athenahealth

athenaClinicals for Hospitals and Health Systems v22 & v23 2024 Real World Test Plan

Contents

General Information

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

Developer Name: athenahealth, Inc

Product Name(s): athenaClinicals for Hospitals and Health Systems

Version Number(s): v22; v23

Certified Health IT: 2015 Edition Cures Update

Product List (CHPL) ID(s): 15.04.04.2880.Athe.IN.08.1.220726; 15.04.04.2880.Athe.IN.09.1.230317

Developer Real World Testing Page URL: https://www.athenahealth.com/onc-certified-health-it

Justification for Real World Testing approach

At this time, athenaClinicals for Hospitals and Health Systems (HHS) is a Certified electronic health record (EHR) that primarily services small Critical Access Hospitals (CAHs) with inpatient and ambulatory service lines. We are not currently offering this solution in market but are continuing to serve our existing client base.

As all of the certification criteria apply broadly to the care settings noted above, the Real World Testing plan will incorporate several certification criteria into one plan:

- §170.315(b)(1) – Transitions of Care
- §170.315(b)(2) – Clinical Information Reconciliation and Incorporation
- §170.315(b)(3) – Electronic Prescribing
- §170.315(b)(9) – Care Plan
- §170.315(b)(10) – Electronic Health Information Export
- §170.315(e)(1) – View, Download, and Transmit to 3rd Party
- §170.315(f)(1) – Transmission to Immunization Registries
- §170.315(f)(2) – Transmission to Public Health Agencies – Syndromic Surveillance
- §170.315(f)(5) – Transmission to Public Health Agencies – Electronic case reporting
- §170.315(f)(7) – Transmission to Public Health Agencies – Health Care Surveys
- §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
- §170.315(h)(1) – Direct Project

Standards Updates (SVAP and USCDI)

Standard (and version)	All standards versions are as specified in 2015 Edition/Cures Update
Date of ONC-ACB notification (SVAP or USCDI)	Not applicable
Date of customer notification (SVAP only)	Not applicable
USCDI-updated criteria	Not applicable

Care Setting(s)

See summary of supported care settings listed in the "Justification for Real World Testing Approach" section.

Overall Expected Outcomes

- Real World Testing will demonstrate that the EHR is conformant to the criteria listed in the "Justification for Real World Testing" section.
- See below for measures and outcomes associated with the use cases associated with the listed certification criteria.

Measure Used

Use Case 1 – During the course of care, providers share patient records (CCDAs) with each other and where appropriate, reconcile key clinical data elements into the chart.

Certification Criteria	Requirement
§ 170.315 (b)(1) Transition of care	(i) Send and receive via edge protocol…
	(ii) Validate and display…
	(iii) Create…
	(i) General requirements…

§ 170.315 (b)(2) Clinical information reconciliation and incorporation	(iii) Reconciliation…
§ 170.315 (b)(9) Care plan	Enable a user to record, change, access, create, and receive care plan information in accordance with the Care Plan document template…
§ 170.315 (g)(6) Consolidated CDA creation performance	(i) Reference C-CDA match..
	(ii) Document-template conformance…
	(iii) Vocabulary conformance…
	(iv) Completeness verification…
§ 170.315 (h)(1) Direct project	(i) Applicability Statement for Secure Health Transport…
	(ii) Delivery Notification in Direct

Measure 1: Create and send a CCDA: This measure will evaluate the creation and sending of CCDAs (Referral Note, CCD, Discharge Summary) at scale across many providers using athenaClinicals for HHS in a live production environment.

- Justification: A statistically significant sample size of CCDAs generated and sent by athenaClinicals for HHS spanning multiple organizations with expected errors will validate successful use in the real world.
- Test Methodology: System logs will be evaluated for each required type of CCDA that was created and sent.
- Expected Outcomes: Success is defined as CCDAs of each required type successfully being created and sent via Direct with expected errors (e.g., invalid direct address, no response from receiver, etc.)

Measure 2: Receive and display a CCDA – This measure will demonstrate EHR ability to receive and display a CCDA of each type (Referral Note, CCD, Discharge Summary, Care Plan) in a live production environment.

- Justification: Two sub-measures will be evaluated: 1) A manual evaluation of production examples of each required type of CCDA (Referral Note, CCD, Discharge Summary and Care Plan) will show that athenaClinicals for HHS can successfully receive and display CCDAs. 2) An evaluation of a statistically significant number of CCDAs received and displayed by providers using athenaClinicals for HHS spanning multiple organizations will validate successful use in the real world.
- Test Methodology: 1) Examples of CCDAs of each type will be randomly selected for manual review spanning various care settings in the athenaClinicals for HHS network. 2) System logs will be evaluated to identify the number of CCDAs that were successfully received and displayed.
- Expected Outcomes: Success is defined as:
  1) Chosen examples are successfully received and displayed.
  2) CCDAs successfully received via Direct and displayed with expected errors (e.g., incorrect CCDA format).

Measure 3: Receive and reconcile a CCDA – This measure will demonstrate EHR ability to receive and reconcile a CCDA of each required type (Referral Note, CCD) in a live production environment.

- Justification: An evaluation of reconciliation use spanning a statistically significant number of active users spanning multiple organizations will validate successful use in the real world.
- Test Methodology: System logs will be evaluated to determine the number of users that successfully reconcile a CCDA using CEHRT.
- Expected Outcomes: A high number of users successfully use CEHRT to receive and reconcile data into patient charts.

Use Case 2 – During the course of care, patients access a copy of their record (CCDs) for viewing, downloading and/or transmitting.

Certification Criteria	Requirement
§ 170.315 (e)(1) View, download, and transmit to 3rd party	(i) (A) View…
	(i)(B) Download…
	(i)(C) Transmit to third party…
§ 170.315 (h)(1) Direct project	(i) Applicability Statement for Secure Health Transport…
	(ii) Delivery Notification in Direct

Measure 1: Validate user behavior around view actions – This measure will demonstrate the ability for a patient to preview a CCD, Referral Note and Discharge Summary document template in a live production environment for the athenaClinicals for HHS patient portal (athenaCommunicator)

- Justification: The CCD document template contains all required data elements in § 170.315 (e)(1)(i)(A).
- Test Methodology: System logs will be evaluated to identify patients with a successful CCD, Referral Note or Discharge Summary document view in athenaCommunicator.
- Expected Outcomes: Success is defined by the number of patients with successful CCD, Referral Note or Discharge Summary document previews.

Measure 2: Validate user behavior around download actions – This measure will demonstrate the ability for a patient to download a CCD, Referral Note and Discharge Summary document template in a live production environment of athenaCommunicator.

- Justification: An evaluation of a statistically significant number CCD, Referral Note and Discharge Summary document downloads spanning multiple organizations will demonstrate the successful real-world use of the download feature.
- Test Methodology: System logs will be evaluated to identify patients with a successful CCD, Referral Note or Discharge Summary document download in athenaCommunicator.
- Expected Outcomes: Success is defined by the number of patients that can successfully download CCD, Referral Note and Discharge Summary documents.

Measure 3: Validate user behavior around transmit actions – This measure will demonstrate the ability for a patient to transmit a CCD, Referral Note and Discharge Summary document template to a third party in a live production environment of athenaCommunicator.

- Justification: An evaluation of a statistically significant number of CCD, Referral Note and Discharge Summary document transmissions spanning multiple organizations will demonstrate the successful real-world use of the transmit feature.
- Test Methodology: System logs will be evaluated to identify CCD, Referral Note and Discharge Summary documents successfully transmitted from athenaCommunicator. The analysis will break out transmission via either Direct or email.
- Expected Outcomes: Success is defined as:
    - CCD, Referral Note or Discharge Summary documents successfully sent via Direct with expected errors (e.g., invalid Direct address, lack of response, etc.)
    - CCD, Referral Note or Discharge Summary documents successfully sent via email with expected errors (e.g., invalid email address, etc.)

Use Case 3 – EHR users export Electronic Health Information (EHI) for one or many patients for the purpose of sharing with providers, patients or moving bulk data to another EHR.

Certification Criteria	Requirement
§ 170.315 (b)(10) Electronic health information export	(i) Single patient electronic health information export…
	(ii) Patient population electronic health information export…
	(iii) Documentation…

Measure 1: Single/Multi patient export – This measure will assess functionality used to export EHI for a single patient and multiple patients in a production environment.

- Justification: The evaluation of a statistically significant number of exports by users spanning multiple organizations using athenaClinicals for HHS will demonstrate the real-world utility of the data export.
- Test Methodology: System logs will be reviewed to determine the volume of exports generated in various configurations (e.g., single-patient, multi-patient, etc.) and only by authorized users.
- Expected Outcomes: Only authorized users will be able to successfully create export summaries and there will be evidence of successful exports using various configurations (e.g., single-patient, multi-patient, etc.)

Use Case 4 – Clinicians electronically prescribe medications.

Certification Criteria	Requirement
§ 170.315 (b)(3) Electronic prescribing	(i)(A) Enable a user to perform the following prescription-related electronic transactions…
	(i)(C) For the following transactions, the technology must be able to receive and transmit the reason for the prescription…

Measure 1: Transaction success rates – This measure will evaluate athenaClinicals for HHS successful use of required eRx transaction types (via Surescripts).

- Justification: A statistically significant sample size of electronic prescriptions spanning multiple organizations using athenaClinicals for HHS will demonstrate the real-world utility of the feature.
- Test Methodology: System logs will be reviewed to determine success rate for each transaction type relative to the listed benchmark.
- Expected Outcomes: Transactions are successfully delivered with expected errors (e.g., pharmacy does not support electronic transactions, etc.) and achieving the following transaction success rates:
  - NewRx – 99%
  - RxChange – 99%
  - CancelRx – 99%
  - RxRenewal – 99%
  - RxFill – 99%
  - Medication History – 99%

Use Case 5 – Data is appropriately triggered and submitted to relevant public health agencies.

Certification Criteria	Requirement
§ 170.315 (f)(1) Transmission to immunization registries	Create immunization information for electronic transmission…
§ 170.315 (f)(2) Transmission to public health agencies – syndromic surveillance	Create syndrome-based public health surveillance information…
§ 170.315 (f)(5) Transmission to public health agencies – electronic case reporting	Consume and maintain a list of trigger codes…
§ 170.315 (f)(7) Transmission to public health agencies – health care surveys	Create health care survey information for electronic transmission…

Measure 1: Immunization message success – This measure will evaluate the ability for athenaClinicals to submit conformant immunization messages.

- Justification: The evaluation of a statistically significant number of immunization messages spanning multiple organizations using athenaClinicals for HHS will demonstrate the real-world utility of the capability.
- Test Methodology: System logs will be evaluated for different message types including administered (VXU V04 message), historical and forecast query (QBP Q11, RSP K11 Query message).
- Expected Outcomes: Success is defined as (with expected errors including no response from registry, formatting error beyond the scope of CEHRT specification requirements, etc.):
  - Administered vaccines (VXU V04 message) successfully sent to immunization registry.
  - Historical and forecast query requests (QBP Q11 Query message) successfully sent to registry and historical immunizations and forecast (RSP K11 Response message) returned from registry.

Measure 2: Syndromic surveillance message success – This measure will evaluate the ability for athenaClinicals for HHS to submit conformant syndromic surveillance messages spanning urgent care, emergency department and inpatient settings.

- Justification: The evaluation of a statistically significant number of syndromic surveillance messages spanning multiple organizations using athenaClinicals for HHS will demonstrate the real-world utility of the capability.
- Test Methodology: System logs will be evaluated for all applicable messages sent to registries.
- Expected Outcomes: Success is defined as the successful message submission to and receipt by all actively engaged registries, with expected errors (e.g., no response from registry, formatting error beyond scope of CEHRT specification requirement, etc.)

Measure 3: Healthcare survey generation success – This measure will evaluate the ability for athenaClinicals for HHS to generate conformant healthcare survey CCDA documents in the inpatient and emergency department settings.

- Justification: The evaluation of documents spanning multiple organizations using athenaClinicals for HHS will demonstrate the real-world utility of the capability.
- Test Methodology: System logs will be evaluated for all applicable CCDA documents.
- Expected Outcomes: Surveys successfully generated and accepted by National Center for Health Statistics (NCHS) with expected errors (e.g., formatting error beyond the scope of CEHRT specification requirement, etc.)

Measure 4: Electronic case reporting success – This measure will evaluate the ability for athenaClinicals for Hospitals and Health Systems to send Case Reporting electronically to public health agencies through the AIMS Platform.

- Justification: athenaClinicals for Hospitals and Health Systems supports Electronic Case Reporting using the eCR Now application. The evaluation of documents generated and submitted to public health agencies from the eCR Now application will demonstrate the real-world utility of the capability.
- Test Methodology: System logs will be evaluated to determine 1) the count of encounters that generate Electronic Initial Case Report (eICR) documents and 2) the number of eICR documents for which a Reportability Response is received from the public health agency.
- Expected Outcomes: 1) eICR documents are successfully generated for reportable conditions and 2) successfully received by public health agencies via AIMS platform as acknowledged by Reportability Responses.

Use Case 6 – Independent vendors, as well as athenahealth customers and partners of our Marketplace Program use certified APIs for both patient and provider-oriented use cases.

Certification Criteria	Requirement
§ 170.315 (g)(7) Application access – patient selection	(i) Functional requirement. The technology must be able to receive a request with sufficient information to uniquely identify a patient and return an ID or other token that can be used by an application to subsequently execute requests for that patient's data.
§ 170.315 (g)(9) Application access – all data request	(i) Functional requirements Respond to an API request to output the patient's data in a CCDA
§170.315(g)(10) Standardized API for Patient and Population Services	(i) Functional requirements…

Measure 1: Request success rate for certified APIs – This measure will evaluate the successful use of all certified APIs under (g)(7), (g)(9) and (g)(10) certification criteria (see here) through the lens of individual transaction requests by request, API Information Source and API Users.

- Justification: The evaluation of a statistically significant sample size of API requests in the production system spanning a broad spectrum of API Information Sources demonstrates real-world request volume from external applications. Tracking success and failure rates of the API responses by HTTP response status codes further validates the results of the APIs against real-world use cases. The measures also demonstrate the ability to provide sufficient supporting API documentation (see here) to enable external API developers to integrate with athenaClinicals for HHS. Finally, capturing API response rate for 3-legged Personal Health Record applications shows results for allowing patients to use third-party apps to request their health records.
- Test Methodology: Production system logs of external API usage will be reviewed to determine the success rates for the following:
  - API Requests Served (not including OAuth calls)

- Numerator: # of successful responses
- Denominator: Total requests of certified API(s)
  - OAuth Requests Served
    - Numerator: # of successful responses
    - Denominator: Total OAuth requests
  - API Information Sources with at least one successful response – Validates successful API use spanning current API Information Sources
    - Numerator: Total API Information Sources with at least one successful response
    - Denominator: Total API Information Sources with at least one request
  - API Users with at least one successful response – Validates successful API use spanning current API Users
    - Numerator: Total API Users with at least one successful response
    - Denominator: Total API Users with at least one request
  - 3-legged Personal Health Record (PHR) Apps with at least one successful response – Validates successful API use spanning current 3-legged PHR Apps
    - Numerator: Total 3-legged PHR Apps with at least one successful response
    - Denominator: Total 3-legged PHR Apps with at least one request
- Notes:
  - External API usage is defined as API traffic initiated by our customers, partners and vendors. API calls generated by athenaClinicals for HHS internal services will be excluded.
  - 3-legged PHR API User is defined as applications using 3-legged OAuth to allow patient authorization of access to their health records in athenaClinicals.
  - OAuth requests do not capture API Information Sources as the purpose of these calls is to request access token to call one or more API endpoints. Due to inability to split by API Information Sources, the same result for "OAuth Requests Served" will be used for both athenaClinicals and athenaClinicals for Hospitals and Health Systems 2024 Real World Test Plans.
- <u>Expected Outcomes:</u> We expect to see performance of >99% on the above measures.

Schedule of key milestones

Key Milestones	Date/Timeframe
Start of collection of necessary data as laid out by plan (will vary by measure)	January 2024
End of collection of necessary data as laid out by plan (will vary by measure)	January 2025
Analysis of data (will vary by measure)	On-going 2024
Submit Real World Testing report to ACB	February 2025

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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: 10/31/2023