2024 Flatiron Health Real World Testing Results

Background & Instructions

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

A 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. To accompany the plan template, ONC has also provided this results report template.

While the use of this template is voluntary, health IT developers may find it useful in preparing their Real World Testing results report(s). Health IT developers must submit one year of results to address the Real World Testing of eligible products as outlined in their previous year's Real World Testing plan(s). If adjustments to approaches are made throughout Real World Testing, the health IT developer should reflect these adjustments in their Real World Testing results report. ONC expects that the results report will include a list of these changes, the reasons for them, and how intended outcomes were more efficiently met as a result.

While every effort has been made to ensure the accuracy of restatements of 45 CFR Part 170, this template is not a legal document. The official program requirements are contained in the relevant laws and regulations. This resource should be read and understood in conjunction with the following companion resources, which describe in detail many of the Certification Program requirements referenced in this resource.

- Real World Testing–What It Means for Health IT Developers – Fact Sheet
- Real World Testing Resource Guide
- 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 Certification Program.

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

General Information

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

Developer Name: Flatiron Health

Product Name(s): OncoEMR®

Version Number(s): 2.8

Certified Health IT Product List (CHPL) Product Number(s): 15.04.04.3010.Onco.28.02.1.221221

Developer Real World Testing Plan Page URL: https://flatiron.com/certification/

Developer Real World Testing Results Report Page URL [if different from above]: N/A

Changes to Original Plan

Flatiron Health, Inc. (referred to as Flatiron moving forward) conducted Real World Testing as described in our approved 2024 RWT Plan with minor deviations from the plan. ONC has provided guidance that these types of deviations may be acceptable stating, "ONC anticipates that throughout a developer's Real World Testing activities there will be instances where the developer may find a need to modify their testing methodologies or approaches that were originally laid out in their plan(s) to address unexpected changes during the testing period. The developer is not prohibited from adjusting their approaches following the submission of their original plans. To promote public transparency, ONC recommends that developers do not update the plans themselves but include any changes to their Real World Testing approach in their results report. If a developer adjusts their Real World Testing approaches, ONC expects that the Real World Testing results report will include a description of these types of changes, the reasons for the changes, and how intended outcomes were more efficiently met as a result…" Specific deviations to Flatiron's 2024 Real World Testing Plan are described below:

Summary of Change	Reason	Impact
Removed criteria 170.315 (b)(6) Data Export.	Criteria (b)(6) was removed from the certification program on 12/31/23.	We did not complete real world testing for this deprecated criteria. Note: Flatiron certified to 170.315 (b)(10) EHI Export in December 2023. As such, it is not included in our 2024 RWT plan and results. It is included in our 2025 RWT plan.
Expansion of reporting period for 170.315 (f)(4) Transmission to Cancer Registries. We planned to collect data across three, 10 day periods. We expanded to capture data across 90 days.	Ease of reporting to capture data.	None, we opted to include more data demonstrating successful usage of Flatiron's (f)(4) functionality to exchange data.

Summary of Change	Reason	Impact
Inclusion of all customers in data collected for criteria 170.315 (g)(10) Standardized API for patient and population services	Our metrics measure API usage by application (versus customer). As such, we opted to expand this measurement to capture API usage across all customers.	None in that we still demonstrate successful usage of Flatiron's (g)(10) functionality to exchange data.

Summary of Testing Methods and Key Findings

Testing Methods

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,***" Flatiron's testing methods focused on capturing and documenting the number of instances that certified capability is successfully utilized in the real world. In instances where no evidence existed due to zero adoption of a certified capability or the inability to capture evidence of successful use for other reasons, Flatiron demonstrated 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 augments and supports testing that was conducted prior to certification being granted. It is not intended to duplicate the methods or results previously demonstrated. Instead, these results demonstrate that the certified capabilities have been successfully deployed for providers to use at their discretion in live settings.

Flatiron has used a 3-fold approach to demonstrate successful real-world implementations.

- Adoption Rate
- Summative Testing
- Interactive Testing

Adoption rates 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 were used to measure which certified actions were performed at the conclusion of a given time period. These were 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 are generally an indicator of a successful implementation of a given certified capability in a real-world setting. Summative testing was conducted using data from a representative subset of Flatiron Health practices (approximately one third of the Flatiron Health network). These practices were specifically selected to ensure the representative sample population utilized for summative assessments included practices of varying characteristics (e.g., size, location).

Interactive testing was 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 were completed via a live test as opposed to examining historical usage statistics. The goal of these tests was to allow a user to demonstrate the certified Health IT module being used in a way consistent with their own practice or care setting. Flatiron has conducted interactive testing on specified criteria in a non-production environment, consistent with ONC's guidance that the developer may, "use synthetic patient data in lieu of or in addition to real patient data in real or simulated/test scenarios, executed in environments that mirror production environments."

Key Findings

Flatiron's 2024 Real World Testing was used to validate that certified functionality is behaving as expected in production. Our 2024 Real World Testing results show that certified functionality is being utilized at various levels by our customer network. In some cases, certified functionality is being used frequently by Flatiron practices (or third-party application developers). In other cases, certified functionality is being used infrequently or not at all by Flatiron practices (or third-party application developers). The certified functionality that is not being used at all by Flatiron practices (or third-party application developers) was identified in our 2024 Real World Testing Plan as likely criteria to have low or no adoption. This list includes criteria (g)(7)and (g)(9). For this reason, we proactively planned to include interactive testing for these criteria to demonstrate how this functionality operates in production. The results of our 2024 Real World Testing show that some certified functionality has no adoption not because it is not deployed appropriately nor functional in production, but as a result of consumer demand.

Standards Updates (including standards version advancement process-svap and uscdi)

Flatiron's 2024 Real World Testing Results Report includes test criteria that have been updated to include all USCDI v1 data elements.

✓ Yes, I have products certified with voluntary SVAP or USCDI standards

No, none of my products include these voluntary standards

Standard (and version)	Flatiron elected to participate in the SVAP process, certifying to criteria 170.315 (g)(10): Standardized API for patient and population services using the HL7 US Core Implementation Guide 4.0.0 based on FHIR Version R4.
Updated certification criteria and associated product	The following certification criteria are updated to USCDIv1 for the OncoEMR product: • (b)(1) Transitions of Care • (b)(2) Clinical Information Reconciliation and Incorporation • (b)(3) Electronic Prescribing • (e)(1) View, Download, and Transmit to 3rd Party • (f)(5) Transmission to public health agencies electronic case reporting • (g)(9) Application access — all data request • (g)(10) Standard API for patient and population services
CHPL Product Number	15.04.04.3010.Onco.28.02.1.221221
Method used for standard update	Cures Update Certification Testing

Care Settings

OncoEMR is marketed solely to ambulatory Oncology practices.

Metrics and Outcomes

The below information details outcomes from Flatiron's 2024 Real World Testing that successfully demonstrate that Flatiron:

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

This section is also used to describe how the specific data collected from Real World Testing measures demonstrate results. Where possible, context is provided to the measures and results to understand the number of sites/users/transactions tested for the specified measures (i.e., the denominator for comparison to the reported results). If applicable, any Relied Upon Software that is used to meet a criterion's requirements is included in this section.

Adoption Rates

The following metrics are applicable to all criteria and all care settings. These metrics are not meant to directly demonstrate interoperability or conformance to certification criteria. Instead, they were primarily used to help determine the participants that were in scope for this evaluation. These metrics are also provided to 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). OncoEMR requires a one-time implementation fee for installation plus annual subscription fees which cover software licenses, customer support, software upgrades and services. Unless listed below, the usage of certified functionality is included at no additional cost as part of our annual subscription fees. Additional fees:

- Use of HL7 interfaces in OncoEMR may require an additional one-time implementation fee and an additional annual subscription fee for maintenance (Note: Interfaces associated with (f)(1): Transmission to Immunization Registries and (f)(4): Transmission to Cancer Registries are included at no additional cost).
- Data conversions may require an additional one-time fee depending on the volume of data being converted.
- FHIR APIs may require additional fees, more information can be found in our FHIR API documentation.
- We have also partnered with MaxMD to help users deliver electronic referrals, SureScripts for general e-prescribing functionality, and DrFirst for controlled substance e-prescribing functionality in OncoEMR. Please note that there are additional one-time and/or annual vendor fees associated with the use of these services.

Metric	Description	Outcomes	Description & Challenges Encountered (if applicable)
Number of installs of the EHR	The total number of ***licensed*** installs of the certified Health IT module, regardless of care setting, participation in incentive programs, or use of certified capabilities.	**228 Installs**	**Description:** Definition of "license" may be subject to interpretation. We are using the definition here to mean the number of live OncoEMR practices.
Number of active users of EHR	Total number of ***active*** users of the certified Health IT module, regardless of care setting, participation in incentive programs, or use of certified capabilities.	Reporting window: 06/01/24 -0 8/31/24 **48,016 active users**	**Description:** Definition of "active users" may be subject to interpretation. We are using the definition here to mean the unique count of user IDs that have logged in to OncoEMR at least once within the reporting window.

Summative Assessment Metrics

The following metrics were measured by viewing audit logs and reporting systems available to track the behavior of the certified Health IT module during various timeframes within the calendar year of 2024. 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 Flatiron elected to record these metrics over a 90-day period to reflect the reporting periods typically required for compliance with the federal incentive programs. In most cases, Flatiron elected to record these metrics from a *representative* sampling of customers.

The continued measurable use of certified capabilities provides 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, Flatiron has reviewed internal customer and vendor issue tracking systems for reports of failures or unsatisfactory performance in the field.

Criterion	Relied Upon Software (if applicable)	Metric and Outcomes	Description & Challenges Encountered (if applicable)
170.315 (b)(1) Transitions of care	1) Flatiron has partnered with MaxMD Direct mdEmail® to obtain data on direct messaging and electronic referrals. 2) Flatiron leverages FirstDataback to support the translation of FDB identifiers to the minimum RxNorm Code Set for medication list and allergy medication that need to be translated. 3) Flatiron leverages Symedical, a terminology tool, to support required minimum vocabulary code sets (SNOMED, LOINC)	Over a 90-day period (06/01/24 - 08/31/24): 1) Number of CCDAs created: **1,165,261** 2) Number of CCDAs sent via edge protocols (attempted, successful): **(16,364, 13,270)** 3) Number of CCDAs received via edge protocols: **15,634**	**Description:** 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, in alignment with our accepted 2024 RWT plan, Flatiron has demonstrated 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. For metric 2, delivery notifications received do not equal the total number messages sent. For outbound messages, there are various reasons why a message may have failed. One such reason is that the direct message was sent to a user that is no longer active. In this instance, a delivery notification is not received. Sending an outbound message to a recipient that is no longer active is thus the result of workflow error, not an issue with certified functionality. Flatiron encourages providers at OncoEMR practices to utilize admin accounts for direct messaging to avoid sending/receiving direct messages to/from individuals who are no longer active with the practice.

Criterion	Relied Upon Software (if applicable)	Metric and Outcomes	Description & Challenges Encountered (if applicable)
170.315 (b)(2) Clinical information reconciliation and incorporation	1) Flatiron leverages FirstDataback to support the translation of FDB identifiers to the minimum RxNorm Code Set for medication list and allergy medication that need to be translated. 2) Flatiron leverages Symedical, a terminology tool, to support required minimum vocabulary code sets (SNOMED, LOINC)	Over a 90-day period (06/01/24 - 08/31/24): 1) Number of times a user reconciled medication list data: **9,505** 2) Number of times a user reconciled allergies and intolerance list data: **9,737** 3) Number of times a user reconciled problem list data: **11,630**	**Description:** 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, Flatiron has recorded 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.
170.315 (b)(3) Electronic prescribing	Flatiron has partnered with Surescripts, DrFirst, and First Databank for e-prescribing functionality in OncoEMR.	Over a 90-day period (06/01/24 - 08/31/24): 1) Number of prescriptions created: **396,107** 2) Number of prescriptions changed: **8,742** 3) Number of prescriptions canceled: **19,575** 4) Number of prescriptions renewed: **94,917**	**Description:** 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, Flatiron has demonstrated the required certified capabilities are effective by examining reports from our eRx partner which log how often eRx transactions are performed. These reports demonstrate that not only are the eRx transactions sent from the certified Health IT module, but that the transactions are successfully reviewed by the eRx clearinghouse.
170.315 (c)(1) Clinical quality measures (CQMs)	N/A	Over a 90-day period (06/01/24 - 08/31/24): 1) Number of measures recorded during the period: **1** 2) Number of QRDA Category 1 files exported (attempted, successful): **(7,7)**	**Description:** This criterion 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. Flatiron recorded the frequency that CQM files are exported by providers to demonstrate the certified capability is available and effective, regardless of the frequency it is used.

Criterion	Relied Upon Software (if applicable)	Metric and Outcomes	Description & Challenges Encountered (if applicable)
170.315 (e)(1) View, download, and transmit to 3rd party	1) Flatiron has partnered with Amazon Pinpoint to support transmit functionality in OncoEMR. 2) Flatiron leverages FirstDataback to support the translation of FDB identifiers to the minimum RxNorm Code Set for medication list and allergy medication that need to be translated. 3) Flatiron leverages Symedical, a terminology tool, to support required minimum vocabulary code sets (SNOMED, LOINC).	Over a 90-day period (06/01/24 - 08/31/24): 1) Number of views of health information by a patient or authorized representative: **11,998** 2) Number of downloads of health information by a patient or authorized representative (attempted, successful): **(2,488, 2,419)** 3) Total number of transmissions of health information by a patient or authorized representative (attempted, successful): **(1,656, 1,384)** 4) Number of transmissions of health information by a patient or authorized representative using unencrypted method: **1,010** 5) Number of transmissions of health information by a patient or authorized representative using encrypted method: **626**	**Descriptions:** 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. Flatiron has recorded 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. Overall success rate for downloads and transmissions was high (approximately 97% success rate and 84% success rate respectively). Downloads/transmissions may have been attempted but not successful for expected reasons such as end user workflow errors. Errors are not 100% preventable by Flatiron and do not represent a systematic issue or bug within certified functionality.
170.315 (f)(1) Transmission to immunization registries	1) Flatiron has partnered with Infor Cloverleaf to support the delivery of immunization data. 2) Flatiron leverages FirstDataback to support the translation of FDB identifiers to the minimum RxNorm Code Set for medication list and allergy medication that need to be translated. 3) Flatiron leverages Symedical, a terminology tool, to support required minimum vocabulary code sets (SNOMED, LOINC).	Over 3 separate unique 10-day periods within a 90-day window: 1) Number of immunization records created and transmitted to the immunization record: a. Period 1 (6/6 - 6/16/24): **12,946** b. Period 2 (7/27 - 8/5/24): **19,144** c. Period 3: (8/14 - 8/24/24): **15,806**	**Description:** This criterion requires the ability of a certified Health IT module to transmit immunization data to a registry using a specified format. Flatiron intends to record the frequency that immunization data is transmitted to registries by providers to demonstrate the certified capability is available and effective, regardless of the frequency it is used. For this measure we will be reviewing all customers, not the selected cohort used for other testing scenarios.

Criterion	Relied Upon Software (if applicable)	Metric and Outcomes	Description & Challenges Encountered (if applicable)
		2) Total number of immunization history/forecasts requested from the immunization registry a. Period 1 (6/6 - 6/16/24): **4,619** b. Period 2 (7/27 - 8/5/24): **4,686** c. Period 3: (8/14 - 8/24/24): **6,512**	
170.315 (f)(4) Transmission to cancer registries	1) Flatiron has partnered with Infor Cloverleaf to support the delivery of immunization data. 2) Flatiron leverages FirstDataback to support the translation of FDB identifiers to the minimum RxNorm Code Set for medication list and allergy medication that need to be translated. 3) Flatiron leverages Symedical, a terminology tool, to support required minimum vocabulary code sets (SNOMED, LOINC).	Over 3 separate months: 1) Total number of cancer registry data records created and submitted a. Period 1: 197,666 b. Period 2: 258,072 c. Period 3: 203,108	**Description:** This criterion requires the ability of a certified Health IT module to transmit cancer case information to a registry using a specified format. Flatiron intends to record the frequency that cancer case data is transmitted to registries by providers to demonstrate the certified capability is available and effective, regardless of the frequency it is used. For ease of reporting, we expanded to capture 3 months worth of data.
170.315 (f)(5) Electronic case reporting	Flatiron leverages the eCR Now FHIR App and MaxMD's certified (h)(2) Direct Project, Edge Protocol, and XDR/XDM functionality to support our eCR workflow.	Over a 90-day period (06/01/24 - 08/31/24): 1) Count of **eICR** messages going out over the Public Health Case reporting Interface: **572,372**	**Description:** This criterion requires the ability of a certified Health IT module to create a case report based on a patient visit or encounter matched to a trigger code. Flatiron intends to capture the eICR messages that are generated and sent over the Public Health Interfaces during the 90-day test period.

Criterion	Relied Upon Software (if applicable)	Metric and Outcomes	Description & Challenges Encountered (if applicable)
170.315 (g)(7) Application access — patient selection	N/A	Over a 90-day period (06/01/24 - 08/31/24): 1) Number of requests for a patient ID or token: **0** 2) Number of requests that provided sufficient information to provide a valid response: **0** 3) Number of follow-up requests made using the provided patient ID or token: **0**	**Description:** 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 recorded 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. As expected and outlined within our 2024 RWT Plan, there was zero adoption of this certified capability by our users during the specified reporting window. As planned, we have supplemented summative testing with interactive testing to demonstrate the feature is available and functioning as expected should any users elect to begin using this feature.
170.315 (g)(9) Application access — all data request	1) Flatiron leverages FirstDataback to support the translation of FDB identifiers to the minimum RxNorm Code Set for medication list and allergy medication that need to be translated. 2) Flatiron leverages Symedical, a terminology tool, to support required minimum vocabulary code sets (SNOMED, LOINC).	Over a 90-day period (06/01/24 - 08/31/24): 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: **0** 2) 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: **0**	**Description:** 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 recorded 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. As expected and outlined within our 2024 RWT Plan, there was zero adoption of this certified capability by our users during the specified reporting window. As planned, we have supplemented summative testing for this criteria with interactive testing to demonstrate the feature is available and functions as expected should any users elect to begin using this feature.
170.315 (g)(10) Standardized API for patient and population services	1) Flatiron leverages FirstDataback to support the translation of FDB identifiers to the minimum RxNorm Code Set for medication list and allergy medication that need to be translated. 2) Flatiron leverages Symedical, a terminology tool, to support required minimum vocabulary code sets (SNOMED, LOINC).	Over a 90-day period (06/01/24 - 08/31/24): 1) Capture the total number of applications utilized by customers during a reporting period: **31 unique FHIR Applications** 2) Capture total number of times users or systems utilize applications to access information for multiple patients during a reporting period: **102**	**Description:** This criterion requires the certified Health IT module to offer two types of API-enabled services: one focused on a single patient's data and the other on multiple patients' data. This will be achieved through the utilization of Fast Healthcare Interoperability Resources (FHIR) standards. The approach for gauging the adoption and usage of these APIs involves tracking the total number of external and Flatiron-supported applications that invoke our customers' FHIR APIs within their live environments. Flatiron will monitor the frequency with which applications utilize the platform to connect to our customers' live environments for the purpose of reviewing FHIR data elements which can include USCDI information. Additionally, Flatiron will record the instances in which third-party applications connect to the FHIR APIs to access data pertaining to multiple patients.

Interactive Testing

The following test plans have been executed to demonstrate Real World certified capabilities for criteria where metrics are not available due to lack of adoption of the certified capability. Individual justifications for why each criterion has had low adoption are specified in the table below.

Flatiron has completed interactive testing for the following criteria:

- 170.315(g)(7) Application access—patient selection
- 170.315(g)(9) Application access—all data request

High Level Interactive Test Plan:

- **Care Settings**: All interactive testing was performed specifically targeting Oncology practice settings and real world data exchanges in the Oncology space.
- **Test Environment:** All interactive testing was performed in a live, staging environment. See table below for details.
    - Flatiron has completed a video recording where a representative end user walks through the intended workflow for the criteria and captures evidence that the functionality works as expected in the Real-World deployment.
- **Test Data**: Interactive testing was performed using specially developed test patient data in the live staging environment. Test patients were created using the data elements that are typically used by Oncology providers. Flatiron ensured that the test data entered for each patient included the minimum necessary to meet the data requirements for each criterion being tested using the interactive testing method.

Criterion	Interactive Test Plan and Results	Justification for Interactive Testing
170.315 (g)(7): Application Access - Patient Selection	Flatiron used Swagger as a test app against the production deployment of the Flatiron API server. Flatiron set up new test patients so as not to expose PHI, but these test patients were set up in the manner of Real-World Oncology patients, using diagnoses, medications, and other codesets typically found in the Oncology setting. Flatiron used Swagger to mimic the workflow of a provider user querying the API for patients using a third-party app. Flatiron entered patient specific IDs into swagger and evaluated the data returned to ensure it matched the patient and demographic data in the application. We also entered specific practice ID, patient ID and start date data to ensure the returned CCD data matched the output in the application.	**Justification:** Flatiron developed the API functionality to support both patients and providers, but the main use case was to enable other providers and their vendors to query Flatiron API servers for patient data. Flatiron implemented the API criteria according to ONC standards, and currently has a publicly-accessible Patient API. As of the submission of the 2024 RWT Plan, there was no adoption by any developers, so Flatiron has used interactive testing to demonstrate that this certified capability is available in the production environment and that lack of adoption is not caused by lack of availability.

Criterion	Interactive Test Plan and Results	Justification for Interactive Testing
170.315 (g)(9): Application Access - All Data Request	Results: 1) Successfully queried for a token using test patient demographics - demographics are returned 2) Token was used to query for CCD as well as discrete data, data was returned and visible to the user in Swagger	**Justification:** Flatiron developed the API functionality to support both patients and providers, but the main use case was to enable other providers and their vendors to query Flatiron API servers for patient data. Flatiron implemented the API criteria according to ONC standards, and currently has a publicly-accessible Patient API. As of the submission of the 2024 RWT Plan, there was no adoption by any developers, so Flatiron has used interactive testing to demonstrate that this certified capability is available in the production environment and that lack of adoption is not caused by lack of availability.

Schedule of Key Milestones

Overall Schedule

Key Milestone	Care Setting	Date/Time frame
Scheduling and logistics	Ambulatory Oncology	3/01/24 - 6/01/24
Data collection	Ambulatory Oncology	06/01/24 - 08/31/24
Review and collate data	Ambulatory Oncology	12/2/24 - 1/15/25
Writing report	Ambulatory Oncology	1/6/25 -1/15/25

Criteria Breakdown

Criteria	Method	Care Setting	RWT Reporting Window (Timeframe within with data was collected)	Reviewed Data and Wrote Report
Adoption metrics	Overall	Ambulatory Oncology	90 day window - 06/01/24 - 08/31/24	12/2/24 - 1/15/2025
170.315(b)(1) Transitions of care	Summative metrics	Ambulatory Oncology	90 day window - 06/01/24 - 08/31/24	12/2/24 - 1/15/2025
170.315(b)(2) Clinical information reconciliation and incorporation	Summative metrics	Ambulatory Oncology	90 day window - 06/01/24 - 08/31/24	12/2/24 - 1/15/2025
170.315(b)(3) Electronic prescribing	Summative metrics	Ambulatory Oncology	90 day window - 06/01/24 - 08/31/24	12/2/24 - 1/15/2025
170.315(c)(1) Clinical quality measures (CQMs)	Summative metrics	Ambulatory Oncology	90 day window - 06/01/24 - 08/31/24	12/2/24 - 1/15/2025
170.315(e)(1) View, download, and transmit to 3rd party	Summative metrics	Ambulatory Oncology	90 day window - 06/01/24 - 08/31/24	12/2/24 - 1/15/2025
170.315(f)(1) Transmission to immunization registries	Summative metrics	Ambulatory Oncology	Over 3 separate unique 10-day periods within a 90-day window: 1) Period 1: 6/6 - 6/16/24 2) Period 2: 7/27 - 8/5/24 3) Period 3: 8/14 - 8/24/24	12/2/24 - 1/15/2025
170.315(f)(4) Transmission to cancer registries	Summative metrics	Ambulatory Oncology	Over 3 separate months 1) Period 1: June 2024 2) Period 2: July 2024 3) Period 3: Aug 2024	12/2/24 - 1/15/2025
170.315 (f)(5) Electronic case reporting	Summative metrics	Ambulatory Oncology	90 day window - 06/01/24 - 08/31/24	12/2/24 - 1/15/2025
170.315 (g)(7): Application Access - Patient Selection	Interactive test plan	Ambulatory Oncology	Test plan executed & recorded on 9/12/2024	12/2/24 - 1/15/2025
(g)(9): Application Access - All Data Request	Interactive test plan	Ambulatory Oncology	10/12/2024	12/2/24 - 1/15/2025

Attestation

This Real World Testing Results Report 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: 1/30/2025