

REAL WORLD TESTING PLAN TEMPLATE

BACKGROUND & INSTRUCTIONS

Under the ONC Health IT Certification Program (**Program**), health IT developers are required to conduct Real World Testing of their certified health IT (45 CFR 170.405). The Office of the National Coordinator for Health Information Technology (ONC) issues Real World Testing resources to clarify health IT developers' responsibilities for conducting Real World Testing, to identify topics and specific elements of Real World Testing that ONC considers a priority, and to assist health IT developers in developing their Real World Testing plans.

Health IT developers have maximum flexibility to develop innovative plans and measures for Real World Testing. As developers are planning how they will execute Real World Testing, they should consider the overall complexity of the workflows and use cases within the care settings in which they market their certified health IT to determine the approaches they will take. This Real World Testing plan template was created to assist health IT developers in organizing the required information that must be submitted for each element in their Real World Testing plan. While the use of this template is voluntary, health IT developers may find it useful in preparing their Real World Testing plans. Health IT developers must submit one plan for each year of Real World Testing (see resources listed below for specific timelines and due dates). ONC does not encourage updating plans outside the submission timeline and will not post updates on the Certified Health IT Product List (CHPL). If adjustments to approaches are made throughout Real World Testing, the health IT developer should reflect these adjustments in their Real World Testing results report. ONC expects that the Real World Testing results report will include a description of these types of changes, the reasons for them, and how intended outcomes were more efficiently met as a result. **While every effort has been made to ensure the accuracy of restatements of 45 CFR Part 170, this template is not a legal document. The official program requirements are contained in the relevant laws and regulations. This resource should be read and understood in conjunction with the following companion resources, which describe in detail many of the Program requirements referenced in this resource.**

- [Real World Testing—What It Means for Health IT Developers – Fact Sheet](#)
- Real World Testing Resource Guide – Coming Soon
- [Real World Testing Certification Companion Guide](#)

Health IT developers should also review the following regulatory materials, which establish the core requirements and responsibilities for Real World Testing under the Program.

- 21st Century Cures Act: Interoperability, Information Blocking, and the ONC Health IT Certification Program final rule, [85 FR 25642](#) (May 1, 2020) (**ONC Cures Act Final Rule**)
 - ↳ [Section VII.B.5](#) — “Real World Testing”

TEMPLATE INSTRUCTIONS

The following template is organized by elements required to be submitted in the Real World Testing plan. Each section provides a field for submitting responses and/or explanations for how the health IT developer will address each required element in their Real World Testing approach. These fields serve as a foundation of information

required for developing a Real World Testing plan and can be expanded with additional rows or columns to address the specific needs of the Real World Testing plan being submitted.

GENERAL INFORMATION

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

Developer Name: STI Computer Services, Inc.

Product Name(s): ChartMaker Medical Suite

Version Number(s): ChartMaker 2018.2

Certified Health IT: Yes

Product List (CHPL) ID(s): 15.04.04.2296.Char.18.01.0.191218

Developer Real World Testing Page URL: <https://sticomputer.com/real-world-testing/>

JUSTIFICATION FOR REAL WORLD TESTING APPROACH

Provide an explanation for the overall approach to Real World Testing, including an outline of the approach and how data will be used to demonstrate successful Real World Testing¹.

All measures should reasonably align with the elements within a Real World Testing plan, the scope of the certification, the types of settings in which the certified health IT is marketed, and other factors relevant to the implementation of the certified Health IT Module(s). The justification should reflect how each element within the plan is relevant to the developer's overall strategy for meeting the Real World Testing Condition and Maintenance of Certification requirements.

Note: A single Real World Testing plan may address multiple products and certification criteria for multiple care settings.

STI Computer Services, Inc plan for Real World Testing (RWT) of ChartMaker Medical Suite version 2018.2 addresses the following goals that are consistent with RWT criteria required by ONC:

- Verify the successful use of certified functionality related to the interoperability criteria
- Avoid impacting client use of system and their preferred workflow
 - o The plan achieves these goals by automating the capture of key metrics behinds the scenes which also supports a continuous collection of verification data over the entire year.

This test plan will list each of the criteria that is to be covered by RWT along with corresponding metrics that provide *qualitative information*--such as successful or unsuccessful uses--as well as *quantitative information* which will help to determine the degree of success against expected thresholds. Both types of information will inform a determination on whether intervention is necessary. Possible interventions would include design change and/or client outreach including, but not limited to, user education.

Using this method for the test plan, and reviewing the data from the metrics individually, comparatively, and collectively will show an accurate representation of the interoperability effectiveness of ChartMaker Medical Suite 2018.2 in meeting the certification criteria.

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

Both required and voluntary standards updates must be addressed in the Real World Testing plan. Real World Testing plans must include all certified health IT updated to newer versions of standards prior to August 31 of the year in which the updates were made.

Describe approach(es) for demonstrating conformance to all certification requirements using each standard to which the health IT is certified. List each version of a given standard separately. For each version of a standard submit the following:

- ✓ *Identify standard versions*
- ✓ *Indicate what certification criteria in which product(s) has been updated*
- ✓ *If reporting for multiple products, identify the certification criteria that were affected by the update for each of the associated products*
- ✓ *CHPL ID for each Health IT Module*
- ✓ *Method used for standard update (e.g., SVAP)*
- ✓ *Date notification sent to ONC-ACB*
- ✓ *If SVAP, date notification sent to customers*
- ✓ *Measure used to demonstrate conformance with updated standard(s)*
- ✓ *Which certification criteria were updated to USCDI and/or to which version of USCDI was the certification criteria updated?*

The following are the current standards implemented by ChartMaker Medical Suite 2018.2. At this time there is no plan to implement new standards during the time span covered by this RWT plan.

Standard (and version)	Applicability Statement for Secure Health Transport, Version 1.2, August 2015 (Direct)
Updated certification criteria and associated product	ChartMaker Medical Suite 2018.2 170.315(b)(1) - Transitions of care 170.315(h)(1) - Direct Project
Health IT Module CHPL ID	15.04.04.2296.Char.18.01.0.191218
Method used for standard update	USCDI
Date of ONC-ACB notification	The implementation of this standard pre-dates 21CCA requirement of ONC-ACB notification
Date of customer notification (SVAP only)	

Conformance measure	This is addressed by measure/metrics testing (described further below) of 170.315(b)(1) Transitions of Care and 170.315(h)(1) - Direct Project
USCDI-updated certification criteria (and USCDI version)	170.315(b)(1) was updated to include the data elements required in USCDI v1
Standard (and version)	ONC Implementation Guide for Direct Edge Protocols, Version 1.1, June 25, 2014
Updated certification criteria and associated product	ChartMaker Medical Suite 2018.2 170.315(b)(1) - Transitions of care
Health IT Module CHPL ID	15.04.04.2296.Char.18.01.0.191218
Method used for standard update	USCDI
Date of ONC-ACB notification	The implementation of this standard pre-dates 21CCA requirement of ONC-ACB notification
Date of customer notification (SVAP only)	
Conformance measure	This is addressed by measure/metrics testing (described further below) of 170.315(b)(1)
USCDI-updated certification criteria (and USCDI version)	170.315(b)(1) was updated to include the data elements required in USCDI v1
Standard (and version)	HL7 Implementation Guide for CDA® Release 2: IHE Health Story Consolidation, DSTU Release 1.1 (US Realm) Draft Standard for Trial Use July 2012
Updated certification criteria and associated product	ChartMaker Medical Suite 2018.2 170.315(b)(1) - Transitions of care 170.315(b)(2) - Clinical information reconciliation and incorporation
Health IT Module CHPL ID	15.04.04.2296.Char.18.01.0.191218
Method used for standard update	USCDI
Date of ONC-ACB notification	The implementation of this standard pre-dates 21CCA requirement of ONC-ACB notification
Date of customer notification (SVAP only)	
Conformance measure	This is addressed by measure/metrics testing (described further below) for 170.315(b)(1), 170.315(b)(2), 170.315(b)(6), 170.315(e)(1) and 170.315(g)(9)
USCDI-updated certification criteria (and USCDI version)	170.315(b)(1) and 170.315(b)(2) was updated to include the data elements required in USCDI v1
Standard (and version)	HL7 Implementation Guide for CDA® Release 2: Consolidated CDA Templates for Clinical Notes (US Realm), Draft Standard for Trial Use, Volume 1 - Introductory Material, Release 2.1, August 2015
Updated certification criteria and associated product	ChartMaker Medical Suite 2018.2 170.315(b)(1) - Transitions of care 170.315(b)(2) - Clinical information reconciliation and incorporation 170.315(b)(6) - Data export 170.315(e)(1) - View, download, and transmit to 3rd party 170.315(g)(9) - Application access - all data request

Health IT Module CHPL ID	15.04.04.2296.Char.18.01.0.191218
Method used for standard update	USCDI
Date of ONC-ACB notification	The implementation of this standard pre-dates 21CCA requirement of ONC-ACB notification
Date of customer notification (SVAP only)	
Conformance measure	This is addressed by measure/metrics testing (described further below) for 170.315(b)(1), 170.315(b)(2), 170.315(b)(6), 170.315(e)(1) and 170.315(g)(9)
USCDI-updated certification criteria (and USCDI version)	170.315(b)(1), 170.315(b)(2), 170.315(e)(1) and 170.315(g)(9) were updated to include the data elements required in USCDI v1
Standard (and version)	HL7 Implementation Guide for CDA® Release 2: Consolidated CDA Templates for Clinical Notes (US Realm), Draft Standard for Trial Use, Volume 2 - Templates and Supporting Material, Release 2.1, August 2015
Updated certification criteria and associated product	ChartMaker Medical Suite 2018.2 170.315(b)(1) - Transitions of care 170.315(b)(2) - Clinical information reconciliation and incorporation 170.315(b)(6) - Data export 170.315(e)(1) - View, download, and transmit to 3rd party 170.315(g)(9) - Application access - all data request
Health IT Module CHPL ID	15.04.04.2296.Char.18.01.0.191218
Method used for standard update	USCDI
Date of ONC-ACB notification	The implementation of this standard pre-dates 21CCA requirement of ONC-ACB notification
Date of customer notification (SVAP only)	
Conformance measure	This is addressed by measure/metrics testing (described further below) for 170.315(b)(1), 170.315(b)(2), 170.315(b)(6), 170.315(e)(1) and 170.315(g)(9)
USCDI-updated certification criteria (and USCDI version)	170.315(b)(1), 170.315(b)(2), 170.315(e)(1) and 170.315(g)(9) were updated to include the data elements required in USCDI v1
Standard (and version)	HL7® CDA R2 Implementation Guide: C-CDA Templates for Clinical Notes R2.1 Companion Guide, Release 2-US Realm, October 2019
Updated certification criteria and associated product	ChartMaker Medical Suite 2018.2 170.315(b)(1) - Transitions of care 170.315(b)(2) - Clinical information reconciliation and incorporation 170.315(e)(1) - View, download, and transmit to 3rd party 170.315(g)(9) - Application access - all data request
Health IT Module CHPL ID	15.04.04.2296.Char.18.01.0.191218
Method used for standard update	USCDI
Date of ONC-ACB notification	The implementation of this standard pre-dates 21CCA requirement of ONC-ACB notification
Date of customer notification (SVAP only)	
Conformance measure	This is addressed by measure/metrics testing (described further below) for 170.315(b)(1), 170.315(b)(2), 170.315(e)(1) and 170.315(g)(9)

USCDI-updated certification criteria (and USCDI version)	170.315(b)(1), 170.315(b)(6), 170.315(e)(1) and 170.315(g)(9) were updated to include the data elements required in USCDI v1
Standard (and version)	NCPDP SCRIPT Standard, Implementation Guide, Version 2017071 (Approval Date for ANSI: July 28, 2017)
Updated certification criteria and associated product	ChartMaker Medical Suite 2018.2 170.315(b)(3) - Electronic prescribing
Health IT Module CHPL ID	15.04.04.2296.Char.18.01.0.191218
Method used for standard update	Cures
Date of ONC-ACB notification	The implementation of this standard pre-dates 21CCA requirement of ONC-ACB notification
Date of customer notification (SVAP only)	
Conformance measure	This is addressed by measure/metrics testing (described further below) of 170.315(b)(3)
USCDI-updated certification criteria (and USCDI version)	N/A
Standard (and version)	IHE IT Infrastructure Technical Framework Volume 2b (ITI TF-2b), Transactions Part B - Sections 3.29 - 2.43, Revision 7.0, August 10, 2010
Updated certification criteria and associated product	ChartMaker Medical Suite 2018.2 170.315(b)(1) - Transitions of care
Health IT Module CHPL ID	15.04.04.2296.Char.18.01.0.191218
Method used for standard update	USCDI
Date of ONC-ACB notification	The implementation of this standard pre-dates 21CCA requirement of ONC-ACB notification
Date of customer notification (SVAP only)	
Conformance measure	This is addressed by measure/metrics testing (described further below) of 170.315 (b)(1)
USCDI-updated certification criteria (and USCDI version)	170.315(b)(1) was updated to include the data elements required in USCDI v1
Standard (and version)	United States Core Data for Interoperability (USCDI), Version 1, July 2020 Errata
Updated certification criteria and associated product	ChartMaker Medical Suite 2018.2 170.315(b)(1) - Transitions of care 170.315(b)(2) - Clinical information reconciliation and incorporation 170.315(e)(1) - View, download, and transmit to 3rd party 170.315(g)(9) - Application access - all data request
Health IT Module CHPL ID	15.04.04.2296.Char.18.01.0.191218
Method used for standard updates	USDCI
Date of ONC-ACB notification	The implementation of this standard pre-dates 21CCA requirement of ONC-ACB notification
Date of customer notification (SVAP only)	

Conformance measure	This is addressed by measure/metrics testing (described further below) of 170.315(b)(1), 170.315(b)(2), 170.315(e)(1) and 170.315(g)(9)
USCDI-updated certification criteria (and USCDI version)	This section is about USCDI v1

MEASURES USED IN OVERALL APPROACH

Each plan must include at least one measurement/metric that addresses each applicable certification criterion in the Health IT Module's scope of certification. Describe the method for measuring how the approach(es) chosen meet the intent and purpose of Real World Testing.

For each measurement/metric, describe the elements below:

- ✓ Description of the measurement/metric
- ✓ Associated certification criteria
- ✓ Justification for selected measurement/metric
- ✓ Care setting(s) that is addressed
- ✓ Expected outcomes

DESCRIPTION OF MEASUREMENT/METRIC

Describe the measure(s) that will be used to support the overall approach to Real World Testing.

Measurement/Metric	Description
170.315(b)(1) - Transitions of Care <ul style="list-style-type: none"> • Number of successful transmissions of Transitions of care and Referral summaries sent via Direct messaging • Number of failed transmissions of Transitions of care and Referral summaries sent via Direct messaging 	These 2 metrics will capture the TOC and Referral summary activity being sent via Direct Messaging, providing a percentage of successful activity of interoperability.
170.315(b)(2) Clinical Information Reconciliation	These 6 metrics will capture the Clinical Information Reconciliation numbers along with the total number of CDAs that were imported.

<ul style="list-style-type: none"> • Total number of CDAs imported (attempted and completed) • Number of CDAs that had validation errors • Number of CDAs that had CIR performed • Number of CDAs that had Medications reconciled • Number of CDAs that had Allergies reconciled • Number of CDA that had Diagnoses reconciled 	
<p>170.315(b)(3) E-Prescribing</p> <ul style="list-style-type: none"> • Number of successful NewRX messages • Number of failed NewRX messages • Number of successful RXRenewal requests • Number of failed RXRenewal requests • Number of successful RXRenewal responses • Number of failed RXRenewal responses • Number of successful RXCancel messages • Number of failed RXCancel messages • Number of successful RXCancel responses • Number of failed RXCancel responses • Number of successful RXChange requests • Number of failed RXChange requests • Number of successful RXChange responses • Number of failed RXChange responses • Number of successful RXFill Status messages • Number of failed RXFill Status messages 	<p>These 22 metrics will capture the quantity of all message types covered under the E-prescribing criteria and provide a percentage of successful activity.</p>

<ul style="list-style-type: none"> • Number of successful Formulary requests • Number of failed Formulary requests • Number of successful Eligibility requests • Number of failed Eligibility requests • Number of successful Prior Authorization requests • Number of failed Prior Authorization requests 	
<p>170.315(b)(6) Data Export</p> <ul style="list-style-type: none"> • Number of All Patient TOC exports that were successful • Number of All Patient TOC exports that failed • Number of data exports scheduled that were successful • Number of data exports scheduled that failed 	<p>These 4 metrics will capture the number of exports taking place. There are separate metrics for regular data exports and for generating a TOC for all patients. We will get a percentage of successful runs for both categories.</p>
<p>170.315(c)(1) CQMs Record & Export</p> <ul style="list-style-type: none"> • Number of times CMS 50 completed • Number of times CMS 50 errored • Number of times CMS 52 completed • Number of times CMS 52 errored • Number of times CMS 65 completed • Number of times CMS 65 errored • Number of times CMS 68 completed • Number of times CMS 68 errored • Number of times CMS 69 completed 	<p>These metrics will capture the number of times our clients run each CQM on our dashboard. The resulting values will show, per CQM, the number of successful runs as well as any errors that occur while running, allowing us to obtain a percentage of successful completion.</p>

<ul style="list-style-type: none"> • Number of times CMS 69 errored • Number of times CMS 75 completed • Number of times CMS 75 errored • Number of times CMS 90 completed • Number of times CMS 90 errored • Number of times CMS 122 completed • Number of times CMS 122 errored • Number of times CMS 123 completed • Number of times CMS 123 errored • Number of times CMS 124 completed • Number of times CMS 124 errored • Number of times CMS 125 completed • Number of times CMS 125 errored • Number of times CMS 127 completed • Number of times CMS 127 errored • Number of times CMS 130 completed • Number of times CMS 130 errored • Number of times CMS 131 completed • Number of times CMS 131 errored • Number of times CMS 134 completed • Number of times CMS 134 errored 	
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<ul style="list-style-type: none"> • Number of times CMS 135 completed • Number of times CMS 135 errored • Number of times CMS 136 completed • Number of times CMS 136 errored • Number of times CMS 138 completed • Number of times CMS 138 errored • Number of times CMS 139 completed • Number of times CMS 139 errored • Number of times CMS 144 completed • Number of times CMS 144 errored • Number of times CMS 146 completed • Number of times CMS 146 errored • Number of times CMS 147 completed • Number of times CMS 147 errored • Number of times CMS 149 completed • Number of times CMS 149 errored • Number of times CMS 153 completed • Number of times CMS 153 errored • Number of times CMS 154 completed • Number of times CMS 154 errored • Number of times CMS 155 completed 	
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<ul style="list-style-type: none"> • Number of times CMS 155 errored • Number of times CMS 156 completed • Number of times CMS 156 errored • Number of times CMS 159 completed • Number of times CMS 159 errored • Number of times CMS 165 completed • Number of times CMS 165 errored • Number of times CMS 167 completed • Number of times CMS 167 errored • Number of times CMS 347 completed • Number of times CMS 347 errored 	
<p>170.315(c)(2) CQMs – Import & Calculate</p> <ul style="list-style-type: none"> • Number of times import ran successfully • Number of times import failed 	<p>These 2 metrics will capture how many times our clients imported a QRDA file, as well as a percentage of successful activity.</p>
<p>170.315(c)(3) CQMs- Reporting</p> <ul style="list-style-type: none"> • Number of times QRDA 1 ran successfully • Number of times QRDA 1 failed • Number of times QRDA 3 ran successfully • Number of times QRDA 3 failed 	<p>These 4 metrics will capture how many times our clients compile QRDA 1 and QRDA 3 files, as well as a percentage of successful activity.</p>
<p>170.315(e)(1) View, download and transmit to 3rd party</p> <ul style="list-style-type: none"> • Number of documents exported to PatientPortal • Number of documents viewed 	<p>These 5 metrics will capture statistics based on our client's patient activity on the ChartMaker® Patient Portal.</p>

<ul style="list-style-type: none"> • Number of documents downloaded • Number of documents sent via Direct Messaging from PatientPortal • Number of documents sent via email from PatientPortal 	
170.315(f)(1) Transmission to immunization registries <ul style="list-style-type: none"> • Number of immunization messages transmitted successfully • Number of immunization messages transmitted that failed 	These 2 metrics will capture immunization activity transmitted to registries, as well as percentage of successful activity.
170.315(f)(2) Transmission to Public Health Agencies – Syndromic Surveillance <ul style="list-style-type: none"> • Number of syndromic surveillance files created successfully • Number of syndromic surveillance files that failed 	These 2 metrics will capture the creation of syndromic surveillance file activity being sent to registries, as well as percentage of successful activity.
170.315(g)(7) API Access – Patient Selection <ul style="list-style-type: none"> • Number of successful patient selection requests received via API • Number of failed patient selection requests received via API 	These 2 metrics will capture API activity related to patient selection, as well as percentage of successful activity.
170.315(g)(8) API Access – Data Category <ul style="list-style-type: none"> • Number of successful data category requests received via API • Number of failed data category requests received by API 	These 2 metrics will capture API activity related to data category requests, as well as percentage of successful activity.
170.315(g)(9) API Access – All Data	These 2 metrics will capture API activity related to all data requests, as well as percentage of successful activity.

<ul style="list-style-type: none"> • Number of successful all data requests received via API • Number of failed all data requests received via API 	
170.315(h)(1) - Direct Messaging <ul style="list-style-type: none"> • Number of successful outgoing Direct Messages • Number of failed outgoing Direct Messages • Number of successful incoming Direct Messages • Number of failed incoming Direct Messages 	These 4 metrics will capture all Direct Message activity, as well as percentage of successful activity of outgoing and incoming messages.

ASSOCIATED CERTIFICATION CRITERIA

List certification criteria associated with the measure and if updated to the 2015 Edition Cures Update criteria.

Measurement/Metric	Associated Certification Criteria
<ul style="list-style-type: none"> • Number of successful transmissions of Transitions of care and Referral summaries sent via Direct messaging • Number of failed transmissions of Transitions of care and Referral summaries sent via Direct messaging 	170.315(b)(1) - Transitions of Care
<ul style="list-style-type: none"> • Total number of CDAs imported (attempted and completed) • Number of CDAs that had validation errors • Number of CDAs that had CIR performed • Number of CDAs that had Medications reconciled 	170.315(b)(2) Clinical Information Reconciliation

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<ul style="list-style-type: none"> • Number of CDAs that had Allergies reconciled • Number of CDA that had Diagnoses reconciled 	
<ul style="list-style-type: none"> • Number of successful NewRX messages • Number of failed NewRX messages • Number of successful RXRenewal requests • Number of failed RXRenewal requests • Number of successful RXRenewal responses • Number of failed RXRenewal responses • Number of successful RXCancel messages • Number of failed RXCancel messages • Number of successful RXCancel responses • Number of failed RXCancel responses • Number of successful RXChange requests • Number of failed RXChange requests • Number of successful RXChange responses • Number of failed RXChange responses • Number of successful RXFill Status messages • Number of failed RXFill Status messages • Number of successful Formulary requests • Number of failed Formulary requests • Number of successful Eligibility requests • Number of failed Eligibility requests • Number of successful Prior Authorization requests 	170.315(b)(3) E-Prescribing

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The Office of the National Coordinator for Health Information Technology

<ul style="list-style-type: none"> • Number of failed Prior Authorization requests 	
<ul style="list-style-type: none"> • Number of All Patient TOC exports that were successful • Number of All Patient TOC exports that failed • Number of data exports scheduled that were successful • Number of data exports scheduled that failed 	170.315(b)(6) Data Export
<ul style="list-style-type: none"> • Number of times CMS 50 completed • Number of times CMS 50 errored • Number of times CMS 52 completed • Number of times CMS 52 errored • Number of times CMS 65 completed • Number of times CMS 65 errored • Number of times CMS 68 completed • Number of times CMS 68 errored • Number of times CMS 69 completed • Number of times CMS 69 errored • Number of times CMS 75 completed • Number of times CMS 75 errored • Number of times CMS 90 completed • Number of times CMS 90 errored • Number of times CMS 122 completed 	170.315(c)(1) CWMs – Record and Export

<ul style="list-style-type: none"> • Number of times CMS 122 errored • Number of times CMS 123 completed • Number of times CMS 123 errored • Number of times CMS 124 completed • Number of times CMS 124 errored • Number of times CMS 125 completed • Number of times CMS 125 errored • Number of times CMS 127 completed • Number of times CMS 127 errored • Number of times CMS 130 completed • Number of times CMS 130 errored • Number of times CMS 131 completed • Number of times CMS 131 errored • Number of times CMS 134 completed • Number of times CMS 134 errored • Number of times CMS 135 completed • Number of times CMS 135 errored • Number of times CMS 136 completed • Number of times CMS 136 errored • Number of times CMS 138 completed • Number of times CMS 138 errored 	
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<ul style="list-style-type: none"> • Number of times CMS 139 completed • Number of times CMS 139 errored • Number of times CMS 144 completed • Number of times CMS 144 errored • Number of times CMS 146 completed • Number of times CMS 146 errored • Number of times CMS 147 completed • Number of times CMS 147 errored • Number of times CMS 149 completed • Number of times CMS 149 errored • Number of times CMS 153 completed • Number of times CMS 153 errored • Number of times CMS 154 completed • Number of times CMS 154 errored • Number of times CMS 155 completed • Number of times CMS 155 errored • Number of times CMS 156 completed • Number of times CMS 156 errored • Number of times CMS 159 completed • Number of times CMS 159 errored • Number of times CMS 165 completed 	
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<ul style="list-style-type: none"> • Number of times CMS 165 errored • Number of times CMS 167 completed • Number of times CMS 167 errored • Number of times CMS 347 completed • Number of times CMS 347 errored 	
<ul style="list-style-type: none"> • Number of times import ran successfully • Number of times import failed 	170.315(c)(2) CQMs – Import & Calculate
<ul style="list-style-type: none"> • Number of times QRDA 1 ran successfully • Number of times QRDA 1 failed • Number of times QRDA 3 ran successfully • Number of times QRDA 3 failed 	170.315(c)(3) CQMs- Reporting
<ul style="list-style-type: none"> • Number of documents exported to PatientPortal • Number of documents viewed • Number of documents downloaded • Number of documents sent via Direct Messaging from PatientPortal • Number of documents sent via email from PatientPortal 	170.315(e)(1) View, download and transmit to 3 rd party
<ul style="list-style-type: none"> • Number of immunization messages transmitted successfully • Number of immunization messages transmitted that failed 	170.315(f)(1) Transmissions to immunization registries

<ul style="list-style-type: none"> • Number of syndromic surveillance files created successfully • Number of syndromic surveillance files that failed 	170.315(f)(2) Transmission to Public Health Agencies – Syndromic Surveillance
<ul style="list-style-type: none"> • Number of successful patient selection requests received via API • Number of failed patient selection requests received via API 	170.315(g)(7) API Access – Patient Selection
<ul style="list-style-type: none"> • Number of successful data category requests received via API • Number of failed data category requests received by API 	170.315(g)(8) API Access – Data Category
<ul style="list-style-type: none"> • Number of successful all data requests received via API • Number of failed all data requests received via API 	170.315(g)(9) API Access – All Data
<ul style="list-style-type: none"> • Number of successful outgoing Direct Messages • Number of failed outgoing Direct Messages • Number of successful incoming Direct Messages • Number of failed incoming Direct Messages 	170.315(h)(1) - Direct Messaging

JUSTIFICATION FOR SELECTED MEASUREMENT/METRIC

Provide an explanation for the measurement/metric selected to conduct Real World Testing.

Measurement/Metric	Justification
170.315(b)(1) - <ul style="list-style-type: none"> • Number of successful transmissions of Transitions of care and 	The results of these 2 metrics will show the success rate/percentage of the exchange of EHI data between clinicians. Seeing the failed rate/percentage will allow for analysis to take place to determine if any action is needed in either client education and/or changes in design.

<p>Referral summaries sent via Direct messaging</p> <ul style="list-style-type: none"> • Number of failed transmissions of Transitions of care and Referral summaries sent via Direct messaging 	
<p>170.315(b)(2) Clinical Information Reconciliation</p> <ul style="list-style-type: none"> • Total number of CDAs imported (attempted and completed) • Number of CDAs that had validation errors • Number of CDAs that had CIR performed • Number of CDAs that had Medications reconciled • Number of CDAs that had Allergies reconciled • Number of CDA that had Diagnoses reconciled 	<p>The results of these 6 metrics will show the success rate/percentage of CDAs imported that were also reconciled via CIR. These metrics will also reflect if users are successfully reconciling each of the three components. Analysis of the data will help determine if any action is needed in either client education and/or changes in design.</p>
<p>170.315(b)(3) E-Prescribing</p> <ul style="list-style-type: none"> • Number of successful NewRX messages • Number of failed NewRX messages • Number of successful RXRenewal requests • Number of failed RXRenewal requests • Number of successful RXRenewal responses • Number of failed RXRenewal responses • Number of successful RXCancel messages • Number of failed RXCancel messages • Number of successful RXCancel responses • Number of failed RXCancel responses 	<p>The results of these 22 metrics will capture all e-prescribing activity. Capturing both the successful and failed message types will show us potential areas that may need client education and/or design changes. These metrics will show the effectiveness of our functionality related to e-prescribing.</p>

<ul style="list-style-type: none"> • Number of successful RXChange requests • Number of failed RXChange requests • Number of successful RXChange responses • Number of failed RXChange responses • Number of successful RXFill Status messages • Number of failed RXFill Status messages • Number of successful Formulary requests • Number of failed Formulary requests • Number of successful Eligibility requests • Number of failed Eligibility requests • Number of successful Prior Authorization requests • Number of failed Prior Authorization requests 	
<p>170.315(b)(6) Data Export</p> <ul style="list-style-type: none"> • Number of All Patient TOC exports that were successful • Number of All Patient TOC exports that failed • Number of data exports scheduled that were successful • Number of data exports scheduled that failed 	<p>The results of these 4 metrics will show client activity around the Data Export functionality. Analysis of these metrics will demonstrate the effectiveness of this interoperability and data exchange feature. The resulting percentage will inform us of potential areas that may need client education and/or design changes.</p>
<p>170.315(c)(1) CQMs Record & Export</p> <ul style="list-style-type: none"> • Number of times CMS 50 completed • Number of times CMS 50 errored • Number of times CMS 52 completed 	<p>The results of these metrics will show the number of times each of the CQMs were run. Analysis of these metrics will allow us to see if there are any issues executing any of the measures that may need client education and/or design changes. These results will also allow us to produce a percentage of successful completion for each measure.</p>

<ul style="list-style-type: none"> • Number of times CMS 52 errored • Number of times CMS 65 completed • Number of times CMS 65 errored • Number of times CMS 68 completed • Number of times CMS 68 errored • Number of times CMS 69 completed • Number of times CMS 69 errored • Number of times CMS 75 completed • Number of times CMS 75 errored • Number of times CMS 90 completed • Number of times CMS 90 errored • Number of times CMS 122 completed • Number of times CMS 122 errored • Number of times CMS 123 completed • Number of times CMS 123 errored • Number of times CMS 124 completed • Number of times CMS 124 errored • Number of times CMS 125 completed • Number of times CMS 125 errored • Number of times CMS 127 completed • Number of times CMS 127 errored 	
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<ul style="list-style-type: none"> • Number of times CMS 130 completed • Number of times CMS 130 errored • Number of times CMS 131 completed • Number of times CMS 131 errored • Number of times CMS 134 completed • Number of times CMS 134 errored • Number of times CMS 135 completed • Number of times CMS 135 errored • Number of times CMS 136 completed • Number of times CMS 136 errored • Number of times CMS 138 completed • Number of times CMS 138 errored • Number of times CMS 139 completed • Number of times CMS 139 errored • Number of times CMS 144 completed • Number of times CMS 144 errored • Number of times CMS 146 completed • Number of times CMS 146 errored • Number of times CMS 147 completed • Number of times CMS 147 errored • Number of times CMS 149 completed 	
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<ul style="list-style-type: none"> • Number of times CMS 149 errored • Number of times CMS 153 completed • Number of times CMS 153 errored • Number of times CMS 154 completed • Number of times CMS 154 errored • Number of times CMS 155 completed • Number of times CMS 155 errored • Number of times CMS 156 completed • Number of times CMS 156 errored • Number of times CMS 159 completed • Number of times CMS 159 errored • Number of times CMS 165 completed • Number of times CMS 165 errored • Number of times CMS 167 completed • Number of times CMS 167 errored • Number of times CMS 347 completed • Number of times CMS 347 errored 	
170.315(c)(2) CQMs – Import & Calculate <ul style="list-style-type: none"> • Number of times import ran successfully • Number of times import failed 	These 2 metrics will capture activity as it relates to the Import and Calculate functionality of CQMs. The results will also produce a percentage of successful activity. Analysis of these metrics will allow us to see if there are any issues executing any of the measures that may need client education and/or design changes.
170.315(c)(3) CQMs- Reporting <ul style="list-style-type: none"> • Number of times QRDA 1 ran successfully 	These 4 metrics will capture activity as it relates to the Reporting functionality of CQMs. The results will also produce a percentage of successful activity. Analysis of these metrics will allow us to see if there are

<ul style="list-style-type: none"> • Number of times QRDA 1 failed • Number of times QRDA 3 ran successfully • Number of times QRDA 3 failed 	any issues creating these files that may need client education and/or design changes.
<p>170.315(e)(1) View, download and transmit to 3rd party</p> <ul style="list-style-type: none"> • Number of documents exported to PatientPortal • Number of documents viewed • Number of documents downloaded • Number of documents sent via Direct Messaging from PatientPortal • Number of documents sent via email from PatientPortal 	These 5 metrics will capture activity as it relates to the patient's activity on the patient portal. Analysis of these metrics will allow us to see if there are any issues related to this measure's activity that may need education and/or design changes.
<p>170.315(f)(1)</p> <ul style="list-style-type: none"> • Number of immunization messages transmitted successfully • Number of immunization messages transmitted that failed 	These 2 metrics will capture activity as it relates to the exchange of EHI data with immunization registries. Analysis of these metrics will allow us to see if there are any issues related to this measure's activity that may need client education and/or design changes.
<p>170.315(f)(2) Transmission to Public Health Agencies – Syndromic Surveillance</p> <ul style="list-style-type: none"> • Number of syndromic surveillance files created successfully • Number of syndromic surveillance files that failed 	These 2 metrics will capture activity as it relates to the exchange of EHI data with public health agencies. Analysis of these metrics will allow us to see if there are any issues related to this measure's activity that may need client education and/or design changes.
<p>170.315(g)(7) API Access – Patient Selection</p> <ul style="list-style-type: none"> • Number of successful patient selection requests received via API 	These 2 metrics will capture activity as it relates to the access of EHI data by patients. Analysis of these metrics will allow us to see if there are any issues related to this measure's activity that may need education and/or design changes.

<ul style="list-style-type: none"> • Number of failed patient selection requests received via API 	
170.315(g)(8) API Access – Data Category <ul style="list-style-type: none"> • Number of successful data category requests received via API • Number of failed data category requests received by API 	These 2 metrics will capture activity as it relates to the access of EHI data by patients. Analysis of these metrics will allow us to see if there are any issues related to this measure's activity that may need education and/or design changes.
170.315(g)(9) API Access – All Data <ul style="list-style-type: none"> • Number of successful all data requests received via API • Number of failed all data requests received via API 	These 2 metrics will capture activity as it relates to the access of EHI data by patients. Analysis of these metrics will allow us to see if there are any issues related to this measure's activity that may need education and/or design changes.
170.315(h)(1) - Direct Messaging <ul style="list-style-type: none"> • Number of successful outgoing Direct Messages • Number of failed outgoing Direct Messages • Number of successful incoming Direct Messages • Number of failed incoming Direct Messages 	These 4 metrics will capture activity as it relates to the sending and receiving of Direct Messages, which aides in the interoperability and data exchange between clinicians. The results will also produce a percentage of successful activity. Analysis of these metrics will allow us to see if there are any issues creating these messages that may need client education and/or design changes.

CARE SETTING(S)

The expectation is that a developer's Real World Testing plan will address each type of clinical setting in which their certified health IT is marketed. Health IT developers are not required to test their certified health IT in every setting in which it is marketed for use. Developers should address their choice of care and/or practice settings to test and provide a justification for the chosen approach.

Note: Health IT developers may bundle products by care setting, criteria, etc. and design one plan to address each, or they may submit any combination of multiple plans that collectively address their products and the care settings in which they are marketed

List each care setting which is covered by the measure and an explanation for why it is included.

Care Setting	Justification
Ambulatory	STI serves a client base that is entirely within the ambulatory setting.

EXPECTED OUTCOMES

Health IT developers should detail how the approaches chosen will successfully demonstrate that the certified health IT:

- (1) is compliant with the certification criteria, including the required technical standards and vocabulary codes sets;
- (2) is exchanging electronic health information (EHI) in the care and practice settings for which it is marketed for use; and/or,
- (3) EHI is received by and used in the certified health IT.

(from 85 FR 25766)

Not all of the expected outcomes listed above will be applicable to every certified Health IT Module, and health IT developers may add an additional description of how their measurement approach best addresses the ongoing interoperability functionality of their product(s). Health IT developers could also detail outcomes that should not result from their measurement approach if that better describes their efforts.

Within this section, health IT developers should also describe how the specific data collected from their Real World Testing measures demonstrate expected results. Expected outcomes and specific measures do not necessarily have to include performance targets or benchmarks, but health IT developers should provide context for why specific measures were selected and how the metrics demonstrate individual criterion functionality, EHI exchange, and/or use of EHI within certified health IT, as appropriate.

Measurement/Metric	Expected Outcomes
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<p>170.315(b)(1) -</p> <ul style="list-style-type: none"> • Number of successful transmissions of Transitions of care and Referral summaries sent via Direct messaging • Number of failed transmissions of Transitions of care and Referral summaries sent via Direct messaging 	<p>The expected outcome is above a 95% success rate. A high success rate will show compliance with the certification criteria of 170.315(b)(1) including the required standards and vocabulary code sets. The expected high percentage will demonstrate the successful exchange of EHI with other clinicians.</p>
<p>170.315(b)(2) Clinical Information Reconciliation</p> <ul style="list-style-type: none"> • Total number of CDAs imported (attempted and completed) • Number of CDAs that had validation errors • Number of CDAs that had CIR performed • Number of CDAs that had Medications reconciled • Number of CDAs that had Allergies reconciled • Number of CDA that had Diagnoses reconciled 	<p>There are three expected outcomes from these 6 metrics:</p> <ul style="list-style-type: none"> • Less than 10% of CDAs imported have a validation error • More than 75% of CDAs imported had CIR performed • More than 90% of CDAs that had CIR performed had all three categories reconciled <p>The first threshold above is technical in nature and reflects conformance of the incoming CDA to the standard. Significant validation failures will tend to require a technical resolution.</p> <p>The last two thresholds listed above are dependent on the medical value of the content and the user decision to use it. If these are not met, client outreach will be conducted first understand the reason, then if appropriate, to provide additional training or workflow improvements for incorporating EHI.</p>
<p>170.315(b)(3) E-Prescribing</p> <ul style="list-style-type: none"> • Number of successful NewRX messages • Number of failed NewRX messages • Number of successful RXRenewal requests • Number of failed RXRenewal requests • Number of successful RXRenewal responses • Number of failed RXRenewal responses • Number of successful RXCancel messages • Number of failed RXCancel messages • Number of successful RXCancel responses 	<p>The expected outcomes of these 22 metrics are:</p> <ul style="list-style-type: none"> • 97% success rate for NewRX messages • 97% success rate for RxRenewal requests • 97% success rate for RxRenewal responses • 97% success rate for RXCancel messages • 97% success rate for RXCancel responses • 97% success rate for RXChange requests • 97% success rate for RXChange responses • 97% success rate for RXFill status messages • 95% success rate for Formulary requests • 95% success rate for Eligibility requests • 97% success rate for Prior Authorization requests <p>The successful transmission and receipt of these message types shows compliance with the standards and vocabulary code set for 170.315(b)(3).</p>

<ul style="list-style-type: none"> • Number of failed RXCancel responses • Number of successful RXChange requests • Number of failed RXChange requests • Number of successful RXChange responses • Number of failed RXChange responses • Number of successful RXFill Status messages • Number of failed RXFill Status messages • Number of successful Formulary requests • Number of failed Formulary requests • Number of successful Eligibility requests • Number of failed Eligibility requests • Number of successful Prior Authorization requests • Number of failed Prior Authorization requests 	
<p>170.315(b)(6) Data Export</p> <ul style="list-style-type: none"> • Number of All Patient TOC exports that were successful • Number of All Patient TOC exports that failed • Number of data exports scheduled that were successful • Number of data exports scheduled that failed 	<p>The expected outcome of these metrics is:</p> <ul style="list-style-type: none"> • 95% success rate of data exports
<p>170.315(c)(1) CQMs Record & Export</p> <ul style="list-style-type: none"> • Number of times CMS 50 completed • Number of times CMS 50 errored • Number of times CMS 52 completed 	<p>The expected outcome of these metrics is:</p> <ul style="list-style-type: none"> • 95% success rate for each listed CQM. (Success is defined as the system's ability to calculate the specific measures.)

<ul style="list-style-type: none"> • Number of times CMS 52 errored • Number of times CMS 65 completed • Number of times CMS 65 errored • Number of times CMS 68 completed • Number of times CMS 68 errored • Number of times CMS 69 completed • Number of times CMS 69 errored • Number of times CMS 75 completed • Number of times CMS 75 errored • Number of times CMS 90 completed • Number of times CMS 90 errored • Number of times CMS 122 completed • Number of times CMS 122 errored • Number of times CMS 123 completed • Number of times CMS 123 errored • Number of times CMS 124 completed • Number of times CMS 124 errored • Number of times CMS 125 completed • Number of times CMS 125 errored • Number of times CMS 127 completed • Number of times CMS 127 errored 	
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<ul style="list-style-type: none"> • Number of times CMS 130 completed • Number of times CMS 130 errored • Number of times CMS 131 completed • Number of times CMS 131 errored • Number of times CMS 134 completed • Number of times CMS 134 errored • Number of times CMS 135 completed • Number of times CMS 135 errored • Number of times CMS 136 completed • Number of times CMS 136 errored • Number of times CMS 138 completed • Number of times CMS 138 errored • Number of times CMS 139 completed • Number of times CMS 139 errored • Number of times CMS 144 completed • Number of times CMS 144 errored • Number of times CMS 146 completed • Number of times CMS 146 errored • Number of times CMS 147 completed • Number of times CMS 147 errored • Number of times CMS 149 completed 	
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<ul style="list-style-type: none"> • Number of times CMS 149 errored • Number of times CMS 153 completed • Number of times CMS 153 errored • Number of times CMS 154 completed • Number of times CMS 154 errored • Number of times CMS 155 completed • Number of times CMS 155 errored • Number of times CMS 156 completed • Number of times CMS 156 errored • Number of times CMS 159 completed • Number of times CMS 159 errored • Number of times CMS 165 completed • Number of times CMS 165 errored • Number of times CMS 167 completed • Number of times CMS 167 errored • Number of times CMS 347 completed • Number of times CMS 347 errored 	
170.315(c)(2) CQMs – Import & Calculate <ul style="list-style-type: none"> • Number of times import ran successfully • Number of times import failed 	The expected result of these metrics is: <ul style="list-style-type: none"> • 95% success rate of importing and calculating a QRDA file for CQMs
170.315(c)(3) CQMs- Reporting <ul style="list-style-type: none"> • Number of times QRDA 1 ran successfully 	The expected results of these metrics are: <ul style="list-style-type: none"> • 99% success rate of QRDA 1 creation • 99% success rate of QRDA 3 creation

<ul style="list-style-type: none"> • Number of times QRDA 1 failed • Number of times QRDA 3 ran successfully • Number of times QRDA 3 failed 	
<p>170.315(e)(1) View, download and transmit to 3rd party</p> <ul style="list-style-type: none"> • Number of documents exported to PatientPortal • Number of documents viewed • Number of documents downloaded • Number of documents sent via Direct Messaging from PatientPortal • Number of documents sent via email from PatientPortal 	<p>The expected results of these metrics are currently unknown and inestimable at this time.</p>
<p>170.315(f)(1)</p> <ul style="list-style-type: none"> • Number of immunization messages transmitted successfully • Number of immunization messages transmitted that failed 	<p>The expected result of these metrics is:</p> <ul style="list-style-type: none"> • 97% successful transmissions of immunization messages to registries
<p>170.315(f)(2) Transmission to Public Health Agencies – Syndromic Surveillance</p> <ul style="list-style-type: none"> • Number of syndromic surveillance files created successfully • Number of syndromic surveillance files that failed 	<p>The expected result of these metrics is:</p> <ul style="list-style-type: none"> • 97% successful creation of syndromic surveillance files
<p>170.315(g)(7) API Access – Patient Selection</p> <ul style="list-style-type: none"> • Number of successful patient selection requests received via API • Number of failed patient selection 	<p>The expected result of these metrics is:</p> <ul style="list-style-type: none"> • 97% success rate of API patient selection requests

requests received via API	
170.315(g)(8) API Access – Data Category <ul style="list-style-type: none"> • Number of successful data category requests received via API • Number of failed data category requests received by API 	The expected result of these metrics is: <ul style="list-style-type: none"> • 97% success rate of API data category requests
170.315(g)(9) API Access – All Data <ul style="list-style-type: none"> • Number of successful all data requests received via API • Number of failed all data requests received via API 	The expected result of these metrics is: <ul style="list-style-type: none"> • 97% success rate of API all data requests
170.315(h)(1) - Direct Messaging <ul style="list-style-type: none"> • Number of successful outgoing Direct Messages • Number of failed outgoing Direct Messages • Number of successful incoming Direct Messages • Number of failed incoming Direct Messages 	The expected results of these metrics are: <ul style="list-style-type: none"> • 95% success rate of outgoing Direct Messages • 95% success rate of incoming Direct Messages

SCHEDULE OF KEY MILESTONES

Include steps within the Real World Testing plan that establish milestones within the process. Include details on how and when the developer will implement measures and collect data. Key milestones should be relevant and directly related to expected outcomes discussed in the next section.

For each key milestone, describe when Real World Testing will begin in specific care settings and the date/timeframe during which data will be collected.

Key Milestone	Care Setting	Date/Timeframe
First quarter analysis of metrics	Ambulatory	April 2022

Automated metric collection is implemented, and will be maintained, as a standard function of the Medical Suite and therefore available to all clients. STI expects at least 50% of clients to have upgraded to the version that supports every metric by the end of the 1st QTR of 2022 which is enough to surpass RWT expectations by a significant margin. Metrics will be transmitted automatically to the ChartMaker Health Portal for analysis.		
Second quarter analysis of metrics STI expects at least 80% of clients to be participating in metric collection through the second QTR of 2022.	Ambulatory	July 2022
Third quarter analysis of metrics	Ambulatory	October 2022
Fourth quarter analysis of metrics	Ambulatory	Jan 2023
Year-end analysis and submission of RWT results	Ambulatory	Jan 2023

ATTESTATION

The Real World Testing plan must include the following attestation signed by the health IT developer authorized representative.


Note: The plan must be approved by a health IT developer authorized representative capable of binding the health IT developer for execution of the plan and include the representative's contact information.ⁱⁱ

This Real World Testing plan is complete with all required elements, including measures that address all certification criteria and care settings. All information in this plan is up to date and fully addresses the health IT developer's Real World Testing requirements.

Authorized Representative Name: Swithin Chandler, IV

Authorized Representative Email: Schandler@sticomputer.com

Authorized Representative Phone: 610-650-9700

Authorized Representative Signature: 

Date: 

ⁱ 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)

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