



# REAL WORLD TESTING PLAN TEMPLATE

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## GENERAL INFORMATION

Plan Report ID Number: [For ONC-Authorized Certification Body use only]

Developer Name: MPN Software Systems

Product Name(s): ECLIPSE Spectrum

Version Number(s): v2

Certified Health IT Product List (CHPL) ID(s): 15.04.04.1853.ECLI.02.01.1.181001

Developer Real World Testing Page URL:

## JUSTIFICATION FOR REAL WORLD TESTING APPROACH

This plan demonstrates the real world testing approach for - ECLIPSE application for MPN Software systems or the following scenarios:

**Scenario 1: 170.315(b)(1), 170.315(b)(2):** A patient visits the doctor’s office and a clinical staff member collects basic patient demographic information including name, date of birth, sex and all clinical details (example: Allergies, Medication, Problems). The Primary Care Provider, after examining the patient, refers to a chiropractor. The PCP will share the C-CDA report using direct messaging to the referring physician electronically. After receiving the C-CDA, staff at the referring provider’s office import the C-CDA & match the patient automatically (when possible) or manually prior to reconciling & incorporating the data. Based on the data reconciled and incorporated, the system should be able to create a valid C-CDA file.

**Scenario 2: 170.315(h)(1):** A patient treated by a chiropractor is being referred to a specialist. As part of the process, a direct email message is sent by the chiropractor to the referral along with a clinical summary.

**Scenario 3: 170.315(e)(1):** A patient visits the clinic and a clinical staff member collects basic patient demographic information including name, date of birth, sex and all clinical details (Example: Allergies, Medication, Problems) and an encounter is created. Also, the patient and their authorized representative is provided with patient portal access -- which triggers an automatic electronic invitation including a URL and credentials. The patient logs into the patient portal using the provided URL and credentials to view, download and transmit the C-CDA. Also, the authorized representative can be given full or limited access to view the patient's health information, download it in human readable format, export it to a specified CCD document template, and transmit the health data to any email address using an encrypted method of electronic transmission

**Scenario 4: 170.315(e)(1):** A patient visits the clinic and a staff member collects basic patient demographic information including name, date of birth, sex and all clinical details (example: Allergies, Medication, Problems), an encounter is created and the patient is discharged. The patient and their authorized representative are provided with credentials to view a visit summary in the portal.

**Scenario 5: 170.315(f)(1):** A patient visits the doctor's office and a staff member collects basic patient demographic information including name, date of birth, sex and all clinical details (example: Allergies, Medication, and Problems). A provider reviews the patient's vaccination history & determines that the patient would benefit from an additional vaccination. The patient is then given a Vaccine Information Sheet and agrees to receive the recommended vaccination. The patient also agrees that the data should be shared once it is incorporated into the local IIS. The clinician prepares and administers the vaccine, enters the associated data into the EHR application and transmits it to the IIS by generating HL7 2.5.1 version immunization messages.

**Scenario 6: 170.315(f)(2):** A mother brings her 6-month old male infant to a clinic. A clerical assistant registers the patient. She records the patient's name, date of birth, race, ethnicity, residence, insurance information, and health history. The clerical assistant also records the patient's chief complaint. A nurse sees the patient and performs a vital sign assessment. The physician examines the patient, renders a suspected diagnosis & orders tests. Since this outpatient facility sends electronic syndromic surveillance data, once results are available, the facility's EHR module for syndromic surveillance data assembles and transmits an ADT message v2.5.1 regarding this patient encounter directly to the respective state registry.

**Scenario 7: 170.315(g)(7), 170.315(g)(8), 170.315(g)(9):** A patient visits the doctor's office and a staff member collects basic patient demographic information including name, date of birth, gender and all clinical details (example: Allergies, Medication, Problems). An encounter is created and patient is discharged. The patient and their authorized representative is provided with credentials to view their visit summary via the APIs.

**Scenario 8: 170.315(b)(6):** A provider is relocating from one clinic to another. They export clinical summaries (C-CDA R2.1) based on one patient, a set of patients, and all patients [with patients' consent] by providing a start and end date range.

**Scenario 9: 170.315(c)(1):** Based on the services provided by the eligible providers, HL7 QRDA compliant Category I & Category III files are generated. These files are then submitted by eligible providers in order to qualify for MIPS and MACRA programs.

**Scenario 10: 170.315(c)(2), 170.315(c)(3):** An eligible provider relocates from one clinic to another and wants to be a part of QRDA submissions at the new clinic. Clinical data for all patients for whom services were provided in the previous clinic is exported to transient system memory. Category files are generated from the system. The generated Cat files are then submitted in order to qualify for MIPS and MACRA programs.



**STANDARDS UPDATES (INCLUDING STANDARDS VERSION ADVANCEMENT PROCESS (SVAP) AND UNITED STATES CORE DATA FOR INTEROPERABILITY (USCDI))**

<b>Standard (and version)</b>	N/A
<b>Updated certification criteria and associated product</b>	<p>Care Coordination</p> <ul style="list-style-type: none"> <li>- 170.315(b)(1) Transitions of Care</li> <li>- 170.315(b)(2) Clinical information reconciliation and incorporation</li> <li>- 170.315(b)(6) Data export</li> </ul> <p>Clinical Quality Measures</p> <ul style="list-style-type: none"> <li>- 170.315(c)(1) CQMs Record and export</li> <li>- 170.315(c)(2) CQMs Import and Calculate</li> <li>- 170.315(c)(3) CQMs report</li> </ul> <p>Patient Engagement</p> <ul style="list-style-type: none"> <li>- 170.315(e)(1) View, download, and transmit to 3rd party</li> </ul> <p>Public Health</p> <ul style="list-style-type: none"> <li>- 170.315(f)(1) Transmission to immunization registries</li> <li>- 170.315(f)(2) Transmission to public health agencies – syndromic surveillance</li> </ul> <p>Application Programming Interface</p> <ul style="list-style-type: none"> <li>- 170.315(g)(7) Application access – patient selection</li> <li>- 170.315(g)(8) Application access – data category request</li> <li>- 170.315(g)(9) Application access – all data request</li> </ul> <p>Electronic Exchange</p> <ul style="list-style-type: none"> <li>- 170.315(h)(1) Direct Project</li> </ul>
<b>Health IT Module CHPL ID</b>	15.04.04.1853.ECLI.02.01.1.181001
<b>Method used for standard update</b>	C-CDA Companion Guide Updates, Security tags, ASTM updates, Clinical Quality Measures –Report
<b>Date of ONC ACB notification</b>	
<b>Date of customer notification (SVAP only)</b>	N/A
<b>Conformance measure</b>	<p>Care Coordination</p> <ul style="list-style-type: none"> <li>- 170.315(b)(1) Transitions of Care</li> <li>- 170.315(b)(2) Clinical information reconciliation and incorporation</li> <li>- 170.315(b)(6) Data export</li> </ul> <p>Clinical Quality Measures</p> <ul style="list-style-type: none"> <li>- 170.315(c)(1) CQMs Record and export</li> <li>- 170.315(c)(2) CQMs Import and Calculate</li> <li>- 170.315(c)(3) CQMs report</li> </ul> <p>Patient Engagement</p> <ul style="list-style-type: none"> <li>- 170.315(e)(1) View, download, and transmit to 3<sup>rd</sup> party</li> </ul>



	<p><b>Public Health</b></p> <ul style="list-style-type: none"> <li>- 170.315(f)(1) Transmission to immunization registries</li> <li>- 170.315(f)(2) Transmission to public health agencies – syndromic surveillance</li> </ul> <p><b>Application Programming Interface</b></p> <ul style="list-style-type: none"> <li>- 170.315(g)(7) Application access – patient selection</li> <li>- 170.315(g)(8) Application access – data category request</li> <li>- 170.315(g)(9) Application access – all data request</li> </ul> <p><b>Electronic Exchange</b></p> <ul style="list-style-type: none"> <li>- 170.315(h)(1) Direct Project</li> </ul>
<b>USCDI updated certification criteria (and USCDI version)</b>	N/A

## MEASURES USED IN OVERALL APPROACH

### Description of Measurement/Metric

Measurement/Metric	Description
<p><b>Care Coordination</b> 170.315(b)(1) - Transitions of Care</p>	<p>As part of the Real World Testing, we will be evaluating the 170.315(b)(1) criterion and test if the data exchange and consumption is happening as desired through C-CDA for the following scenarios:</p> <ul style="list-style-type: none"> <li>• The provider should be able to refer a patient to another clinic or a provider while using the ECLIPSE application to create and electronically transmit a C-CDA to the referred clinic or provider.</li> <li>• ECLIPSE application should be able to send and receive C-CDA 1.1 and 2.1 version from one application to another.</li> <li>• Metrics used during real world testing will include tracking the number of referral summaries generated and the number of referral summaries transmitted electronically over a defined measurement period.</li> </ul>
<p><b>Care Coordination</b> 170.315(b)(2) - Clinical Information Reconciliation and Incorporation</p>	<p>As part of the Real World Testing, we will be evaluating the 170.315(b)(2) criteria and test if the data exchange and consumption is happening as desired through C-CDA for the following scenarios:</p> <ul style="list-style-type: none"> <li>• Users should be able to verify a patient and clinical data sent as part of the summary document and the clinical data (Medications, allergies, problems) can be reconciled and incorporated into the system.</li> <li>• System should be able to match a patient automatically or manually when importing C-CDA.</li> <li>• Upon reconciliation, a new C-CDA should be generated consisting of the reconciled data.</li> <li>• Metric used during real world testing will include tracking the number of referral summaries received and reconciled over a defined measurement period.</li> </ul>



<p><b>Care Coordination</b> 170.315(b)(6) – Data Export</p>	<p>As part of the Real World Testing, we will be evaluating the 170.315(b)(6) criteria and test if the data exchange and consumption is happening as desired through C-CDA for the following scenarios:</p> <ul style="list-style-type: none"> <li>• When a provider moves from one clinic to another or if requested by any other provider or a clinic, the entire patient health data for a specific patient or a group of patients should be generated from the ECLIPSE application as a Patient Health Data export summary.</li> <li>• The export summary can be specific to a date, relative date range, or specific date range.</li> <li>• Only authorized users of ECLIPSE application should be able to define the path/location where the C-CDA will be exported.</li> <li>• The authorized users should also be able to schedule a periodic export of the summary record.</li> <li>• The measurement metric would include tracking the number of C-CDAs generated over a defined measurement period.</li> </ul>
<p><b>Patient Engagement</b> 170.315(e)(1) - View, Download, and Transmit to Third Party</p>	<p>As part of Real World Testing, we will be evaluating the 170.315(e)(1) criterion to test whether Patient and their authorized representative are able to access the C-CDA via patient portal for the following scenarios:</p> <ul style="list-style-type: none"> <li>• Once a visit is complete, patients should have access to their entire visit data through the Patient Portal.</li> <li>• The patients should be able to login, view, download, and transmit their visit summary from the portal.</li> <li>• The measurement metric will include <ul style="list-style-type: none"> <li>○ Tracking the count of patients or their Authorized representatives who are given patient portal access during the measurement period.</li> <li>○ Tracking the count of unique patients, who have accessed any of their health data through patient portal during the measurement period.</li> <li>○ Tracking the count of unique patients, who downloaded or transmitted C-CDAs through patient portal over the measurement period.</li> </ul> </li> </ul>
<p><b>Clinical Quality Measures</b> 170.315(c)(1)—record and export 170.315(c)(2)—import and calculate 170.315(c)(3)—report</p>	<p>As part of the Real World Testing, we will be evaluating 170.315(c)(1), 170.315(c)(2), and 170.315(c)(3) criteria to check for the following scenarios:</p> <ul style="list-style-type: none"> <li>• Test if authorized user is able to record the data and should have the capabilities to export all the declared the measures for which the EHR should be certified 170.315(c)(1).</li> <li>• The ECLIPSE EHR application will also be tested for the functionality to import the QRDA I files and incorporate them in calculation 170.315(c)(2)</li> <li>• The ECLIPSE EHR application will be evaluated for its capability to generate the QRDA I and QRDA III files in the specified formats. 170.315(c)(3)</li> </ul>



	<ul style="list-style-type: none"> <li>• All the validations of QRDA files will be done using the Cypress certification tool.</li> <li>• The measurement metric would be the percentage of patient population for whom QRDA files are successfully generated.</li> <li>• And the percentage of patient population for whom QRDA files are imported.</li> </ul>
<p><b>Public Health</b> 170.315(f)(1) Transmission to immunization registries</p>	<p>As part of Real World Testing, we will be evaluating the 170.315(f)(1) criterion to check for the following scenarios:</p> <ul style="list-style-type: none"> <li>• Whenever a patient visits the clinic to receive Immunization shots, the providers will record the Immunization data and send it electronically to the respective Immunization registry.</li> <li>• In the scenario, where the clinic does not have patient past immunization data or would like to receive the patient future shot recommendation, then the providers can query the same from the registry.</li> <li>• The measurement metric would include tracking the number of successful Immunization submissions to an IIS during the measurement period.</li> <li>• Along with tracking the number of successful query calls to an IIS during the measurement period.</li> </ul>
<p><b>Public Health</b> 170.315(f)(2) Transmission to public health agencies – syndromic surveillance</p>	<p>As part of Real World Testing, we will be evaluating the 170.315(f)(2) criteria to check for the following scenarios:</p> <ul style="list-style-type: none"> <li>• The system can generate Syndrome based HL7 messages, which will be electronically sent to the associated public health registry.</li> <li>• The measurement metric will include tracking the percentage of successful syndromic surveillance message generation during the measurement period.</li> </ul>
<p><b>Application Programming Interfaces (APIs)</b> 170.315(g)(7) Application access—patient selection 170.315(g)(8) Application access—data category request 170.315(g)(9) Application access—all data request</p>	<p>As part of Real World Testing, we will be evaluating the 170.315(g)(7) (Attestation), 170.315(g)(8) and 170.315(g)(9) criteria to check for the following scenarios:</p> <ul style="list-style-type: none"> <li>• Patients can request their health data from the clinic through a third-party application. In this scenario, the clinic can share patient data from the system.</li> <li>• Patients can either request specific health data or the full health data set.</li> <li>• The measurement metric will include tracking the successful API transaction requests during the measurement period.</li> </ul>
<p><b>Electronic Exchange</b> 170.315(h)(1)- Direct Message</p>	<p>As part of Real World Testing, we will be evaluating the 170.315(h)(1) criterion to check for the following scenarios:</p> <ul style="list-style-type: none"> <li>• After a patient visit, the providers should be able to electronically send the patient health data to another provider or clinic’s Direct Address through the Direct Messaging service.</li> <li>• The clinic should be able to receive the patient data on its Direct address (provider specific or either organization specific) from</li> </ul>



	<p>another provider or clinic.</p> <ul style="list-style-type: none"> <li>The measurement metric would include tracking the percentage of successful direct messages sent and received during the measurement period</li> </ul>
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**Associated Certification Criteria**

Measurement/Metric	Associated Certification Criteria
Care Coordination	170.315(b)(1) - Transitions of Care 170.315(b)(2) - Clinical Information Reconciliation and Incorporation 170.315(b)(6) – Data Export
Patient Engagement	170.315(e)(1) - View, Download, and Transmit to Third Party
Clinical Quality Measures	170.315(c)(1)—record and export 170.315(c)(2)—import and calculate 170.315(c)(3)—report
Public Health	170.315(f)(1) Transmission to immunization registries 170.315(f)(2) Transmission to public health agencies –syndromic surveillance
Application Programming Interfaces (APIs)	170.315(g)(7) Application access—patient selection 170.315(g)(8) Application access—data category request 170.315(g)(9) Application access—all data request
Electronic Exchange	170.315(h)(1)- Direct Message

**Justification for Selected Measurement/Metric**

Measurement/Metric	Justification
<b>Care Coordination</b> 170.315(b)(1) - Transitions of Care	<ul style="list-style-type: none"> <li>ECLIPSE EHR application will be generating the C-CDA document of the patients care details with all elements as required by CCDS standard.</li> <li>An increment in the count of C-CDA's generated over a defined measurement period will justify that the system supports the capability to create referral summaries.</li> <li>The generated C-CDA will be considered as successfully validated if it passes without any errors in Edge tool.</li> <li>And its successful transmission using Edge protocol tool will justify its compliance with the transmission part of the standard.</li> </ul>
<b>Care Coordination</b> 170.315(b)(2) - Clinical Information Reconciliation and Incorporation	<ul style="list-style-type: none"> <li>ECLIPSE EHR application should be able to receive a C-CDA patient summary record and then incorporate problems, medications, and medication allergies</li> </ul>



	<p>from the C-CDA into the patient record by automatic/manual patient matching.</p> <ul style="list-style-type: none"> <li>• An increment in the count of C-CDAs received and reconciled over a defined measurement period will justify the system’s capability for C-CDA reconciliation.</li> <li>• Evaluation of the C-CDA error detection capability will be done using Edge tool.</li> <li>• And its successful transmission using Edge protocol tool will justify its compliance with the transmission part of the standard.</li> <li>• This C-CDA error detection provides assurance to the user of the validity of received or imported in C-CDAs which is both a certification requirement and supports interoperability within production setting.</li> </ul>
<p><b>Care Coordination</b> 170.315(b)(6) – Data Export</p>	<ul style="list-style-type: none"> <li>• An authorized user using ECLIPSE EHR application should be able to export C-CDA for single patient, all patients, sub set of patients, real time and also at a Scheduled Specific and Relative Date and Time and the C-CDA should be exported at a defined Export location.</li> <li>• Successful generation of C-CDA files with all the elements as per CCD version R2.1, at the defined export path, for a defined export period, by an authorized user will justify the measure compliance.</li> <li>• An increment in the count of C-CDAs over a defined measurement period will justify the compliance with the measure.</li> <li>• And its successful transmission using Edge protocol tool will justify its compliance with the transmission part of the standard.</li> <li>• Evaluation of the C-CDA error detection capability will be done using Edge tool. This C-CDA error detection provides assurance to the user of the validity of received or imported in C-CDAs which is both a certification requirement and supports interoperability within production setting.</li> </ul>
<p><b>Patient Engagement</b> 170.315(e)(1) - View, Download, and Transmit to Third Party</p>	<ul style="list-style-type: none"> <li>• The ECLIPSE EHR application creates patient portal log in credentials and it is shared with the patients and their authorized representatives along with the patient portal URL.</li> <li>• Patient Portal will then check for the authorized/unauthorized user logging into the application and provides validation accordingly.</li> <li>• After successful login, patient/ authorized representatives, should be able to view the C-CDA in</li> </ul>





	<p>human readable form.</p> <ul style="list-style-type: none"> <li>• Patient/ authorized representatives should be able to download both a human readable form and CCD format (xml) files.</li> <li>• The downloaded XML will then be validated in edge tool. Evaluation of the C-CDA error detection capability will be done using Edge tool. This C-CDA error detection provides assurance to the user of the validity of received or imported in C-CDAs which is both a certification requirement and supports interoperability within production setting.</li> <li>• Patient/ authorized representatives should be able to transmit human readable and CCD format (xml) C-CDA by both Unencrypted E-mail &amp; Encrypted Method.</li> <li>• The transmitted XML will then be validated in edge tool. Evaluation of the C-CDA error detection capability will be done using Edge tool. This C-CDA error detection provides assurance to the user of the validity of received or imported in C-CDAs which is both a certification requirement and supports interoperability within production setting.</li> <li>• Patient Portal should be able to capture the audit actions performed by Patient/Authorized representative along with the date/time, what action was performed, User who took the action and addressee to whom transmission was sent. Validation of captured actions will be done by reviewing the audit logs of the patient portal application.</li> <li>• The count increase in the measurement metric will help justify: Patient are successfully able to login to their Portal, Patients are able to View, Download and Email (Both Email and Direct Message) their health data, and Patients Authorized person is able to view, transmit, and download the patient health data.</li> </ul>
<p><b>Clinical Quality Measures</b>  170.315(c)(1)—record and export  170.315(c)(2)—import and calculate  170.315(c)(3)—report</p>	<ul style="list-style-type: none"> <li>• The successful generation and export of QRDA files for each of the certified eCQM measures for entire relevant patient population will justify the compliance with the measure (c)(1).</li> <li>• Ability to import and incorporate QRDA files will justify the compliance with measure (c)(2).</li> <li>• An increment in the percentage patient population for whom QRDA I and QRDA III files are generated and successfully validated in the Cypress tool will prove its compliance to the (c)(3) measure.</li> </ul>
<p><b>Public Health</b>  170.315(f)(1) Transmission to</p>	<ul style="list-style-type: none"> <li>• An increment in the count of successful Immunization message generation which can be</li> </ul>



<p>immunization registries</p>	<p>consumed by IIS will indicate the compliance with the measure standards.</p> <ul style="list-style-type: none"> <li>• Displaying the response message and the Query result will justify that the EHR is able to consume and process the responses sent from the IIS/Registry</li> <li>• The ECLIPSE EHR application will be loaded with data as present in NIST HL7 V2 Immunization test suite under Administration Group &amp; Evaluated History and Forecast Group.</li> <li>• The ECLIPSE EHR application will be evaluated by generating HL7 messages as per HL7 2.5.1 Implementation Guide for Immunization Messaging for all the test cases present in NIST Tool.</li> <li>• Each of the HL7 immunization message will be validated using the NIST Immunization Test Tool to verify compliance.</li> </ul>
<p><b>Public Health</b> 170.315(f)(2) Transmission to public health agencies –syndromic surveillance</p>	<ul style="list-style-type: none"> <li>• An increment in count in the count of successful generation of syndromic messages and its validation in the test tool will justify the compliance with the measure.</li> <li>• The ECLIPSE EHR application will be loaded with data as present in NIST HL7v2 Syndromic Surveillance Test Suite.</li> <li>• The ECLIPSE EHR application will be evaluated by recording syndromic surveillance content and generating the HL7 v2.5.1 ADT according to the HL7 v2.5.1 PHIN Messaging Guide</li> <li>• Each of the HL7 messages are uploaded into the NIST syndromic surveillance tool and verifies compliance using the NIST validation report.</li> </ul>
<p><b>Application Programming Interfaces (APIs)</b> 170.315(g)(7) Application access—patient selection 170.315(g)(8) Application access—data category request 170.315(g)(9) Application access—all data request</p>	<ul style="list-style-type: none"> <li>• An increment in the count of successful patient selection, retrieval of specific data element set (CCDS), and the entire patient data from ECLIPSE application through API client (Postman) in forms of FHIR API will prove its adherence to the specified measures</li> <li>• Demonstrating the ability to use a validated security token for the API session for subsequent API calls until the session expires or time out.</li> <li>• The ECLIPSE EHR application will be tested to verify if the API routines responds to and returns the full set of data for each data category, for Specific Date and Date Range for the unique patient identified by the token.</li> <li>• API request should be made (using test client) for an entire C-CDA R2.1 (All Data Categories) for the test Patient using a Patient ID or token based upon a specific date request; and a date range.</li> </ul>



	<ul style="list-style-type: none"> <li>The response returned is then validated in edge tool under C-CDA R2.1 Validator to verify the document returned by the API is in a summary record formatted in accordance with the standard.</li> <li>A documentation should be provided describing the API details and Documentation supplied for this section must be available via a publicly accessible hyperlink.</li> </ul>
<b>Electronic Exchange</b> 170.315(h)(1)- Direct Message	<ul style="list-style-type: none"> <li>Successful electronic transmission of messages using Direct protocol from ECLIPSE EHR application with a third party will justify the compliance with the measure.</li> </ul>

**Care Setting(s)**

Care Setting	Justification
Chiropractic & Chiropractic based Multi-Disciplinary Outpatient care	The majority of ECLIPSE installations are single or multi provider chiropractic offices that provide ambulatory / outpatient care.

**Expected Outcomes**

Measurement/Metric	Expected Outcomes
<b>Care coordination</b> 170.315(b)(1) - Data Export and Validation	<ol style="list-style-type: none"> <li>Following numeric metrics will be used to measure expected outcome:           <ul style="list-style-type: none"> <li>Patient Data transitioned in the C-CDA format should meet the standards with less than 1 percent errors. Error rates will be tracked and trended over time.</li> <li>The number of patients' visits for which a C-CDA document was received or sent should be &gt; 50% of total patient referrals.</li> <li>The validation rate of C-CDA documents received inbound should pass with &lt; 25% errors.</li> <li>The measurement will produce numerator numeric results over a given interval. We will utilize various reports and audit logs, including Automated Measure reports, to determine our measure count. During the test period, we will examine the log information for a minimum period of three (3) months to determine an appropriate sample of this measurement.</li> </ul> </li> <li>System should be able to send and receive different Care coordination reports such as C-CDA and Referral Notes. And all of these reports should be successfully validated.</li> <li>The system should be able to set the sequence in the order to view each of the clinical components in C-CDA document.</li> </ol>



	<ol style="list-style-type: none"><li>4. The system is able to create a human readable format for both the versions R1.1 and R2.1</li><li>5. When receiving C-CDA's, the system is able to detect invalid C-CDA's and notify the user of validation issues.</li><li>6. 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.</li></ol>
170.315(b)(2) - Data Import, Processing and Validation	<ol style="list-style-type: none"><li>1. Following numeric metrics will be used to measure expected outcome:<ul style="list-style-type: none"><li>• The generated C-CDA should be validated successfully with less than 1 percent errors in Edge Tool. Error rates will be tracked and trended over time.</li><li>• Number of patient visits during the measured period with at least one reconciliation workflow performed should be &gt;= 50%.</li><li>• The measurement will produce numerator numeric results over a given interval. We will utilize various reports and audit logs, including Automated Measure reports, to determine our measure count. During the test period, we will examine the log information for a minimum period of three (3) months to determine an appropriate sample of this measurement.</li></ul></li><li>2. System should be able to consume process a C-CDA in either of the format R1.1 and R2.1</li><li>3. The system is able to identify a valid C-CDA</li><li>4. The system should be able to detect errors and display the errors, if any.</li><li>5. System should be able to successfully demonstrate that the transition of care/referral summary received should be properly matched to the correct patient based on the demographics details.</li><li>6. Authorized User should be able to reconcile the data that represent a patient's active clinical information such as medication list, medication allergy list, and problem list.</li><li>7. The system should be able to detect duplicates record, merge the records.</li><li>8. Based on the data reconciled and incorporated, system should be able to create a valid C-CDA file.</li><li>9. Evaluation of the generated C-CDA error detection capability will be done using Edge tool.</li><li>10. 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.</li></ol>



<p>170.315(b)(6) Data Export and Validation</p>	<ol style="list-style-type: none"><li>1. Following numeric metrics will be used to measure expected outcome:<ul style="list-style-type: none"><li>• The generated C-CDA for specific date and time should be validated successfully with less than 1 percent errors in Edge Tool. Error rates will be tracked and trended over time</li><li>• The system is capable of exporting a clinical summary in C-CDA r2.1 format in 95% of real world test cases.</li><li>• The measurement will produce numerator numeric results over a given interval. We will utilize various reports and audit logs to determine our measure count. During the year, we will examine the log information for a minimum period of three (3) months to determine an appropriate sample of this measurement.</li></ul></li><li>2. THE ECLIPSE EHR application allows authorized users to export C-CDA version R2.1 for single patient and multiple patients( Real-Time),</li><li>3. The generated C-CDA for real time should be validated successfully without any errors in Edge Tool.</li><li>4. The authorized users are able to export the C-CDA R2.1 for a specific date, relative date range, or a specified date range.</li><li>5. Authorized user should be able to export patients C-CDA R2.1 at a scheduled at a Specific and Relative Date and Time.</li><li>6. Authorized user should be able to configure the export summaries at his/her preferred location.</li><li>7. 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.</li></ol>
<p><b>Patient Engagement</b> 170.315(e)(1) Patient Engagement, Logging and Reporting</p>	<ol style="list-style-type: none"><li>1. Following numeric metrics will be used to measure expected outcome:<ul style="list-style-type: none"><li>• Success rate for patients provided with access to their health information via patient portal should be <math>\geq 90\%</math></li><li>• Percentage of patients or authorized representatives who have logged in to the patient portal using the username and password created for them should be <math>\geq 60\%</math></li><li>• Success rate for C-CDA documents received on time in the patient portal should be <math>\geq 98\%</math></li><li>• The measurements will produce numerator numeric results over a given time interval of a minimum of three (3) months. We will utilize various reports and audit logs, including Automated Measure reports, to determine our measure count.</li><li>• Increment in the count of Patient login to the Patient Portal, indicating that the patients are successfully able to login to their account.</li></ul></li></ol>



	<ul style="list-style-type: none"> <li>• Increment in the count of View, download, and transmit action will help justify that the patients are able to view their data, download the data, and email/direct message data to third parties</li> </ul> <ol style="list-style-type: none"> <li>2. Patients and their authorized representatives should be able to login to the 3<sup>rd</sup> party application (Patient Portal) using internet access and should be able to:             <ul style="list-style-type: none"> <li>• View the real time health data.</li> <li>• Download the health data using human readable format and format specified in CCD document template.</li> <li>• Transmit the health data by any email address and using encrypted method of electronic transmission.</li> <li>• The activity log will be captured for all view, download, and transmit capabilities.</li> </ul> </li> <li>3. A successful increment indicates compliance to the underlying ONC criteria. It will show that patients can log into their patient portal to access their patient data and transmitting their health data to a 3<sup>rd</sup> party.</li> <li>4. 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.</li> </ol>
<p><b>Clinical Quality Measures</b> 170.315(c)(1) Data Export, Submission and Validation</p>	<ol style="list-style-type: none"> <li>1. Following numeric metrics will be used to measure expected outcome:             <ul style="list-style-type: none"> <li>• QRDA-1 files generated as part of the real world testing will be de-identified and validated for accuracy and conformance with 170.315(c)(1) criteria, with less than 1 percent errors. Error rates will be tracked and trended over time.</li> <li>• The percentage of selected patients for whom QRDA files are successfully generated should be =100%.</li> </ul> </li> <li>2. The ECLIPSE EHR application should be able to record all of the data that would be necessary to calculate each CQM.</li> <li>3. The ECLIPSE EHR application should be able to export patient-level eCQM data formatted to the HL7 QRDA Category I standard.</li> <li>4. The ECLIPSE EHR application should be able to export based on one or multiple patients</li> <li>5. The QRDA Category I file (Zipped) will be validated using the Cypress validation tool.</li> <li>6. 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.</li> </ol>



<p><b>Clinical Quality Measure</b> 170.315(c)(2) Data Export, Submission and Validation</p>	<ol style="list-style-type: none"> <li>1. Following numeric metrics will be used to measure expected outcome: <ul style="list-style-type: none"> <li>• QRDA Category III files generated as part of the real world testing will be de-identified and validated for accuracy and conformance with 170.315(c)(2) criteria, with less than 1 percent errors. Error rates will be tracked and trended over time</li> <li>• The percentage of patient data successfully imported should be &gt;= 90%.</li> </ul> </li> <li>2. THE ECLIPSE EHR application should be able to Electronically import a data file formatted in accordance to the HL7 QRDA Category III standard</li> <li>3. QRDA files will be validated using Cypress validation tool.</li> <li>4. 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.</li> </ol>
<p><b>Clinical Quality Measure</b> 170.315(c)(3) Data Export, Submission and Validation</p>	<ol style="list-style-type: none"> <li>1. Following numeric metrics will be used to measure expected outcome: <ul style="list-style-type: none"> <li>• QRDA files generated as part of the real world testing will be de-identified and validated for accuracy and conformance with 170.315(c)(3) criteria, with less than 1 percent errors. Error rates will be tracked and trended over time.</li> <li>• The percentage of successful QRDA file submissions to CMS with &lt;= 10% outcome mismatches against ECLIPSE EHR reporting should be &gt;=95%</li> </ul> </li> <li>2. The ECLIPSE EHR application should be able generate files formatted to the HL7 QRDA Category I standard and HL7 QRDA Category III standards.</li> <li>3. QRDA files will be validated using Cypress validation tool.</li> <li>4. 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.</li> </ol>
<p><b>Public Health</b> 170.315(f)(1) Reports and Logs</p>	<ol style="list-style-type: none"> <li>1. Following numeric metrics will be used to measure expected outcome: <ul style="list-style-type: none"> <li>• The generated HL7 syndromic surveillance messages for all the scenarios should be validated with less than 1 percent errors in NIST tool. Error rates will be tracked and trended over time.</li> </ul> </li> </ol>



	<ul style="list-style-type: none"> <li>• The system is capable of generating and transmitting Immunization messages for each of the action type (New, Delete, and Update), to an IIS with a success rate of &gt;90%.</li> <li>• The system is capable of displaying to the user the acknowledgement received from the registry in 95% of real world test cases.</li> <li>• The system is capable of performing immunization registry queries in &gt;95% of real world test cases.</li> <li>• The system is capable of displaying the query response received from the registry to the user in 95% of real world test cases.</li> </ul> <ol style="list-style-type: none"> <li>2. The ECLIPSE EHR application should be able to Record immunization content and generate the HL7 v2.5.1 immunization information messages</li> <li>3. The ECLIPSE EHR application should be to display the acknowledgement received from the registry.</li> <li>4. THE ECLIPSE EHR application should be able Receive and display HL7 evaluated immunization history and forecast response.</li> <li>5. The measurement will record if the immunization interface is active and working between the EHR and public health registry. Our IIS interface log/report indicates status of the interface, and during the year, we will examine the log information for a minimum period of three (3) months to determine an appropriate sample of this measurement.</li> <li>6. In sending the immunization message, the EHR will demonstrate ability to confirm successful interoperability of patient's immunization data to an IIS/immunization registry.</li> <li>7. 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.</li> </ol>
<p><b>Public Health</b> 170.315(f)(2) Export and Validation</p>	<ol style="list-style-type: none"> <li>1. Following numeric metrics will be used to measure expected outcome: <ul style="list-style-type: none"> <li>• The generated HL7 syndromic surveillance messages for all the scenarios should be validated with less than 1 percent errors in NIST tool. Error rates will be tracked and trended over time</li> <li>• The percentage of successful syndromic surveillance of ADT messages for sample clients across the measurement period should be &gt;=85%.</li> </ul> </li> <li>2. The ECLIPSE EHR application should be able to record syndromic surveillance content and generate the HL7 v2.5.1 ADT according to the HL7 v2.5.1 PHIN Messaging Guide for all the scenarios.</li> <li>3. The measurement will record if the syndromic surveillance interface is active and working between the EHR and public health registry. Our logs indicate the status of the interface, and</li> </ol>





	<p>during the year, we will examine this log information for a minimum period of three (3) months to determine an appropriate sample of this measurement.</p> <ol style="list-style-type: none"> <li>4. In sending the syndromic surveillance message, the EHR will demonstrate ability to confirm successful interoperability of patient’s syndromic data to public health registry.</li> <li>5. 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.</li> </ol>
<p><b>Application Programming Interfaces (APIs)</b>  170.315(g)(7) Self Attestation  170.315(g)(8) Interoperability and Data Exchange/Logging  170.315(g)(9) Interoperability and Data Exchange/Logging</p>	<ol style="list-style-type: none"> <li>1. Following numeric metrics will be used to measure expected outcome: <ul style="list-style-type: none"> <li>• The system allows an external application such as Postman, to select a specific patient based on the Patient ID in more than 95% of the real world test cases.</li> <li>• The system also allows a user to retrieve a specific data category from CCDS elements for a selected patient for both a specific date and a specified date range, with a success rate greater than 90%.</li> <li>• The system allows a user to retrieve the entire CCDS data set for a selected patient for both: A specific date and a specified date range, with a success rate greater than 90%</li> </ul> </li> <li>2. The system is able to establish a trusted connection with an external application, in this case, the Postman application.</li> </ol>
<p><b>Electronic Exchange</b>  170.315(h)(1)- Direct messaging send and receive</p>	<ol style="list-style-type: none"> <li>1. Following numeric metrics will be used to measure expected outcome: <ul style="list-style-type: none"> <li>• The success rate for all message transactions (inbound and outbound) over the measurement period should be &gt;= 80%.</li> </ul> </li> <li>2. ECLIPSE EHR application is able to send a Direct message to a ETT Direct To email address formatted as a wrapped message.</li> <li>3. The system is able to consume, process, and display the Direct message received from a third party.</li> <li>4. The encrypted message should be successfully decrypted and validates received Direct messages received from the EHR application.</li> <li>5. ECLIPSE EHR application should be capable enough to send and receive the patient data through direct messaging mechanism. Error rates will be tracked and trended over time.</li> <li>6. Log Files obtained during Real World Testing will be de-identified and used for analysis in several areas to validate the proper operation of 170.315(h)(1) and the data accuracy and email functionality will be tested.</li> </ol>

**SCHEDULE OF KEY MILESTONES**

Key Milestone	Care Setting	Date/Timeframe
Development of candidate list of providers to assist with the Real World Testing	Chiropractic	30 <sup>th</sup> Nov, 2021
Development of software, which could be used to gather data for analysis	Chiropractic	20 <sup>th</sup> Nov, 2021

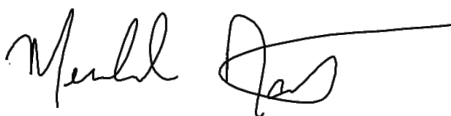
Key Milestone	Care Setting	Date/Timeframe
Finalization of the Real World Testing plan, and submission to ONC-ACB per ONC-ACB instruction	Chiropractic	15 <sup>th</sup> Nov, 2021
Collection of information as laid out by the plan for the period	Chiropractic	30 <sup>th</sup> Dec, 2021
Validation of expected outcomes	Chiropractic	Q2, 2022
Completion of test suites	Chiropractic	Q2, 2022
Cycle of testing begin and end dates	Chiropractic	Q3, 2022
Completion of testing phases	Chiropractic	Q3, 2022
End of Real World Testing period/final collection of all data for analysis	Chiropractic	Q4, 2022
Analysis and report creation	Chiropractic	Q4, 2022

**ATTESTATION**

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Authorized Representative Phone: (201) 818-4335

Authorized Representative Signature: 

Date:

11/29/2021

<sup>i</sup> Certified health IT continues to be compliant with the certification criteria, including the required technical standards and vocabulary codes sets; certified health IT is exchanging EHI in the care and practice settings for which it is marketed for use; and EHI is received by and used in the certified health IT. (85 FR 25766)

<sup>ii</sup> <https://www.federalregister.gov/d/2020-07419/p-3582>