Sophrona e2015 Portal Technology
2022 Real-World Test Plan

Introduction

Document last updated: 11/10/2021

Certified Health IT developers are required to conduct Real World Testing of their Certified Health IT products under the ONC Health IT Certification Program. This document is the Real-World Testing Plan for Sophrona Solutions, Inc. portal technology v10.5 for testing to be performed during the 2022 calendar year.

General Information:

Developer Name:	Sophrona Solutions, Inc.
Product Name:	Sophrona e2015 Portal Technology
Version Number:	Version R10.5
Certified Health IT Product List (CHPL) ID(s):	15.04.04.2355.Soph.10.00.0.171108
ONC-ACT Certification ID:	15.04.04.2355.Soph.10.00.0.171108
Developer Real World Testing Page URL:	https://sophrona.com/products/meaningful-use-portal/#drummond-certification

Applicable Real World Testing Certification Criteria according to the current ONC Health IT Certification Program requirements:

Regulation Text Citation	**Certification Criterion**
§170.315(e)(1)	View, download, and transmit to 3rd party
§170.315(g)(7)	Application access – patient selection
§170.315(g)(8)	Application access – data category request
§170.315(g)(9)	Application access – all data request

This test plan is organized based on the current Real World Testing Plan Template published by ONC (The Office of the National Coordinator for Health Information Technology), as applicable to its Health IT Certification Program. Measures are organized by use cases with content specific to individual or related certification criteria

No new standards updates apply relative to the Sophrona Portal Technology software version certified by Drummond Group in 2018; a separate project is in progress to develop an updated version of the Sophrona Portal Technology and to certify this for 2015 Edition CURES Update requirements in 2022, which is outside the scope of this test plan.

Care Setting

Sophrona Solutions is a leading provider of patient engagement solutions to eye care doctors in the US. The Real-World Testing specified in this test plan is restricted to an ambulatory setting within three different sized practices to best reflect Sophrona's client base of providers.

Care Setting	Justification
Small Group Practice (solo physician up to 3 physicians)	Because of their small size, the smaller practices often have a greater pulse on patient experiences with the Patient Portal. The challenge will be whether the smallest practices have the time to complete testing logs as requested.
Medium Group Practice (4 to 15 physicians)	The medium group practice will have a good blend of patient experience along with enough staff to be able to provide feedback and complete testing logs as requested.
Large Group Practice (16 or more physicians)	The larger group practices will be the most useful for the API testing as these groups are most typically the ones utilizing the functionality with their referral network.

To ensure effective participation in 2022 Real World Testing, client practices must identify a testing liaison (and perhaps an alternate) and must agree to follow Real World Testing instructions and data collection. A reasonable effort will be made to identify at least one client of each size to participate in 2022 Real World Testing, but if it should prove impossible to identify any client of a particular size to agree to participate in Real World Testing, **3 clients of any size shall be considered a minimum number needed** to meet the requirements of this test plan. So as to ensure the confidentiality of information, especially in light of the public disclosure of test plans and reports, the list of participating clients will not be included in the test plan or report but will be available in case of any audits which may be required by the ONC-ACB or ONC itself.

Schedule of Key Milestones

Key Milestone	Date/Timeframe
Submit 2022 Real World Testing Plan to Drummond Group	Nov. 15, 2021
2022 Real World Testing Plan made publicly available on CHPL website	Dec. 15, 2021
Finalize list of Sophrona clients participating in 2022 Real-World Testing, including identification of each such client's testing liaison(s); provide documentation and Real-World Testing instructions to the testing liaisons.	Dec. 17, 2021
Testing begins	January 1, 2022
Follow-up with authorized representatives to evaluate any issues with Real-World testing	April 15, 2022
Follow-up with test site authorized representatives to evaluate 1st quarter test results and identify any issues with Real World Testing	July 15, 2022
Follow-up with test site authorized representatives to evaluate 2nd quarter test results and identify any issues with Real World Testing	October 14, 2022
Follow-up with test site authorized representatives to evaluate 3rd quarter test results and identify any issues with Real World Testing	January 1, 2023
End of Real-World Testing	December 31, 2022
Begin final analysis and report creation.	January 16, 2023
Submit 2022 Real World Testing Report to Drummond Group	February 1, 2023
2022 Real World Testing results provided to ONC	March 15, 2023

Test Design

The Real-World Testing is designed around "use cases," which describe how the user interacts with the system for performing a specific task. In this Real-World Testing Plan, the use cases are mapped to individual groups of related certification criteria associated with those user tasks. The test design for each such use case specifies and justifies an approach to real world testing and specifies one or metrics, which are intended to facilitate meaningful evaluation of the system in a real-world environment.

The following table provides a summary of the use cases and the associated RWT metrics. Details for each use case are defined in detail in this test plan.

Use Case	Metric
1. View electronic health information	1A – Percentage of error rate of users unable to view their available chart information.
	1B – Percentage of error rate of users unable to view their chart information for a specific date.
	1C – Percentage of error rate of users unable to find chart information within a chosen date range.
	1D – Percentage of error rate of users unable to view provider name and office contact info (ambulatory specific setting)
2. Download electronic health information	2A – Percentage of error rate for users downloading their human readable chart information.

Use Case	Metric
	2B – Percentage of error rate for users downloading chart information as CCD.
3. Transmit electronic health information	3A – Percentage of error rate for users transmitting their chart information using the encrypted process.
	3B – Percentage of error rate for users transmitting their chart information using the unencrypted process.
4. Patient Selection API Request	4A – Percentage of error rate of API requests for patient identification.
5. Patient Data Category API Request	5A – Percentage of error rate of API requests for patient data category request for *Assessment and Plan of Treatment.*
6. Patient Data All API Request	6A – Percentage of error rate of API requests for patient all-data requests.

Use Case 1 (View Conformance Metrics)

This use case will demonstrate the ability for a patient and authorized user of the patient to view their electronic health information on the Patient Portal.

Regulation Text Citation	Certification Criterion
§170.315(e)(1) View, download, and transmit to 3rd party	(i)(A)(1) View Common Clinical Data Set
	(i)(A)(2) Ambulatory setting Only
	(i)(D)(1) Specific Date
	(i)(D)(2) Date Range

Test Methodology and Justification

Testing will be completed for all patients viewing their health information in the Patient Portal for the practice. The Patient Portal allows users to view their health information in the Health Information module within the portal application. When this module is accessed, the user must first select which document to view from a list of dates. The user can also modify their search to select a document for a specific date range. Since the user must make these selections first before the document can be displayed, both "view" requirements and "date selection" requirements are combined into this single use case.

Human readability and expected data-set results will be verified by visual inspection. The practice(s) involved in testing will keep a log of any patient or patient representative who is unable to view their health information inside the portal. In addition, API log files will be reviewed to verify the activity log entry for all attempted and successful views of patient information.

One challenge will be that patients may report to the testing practice that they are unable to view their health information, and upon inspection, it could be that the health information is not present (or not present at the time of the attempted "view"). This can happen when there is a delay from an EHR partner when posting health information to the portal. These instances will be documented accordingly.

Expected outcome(s):

It is expected that patients and their authorized users are *nearly always* able to select the health information to be viewed by date or date range, and successfully view all information including the ambulatory specific required fields (provider name and office contact information) for health information that is present.

Measures used:

The test site will be asked to manually record instances when a patient or patient representative reports they are unable to view their health information online and categorize the failures as follows. Log files will be used to determine the number of successful views.

A. Failure. Patient health information successfully received electronically to the Patient Portal but is not viewable or unreadable (shows an error indicating a technical failure).
B. Failure. Patient health information successfully received electronically to the Patient Portal but is not viewable (error not present, but empty data set displays).
C. Failure. Patient health information successfully received electronically to the Patient Portal but is not showing for a selected date range.
D. Failure. Patient health information successfully received electronically to the Patient Portal, but missing provider name and contact information.
E. Success. Patient health information successfully received electronically and viewed on the Patient Portal.
F. Not failure / Not success. Patient reports that information is unavailable, however the health information was not successfully received electronically.

Use Case 2 (Download Conformance Metrics)

This use case will demonstrate the ability for a patient and authorized user of the patient to download their electronic health information from the Patient Portal and view the downloaded information using a mechanism outside of the Patient Portal.

Regulation Text Citation	Certification Criterion
§170.315(e)(1) View, download, and transmit to 3rd party	(i)(B)(1)(i) Download in Human Readable Format
	(i)(B)(1)(ii) Download as CCD
	(i)(B)(2) Download CCD in Human Readable Format

Test Methodology and Justification

Testing will be completed for all patients downloading their health information from the Patient Portal for the practice. The Patient Portal allows users to download their health information as a CCD in XML format or as a human readable PDF document.

The practice(s) involved in testing will keep a log of any patient or patient representative who is unable to download or view their downloaded health information. Human readability and expected data-set results will be completed by visual inspection of the patient. In addition, API log files will be reviewed to verify the activity log entry for the downloads of patient information.

One challenge will be to report on patients who download their information as XML, as this data format is not common to the typical patient as the end user, and thus is rarely done from the Patient Portal.

Expected outcome(s):

It is expected that many patients or their authorized users will successfully be able to download the patients' health information in a human readable format, and subsequently view the downloaded information. It is expected that nearly all patients who attempt the download will be successful.

Additionally, it is expected that *very few (if any)* users will download patient health information as a CCD in XML format.

Measures used:

The test site will be asked to manually record instances when a patient or patient representative reports they are unable to either download their health information or view their downloaded information and categorize the failures as follows. Log files will be used to determine the number of successful downloads by type.

A. Failure. Patient unable to download human readable health information successfully (shows an error indicating a technical failure).
B. Failure. Patient unable to view their health information after downloading in human readable format (shows an error or document appears empty).
C. Failure. Patient unable to download health information as CCD (shows an error indicating a technical failure).
D. Failure. Patient unable to view their health information after download as CCD (shows an error or document appears empty).
E. Success. Patient successfully downloads and views their health information in human readable format.

Use Case 3 (Transmit Conformance Metrics)

This use case will demonstrate the ability for a patient and authorized user of the patient to transmit their electronic health information from the Patient Portal using unencrypted and encrypted methods.

Regulation Text Citation	Certification Criterion
§170.315(e)(1) View, download, and transmit to 3rd party	(i)(C)(1)(i) Transmit using Unencrypted Email
	(i)(C)(1)(ii) Transmit using Encrypted Method

Test Methodology and Justification

Testing will be completed for all patients transmitting their health information from the Patient Portal for the practice. The Patient Portal allows users to transmit a patients' health information by way of unencrypted email or an encrypted method utilizing the Patient Portal for transmission and viewing.

The practice(s) involved in testing will keep a log of any patient or patient representative who is unable to transmit their health information. Human readability and expected data-set results will be completed by visual inspection of the patient. In addition, API log files will be reviewed to verify the activity log entry for all health information that has been transmitted. It is possible that health information that is transmitted by unencrypted email is not received by the email recipient due to external email deliverability issues. Email deliverability is outside the scope of the transmit tests.

One challenge will be to report on patients who transmit their information using the encrypted method, as this is not as common of a practice as transmitting by email. There is not a sufficient use case with clients to utilize this functionality.

Expected outcome(s):

It is expected that patients and their authorized users are successfully able to transmit the patients' health information by way of either unencrypted email or the encrypted process as provided on the Patient Portal. It is expected that of the transmits that are performed, most will be done by unencrypted email method with very few (if any) that are using the encrypted method.

Measures used:

The test site will be asked to manually record instances when a patient or patient representative reports they are unable to transmit their health information and categorize the failures as follows. Log files will be used to determine the number of successful transmits by type (unencrypted vs. encrypted).

A. Failure. Patient unable to download human readable health information successfully (shows an error indicating a technical failure).
B. Failure. Patient unable to view their health information after downloading in human readable format (shows an error or document appears empty).
C. Failure. Patient unable to download health information as CCD (shows an error indicating a technical failure).
D. Failure. Patient unable to view their health information after download as CCD (shows an error or document appears empty).
E. Success. Patient successfully downloads and views their health information in human readable format.

Use Case 4 (Application Access Patient Selection)

This use case will demonstrate the ability for the API (Sophrona SageBridge API application) to identify and return a patient identifier from a request of the Referral Portal (i.e. the calling application).

Regulation Text Citation	Certification Criterion
§170.315(g)(7) Application Access – patient selection	(i) uniquely identify a patient and return the patient ID to the calling application.

Test Methodology and Justification

Testing will be performed by referring providers who are utilizing the Referral Portal application to refer and manage the care of patients they are referring to the specialty ophthalmology practice. The Referral Portal application makes calls to Sophrona's SageBridge API for the purposes of finding the proper patient and retrieving relevant data as requested by the referring provider.

In addition to the review of API log files, the test practice will keep a log of potential issues reported by the referring provider network that will be used to examine specific instances of failure.

The certification criterion is limited to the *functional requirements only* for the API as the referring provider utilizing the Referral Portal would not need to review the required API documentation or terms of use to be able to use the technology.

Expected outcome(s):

It is expected that the proper patient identifiers will be properly returned to the Referral Portal application from the API for *nearly all* requests whereby a sufficient patient match is made. For a patient identifier to be returned, the minimum of unique identifiable patient information is required, and a duplicate cannot be identified.

Measures used:

Log files of the API will be used to determine the number of instances where a patient identifier was returned or not. Results will be formulated as follows:

A. Failure. Patient identifier not returned due to API error (technical failure).
B. Failure. Incorrect patient identifier returned.
C. Success. Patient identifier returned successfully from API.

Use Case 5 (Application Access Data Category Request)

This use case will demonstrate the ability for the API (Sophrona SageBridge API application) to identify and return a patient identifier from a request of the Referral Portal (i.e. the calling application).

Regulation Text Citation	Certification Criterion
§170.315(g)(8) Application Access – data category request	(i)(A) full set of data returned for a requested data category.
	(i)(B) data category data set returned for a specific date.

Test Methodology and Justification

Testing will be performed by referring providers who are utilizing the Referral Portal application to refer and manage the care of patients they are referring to the specialty ophthalmology practice. The Referral Portal application makes calls to Sophrona's SageBridge API for the purposes of finding the proper patient and retrieving relevant data as requested by the referring provider. The specific data categories being tested are limited to data that is relevant to the referring provider, for example, the Assessment and Plan of Treatment, and Health Concerns are two areas of interest to referring providers so these are supported within the Referral Portal application.

In addition to the review of API log files, the test practice will keep a log of potential issues reported by the referring provider network that will be used to examine specific instances of failure.

The certification criterion is limited to the *functional requirements only* for the API as the referring provider utilizing the Referral Portal would not need to review the required API documentation or terms of use to be able to use the technology.

Expected outcome(s):

It is expected that the data categories requested by the referring providers will be properly returned to the Referral Portal application from the API for *nearly all* requests.

Measures used:

Log files of the API will be used to determine the number of instances where a patient identifier was returned or not. Results will be formulated as follows:

A. Failure. Data Category requested not returned due to API error (technical failure).
B. Failure. Data Category incorrect or incomplete.
C. Failure. Data Category returns data but for incorrect date.
D. Success. Correct Data Category information requested for date returned successfully from API.

Use Case 6 (Application Access All Data Request)

This use case will demonstrate the ability for the API (Sophrona SageBridge API application) to identify and return a patient identifier from a request of the Referral Portal (i.e. the calling application).

Regulation Text Citation	Certification Criterion
§170.315(g)(9) Application Access – all data request	(i)(A) all patient data as CCD returned from API request.
	(i)(B) all patient data as CCD returned for specific date.

Test Methodology and Justification

Testing will be performed by referring providers who are utilizing the Referral Portal application to refer and manage the care of patients they are referring to the specialty ophthalmology practice. The Referral Portal application makes calls to Sophrona's SageBridge API for the purposes of finding the proper patient and retrieving relevant data as requested by the referring provider.

In addition to the review of API log files, the test practice will keep a log of potential issues reported by the referring provider network that will be used to examine specific instances of failure.

Expected outcome(s):

It is expected that the "all patient data" requested by the referring providers will be properly returned as a CCD document to the Referral Portal application from the API for *nearly all* requests.

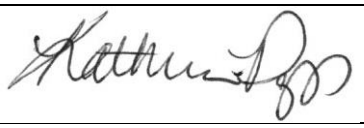
Measures used:

Log files of the API will be used to determine the number of instances where a patient identifier was returned or not. Results will be formulated as follows:

A. Failure. All Patient Data requested not returned due to API error (technical failure).
B. Failure. All Patient Data incorrect or incomplete.
C. Failure. All Patient Data returns data but for incorrect date.
D. Success. All Patient Data requested for date requested returns CCD successfully from API.

Attestation

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

Authorized Representative Name:	Katherine Papp
Authorized Representative Email:	kpapp@sophrona.com
Authorized Representative Phone:	763-222-3511
Authorized Representative Signature:	

Appendix

Standards Updates

Standard (and version)	Web Content Accessibility Guidelines (WCAG) 2.0 Level A Conformance (no change)
Date of ONC-ACT notification (SVAP or USCDI)	N/A
Date of customer notification (SVAP only)	N/A
USCDI-updated criteria	None