Real World Testing Plan

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 170.556 and 170.523(i)). 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 to develop 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 for 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 which 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. 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 would expect 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. 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) (**Century Cures final rule**)

  Section VII.B.5 — *"Real World Testing"*

General Information

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

Developer Name: Streamline Healthcare Solutions, LLC

Product Name(s): SmartCare

Version Number(s): R6

Certified Health IT

Product List (CHPL) ID(s): 15.04.04.2855.Smar.R6.01.1.220915

Developer Real World Testing Page URL: https://streamlinehealthcare.com/meaningful-use/

Justification for Real World Testing Approach

Consistent with the ONC's recommendation that "Real World Testing verify that deployed Certified Health IT continues to ***perform as intended by conducting and measuring observations of interoperability and data exchange***", this test plan focuses on capturing and documenting the number of instances that certified capability is successfully utilized in the real world. In instances where no evidence exists due to zero adoption of a certified capability or the inability to capture evidence of successful use for other reasons, we will demonstrate the required certified capability in a semi-controlled setting as close to a "real world" implementation as possible.

It is important to note that Real World Testing is only one component of the Health IT Certification program used to demonstrate compliance with the program requirements. Real World Testing should augment and support testing that was conducted prior to certification being granted. It is not intended to duplicate the methods or results previously demonstrated. Instead, this test plan was developed to demonstrate that the certified capabilities have been successfully deployed for providers to use at their discretion in live settings.

We are using a 3-fold approach to demonstrate successful real-world implementations.

- Adoption Rate
- Summative Testing
- Interactive Testing

Adoption rate will be used to determine if/when certified capability is being used in the real world and to help identify differences in care settings. Evidence of high rates of implementation and usage indicate (but don't by themselves prove) a certified capability's usefulness and practical value. Evidence of low rates of implementation and usage might indicate a potential problem, of which there could be several different causes. Note, it is not the goal of this exercise to identify the individual causes of why a given certified capability may have a high or low adoption rate, but rather to identify the users and care settings for which a given test is relevant.

Summative assessments will be used to measure which certified actions were performed at the conclusion of a given time period. These will be conducted by generating reports and examining audit logs from within the certified health IT module to help demonstrate the frequency of actions within the given time frame, and where possible, whether those actions were successful or unsuccessful. High success rates should be an indicator of a successful implementation of a given certified capability in a real-world setting.

Interactive testing will be used to demonstrate conformance to requirements where the adoption rate of a given certified capability is zero and to demonstrate ongoing compliance with updated standards and code sets (SVAP). Interactive tests will require a live test as opposed to examining historical usage statistics. The goal is to allow a user to demonstrate the certified Health IT module being used in a way consistent with their own practice or care setting.

Standards Updates (including standards version advancement process-SVAP and USCDI)

Streamline has not updated SmartCare to any new standards as part of SVAP or the Cures Update criteria as of this date nor plan to prior to the execution of the 2022 Real World Test.

Care Settings

SmartCare is marketed exclusively to Behavioral Health settings of care. A majority of the providers provide Outpatient Behavioral Health services. Some of these clinics also contain Primary Care providers. We also have a small number of Inpatient Behavioral Health clinics as customers that are contained within the same organization as our outpatient clinic customers.

Care Setting	Justification
Outpatient Behavioral Health	100% of our customers identify at least a portion of their business as Outpatient Behavioral Health
Inpatient Behavioral Health	A small percentage of our customer base but providers follow a different workflow. All providers who do inpatient behavioral health also do some outpatient behavioral health services as well.
Primary Care	A small percentage of our customer base, operating within Outpatient Behavioral Health clinics, but providers follow a different workflow.

Measures Used in Overall Approach

For each measurement/metric, describe the elements below:

- ✔ Description of the measurement/metric
- ✔ Associated certification criteria
- ✔ Care setting(s) that are addressed
- ✔ Justification for selected measurement/metric
- ✔ Expected Outcomes

Adoption Rates

The following metrics are applicable to all criteria and all care settings. These metrics will not be used directly to demonstrate interoperability or conformance to certification criteria. Instead, they will primarily be used to help determine the participants that will be in scope for this evaluation. They can also aid with the justification for other metrics by providing additional context (i.e., extremely low adoption rates for certain certified capabilities will necessitate a different approach to testing).

Metric	Description

Number of licensed installs/users of EHR • The definition of a "license" is dependent upon the model used (e.g., total number of systems, total number of seats per license, etc.)	Identify the total number of licensed installs/users of the certified Health IT module, regardless of care setting, participation in incentive programs, or use of certified capabilities.
Number of active installs/users of EHR	Identify the total number of ***active*** installs and/or users of the certified Health IT module, regardless of care setting, participation in incentive programs, or use of certified capabilities.

The following metrics are applicable to all criteria that are licensed separately from the base license and all care settings.

Metric	Description
Certified capabilities that are licensed separately	Identify which certified capabilities are licensed separately from the base EHR license. Examples may include eRx, CQMs, public health, etc.
Number of installs/users who licensed a certified capability	Where applicable, identify the number of licensed installs/users of a given certified capability.
Number of installs/users that have used the certified capability in the preceding 365 days	Where applicable, identify the number of ***active*** installs/users of a given certified capability.

Summative Assessment Metrics

The following metrics will be measured by viewing audit logs and reporting systems available to track the behavior of the certified Health IT module during a given time frame. All metrics are designed to reflect the core elements of the criteria, demonstrate interoperability, and demonstrate the success rate of the certified capability being used. In most cases we elected to record these metrics over a 90-day period to reflect the reporting periods typically required for compliance with the federal incentive programs.

The continued measurable use of certified capabilities will provide implicit evidence of successful implementation of the required certified capability. This is especially meaningful in cases where interoperability with outside systems is demonstrated. In cases where it is not possible to determine "success" via an explicit confirmation by a receiving system, success will be defined as a transmission was made where no error was received from the destination system or its intermediaries. Additionally, we will review internal customer and vendor issue tracking systems for reports of failures or unsatisfactory performance in the field.

None of the following criteria were updated to the Cures Update version of criteria prior to August 31, 2021. As a result, all testing is scheduled to be conducted against the 2015 Edition version of the criteria.

Criterion	Metric	Care Setting	Justification and Expected Outcome

170.315(b)(1) Transitions of care	Over a 90-day period: 1) Number of CCDAs created 2) Number of CCDAs sent via edge protocols 3) Number of CCDAs received via edge protocols	• Outpatient Behavioral Health • Inpatient Behavioral Health • Primary Care	This criterion requires the ability of a certified Health IT module to create CCDAs according to specified standards and vocabulary code sets, as well as send and receive CCDAs via edge protocols. However, it is not possible to consistently and reliably demonstrate that all required standards and code sets were used because not all CCDAs created in a real-world setting contain all the necessary data elements. Furthermore, it is not feasible to obtain copies of CCDA documents from "outside" developers or providers who have no incentive to participate in this exercise. Therefore, we intend to demonstrate the required certified capabilities by demonstrating how often CCDAs are created and exchanged with other systems to demonstrate the certified capability is available and effective, regardless of the frequency it is used. Our expectation is there will be new adoption of this certified capability by our users but still minimal, specifically the sending and receiving via edge protocols. So we have added interactive testing methodology for these capabilities to the test plan below to demonstrate the feature is available and functions as expected should additional customers elect to begin using this feature. Interactive testing will include use of the third party softwares used for sending and receiving of the edge protocols.

170.315(b)(2) Clinical information reconciliation and incorporation	Over a 90-day period: 1) Number of times a user reconciled medication list data from a received CCDA 2) Number of times a user reconciled allergies and intolerance list data from a received CCDA 3) Number of times a user reconciled problem list data from a received CCDA	• Outpatient Behavioral Health • Inpatient Behavioral Health • Primary Care	This criterion requires the ability of a certified Health IT module to take a CCDA received via an outside system and match it to the correct patient; reconcile the medication, allergy, and problem lists; and then incorporate the lists into the patient record. The expectation is each of these steps is done electronically within the certified Health IT module. While this certified capability is available to our users, most providers in the real world typically prefer to perform these steps manually and elect to save any outside received CCDAs as attachments to the patient record. Therefore, we intend to record the frequency that providers are electronically reconciling and incorporating CCDAs that were received from outside providers to demonstrate the certified capability is available and effective, regardless of the frequency it is used. Our expectation is there will be minimal adoption of this certified capability by our users, so we have added interactive testing methodology for these capabilities to the test plan below to demonstrate the feature is available and functions as expected should additional customers elect to begin using this feature.
170.315(b)(3) Electronic prescribing	Over a 90-day period: 1) Number of prescriptions created 2) Number of prescriptions changed 3) Number of prescriptions canceled 4) Number of prescriptions renewed	• Outpatient Behavioral Health • Inpatient Behavioral Health • Primary Care	This criterion requires the ability of a certified Health IT module to perform prescription-related electronic transactions (eRx) using required standards. However, it is not possible to demonstrate the correct standards were used because it is not feasible to obtain copies of eRx documents from "outside" companies or pharmacies who have no incentive to participate. Therefore, we intend to demonstrate the required certified capabilities are effective by demonstrating how often eRx transactions are performed by examining reports from our eRx partner. This will demonstrate that not only are the eRx transactions sent from the certified Health IT module, but that the transactions are successfully received by the eRx clearinghouse. Our expectation is there will be high utilization by providers with a high success rate.

170.315(b)(6) Data export	Over a 90-day period: 1) Number of times a data export was performed for a patient 2) Number of times a data export was performed for multiple patients in a single transaction 3) Number of times a data export was performed for all patients in a single transaction	• Outpatient Behavioral Health • Inpatient Behavioral Health • Primary Care	This criterion requires the ability of a certified Health IT module to export a summary of a patient's record in CCDA format according to specified standards and vocabulary code sets. However, it is not possible to consistently and reliably demonstrate that all required standards and code sets were used because not all CCDAs created in a real-world setting contain all the necessary data elements. Therefore, we intend to demonstrate the certified capability is available and effective, regardless of the frequency it is used. Our expectation is there will be very low utilization by providers with a high success rate.
170.315(c)(1-3) Clinical quality measures (CQMs)	Over a 90-day period: 1) Number of measures recorded during the period 2) Number of QRDA Category 1 files exported 3) Number of QRDA Category 1 files imported (if applicable) 4) Number of QRDA Category 3 aggregate report(s) created over the period	• Outpatient Behavioral Health • Inpatient Behavioral Health • Primary Care	These criteria will be tested together. C1 requires a certified Health IT module to record required data, calculate CQMs from the recorded data, and export the data in QRDA Category 1 format. C2 requires a certified Health IT module must be able to import data from a QRDA Category 1 formatted file and calculate the CQMs based on that data. C3 requires a certified Health IT module must be able to create a QRDA Category 1 formatted file and a QRDA Category 3 aggregate report to be used for transmitting CQM data to CMS. In conjunction with the third party vendor used for producing the CQM files, we intend to record the frequency that CQM files are imported and/or exported by providers to demonstrate the certified capability is available and effective, regardless of the frequency it is used. Our expectation is there will be moderate utilization by providers with a high success rate.

170.315(e)(1) View, download, and transmit to 3rd party	Over a 90-day period: 1) Number of views of health information by a patient or authorized representative 2) Number of downloads of health information by a patient or authorized representative 3) Number of transmissions of health information by a patient or authorized representative using unencrypted email 4) Number of transmissions of health information by a patient or authorized representative using encrypted method	• Outpatient Behavioral Health • Inpatient Behavioral Health • Primary Care	This criterion requires the ability of a certified Health IT module to provide patients access to a patient portal with the ability to view, download, and send their health care records to other providers via encrypted or unencrypted transmission methods in CCDA format. We intend to record the frequency that patients are viewing, downloading, and transmitting their records from the portal using the certified capabilities to demonstrate the certified capability is available and effective, regardless of the frequency it is used. Our expectation is there will be moderate utilization by patients for view and lower utilization for download and transmit with a high success rate for all certified capabilities.
170.315(f)(1) Transmission to immunization registries	Over 3 separate unique 10-day periods within a 90-day window: Number (or percentage) of immunization records submitted to the immunization record	• Outpatient Behavioral Health • Inpatient Behavioral Health • Primary Care	This criterion requires the ability of a certified Health IT module to transmit immunization data to a registry using a specified format. We intend to record the frequency that immunization data is submitted to registries by providers to demonstrate the certified capability is available and effective, regardless of the frequency it is used. Our expectation is there will be new adoption of this certified capability by our users but still minimal, so we have added interactive testing methodology in cooperation with third party software used for sending and receiving of this data for these capabilities to the test plan below to demonstrate the feature is available and functions as expected should any additional users elect to begin using this feature.

170.315(f)(2) Transmission to public health agencies — syndromic surveillance	Over 3 separate unique 10-day periods within a 90-day window: Total number of syndromic surveillance events created and submitted	• Outpatient Behavioral Health • Inpatient Behavioral Health • Primary Care	This criterion requires the ability of a certified Health IT module to transmit syndrome-based public health surveillance data to a registry using a specified format. We intend to record the frequency that syndromic surveillance data is submitted to registries by providers to demonstrate the certified capability is available and effective, regardless of the frequency it is used. Our expectation is there will be zero adoption of this certified capability by our users, so we have added interactive testing methodology for these capabilities to the test plan below to demonstrate the feature is available and functions as expected should any users elect to begin using this feature.
170.315(f)(3) Transmission to public health agencies — reportable laboratory tests and value/results	Over 3 separate unique 10-day periods within a 90-day window: Total number of reportable laboratory results created and submitted	• Outpatient Behavioral Health • Inpatient Behavioral Health • Primary Care	This criterion requires the ability of a certified Health IT module to transmit reportable laboratory tests and values/results to a registry using a specified format. We intend to record the frequency that reportable laboratory tests and values/results is submitted to registries by providers to demonstrate the certified capability is available and effective, regardless of the frequency it is used. Our expectation is there will be zero adoption of this certified capability by our users, so we have added interactive testing methodology for these capabilities to the test plan below to demonstrate the feature is available and functions as expected should any users elect to begin using this feature.
170.315(f)(5) Transmission to public health agencies — electronic case reporting	Over 3 separate unique 10-day periods within a 90-day window: Total number of electronic case reports created and submitted	• Outpatient Behavioral Health • Inpatient Behavioral Health • Primary Care	This criterion requires the ability of a certified Health IT module to identify which encounters may be reportable and then create an electronic case report for transmission to a registry using a specified format. We intend to record the frequency that electronic case reports are created and submitted by providers to demonstrate the certified capability is available and effective, regardless of the frequency it is used. Our expectation is there will be zero adoption of this certified capability by our users, so we have added interactive testing methodology for these capabilities to the test plan below to demonstrate the feature is available and functions as expected should any users elect to begin using this feature.

170.315(g)(7) Application access — patient selection	1) Number of requests for a patient ID or token 2) Number of requests that provided sufficient information to provide a valid response Number of follow-up requests made using the provided patient ID or token	• Outpatient Behavioral Health • Inpatient Behavioral Health • Primary Care	This criterion requires the certified Health IT module to provide an API and supporting documentation that enable external applications to request a unique patient identifier from the certified Health IT module that can be used to request additional patient data. We intend to record the frequency that patient ID requests are received by providers via API to demonstrate the certified capability is available and effective, regardless of the frequency it is used. Our expectation is there will be zero adoption of this certified capability by our users, so we have added interactive testing methodology for these capabilities to the test plan below to demonstrate the feature is available and functions as expected should any users elect to begin using this feature.
170.315(g)(8) Application access — data category request	1) Number of requests for a patient's data made by an application via a data category request using a valid patient ID or token Number of requests for a patient's data made by an application via a data category request using a valid patient ID or token for a specific date range	• Outpatient Behavioral Health • Inpatient Behavioral Health • Primary Care	This criterion requires the certified Health IT module to provide an API and supporting documentation that enable external applications to request patient data by category from the certified Health IT module. We intend to record the frequency that patient data requests by category are received by providers and fulfilled via API to demonstrate the certified capability is available and effective, regardless of the frequency it is used. Our expectation is there will be zero adoption of this certified capability by our users, so we have added interactive testing methodology for these capabilities to the test plan below to demonstrate the feature is available and functions as expected should any users elect to begin using this feature.
170.315(g)(9) Application access — all data request	1) Number of requests for a patient's Summary Record made by an application via an all data category request using a valid patient ID or token Number of requests for a patient's Summary Record made by an application via an all data category request using a valid patient ID or token for a specific date range	• Outpatient Behavioral Health • Inpatient Behavioral Health • Primary Care	This criterion requires the certified Health IT module to provide an API and supporting documentation that enable external applications to request all categories of patient data defined in the CCDS from the certified Health IT module. We intend to record the frequency that patient data requests for all categories are received by providers and fulfilled via API to demonstrate the certified capability is available and effective, regardless of the frequency it is used. Our expectation is there will be zero adoption of this certified capability by our users, so we have added interactive testing methodology for these capabilities to the test plan below to demonstrate the feature is available and functions as expected should any users elect to begin using this feature.

170.315(h)(1) Direct Project	1) Number of Direct Messages sent 2) Number of Delivery Notifications received 3) Number of Direct Messages received Number of Delivery Notifications sent	• Outpatient Behavioral Health • Inpatient Behavioral Health • Primary Care	This criterion requires the ability of a certified Health IT module to record the frequency that direct messages are sent and received by providers, along with how often MDNs are sent and received. Since not all systems respond with MDNs, we cannot reliably use that metric to define success. Furthermore, it is not feasible to obtain copies of Direct Messages from "outside" developers or providers who have no incentive to participate in this exercise. Therefore, we intend to demonstrate the required certified capabilities by demonstrating how often Direct Messages are exchanged with other systems to demonstrate the certified capability is available and effective, regardless of the frequency it is used. Our expectation is there will be new adoption of this certified capability by our users but still minimal, so we have added interactive testing methodology for these capabilities to the test plan below to demonstrate the feature is available and functions as expected should additional customers elect to begin using this feature.

Interactive Testing

The following test plans will be executed to demonstrate Real World certified capabilities for criteria where metrics are not available: Streamline Healthcare primarily works in the behavioral health sector and does not currently have existing workflows that use the following criteria:

- 170.315(b)(1) Transitions of Care
- 170.315(b)(2) Clinical information reconciliation and incorporation
- 170.315(f)(1) Transmission to immunization registries
- 170.315(f)(2) Transmission to public health agencies — syndromic surveillance
- 170.315(f)(3) Transmission to public health agencies — reportable laboratory tests and value/results
- 170.315(f)(5) Transmission to public health agencies — electronic case reporting
- 170.315(g)(7-9) Application access
- 170.315(h)(1) Direct Project

High Level Interactive Test Plan:

- **Care Settings**: Streamline Healthcare is currently used in a Behavioral Health Setting both in an inpatient and ambulatory setting.
- **Test Environment:** All Interactive testing will be performed in an environment which is a recent production copy, hosted on the same server setup as the production environment.
    - Streamline will work with 2 representative customers to perform the interactive testing for all of the criteria listed. One customer in inpatient behavioral health and one customer in outpatient/primary care integrated with behavioral health.
- **Test Data**: Interactive testing will be performed using test patient data in the live production environment to be as representative as possible of real-world deployments without risking compromise of sensitive PHI. This is a client requirement due to the sensitive nature of behavioral health and mental health information.
    - Streamline will work with the providers to set up test clients and enter data that is representative of a typical behavioral health encounter.

Criterion	Interactive Test Plan	Justification and Expected Outcome

170.315 (b)(1): Transitions of Care 170.315 (b)(2): Clinical information reconciliation (h)(1): Direct Project	Streamline Healthcare will set up test patients with identical patient demographics on each of the systems along with patient data representative of behavioral health, but include different problems, medications and medication allergies on each of the systems. Streamline Healthcare will send Transitions of care CCDA documents from the inpatient behavioral health site to the outpatient/primary care integrated with behavioral health with slightly different representative patient data and vice versa, using Direct messaging. Streamline Healthcare will then run through the steps of performing the workflow to reconcile and incorporate the CCDA with the new/changed medications, problems and medication allergies on each of the systems. Streamline Healthcare will re-send the reconciled Transitions of care CCDA documents back and perform the workflow to reconcile and incorporate the CCDA again.	**Justification:** • Streamline Healthcare customers may use the product as a summary of care for psychiatric appointments to meet meaningful use, however they mostly provide documentation in PDF format as opposed to CCDA because of 42CFR. • As a behavioral health organization, our customers are often very hesitant to electronically share their data because they want to review the content ahead of time and manually restrict data per privacy concerns, and then share it as a PDF. • Streamline Healthcare customers are more referral base, coming from community-based settings and it is not likely that the other healthcare providers will want to adapt the reconcile and incorporate workflow because the percentage of referrals received from a provider who can provide a CDA is a small portion of the referrals received. **Expected outcomes:** o The CDA documents are able to be sent using Direct messaging, imported, and matched to the patient on the opposite system. o Using Visual Inspection, the content of each of the systems will contain the same clinical information for the medications, problems and medication allergies after the reconciliation is complete. o A re-send of the updated patient data using direct to send a new transitions of care will show that there is no reconciliation necessary for the clinical information for the medications, problems and medication allergies.

170.315(f)(1) Transmission to immunization registry	Streamline Healthcare will setup a test clinic in the production environment (cloud-based) to test the transmission of immunizations to a registry. Streamline Healthcare will create a set of test patient data that includes representative data for children of the ages who would normally receive vaccines and an adult who will receive an influenza vaccination. Streamline Healthcare will send a request for immunization history for each of the test patients and use the HL7 context free NIST H7 Immunization 2.5.1 IG Release 1.5 Tool to verify message conformance. Streamline Healthcare can receive a response from the HL7 context free NIST H7 Immunization 2.5.1 IG Release 1.5 Tool with history and forecast. Streamline Healthcare will send immunization records to the HL7 context free NIST H7 Immunization 2.5.1 IG Release 1.5 Tool .to verify message conformance.	**Justification:** • Streamline Healthcare developed this criterion to meet certification requirements for the primary care setting. However, penetration into the primary care market is low (less than 5 customers), and most of them are Adult primary care so immunization reporting is not something they have needed to do so they are not using this functionality. **Expected outcomes:** o Immunization history can be requested for both children and adult patients and conform the HL7 Immunization 2.5.2 IG Release 1.5 Z44message. o Visual inspection that SmartCare can receive the History and Forecast from the context-free NIST Tool (the content will not relate to the patient data that was requested, it will be the default message from the NIST tool). o Immunization messages can be transmitted for both children and adult patients and conform the HL7 Immunization 2.5.2 IG Release 1.5 Z22 VXU^V04 message.

170.315(f)(2) Transmission to public health agencies — syndromic surveillance	This criterion is relevant to the inpatient behavioral health setting. Streamline Healthcare will setup a test instance of an inpatient behavioral health setting in the production environment (cloud-based) to test the transmission of a syndromic surveillance event. Streamline Health will setup test patients in the inpatient setting and update the patients with a confirmed diagnosis to trigger a syndromic surveillance event per the list based on the guidelines from the CDC: https://www.cdc.gov/nssp/technical-pubs-and-standards.html#Dictionaries Streamline Health will use the NIST syndromic surveillance HLv2 tool found here: https://hl7v2-ss-r2-testing.nist.gov/ss-r2/#/home to confirm that the PHIN ADT message conforms to the expected standard.	**Justification:** • Streamline Healthcare customer base is not using this feature because all of our inpatient customers are behavioral health organizations so they are not required to report to public health agencies and don't typically have diagnoses that qualify. **Expected outcomes:** ○ A PHIN ADT message for syndromic surveillance will be automatically generated upon the detection of a syndromic surveillance event. ○ The PHIN ADT message contains the correct syndromic surveillance information and conforms to the standard.

170.315(f)(3) Transmission to public health agencies — reportable laboratory tests and value/results	Streamline Healthcare will setup a primary care setting in the production environment (cloud-based) to test the transmission of a reportable laboratory test value/results event. Streamline Health will setup test patients in the primary care setting and update the patients with a reportable laboratory tests and values/results event. Streamline Health will use the NIST ELR tool found here: https://hl7v2-elr-testing.nist.gov/mu-elr/ to validate that the ELR messages sent are well-formed HL7v2 messages that conform to the HL7v2 ELR implementation guide.	**Justification:** • Streamline Healthcare built this functionality into the systems as it was required for the CEHRT certification. We do not have any customers who are currently reporting this as one of their Interoperability Measures either because they are excluded due to the limited volume of applicable reportable diagnosis or due to not reporting that particular measure. This one was much more difficult to find the required labs to submit as it appears to be by local entity. The hospitals we serve are not emergency department but instead would be screened in other hospital settings and screened for some of the labs like COVID and infectious diseases prior to admission to the psychiatric unit that would be using SmartCare. **Expected outcomes:** o A qualifying laboratory result will trigger the creation of an ELR message when qualifying lab results are entered. o Visual inspection includes a well formed ELR message.

170.315(f)(5) Transmission to public health agencies — electronic case reporting	Streamline Healthcare developed this workflow as an automatic workflow that runs in the background. Whenever a diagnosis, lab result or medication is entered, it is checked against a trigger table. When a match occurs, it creates a report. Streamline Healthcare will create 3 test patients in their test clinic production system, each one with a different encounter or parameter that matches the trigger code table, as well as representative data for that encounter, including but not limited to: o Encounter diagnoses and their associated ICD10 code o Reason for visit o Problems o Medications o Laboratory Tests o Laboratory Values(s)/Result(s) o Vital Signs o Procedures o Immunizations Streamline Healthcare will document the patient encounter in the SmartCare EHR and satisfy the trigger conditions, then use visual inspection to show that the trigger resulted in a transmission of the expected data for each patient to create a report.	**Justification:** • None of Streamline Healthcare customers are currently required to submit this type of data to a public health registry for MIPS. It is reportable for both Eligible hospitals and providers. However, the list of reportable diagnoses are not diagnoses commonly diagnosed in an inpatient behavioral healthcare setting. Our customers would only be noting these diagnoses as reported or shared from other healthcare providers or the patient. **Expected outcomes:** o There will be 3 electronic case reports available for each of the patient encounters showing the expected patient data. o Visual inspection will confirm that this functionality is available for deployment in a production environment and ready to be configured and deployed to a customer system

170.315 (g)(7): Application Access - Patient Selection meets170.315 (g)(8): Application Access - Data Category Request meets170.315 (g)(9): Application Access - All Data Request	Streamline Healthcare will setup 2 test clinics in the production environment with all 3 types of services. 5 Test patients with representative behavioral health data will be setup in one of the test clinics in advance (Clinic B). Clinic A will be running an app which will allow it to access data in Clinic B. o Clinic A queries Clinic B for token representing 5 patients o Clinic A uses those 5 tokens to request data by category for all 5 patients o Clinic A uses those 5 tokens to request CCDA documents for all 5 patients	**Justification:** • The certified capabilities are available but nobody has ever asked to use them. The most likely scenario where the API criteria might be used would be for batch transfers between organizations (e.g. research) and even then nobody has asked for it. • For the customer population, it took significant effort to promote adoption of patient portals. To date, there has not been a request from a patient to directly download via an API their health information. • Customers in Behavioral health are particularly concerned with the harm associated with disclosure of behavioral health data, so the privacy and security concerns with adoption API criteria are particularly complex. • With the addition in 2022 to the g(10) capability, customers are requesting to use this API and not to use the existing API option. However, the g(10) was not certified before August 31, 2022. **Expected outcomes:** o Each of the Patient ID is accepted, and tokens are returned for each of the 5 test patients. o Upon completion of the request, patient CCDS data is visible in the Clinic A as either discreet data fields or as a CCDA for each of the 5 patients.

Schedule of Key Milestones

Real World test planning will commence in first quarter of 2022. Each phase is expected to take the number of days listed below to complete, with report writing to occur end of 2022/early 2023.

Key Milestone	Care Setting	Date/Timeframe
Scheduling and logistics	• Outpatient Behavioral Health • Inpatient Behavioral Health • Primary Care	90-days
Data collection	• Outpatient Behavioral Health • Inpatient Behavioral Health • Primary Care	90-180 days
Review and collate data	• Outpatient Behavioral Health • Inpatient Behavioral Health • Primary Care	60-days
Writing report	• Outpatient Behavioral Health • Inpatient Behavioral Health • Primary Care	30-days

Attestation

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

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Date: 12/6/2022