application Access - Patient Selection</b>                | (i) Identify a patient and return an ID or token that can be used by the application to execute requests for the patient's data          |
| <b>170.315(g)(9) Application Access – All Data Request</b>                 | (i)(A) API responds to requests for patient data for all data categories of the CCD for the unique patient.                              |
|                                                                            | (i)(B) API responds to request for patient data for a specific date or date range                                                        |

### 7.1 Measures Use Case(s)

The measure use cases listed below have been chosen to demonstrate interoperability in real world use. To cover all criteria, multiple use cases are required for this plan. Because the CEHRT manages multiple functions for the same patient, the following criteria may be tested simultaneously:

**Use Case 1: (Single Patient): 170.315(b)(1) Transitions of Care**

- **Measure 1:** Conformance to 170.315(b)(1)(i)(A) Transitions of care – Sending – This measure will track the export of CCD created by the CEHRT and monitor the ability to share the CCD with the intended recipient using Edge protocols.
- **Measure 2:** Conformance to 170.315(b)(1)(ii)(B) Transitions of care – Receiving - This measure will track the ability of the CEHRT to display the data received in the transition of care/referral summary in human readable format

Measure Justification: The CEHRT has been developed to provide the eye care provider with the ability to document, store and share EHI regarding a patient's visit in an ambulatory care setting. The CEHRT allows for the creation of the patient health information based on the patient visit, and according to the United States Core Data for Interoperability (USCDI) Version 1 data class and data element categories. The CEHRT allows for the sharing of CCDs between providers and patients both within and outside of the healthcare practice using Edge protocols.

Test Methodology: The CEHRT utilizes Updox as the HISP to perform authentication, encryption, trust verification and acknowledgement of responsibility to deliver the message utilizing SMTP transport protocol as specified in the Applicability Statement for Direct Secure Health Transport when securely routing messages from a sender's address to an intended recipient's address. Updox provides API Reporting that will allow for the retrieval of details about the transmissions of all DSM transmissions. Previous year testing concluded that Direct Messaging of the TOC was not widely used and therefore it may be required to demonstrate the functionality using test patient data in the chosen practice environment.

It is anticipated that the transmission details will include, but are not limited to, the following scenarios to verify transmissions success or failure:

| Scenario                                                                                                                   | MDN Status |
|----------------------------------------------------------------------------------------------------------------------------|------------|
| When receiving a Direct message                                                                                            | Processed  |
| When receiving a Direct message and successfully delivering to the Edge Client and sending HISP requested a Dispatched MDN | Dispatched |
| When receiving a Direct message and unable to deliver to Edge Client                                                       | Failure    |
| When sending a Direct message and counterparty HISP doesn't send a Processed MDN within 60 minutes                         | Failure    |

Comparative Summaries will be collected using EHR audit and system logs to determine the frequency of and the transport mechanism used by providers. Log files obtained during Real World Testing will be de-identified and used for analysis to ensure that the creation and export of CCDA files is reflected in the API reporting provided by the HISP. Since the action of sending the CCDA to an intended recipient via HISP remains elective, we intend to demonstrate that the functionality is available and can be successfully utilized by the client, regardless of the frequency of use.

Expected Outcomes: It is expected that providers will be able to share EHI using the transmission mechanisms provided. A low utilization rate is expected, with a higher rate of success seen for the creating and sending of a CCD versus the receipt of an external CCD. This is because of the lack of control over the quality of data occurring in an externally generated CCD and errors may exist that prohibit the acceptance of the CCD into the EHR.

## **Use Case 2: (Single Patient) Metrics: 170.315(b)(2) Clinical Information Reconciliation and Incorporation**

- **Measure 1:** Conformance to 170.315(b)(2)(ii) Clinical Information Reconciliation and Incorporation – Correct Patient – This measure will track the ability of the CEHRT that a received transition of care/referral can be correctly matched to the specific patient.
- **Measure 2:** Conformance to 170.315(b)(2)(ii) Clinical Information Reconciliation and Incorporation – Reconciliation – This measure will track the ability that a user of the CEHRT can review, validate, and incorporate a patient's medication list, allergies, and problems list from a correctly matched transition of care/referral.

Measure Justification: Transitions of Care and/or referrals may be received electronically internally from provider to provider within the practice or externally from a different provider. Correctly matching the incoming or received health record to the appropriate patient and then performing the reconciliation of medication lists, allergies and problems is vital to patient safety and demonstrates the intention of data interoperability. The CEHRT allows for the receipt of an inward bound patient health summary, patient/record matching of the incoming transition of care and/or referral and reconciliation of medications, medication allergies and problem lists associated with the incoming CCD.

Test Methodology: The EHR will utilize a combination of audit and system logs to record the success or failure of actions related to patient matching and reconciliation within the EHR. The volume of naturally occurring transition of care or referrals received by the target clinic during the chosen RWT period cannot be anticipated prior to testing. Previous year testing concluded that the functionality was not adopted in the practices chosen for demonstration. In which case, the EHR's RWT team may initiate transactions involving synthetic patient data in order to generate a sufficient volume of transactions to demonstrate the measure. For this reason, we intend to demonstrate that the functionality is available and can be successfully utilized by the client, regardless of the frequency of use.

Expected Outcomes: It is expected that providers will be able to match and reconcile the medications, allergies and problem lists to the correct patient using the mechanisms provided. It is expected that the rate of usage will be low, with successful outcomes when utilized.

### **Use Case 3: (Single Patient) Metrics: 170.315(b)(3) Electronic Prescribing**

- **Measure 1:** Conformance to 170.315(b)(3)(ii)(A) – This measure will track the ability of the CEHRT to send and receive the specified prescription transactions electronically.

Measure Justification: The CEHRT has been developed to provide the eye care provider the ability to send and receive electronic drug prescriptions to the receiving pharmacy in accordance with NCPDP SCRIPT Standard Implementation Guide Version 2017071 and using RxNorm vocabulary codes. ePrescribing transactions are initiated by the provider or provider agent. Those

transactions are transmitted electronically via a third-party ePrescribing agent to the pharmacy with a return confirmation of successful completion.

Test Methodology: The CEHRT utilizes and integrates with Change Healthcare for electronic prescribing functionality. System logs and audit file records, both internal and external (Change Healthcare) will be reviewed during the testing period to determine the frequency and success of sending electronic prescriptions requests. The CEHRT also integrated with Dr First Rcopia systems as an alternative Electronic Prescribing solution for its providers. Audit logs and reporting will be reviewed for success rates among ePrescribing users.

Expected Outcomes: It is expected that eligible providers will be able to request, send and transmit electronic prescriptions to the intended recipient pharmacy at a high success rate when correct workflows are followed.

#### **Use Case 4: (Single Patient) Metrics: 170.315(b)(10) EHI Export**

- **Measure 1:** Conformance to 170.315 (b)(10)(i)(A) Enable a user to timely create an export file(s) with all of a single patient's electronic health information
- **Measure 2:** Conformance to 170.315(b)(10)(i)(B) – Execute at any time – This measure will track the ability of the CEHRT to create an export summary in real time (i.e., on demand).
- **Measure 3:** Conformance to 170.315(b)(10)(i)(D) – Electronic Format – This measure will track the ability of the CEHRT to create the EHI Export file in an electronic and computable format.

Measure Justification: The CEHRT can share patient healthcare information for a single patient or a group of patients with an external organization using an export function. This information is typically shared when there is a need for the full patient record and should be executable on demand, according to the date and time and destination location chosen by the requestor.

Test Methodology: System logs and audit file records will be reviewed during the testing period to determine the frequency of data export requests. EHI Export is not widely used in the daily clinic scenario so it may be necessary for the Tester to initiate the export request as a naturally occurring Data Export request may not be done by the target clinic during the chosen RWT period. For this reason, we intend to demonstrate that the functionality is available and can be successfully

utilized by the client, regardless of the frequency of use. Log files obtained during RWT will be de-identified and reviewed to validate the proper functionality of the request process.

Expected Outcomes: It is expected that the authorized users will be able to generate an electronic and computable EHI export file using the export function on demand. It is expected that there will be a very low rate of usage with a high success rate.

#### **Use Case 5 (Single Patient): 170.315(e)(1) View, Download and Transmit**

- **Measure 1:** Conformance to 170.315(e)(1)(i)(A)(1) – View - This measure will track the ability of the patient/authorized patient representative of the CEHRT to view in human readable format an ambulatory summary that has been sent to the patient portal.

Measure Justification: The CEHRT includes the ability to transfer the human readable health summary to the proprietary patient portal where the patient can view, download, and transmit the health care summary. The transitions of care, referrals and patient health care summaries are shared between organizations and the patient portal using Edge Protocol technology provided by the use of Updox. Health Summaries are generated for each patient visit and for each update to the health record upon finalization of the patient exam by the overseeing provider.

Test Methodology: Audit and system logs will be generated and reviewed to determine the frequency and success versus error rate of health summary transport to the patient portal. Log files may be de-identified and used for analysis of the ability to view the health summary record from the portal account. Availability of the health summary in the portal is contingent upon the patient having portal access and the finalization of the patient chart by the overseeing provider. Actual viewing of the health summary is a voluntary action by the patient and therefore the compliance to this functionality will be measured by the availability and effectiveness of the function, regardless of the frequency of use or view rate by the patient.

Expected Outcome: It is expected that a health summary file will be generated and sent to the patient's portal account and that the health summary can be

viewed in human readable format. It is also expected that the health summary will be generated for each patient encounter or update to the patient record. Based on the previous year's RWT findings, it is expected that there will be a high rate of availability of the health summary in the portal, with a moderate to low view rate.

#### **Use Case 6 (Single Patient/Multi-Patient): 170.315(c)(1) Clinical Quality Measurement – Record and Export**

- **Measure 1:** Conformance to 170.315(c)(1)(i) – Record - This measure will track the ability of the CEHRT to be able to record all of the data that would be necessary to calculate each CQM that the technology is certified for individual patients
- **Measure 2:** Conformance to 170.315(c)(1)(ii) – Export - This measure will track the ability of the CEHRT to be able to export a data file for single patient and multiple patients, formatted in accordance with the corresponding version of the QRDA I standard.

Measure Justification: The CEHRT is designed to capture specific certified clinical quality measures for QRDA I file creation and export to a designated destination file or URL. This allows for the quality measure data to be uploaded and calculated for the CMS MIPS Quality category by third party vendors, specifically Clinical Data Registries OR Qualified Clinical Data Registries.

Testing Methodology: Nine Clinical Quality measures are certified by myCare iMedicWare Version R8-V3. The target clinic(s) may or may not utilize all nine measures. QRDA I files will be de-identified and reviewed for appropriate measure inclusion or exclusion. An SFTP or similar server may be configured to simulate 3rd party receipt of data, if necessary. Comparison of data against a CDR or QCDR utilized by the clinic may be performed to validate data accuracy, if available. There is low to moderate usage of this function so it may be necessary for the RWT team to initiate the report generation.

Expected Outcome: It is expected that the CEHRT will evaluate and record Clinical Quality Measure data according to measure inclusion/exclusion eligibility into a QRDA I file and that the CEHRT can export a QRDA I data file for a single patient or for multiple patients. A low usage range is expected with a high success rate and it may be necessary to generate reports with shorter date ranges to compensate for clinics with extremely large data volume.

## **Use Case 7 (Single Patient): 170.315(g)(7),(9) Application Access**

The following criteria may be tested simultaneously:

### **Use Case 6A: 170.315(g)(7) Application Access – Patient Selection**

- **Measure 1:** Conformance to 170.315(g)(7)(i) – Identify – This measure will track the ability of the API to identify a patient and return an ID or token that can be used by the application to execute requests for the patient's data

### **Use Case 6B: 170.315.(g)(9) Application Access- All Data Request**

- **Measure 1:** Conformance to 170.315(g)(9)(i)(A) – Unique Patient – all records - This measure will track the ability of the API to respond to a request for patient data for all data categories of the CCD for the unique patient.
- **Measure 2:** Conformance to 170.315(g)(9)(i)(B)- Date/Date Range Request - API responds to request for patient data for a specific date or date range.

Measure Justification for 170.315(g)(7)(9): The CEHRT API technology is intended to accommodate the full range of API certified functionalities to pull patient data for a single patient. These measures will look at the performance of the certified API technology to manage multiple functionalities at once. Performance will pertain to token creation and the ability of the API to pull category specific data and all category data for the chosen date or date range.

Test Methodology: The API requires an active patient portal account. RWT will review the ability of the CEHRT to authenticate user credentials to create a token for the unique patient and then the ability to access the PHI data for the patient with the search criteria or input through the patient application. Data accessed can be downloaded in the form of a CDA XML or by HTML human readable format. Date ranges and CDA subsections may be queried separately or together.

System logs will be reviewed for error codes indicating a bad request response or unauthorized credentials. Log files will be de-identified and used for analysis to ensure proper functionality. The API feature of the CEHRT is not utilized in normal day to day practice. The API feature of the CEHRT is not utilized in normal day to day practice. Real World Testing may require the direct initiation of an API event(s) by the tester in conjunction with the CEHRT client's application under test.

Expected Outcomes: It is expected that the CEHRT will perform API calls with a minimum of error. The API feature of the CEHRT is not utilized in normal day to day practice. Real World Testing may require the direct initiation of an API event(s) by the tester in conjunction with the CEHRT client's application under test.

## 7.2 Relied Upon Software

myCare iMedicWare Version R8-V3 requires the use relied upon software for direct certification of the following certified function: 170.315(b)(3) electronic prescribing:

iMedicWare is integrated with two different ePrescribing software applications

1. Change Healthcare – used for demonstrating 170.315(b)(3) – electronic prescribing functionality.
2. Dr First Rcopia – alternative ePrescribing solution – Rcopia is directly certified for criterion (b)(3).

myCare iMedicWare Version R8-V3 requires the use relied-upon software for direct certification of the following certified function: 170.315(e)(1) View Download Transmit: iMedicWare utilizes UPDOX for HISP related clinical data exchanges.

## 8 Test Methods

### 8.1 Test Requirements and Resources

- **Test or staging environment** – this environment is to be ready to accept an installed and functional copy of the CEHRT to be tested
- **Installed CEHRT** - is to be configured to exactly mirror the CEHRT in use by the client in production
- **Network** – LAN / Internet to simulate the real business and user environment.
- **Computer** – to simulate a user environment in the real world.
- **Synthetic Patient Data** – In order to protect patient identity, the CEHRT development team will use synthetic patient data to model the demographics and medical history of realistic patient health data. This modeled data will mirror a typical patient encounter(s) in order to generate

the system and use case outcomes that are aligned with the scenario and use case under test.

- o Data will include all elements found in the Common Clinical Data Set, allergies, medications, care plans, ICD10 and CPT codes as needed to align with the scenario and use case under test.
- **Trading Partner Access** – allows for third party confirmation of successful send/receipt of CCDA.

## 8.2 Test Justification of Mirrored Environment and Synthetic Data

**Synthetic Patient Data** – In order to protect patient identity, or to initiate the use of certified functionality that may not be naturally triggered by the client, the CEHRT development team may use synthetic patient data to model the demographics and medical history of realistic patient health data. This modeled data will mirror a typical patient encounter(s) in order to generate the system and use case outcomes that are subject to RWT. Data will include all elements found in the USCDI v. 1., allergies, medications, care plans, ICD10 and CPT codes as needed to align to the scenario and use case under test

## 8.3 Testing Process Template Example

| Health IT Module Name and Version: | Certified Criterion:   |                 |
|------------------------------------|------------------------|-----------------|
| Test Case ID:                      | Test Case Description: |                 |
| Created By                         | Reviewed By            | Regulation Text |
|                                    | Citation:              |                 |

### QA Tester's Log

| Tester's Name | Date Range Tested | Test Case (Pass/Fail/Not Executed) |
|---------------|-------------------|------------------------------------|
|               |                   |                                    |

| S# | Preconditions:              |
|----|-----------------------------|
| 1  | Test environment configured |
| 2  | Access to accepted browser  |
| 3  | Installed Health IT Module  |
| 4  | Valid Username and password |

|   |                                |
|---|--------------------------------|
| 5 | Test data available            |
| 6 | Interoperability Hub available |

| S# | Test Data Requirement |
|----|-----------------------|
| 1  |                       |
| 2  |                       |
| 3  |                       |
| 4  |                       |

### **Test Conditions**

| Step # | Step Details | Expected Results | Actual Results | Performs to Expectation |
|--------|--------------|------------------|----------------|-------------------------|
|        |              |                  |                |                         |
|        |              |                  |                |                         |
|        |              |                  |                |                         |
|        |              |                  |                |                         |
|        |              |                  |                |                         |

## 9 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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Authorized Representative Signature: \_\_\_\_\_

Date: 10/31/2024