General Information

Developer Name: PCIS GOLD
Product Name: PCIS GOLD EHR
Version Number: Version 2.6
Certified Health IT:
Product CHPL Listing ID: 15.04.04.2126.PCIS.26.02.1.221222
Developer Real World Testing Page URL: www.pcisgold.com/real-world-testing

JUSTIFICATION FOR REAL WORLD TESTING APPROACH

Real World Testing has been defined as a "process by which Health IT Developers demonstrate interoperability and functionality of their Certified Health IT in real world settings and scenarios, rather than in a controlled test environment with an ONC-Authorized Testing Lab (ONC-ATL)." In this document, PCIS outlines our approach to meet the criteria of Real World Testing.

We at PCIS have developed a testing plan to demonstrate the interoperability and functionality of our certified electronic health record (EHR) in the ambulatory setting in the Real World. The following strategy ensures functional transparency and accuracy:

- Our EHR is deployed in a client server-based environment.
- All testing events occur with actual clinical customers in their native environments.
- Users include medical providers, clinical employees, and clerical staff members

STANDARDS UPDATES

Standard (and version).	USCDI Version 1
Updated certification criteria and associated product.	Not applicable
Method used for standard update.	Not applicable
Date of ONC ACB notification.	Not applicable
Date of customer notification (SVAP only).	Not applicable
Conformance measure.	Not applicable
USCDI updated certification criteria (and USCDI version).	USCDI Version 1

Care Settings

Care Setting	Care Setting Justification
Ambulatory Clinics	Outpatient ambulatory setting – The target market of the PCISGOLD EHR is both single and multi-specialty outpatient ambulatory clinics. All testing for the associated certified criteria will be conducted at client sites in a real world environment.

Relied Upon Software

The certified criteria listed below will utilize the trusted business partner(s) as relied upon software to accomplish the functionality as required for compliance purposes:

Product	Criteria / Relied Upon Software
PCISGOLD EHR Version 2.6	170.315(b)(3) – Electronic Prescribing / The PCISGOLD EHR electronic prescribing application is powered by NewCrop RX.

MEASURES USED IN OVERALL APPROACH

Description of the Measurement

The following document outlines the measures that best demonstrate conformance to the certification criteria.

Care Coordination

§170.315(b)(1) – Transitions of care

- Users will send and receive the CCDA to and from outside certified EHR systems.
- Users will send and receive transition of care summaries using the Direct protocols.
- Users may limit the data displayed for each CCDA received as required for certification.
- The CCDA will conform to the required standards of the 2015 Cures Update and include all required elements.
- The referring provider contact information is included in the CCDA.
- The reason for the referral is included in the CCDA.
- The CCDA will have pertinent patient identification for appropriate patient matching.
- The transmission logs will be checked for accuracy.

§170.315(b)(2) – Clinical information reconciliation and incorporation

- Users incorporate and reconcile the CCDA.
- The CCDA is received and matched to the correct patient.
- Users are able to view the data in the PCIS EHR. This includes the reconciliation of the CCDA, including the medication, allergy and problem lists.
- Users are able to create a CCDA that includes the reconciled data

§170.315(b)(3) – Electronic prescribing

- The PCIS EHR allows the user to create new RX (NEWRX).
- The PCIS EHR allows the user to change prescriptions (RXCHG, CHGRES).
- The system allows the associated diagnosis/reason coded as an ICD-10 code to be sent and received.
- Oral medications are submitted in metric units.
- Leading zeros are present before the decimal. No trailing zeros are present.
- Users can request and receive a patient's medication history.

§170.315(b)(6) – Data export

- A PCIS EHR user will set the configuration options for a specific export summary, along with a set of export summaries for patients whose information is stored in the EHR.
- Only authorized users can create export summaries.
- The created export summaries are formatted in accordance with the standards outlined in 170.205(a)(4).
- Users may select a time period for data to be used to create the export summaries.
- Users can create export summaries in real time or schedule them for a future time.
- Users can choose where export summaries are saved.

Clinical Quality Measures

§170.315(c)(1) – Record and export

- Users will select CQMs and export the QRDA 1
- For each CQM that providers will attest, the system will have the ability to record all of the data required to calculate results.
- Users can export a data file on demand for one or multiple patients.
- The exported data file is formatted in accordance with the HL7 QRDA Category I specifications.

§170.315(c)(2) – Import and calculate

- Users import the QRDA received from an external system and calculate the measure.
- Users can import a data file formatted in accordance with HL7 QRDA Category I Release 3 for one or multiple patients.

§170.315(c)(3) – Report

- Users will export QRDA 3 files for all measures that undergo reporting.
- Users can create a data file for the transmission of CQM data in QRDA Category 1 and Category 3 formats.
- The Category 1 and Category 3 reports will successfully pass the Cypress test tool validation for CMS submission.

Patient Engagement

§170.315(e)(1) – View, download, and transmit to 3rd party

- CCDAs are available on the PCIS Patient Portal for patients or an authorized representative to view, download, and transmit to a 3rd party.
- Patients and their authorized representatives are able to view the following:
  a) Health Record data as defined by the Common Clinical Data Set.
  b) The provider's name and office contact information.
  c) Laboratory test report(s).
- C-CDA files must successfully validate with the C-CDA message validator.

Public Health

§170.315(f)(1) – Transmission to immunization registries

- Users will send immunization records electronically, as supported, to a state registry.
- The immunization information will be formatted in HL7 2.5.1 standard, using CVX codes for historical vaccines and NDC codes for newly administered vaccines.
- Users will request a patient's immunization history and forecast from the immunization registry.

§170.315(f)(2) – Transmission to public health agencies – syndromic surveillance

- Users will record syndromic surveillance content and generate the HL7 message.
- The message will conform to the HL7 v2.5.1 PHIN Messaging Guide and support ICD-10 and SNOMED CT.

§170.315(f)(4) – Transmission to cancer registries

- A PCIS user will record cancer information and generate a cancer case document.
- The cancer case document will be generated according to the HL7 message specification and support SNOMED CT and LOINC codes for cancer case information.

Application Programming Interfaces

§170.315(g)(7) – Application access – patient selection

- The PCIS EHR API will receive a request with enough information to uniquely identify a patient. This will return an ID that can be used to subsequently execute requests for that patient's data.

§170.315(g)(9) – Application access – all data request

- The PCIS EHR API will respond to requests for all CCDA patient summary records that include all the data categories specified in the Common Clinical Data Set.
- The requests may include a date range.

§170.315(g)(10)– Standardized API for Patient and Population Services

- The PCIS EHR API supports client application registration and uses standardized operations. API instruction and documentation is available for application developers.

Requirements and Test Plan

Care Coordination -

170.315(b)(1) Transitions of Care

Product	PCISGOLD EHR Version 2.6
Care Setting	Ambulatory Outpatient Multi-Specialty Clinic
Testing Period	2024 – Over a 90-day consecutive period

Requirement / Test Plan:

Send transition of care/referral summaries	1. Find the patient to send an Outbound TOC CCDA. 2. Open the Health record, and navigate to the TOC section. 3. Select the visit marked as TOC outbound. 4. Send via direct.
Receive transmission of care/referral summaries	1. User will open the inbound TOC task in eTask. 2. If patient was not automatically matched, then user will search for patient and attach the inbound CCDA to the selected patient.

Justification:

The PCIS EHR has the ability to send and receive TOC CCDA referral summaries via direct protocols.

The goal of this test procedure is to ensure that the expected results are obtained and consistent with the standards set forth in 170.315(b)(1). We will exchange messages with an external system to conduct this test and verify the results.

Sent and received messages will be logged and counted. All errors will also be recorded.

Expected Outcome / Metric	Transition of care/referral summaries are sent and received to and from external sources with an error rate of less than five percent.

170.315(b)(2) Clinical Information Reconciliation and Incorporation

Product	PCISGOLD EHR Version 2.6
Care Setting	Ambulatory Outpatient Multi-Specialty Clinic
Testing Period	2024 – Over a 90-day consecutive period

Requirement / Test Plan:

Complete the Clinical information reconciliation and incorporate the received TOC CCDA	1. User will open the inbound TOC task and perform the clinical reconciliation for Medication Lists, Allergy Lists and Problems. 2. User confirms that data is in a single reconciled list.

Justification:

The PCIS EHR has the ability to send and receive TOC CCDA Referral summaries via direct protocols.

The goal of this test procedure is to ensure that the expected results are obtained and consistent with the standards set forth in 170.315(b)(2).

We will exchange messages with an external system to conduct this test and verify the results. We will select a sample of inbound messages to confirm that they have been incorporated and reconciled.

Expected Outcome / Metric	Clinical information reconciliation is completed and the CCDA is incorporated for more than 90 percent of the received messages.

170.315(b)(3) Electronic Prescribing

Product	PCISGOLD EHR Version 2.6
Care Setting	Ambulatory Outpatient Multi-Specialty Clinic
Testing Period	2024 – Over a 90-day consecutive period

Requirement / Test Plan:

Electronic Prescription sent by a provider	1. Find a patient to send an electronic prescription. 2. Click on the <Prescribe Meds> button. 3. Search for the drug to eRx and enter sig and dose information. 4. Select the pharmacy for the eRx and process the eRx.

Justification:

The PCIS EHR has the ability to send electronic prescriptions and request patient medication history. The PCIS EHR relies upon third party software, Newcrop to fulfill this requirement.

The goal of this test procedure is to ensure that the eRx is successfully sent to external pharmacies and that patient medication history can be requested consistent with the standards set forth in 170.315(b)(3). This test procedure verifies successful integration with relied upon third party software.

We will confirm that the pharmacy has received the eRX by checking the response status. We will then count the total sent messages and errors.

Expected Outcome / Metric	Providers can successfully send electronic prescriptions with a failure rate of less than one percent.

170.315(b)(6) Data Export

Product	PCISGOLD EHR Version 2.6
Care Setting	Ambulatory Outpatient Multi-Specialty Clinic
Testing Period	2024 – Over a 90-day consecutive period

Requirement / Test Plan:

Authorized user can create a CCDA export file at any time	1. Select the <patient queries> function. 2. Create the patient selection query. 3. Select <Scheduled CCDA Export>. 4. Configure export options, including destination and timeframe. 5. Press <OK> to save. 6. Verify the CCDA files are in the destination when the system runs the extract.

Justification:

The PCIS EHR has the ability to create CCDAs for a single patient, a set of specific patients, or all patients.

The goal of this test procedure is to ensure that the CCDA is successfully exported and saved in the configured destination location and consistent with the standards set forth in 170.315(b)(6).

Each scheduled export builds a log to track the number of CCDAs that were created and to check error rates. A sample of these logs will be reviewed.

Expected Outcome / Metric	Authorized users can create CCDA export files at any time. These files will be exported with a success rate of more than 95 percent.

Clinical Quality Measures –

170.315(c)(1) Record and Export

Product	PCISGOLD EHR Version 2.6
Care Setting	Ambulatory Outpatient Multi-Specialty Clinic
Testing Period	2024 – Over a 90-day consecutive period

b

Requirement / Test Plan:

Record and export the CQM QRDA 1 file for measures selected by the end user	1. Record patient data necessary to calculate quality measures by the PCIS EHR. 2. Select CQM measures under the Tools menu. 3. Select the export QRDA 1. 4. Select one or all patients and export the files to the destination.

Justification:

The PCIS EHR has the ability to record the data necessary to calculate quality measures through manual entry or import. Also, the PCIS EHR has the ability to export patient level eCQM data formatted to HL7 QRDA 1.

The goal of this test procedure is to ensure that the QRDA 1 is successfully exported and saved in the destination location and consistent with the standards set forth in 170.315(c)(1).

Expected Outcome / Metric	The information necessary to calculate quality measures can be manually recorded and exported in QRDA 1 format. The number of files in the destination will match the number of selected files.

170.315(c)(2) Import and Calculate

Product	PCISGOLD EHR Version 2.6
Care Setting	Ambulatory Outpatient Multi-Specialty Clinic
Testing Period	2024 – Over a 90-day consecutive period

Requirement / Test Plan:

Import the CQM QRDA 1 file and calculate the results for measures selected by the end user	1. Place the QRDA 1 files in the folder designated for imports. 2. Start a CQM run (manual/automated). 3. Verify the quality measure results include the data from the imported QRDA file.

Justification:

The PCIS EHR has the ability to import CQM QRDA 1 files and use that data for calculations.

The goal of this test procedure is to ensure that the QRDA 1 is successfully imported and included in the calculations and consistent with the standards set forth in 170.315(c)(2).

The imported data will be saved in the database so it can be reviewed for completeness.

Expected Outcome / Metric	Providers can successfully send electronic prescriptions with a failure rate of less than one percent.

170.315(c)(3) Report

Product	PCISGOLD EHR Version 2.6
Care Setting	Ambulatory Outpatient Multi-Specialty Clinic
Testing Period	2024 – Over a 90-day consecutive period

Requirement / Test Plan:

Create the CQM QRDA 3 results files for the measures selected by the end user	1. Select <Quality Measures> under the Tools menu. 2. Select the provider or the facility tab. 3. Select the checkbox beside each CQM measure to create a QRDA 3 file. 4. Press <Export> button and enter the user information and export location. 5. Press <OK> to create the file.

Justification:

The PCIS EHR has the ability to create CQM QRDA 3 files for the patients and providers selected.

The goal of this test procedure is to ensure that the QRDA 3 file is successfully created and the calculations are consistent with the standards set forth in 170.315(c)(3).

The counts in the QRDA 3 file match the report.

Expected Outcome / Metric	The information necessary to calculate quality measures can be manually recorded and exported in QRDA 1 format. The number of files in the destination will match the number of selected files.

Patient Engagement -

170.315(e)(1) View, Download, and Transmit to 3rd Party

Product	PCISGOLD EHR Version 2.6
Care Setting	Ambulatory Outpatient Multi-Specialty Clinic
Testing Period	2024 – Over a 90-day consecutive period

Requirement / Test Plan:

Patient can view the visit summary on the patient web portal	1. Complete a visit in the EHR to make it available on the Patient Web Portal. 2. Log in as that patient and navigate to the <Medical tab>. 3. Select the <Visit History> menu item. 4. Select <View> under the document's dropdown.
Patient can download the visit summary in the correct CCDA format	1- Complete a visit in the EHR to make it available on the Patient Web Portal. 2- Log in as that patient and navigate to the <Medical tab>. 3- Select the <Visit History> menu item. 4- Select <Download> under the document's dropdown.
Patient can transmit the CCDA to a 3rd party	1. Complete a visit in the EHR to make it available on the Patient Web Portal. 2. Log in as that patient and navigate to the <Medical tab>. 3. Select the <Visit History> menu item. 4. Select <Transmit> under the document's dropdown. 5. Fill in the required information. 6. Press <Send>.

Justification:

The PCIS EHR has the ability to view, download, and transmit the summary of care CCDA file for selected patients.

The goal of this test procedure is to ensure that the CCDA is successfully created and accessible to the patient via the patient web portal. This is consistent with the standards set forth in 170.315(e)(1).

The system creates a log each time a patient views, downloads, or transmits the CCDA. The reported errors for these functions will be tracked.

Expected Outcome / Metric	The information necessary to calculate quality measures can be manually recorded and exported in QRDA 1 format. The number of files in the destination will match the number of selected files.

Public Health -

170.315(f)(1) Transmission to Immunization Registries

Product	PCISGOLD EHR Version 2.6
Care Setting	Ambulatory Outpatient Multi-Specialty Clinic
Testing Period	2024 – Over a 90-day consecutive period

Requirement / Test Plan:

Generate HL7 VXU immunization messages to be sent to an immunization registry	Document the immunization details on the patient immunization screen. HL7 VXU message is automatically generated with immunization information and transmitted to immunization partner registry.
Receive and display historical immunization information	The PCIS system will automatically request immunization history for scheduled patients the morning of their appointment. Immunization details provided from a partner registry will appear on the Patient Immunization screen.
Receive and display immunization forecast information	The PCIS system will automatically request an immunization history for scheduled patients the morning of their appointment. Click <Forecast> to display the forecast details from the partner registry.

Justification:

The PCIS EHR has the ability to send and receive immunization details from a partner registry.

The goal of this test procedure is to ensure that the immunization information is successfully sent and received. This is consistent with the standards set forth in 170.315(f)(1).

A sample of the VXU sent messages will be compared to the partner registry to calculate a percentage of successful messages.

Expected Outcome / Metric	The PCIS GOLD EHR completes the following tasks: 1. sends immunization information to the partner registry, 2. receives and displays historical immunization information, and 3. receives and displays immunization forecast information. More than 95 percent of the sample VXU messages will be successfully received by the partner registry.

170.315(f)(2) Transmission to Public Health Agencies – Syndromic Surveillance

Product	PCISGOLD EHR Version 2.6
Care Setting	Ambulatory Outpatient Multi-Specialty Clinic
Testing Period	2024 – Over a 90-day consecutive period

Requirement / Test Plan:

Create syndromic surveillance information for electronic transmission	1. Open the Patient Visit Charting screen. 2. Select the Urgent Care checkbox in the Transition of Care section. 3. Fill in the appropriate information. Note: The correct HL7 message is generated for electronic transmission.

Justification:

The PCIS EHR has the ability to generate syndromic surveillance information for submission to a public health agency.

The goal of this test procedure is to ensure that the syndromic information is successfully created for submission and consistent with the standards set forth in 170.315(f)(2).

The failure rate for the created messages will be tracked.

Expected Outcome / Metric	Users can create syndromic surveillance information for electronic transmission. This will be done with more than a 99 percent success rate.

170.315(f)(4) Transmission to Cancer Registries

Product	PCISGOLD EHR Version 2.6
Care Setting	Ambulatory Outpatient Multi-Specialty Clinic
Testing Period	2024 – Over a 90-day consecutive period

Requirement / Test Plan:

Create cancer case information for electronic submission	1. Add a cancer diagnosis code to a patient visit. A task for the cancer case is created on the Visit Checkout screen. 2. Fill in the appropriate details on the cancer case task. 3. Press <Send to Registry> to create the HL7 message.

Justification:

The PCIS EHR has the ability to create cancer case information for submission to a public health agency.

The goal of this test procedure is to ensure that the cancer case document is successfully created for submission and consistent with the standards set forth in 170.315(f)(4).

The failure rate for the number of created messages will be tracked.

Expected Outcome / Metric	Users can create cancer case information for electronic submission with a success rate of more than 99 percent.

Application Programming Interfaces -

170.315(g)(7) Application Access Patient Selection

Product	PCISGOLD EHR Version 2.6
Care Setting	Ambulatory Outpatient Multi-Specialty Clinic
Testing Period	Interactive live testing

Requirement / Test Plan:

Receive a request for information to identify a patient and return an ID that can be used for subsequent requests	1. An application developer registers their application with the API by following the API documentation instructions. 2. The application performs standalone patient launch using user credentials that are associated with a patient. 3. The OAuth token exchange response body contains the patient identifier.

Justification:

The PCIS EHR has the ability to return a patient id via the API when requested with enough information.

The goal of this test procedure is to ensure that the API will find a patient and return the unique Id. This is consistent with the requirements of 170.315(g)(7).

The failure rate for the test event will be recorded.

Expected Outcome / Metric	The API can receive a request for information to identify a patient. It can also return an ID that can be used for subsequent requests with a success rate of more than 95 percent.

170.315(g)(9) Application Access – All Data Request

Product	PCISGOLD EHR Version 2.6
Care Setting	Ambulatory Outpatient Multi-Specialty Clinic
Testing Period	Interactive live testing

Requirement / Test Plan:

The API will return properly formatted summary CCDAs when requested via the API	1. A third-party developer follows instructions on the PCIS website for API documentation. 2. The third-party application calls the individual methods to identify and return the CCDA summaries.

Justification:

The PCIS EHR has the ability to return summary CCDAs via the API when requested with the correct patient identifier.

The goal of this test procedure is to ensure that the API will allow a third-party app to retrieve the CCDAs. This is consistent with the requirements of 170.315(g)(9).

The failure rate for calls that occur during the test event will be recorded.

Expected Outcome / Metric	The API will return properly formatted summary CCDAs when requested via the API. This will be done with a success rate of more than 95 percent.

170.315(g)(10) Standardized API for Patient and Population Services

Product	PCISGOLD EHR Version 2.6
Care Setting	Ambulatory Outpatient Multi-Specialty Clinic
Testing Period	Interactive live testing

Requirement / Test Plan:

The API supports client application registration	1. Application developer follows documentation instructions to register their client application. 2. The client application uses standalone patient launch application flow to authorize with the API. 3. The client application makes several calls to obtain patient data.

Justification:

The PCIS EHR API supports application registration and uses standardized operations. Documentation is available for application developers.

The goal of this test is to ensure that client applications can register and use the API to access patient data, and that documentation is available.

Any errors encountered by the client application during the test event are recorded.

Expected Outcome / Metric	The API will return properly formatted summary CCDAs when requested via the API. This will be done with a success rate of more than 95 percent.

Schedule of Key Milestones

Key Milestone	Date/Timeframe
Design and develop the PCIS Real World Testing plans.	August - November 2023
Submit Real World Testing Scripts to the Drummond Group	November 2023
Real World Testing Plan to be published on the PCIS GOLD website.	December 2023
Begin collection of data as laid out by the PCIS Real World Testing Plan.	January 1st, 2024
Data collection and review	2024
End of Real World Testing period collection of all data for analysis.	End of 2024
Data analysis and report generation.	January 2025
Submit Real World Testing Report	February 2025

This Real World Testing plan is complete with all required elements, including measures that addresses 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: Kyle Crandall
Authorized Representative Email: kylec@pcisgold.com
Authorized Representative Phone: 801-429-2201

Authorized Representative Signature: