2025 REAL WORLD TESTING PLAN

INTRODUCTION

Under the ONC Health IT Certification Program (45 CFR 170.405), health IT developers, including PointClickCare, are required to conduct Real World Testing of their certified health IT. The Office of the National Coordinator for Health Information Technology (ONC) provides resources to clarify the responsibilities for conducting these tests, identify priority areas, and assist developers in creating effective testing plans.

Health IT developers are encouraged to design innovative and flexible plans for Real World Testing. In doing so, they must consider the complexity of workflows and use cases in the care settings where their certified health IT is used. This ensures that the testing approach is relevant and comprehensive.

PointClickCare has created this Real World Testing plan to meet ONC's requirements and organize the necessary information for each element of the testing process. The plan focuses on ensuring that our CEHRT continues to meet certification criteria and supports the clinical needs of our long-term care and post-acute care clients. While the ONC requires an annual plan submission, any adjustments made during the testing process will be documented in the Real World Testing results report, including the reasons for those changes and how they enhanced the outcomes.

GENERAL INFORMATION

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

Name: PointClickCare Technologies Inc

Product Name(s): PointClickCare (Core)

Version Number(s): 4

Certified Health IT Product List (CHPL) ID(s): 15.04.04.2181.Poin.04.00.1.191231

Developer Real World Testing Plan Page URL: https://pointclickcare.com/company/certifications/

JUSTIFICATION FOR REAL WORLD TESTING APPROACH AND OUTLINE

Below is 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 Testing.

At PointClickCare, our Certified Electronic Health Record Technology (CEHRT) serves diverse healthcare providers, clinical end-users, and patients, primarily in long-term care and post-acute care settings. Our Real World Testing approach is designed to evaluate the performance of our certified health IT within these settings, ensuring its effectiveness in supporting clinical workflows and delivering quality patient care.

Given the complexity of these care environments, our testing strategy emphasizes real-world interoperability and patient data exchange. By aligning with industry standards and ONC guidelines, our testing aims to verify that our certified health IT continues to meet certification requirements, including compliance with technical standards, vocabulary code sets, and the facilitation of seamless electronic health information (EHI) exchange. We will focus on ensuring that EHI is effectively received and utilized by care teams within the certified health IT module.

Our approach integrates robust data collection methods to capture key performance metrics across multiple certification criteria, emphasizing interoperability, clinical decision support, and reporting functionalities. By leveraging this data, we will demonstrate that our technology functions as intended in actual care settings, ensuring it supports clinicians in providing high-quality care while maintaining compliance with ONC's certification criteria.

Our strategy also includes flexible, adaptive methodologies to account for variations in workflows between different care settings, ensuring that our CEHRT performs consistently across long-term and post-acute care environments. This flexibility is crucial to address the unique challenges and needs present in these settings. Our ongoing commitment to transparency and improvement will be reflected in our testing results and the continuous refinement of our solutions.

Real World Testing Approach Outline

1. Intent
    - To validate the ongoing functionality, compliance, and real-world performance of the certified health IT in diverse care environments.

2. Scope of Testing
    - Care Settings: Long-term care facilities and skilled nursing facilities
    - Certification Criteria Covered: Focus on specific criteria relevant to interoperability, clinical decision support (CDS), and electronic health information (EHI) exchange.
    - Standards and Interoperability: Testing the CEHRT's conformance to ONC-mandated standards (e.g., HL7 FHIR, USCDI, C-CDA).

3. Key Areas of Focus for Testing
    - Interoperability: Assess the ability of the CEHRT to exchange electronic health information seamlessly across different healthcare providers and systems in long-term and post-acute care settings.
    - Clinical Decision Support (CDS): Evaluate how effectively the CEHRT supports clinical decision-making through decision support interventions and automated alerts.
    - Data Exchange & Use: Monitor the receipt and utilization of EHI within the CEHRT across care teams and other stakeholders.

4. Data Collection Methods
    - Metrics/Measurements:
        - Track system performance, including data exchange success rates, errors, and latency in real-time.
        - Measure compliance with certification criteria through structured tests of EHI exchange, CDS triggers, and user interactions.
        - Capture user feedback (from clinicians, administrative staff, etc.) on the system's usability and performance in real-world scenarios.
    - Types of Data Collected:
        - Quantitative Data: Number of successful/failed data exchanges, time taken to send/receive data, error logs, and system uptime.
        - Qualitative Data: User satisfaction surveys, interviews with end-users, and observations from pilot tests.

5. Real World Testing Activities
    - Pilot Testing: Conduct pilot tests in selected LTC and PAC facilities to simulate real-world usage, collecting performance data on interoperability, data exchange, and CDS.
    - Ongoing Monitoring: Implement continuous monitoring of system performance to assess real-world functionality, capturing metrics over a designated time frame.
    - Performance Benchmarking: Compare real-world test data against baseline metrics established during internal testing and certification.

6. Data Usage to Demonstrate Success
    - Data Validation: Analyze collected data to confirm that the certified health IT is compliant with the required technical standards, vocabulary code sets, and certification criteria.
    - Reporting Outcomes:
        - Interoperability Success: Demonstrate that the CEHRT consistently exchanges EHI between providers, ensuring timely and accurate data sharing.
        - Compliance with Certification Criteria: Use data to verify that all certified functionalities

(e.g., CDS, EHI exchange) perform as required in actual care settings.

- Usability and Safety: Analyze feedback and performance data to ensure the system supports safe and effective care delivery without contributing to errors.
    - Continuous Improvement: Use test results to inform any necessary updates to the system, reflecting changes in standards or addressing issues uncovered during testing.

7. Expected Outcomes
    - Certification Compliance: Confirm that the system remains compliant with the ONC certification criteria.

8. Reporting and Documentation
    - Real World Testing Report: Submit comprehensive reports detailing testing methodologies, data collected, analysis, and outcomes to ONC as required.
    - Transparency in Changes: Document any adjustments made during testing, providing justifications for changes in approach or system configuration.

STANDARDS VERSION ADVANCEMENT PROCESS (SVAP) STANDARDS UPDATES

Consistent with the RWT reporting request to include any voluntary standards updates, below is a list of versions of standards that were implemented prior to August 31 of the year in which the updates were made.

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*
- ✓ *Date notification sent to ONC-ACB*
- ✓ *Date notification sent to customers*
- ✓ *Method used to demonstrate conformance with updated standard(s)*
- ✓ *Measurement(s)/metric(s) associated with Real World Testing*

Standard (and version)	All standards and versions are as specified in 2015 Edition (now edition-less) without exception.
Updated certification criteria and associated product	
Health IT Module CHPL ID	
Date of ONC ACB notification	

Date of customer notification	
Conformance method and measurement/metric(s)	

MEASUREMENT(S)/METRIC(S) USED IN OVERALL APPROACH

Below is a list of at least one measurement/metric that addresses each applicable certification criterion in the Health IT Module's scope of certification. The method for approach and measuring how the approach(es) chosen to meet the intent and purpose of Real World Testing is shown and described in the tables below.

For each measurement/metric, we 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 measurement(s)/metric(s) that will be used to support the overall approach to Real World Testing.

Measurement/Metric	Description and Method
(b)(1) Transitions of care - Create and send a CCDA	This measure evaluates the creation and transmission of required CCDAs across multiple providers using PointClickCare v4 in a production environment. System logs will be reviewed to verify the creation and sending of the required CCDAs, ensuring a quantifiable and expected count of CCDAs is achieved.
(b)(2) Clinical information reconciliation and incorporation	This measure assesses the functionality of CCDA ingestion at the production level. It ensures that imported allergies, medications, and problems are displayed side-by-side for end-user review and reconciliation. The goal is to successfully import and integrate concept results into the CEHRT patient record, while selectively excluding certain elements where appropriate.
(b)(3) Electronic prescribing	ePrescribing transactions in customer environments will be analyzed to confirm that all services function well in our care settings. We will utilize existing processes to monitor customer production environments, retrieving summarized successful transmission statistics from sender to the receiver. Reports will be generated from this monitoring, detailing success, acceptance, and failure/error rates. This approach will help us test these capabilities in real-world scenarios.
§ 170.315(b)(10) Electronic Health Information export	The Real World Testing (RWT) methodology for PointCliCkCare Electronic Health Information (EHI) Export certified capabilities will involve tracking live production activity using the certified EHI Export features. Single patient export statistics will be monitored through automated transaction logging at the time of the request, followed by periodic data retrieval into a cross-database analytics tool. For patient population EHI Export statistics, we will review logged requests from customers seeking a complete patient population export and determine the dates of successful deliveries.
§ 170.315(c)(1)—record and export	The CQM – record and export criterion at 170.315(c)(1) allows users to capture all necessary data for calculating electronic Clinical Quality Measures (eCQMs) and enables the export of a data file that complies with the HL7® CDA® Release 2 Implementation Guide for Quality Reporting Document Architecture – Category 1 (QRDA I) specifications. To effectively demonstrate Real World Testing (RWT) for the CQM – record and export and CQM – report criteria, we will monitor data submissions to the Centers for Medicare and Medicaid Services (CMS) and the relevant regulatory body for a sample of PCC EHR customers.

§ 170.315(e)(1) View, download, and transmit to 3rd party	To conduct Real World Testing (RWT) for the View, Download, and Transmit to 3rd Party (VDT) criterion, PCC will monitor the real-world usage of the Patient Portal by consumers authorized to access their health information through our customers over a 3-month measurement period. This data is provided from an analytics platform that tracks data from the portal. The reports will focus on specific capabilities that align closely with the VDT criterion requirements, as indicated by the relevant metrics established in the RWT plan.
§ 170.315(g)(7) Application access—patient selection § 170.315(g)(9) Application access—all data request § 170.315(g)(10) Standardized API for patient and population services	The Real World Testing (RWT) approach for PCC's Application Access and Standardized API certified capabilities will involve monitoring the following live production activities for each relevant certification criterion: • Requests and responses from registered consumer applications using HL7® FHIR® APIs (g10) • Applications that leverage HL7 FHIR Bulk Data extracts (g10) • Live production HL7 FHIR API requests for patient data in HL7 CDA C-CDA Continuity of Care Document (CCD) format (g9) • Total access events using an access token for the patient persona (g7) These activities will be tracked using transaction logging within a cross-database analytics tool, enabling near real-time monitoring of active production environment usage for analytical purposes.

Associated Certification Criteria

List certification criteria associated with the measurement/metric. If conformance to the criteria depends on any Relied Upon Software, this should be noted in your Real World Testing plan for any metrics that would involve use of that software in testing.

Measurement/Metric	Associated Certification Criteria	Relied Upon Software (if applicable)
CCDA Creation and Transmission Success Rate. This metric measures the percentage of successful CCDA documents created and transmitted to the receiving provider or system without errors.	§ 170.315(b)(1) Transitions of care	N/A
Frequency of B2 Utilization These metric measures how often the system's data ingestion capabilities (i.e., the ability to import and display CCDA data) are used by clinicians to update the patient's CEHRT. It quantifies how frequently users engage with the clinical information reconciliation feature by reviewing and incorporating clinical data from incoming CCDAs (e.g., allergies, medications, and problems). **Reconciliation and Exclusion Action Rate** This metric tracks the percentage of times clinicians interact with the reconciliation interface to review, adjust, or exclude incorrect/inconsistent data from the patient's record.	§ 170.315(b)(2) Clinical information reconciliation and incorporation	N/A
1.During testing, a report count will be generated over a 30-day period to quantify successful transmissions of NewRx ePrescribing events to their partner pharmacy 2. During testing, a report count will be generated over a 30-day period to quantify successful transmissions of CancelRx	§ 170.315(b)(3) Electronic prescribing	Surescripts ePrescribing

ePrescribing events to their partner pharmacy. 3. During testing, a report count will be generated over a 30-day period to quantify successful acceptance of RxFill ePrescribing events from the partner pharmacy		
1.Total count of successfully generated single patient EHI Exports in the 2025 calendar year. 2.Total count of successfully generated patient population EHI Exports in the 2025 calendar year.	§ 170.315(b)(10) Electronic Health Information export	N/A
1. CQM – record and export criterion: percentage of chosen patients for whom QRDA files are successfully created (target = 100%)	§ 170.315(c)(1)—record and export	N/A
1 Total number of unique Patient Portal users who viewed an element of their health record during the measurement period. 2.Total number of unique Patient Portal users who downloaded or transmitted an HL7® CDA® C-CDA Continuity of Care Document (CCD) during the measurement period. 3.Total number of unique Patient Portal users who viewed their full CCDA during the measurement period.	§ 170.315(e)(1) View, download, and transmit to 3rd party	N/A
1. (g7): Total count of successful access events for access tokens granted to patients (no target).	§ 170.315(g)(7) Application access—patient selection	N/A
2.**(g9) C-CDA**: Success rate of events that return a C-CDA document in HL7 FHIR API responses (no target).	§ 170.315(g)(9) Application access— all data request	N/A
3. (g10) Single Patient: Success rate of HL7 FHIR API transactions across all customer production activity for the 2024 calendar year (target = 98%+). **4. (g10) Bulk Data**: Number of customers completing an HL7 FHIR Bulk Data extraction during the 2024 calendar year (no target).	§ 170.315(g)(10) Standardized API for patient and population services	N/A

Justification for Selected Measurement/Metric

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

Measurement/Metric	Justification
§ 170.315(b)(1) Transitions of care - Create and send a CCDA	The **creation and transmission of a CCDA (Consolidated Clinical Document Architecture)** plays a central role in facilitating these transitions. CCDAs are standardized documents that contain essential patient health information, such as medical history, diagnoses, medications, allergies, and treatment plans. Ensuring that these documents are created and sent accurately between providers is a key component in improving communication and supporting informed decision-making during patient handoffs.
§ 170.315(b)(2) Clinical information reconciliation and incorporation	Clinical information reconciliation and incorporation refer to the process of reviewing and integrating patient data from multiple sources into a central, consistent patient record. This is particularly important in the context of the CCDA, which often contains a variety of clinical data (such as medications, allergies, and diagnoses) that must be reviewed and updated in the receiving provider's system. This measure ensures that the system ingests the CCDA data correctly, displaying key information (e.g., allergies, medications, problems) side-by-side for clinical review. This process allows healthcare providers to verify and update patient records accurately, flagging any inconsistencies or discrepancies between systems (e.g., when a medication list from a different provider does not match the current one).

§ 170.315(b)(3) Electronic prescribing	This RWT plan monitors NewRx, CancelRx and RxFill transactions related as their volume directly correlates to the effectiveness of electronic prescribing in real-world patient care. By reviewing success metrics of the transactions, we can confirm they comply with the NCPDP SCRIPT Version 2017071 standard and electronic prescribing regulations. Additionally, we can monitor and measure the value it delivers to our customers.
§ 170.315(b)(10) Electronic Health Information export	Monitoring and reporting the actual execution counts of single and patient population EHI Exports in customer production environments is the most reliable method for Real World Testing (RWT). This approach demonstrates that the export functionality is operating as intended and in compliance with regulations. Additionally, it offers a care setting-agnostic way to track the real-world use of these capabilities
§ 170.315(c)(1)—record and export	A customer's capacity to successfully submit eCQM data to CMS for the the Merit-based Incentive Payment System (MIPS) Quality Measurement Category is directly linked to their real-world utilization of the certified capabilities for CQM – record and export and CQM – report criteria.
§ 170.315(e)(1) View, download, and transmit to 3rd party	To conduct Real World Testing (RWT) for the View, Download, and Transmit to 3rd Party (VDT) criterion, PCC will monitor the actual usage of the Patient Portal by consumers who have been granted access to their health information through our customers over a 3-month period. This data will be aggregated and de-identified, then presented in a report derived from the Patient Portal environments utilized by our customers. The reports will focus on specific capabilities that align with the VDT criterion requirements, reflecting the associated metrics outlined in the RWT plan. Additionally, the report will detail the number of U.S.-based portals that contributed to the data set.
§ 170.315(g)(7) Application access—patient selection § 170.315(g)(9) Application access—all data request § 170.315(g)(10) Standardized API for patient and population services	Monitoring success rates and counts within the production environment offers clear insight into the real-world usage of certified APIs, aligning perfectly with the goals of Real World Testing (RWT). This approach ensures that all customers utilizing the certified APIs are represented equally, encompassing all care settings for which these capabilities are marketed and supported, rather than selectively focusing on certain environments. We are employing a range of metrics to evaluate the functionality of various capabilities relevant to our criteria: • For **(g10) Single Patient** data, we are tracking the success and failure rates of API responses through HTTP response codes. This monitoring demonstrates that real-world usage results in successful API calls, rather than just high volumes with significant failure rates. Our target of a 98% success rate accounts for occasional failures due to factors like bad requests, network issues, and other expected complexities outside the control of certified capabilities. • For **(g10) FHIR Bulk Data**, tracking success counts helps us illustrate both the effectiveness of operations and the adoption of this newer capability. • Monitoring success counts for **(g7) Patient Access requests** provides insight into the overall number of patients successfully granted access tokens. • Lastly, tracking successful transactions that return a C-CDA document from an HL7 FHIR API request aligns with the **(g9)** criterion, showcasing real-world utilization.

Care Setting(s)

Consistent with most of our care setting locations, below is a list each care setting which is covered by the measure and an explanation for why it is included.

Care Setting	Justification
Long-term Care	PointClickCare's CEHRT is widely implemented in long-term care facilities, where interoperability, clinical decision support, and efficient data exchange are critical for managing chronic conditions and ensuring continuity of care for residents. This setting is included to validate system performance in environments where long-term patient care coordination is essential.
Post-acute Care	Post-acute care settings, such as skilled nursing facilities, rely on timely access to patient data and smooth transitions of care from hospitals. Testing in this setting is necessary to confirm the system's ability to support short-term, high-intensity care needs and facilitate communication between different care providers.

Expected Outcomes

The following documentation outlines how PointClickCare's chosen approaches will successfully demonstrate that our certified health IT:

1. *Meets compliance with the certification criteria, including the required technical standards and vocabulary code sets.*
2. *Facilitates the exchange of electronic health information (EHI) within the care and practice settings where it is marketed for use.*
3. *Ensures that EHI is both received by and utilized within the certified health IT systems.*

*These outcomes, based on ONC guidelines (85 FR 25766), may not apply to every certified Health IT Module. Where necessary, we may provide additional explanations on how our measurement approach best supports the continued interoperability of our product(s). We also acknowledge the possibility of highlighting outcomes that should **not** result from the measurement approach if this better illustrates our efforts.*

In this section, we describe how the data collected through Real World Testing measures demonstrate expected results. While specific measures and expected outcomes may not always include performance targets or benchmarks, we provide a rationale for why certain measures were chosen. These measures demonstrate individual criterion functionality, EHI exchange, and/or the effective use of EHI within our certified health IT, as appropriate.

Measurement/Metric	Expected Outcomes
§ 170.315(b)(1) Transitions of Care - Create and send a CCDA	The expected outcome for this criterion is that the system will successfully create and send Consolidated Clinical Document Architecture (CCDA) documents as part of the transition of care process. These CCDAs will contain accurate and comprehensive patient data, including allergies, medications, diagnoses, and treatment plans, and will be transmitted to the appropriate receiving provider or healthcare system. Successful creation, format and transmission of CCDAs: The system should generate and send the required CCDAs with no errors or omissions, and the logs should reflect a quantifiable and expected count of CCDAs sent.
§ 170.315(b)(2) Clinical information reconciliation and incorporation	The expected outcome for this criterion is that the system will accurately ingest and display clinical data from the incoming CCDA, such as allergies, medications, and problems, within the CEHRT. It should provide a user-friendly, side-by-side interface

	for clinicians to review and reconcile the data, ensuring the correct information is integrated into the patient's record. Clinicians should be able to exclude incorrect or irrelevant data, with the final integrated record supporting accurate, ongoing care decisions.
§ 170.315(b)(3) Electronic prescribing	Successful electronic prescription transmissions to pharmacies indicate that users have a solid understanding of this functionality and gain value from it. This will showcase our compliance with certification criteria by utilizing the NCPDP SCRIPT Standards. Transmission errors and failures are expected to be less than 1% of all scripts during the defined timeframe.
§ 170.315(b)(10) Electronic Health Information export	We expect to see the following trends from implementing the RWT plan: • Verification that customer end users can reliably execute the single patient EHI Export functionality as intended by the EHI Export feature. • Confirmation that the patient population EHI Export functionality can be successfully executed with the help of developers, as specified by the EHI Export feature. • Evidence of a generally low usage volume of the certified capabilities.
§ 170.315(c)(1)—record and export	We expect successful export of these reports indicates that users possess a solid understanding of this functionality. This will demonstrate compliance with certification criteria by supporting QRDA files for Record and Export.
§ 170.315(e)(1) View, download, and transmit to 3rd party	PCC anticipates observing significant usage of the View, Download, and Transmit (VDT) capabilities within the Patient Portal as part of the RWT plan. The number of unique users will indicate how many individuals were empowered to interact with their electronic health data and that of others during the designated timeframe. It is expected that the volume of viewing events will surpass that of downloading and transmitting health records, as viewing actions are the primary use of the Patient Portal and are more user-friendly. In contrast, the download and transmit features tend to be accessed less frequently, resulting in a lower event volume.
§ 170.315(g)(7) Application access—patient selection	Expected outcomes for the PCC certified APIs Real World Testing (RWT) execution will include a moderate volume of successful API transactions across all live production endpoints. This will be evident on a daily basis, reflecting the application usage of the certified APIs. We also anticipate that transaction volumes will vary significantly among individual FHIR resources. Regarding HL7 FHIR Bulk Data export, we foresee relatively low overall activity due to the newness of these capabilities. The observed production activity is likely to be concentrated among a small group of customer endpoints that are early adopters and innovators in this area.
§ 170.315(g)(9) Application access—all data request	
§ 170.315(g)(10) Standardized API for patient and population services	

SCHEDULE OF KEY MILESTONES

Below are the steps within the Real World Testing plan that establish milestones within the process. It includes details on how and when PointClickCare will implement measures and collect data.

Key Milestone	Care Setting	Date/Timeframe
2025 Report Completed and Submitted to ONC	Long-term and Post-acute Care	December 15, 2024
Identify and Schedule RWT Participants	Long-term and Post-acute Care	Q1 2025
Conduct RWT Sessions and Collect Data	Long-term and Post-acute Care	Q2 2025
Aggregate and Review RWT Data and Start Report Results	Long-term and Post-acute Care	Q3 2025
Complete RWT Results Report and Post to Public URL	Long-term and Post-acute Care	Q4 2025
Report Submitted to Drummond	Long-term and Post-acute Care	February 28, 2026

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: December 1, 2024

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