Executive Summary and Developer Attestation

As a developer of software certified under the Office of the National Coordinator for Health Information Technology Health IT Certification Program, AdvancedMD is pleased to submit this Real-World Test Plan for calendar year 2023 in accordance with 2015 Edition and 2015 Cures Update Edition certification criteria.

AdvancedMD' s objective is to demonstrate interoperability and functionality of Certified Health IT in real world settings and scenarios. Real world testing verifies that deployed Certified Health IT continues to perform as intended by conducting and measuring observations of interoperability and data exchange. These observations are described in a public and transparent way through Real World Testing plans and reported as Real-World Testing results.

AdvancedMD affirms 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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General information

Developer Name	AdvancedMD
Plan Report ID Number	AdvancedMD-2023RWTP
Product Names(s)	AdvancedMD 22.2 CHPL: 15.04.04.2666.Adva.22.04.1.221011 AdvancedMD Mobile 4 CHPL: 15.04.04.2666.AdvM.04.01.1.201229
URL with RWT Plan and Results	https://www.advancedmd.com/emr-ehr-software/meaningful-use/ehr-certification/

Care Settings Targeted

AdvancedMD offers a single instance EHR that is hosted in the cloud for Ambulatory practices as well as a complementary Mobile App certified for § 170.315(b)(3) Electronic Prescribing. Testing metric reporting will focus on ambulatory specialty practices including Family Practice, Behavioral Health, Pediatric, Internal Medicine, Physical Medicine and practices participating in the CMS QPP MIPS Program.

Real World Testing Care Coordination § 170.315(b)

§ 170.315(b)(1) - Transitions of Care

Measurement: Audit sent transition of care/referral summaries for conformance to §170.315 (b)(1)(i).

Description: Clinicians use the Outbound Clinical Information Exchange (CIE) module where they can search for a patient, search for a provider within the direct network or print, select a date range, and insert the reason for referral. Once created and reviewed, users can send or print the Transitions of Care document. To see that the transmission was successful, users view the eSend status report for Outbound CIE. For incoming transitions of care, Practices are notified that an inbound clinical information exchange file has been received via the Inbound CIE donut on the EHR dashboard. Thousands of messages are exchanged daily as reported via Surescripts Message Audit Report.

Methodology: Using the Surescripts Message Audit Report we will track the overall number of times a Referral/Transition of Care is eSent.

- Metric: We will report in the denominator, the total number of outbound CIE sent with a numerator of successful transmissions.

Justification: Thousands of files are exchanged going in and out of AdvancedMD via Surescripts Direct Messaging. This measure will investigate the transmissions that are being sent out of the system to ensure clinicians are accurately transmitting files.

Expected Outcomes: Files are being sent successfully 90% of the time.

SVAP: N/A

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

Measurement: To determine engagement, this measure will track how often practices reconcile data and incorporate the incoming C-CDA into the EHR throughout the year.

Description: Practices are notified that an inbound clinical information exchange file has been received via the Inbound CIE donut on the EHR Dashboard. Users see a visual display of the number of unreviewed inbound files alerting them that action is required. Users select the donut to display the list of patients that have received a new file. In the module, users see the attachments, CDA and patient demographic information. Once the patient file is matched to the patient in the EHR, users review the existing Medications, Problems and Allergies. After the three data sets are reviewed and marked historic, current or dismiss, the user confirms to reconcile the selected data into the patient chart.

Methodology: Utilizing internal tracking logs, we will track the practices that complete the reconcile action as well as the number of referrals reconciled.

Justification: Tracking the number of practices who reconcile data and incorporate the incoming file will expose if clients are engaged with the Inbound CIE module.

Expected Outcomes: It is expected practices understand the benefits of data reconciliation and incorporation and will reconcile patient data more than once per year.

SVAP: N/A

§ 170.315(b)(6) - Data Export

Measurement: This measure will test export summaries downloaded from a live production environment are formatted with the standard specified in §170.205(a)(4) and support the CCDS data elements.

Description: From the EHR, an authorized user can configure the technology to create export summaries. Practices use the Patient Data Export feature to filter patients, and export their chart information immediately, or they can set up a recurrence to send patient charts to an external source.

Methodology: Using the ETT: Message Validators, a sample of patient export summaries will be downloaded from production and tested for conformance.

- Metric: The number of samples tested will be reported in the Denominator, and the number of successful validated files in the Numerator.

Justification: Testing the production environment with synthetic test patient data will accurately determine if the module is working as expected.

Expected Outcomes: It is expected the exported file from the sample of active ambulatory practices will pass the ONC CCDA validator tool and the files will be populated with appropriate patient level data.

SVAP: N/A

§ 170.315(b)(3) - Electronic Prescribing

Measurement: This measure will track the monthly average error rate of New Prescription (NewRx) Retail Messages sent from AdvancedMD EHR and AdvancedMD Mobile.

Description: There are on average 6000 clinicians utilizing the certified AdvancedMD EHR and/or certified AdvancedMD Mobile App for ePrescribing. On average, there are 2 million new retail prescriptions transmitted monthly. With the 2017071 Script standard in both the EHR and Mobile App, users can send and/or receive the following messages: New Prescription (NewRx),

Cancel Prescriptions (CancelRx, CancelRxResponse), Change/Replace Prescriptions (RxChangeRequest, RxChangeResponse), Renewal Prescriptions (RxRenewalRequest, RxRenewalResponse) and Check Medication History.

Methodology: Utilizing the monthly Surescripts Prescriber Report Card we will be able to monitor and track NewRx errors and identify the issues.

- Metric: Percentage of errors for all NewRx Messages sent

Justification: ePrescribing messaging is monitored 24/7 by a dedicated team. Locating and fixing technical and human errors to improve the provider/pharmacy communication is essential and 100% supported by the AdvancedMD eRx team.

Expected Outcomes: It is expected that authorized users will be able to send NewRx Retail prescriptions without issue, and there will be less than 1% of errors on NewRx Retail reported by Surescripts monthly.

SVAP: N/A

Real World Testing: Clinical Quality Measures § 170.315(c)

170.315 (c)(1): Clinical Quality Measures - Record and Export
170.315 (c)(2): Clinical Quality Measures - Import and Calculate
170.315 (c)(3): Clinical Quality Measures – Report

Description: AdvancedMD has a dedicated team supporting the eCQM lifecycle from updating measures to reporting and exporting files. The record/export and report criterion allows the end user to record all the data that would be required to calculate an eCQM and allows the end user to export a QRDA I or QRDA III file. The Import and Calculate criterion allows the end user to import and calculate every eCQM used for reporting purposes.

Methodology: Rate of successful QRDA I and III downloads and rate of successful Import/calculate requests by clients.

- Metric: Total number of QRDA III downloads will be reported in the Denominator and total successful QRDA III downloads will be reported in the Numerator.
- Metric: Metric: Total number of QRDA I downloads will be reported in the Denominator and total QRDA I successful downloads will be reported in the Numerator.
- Metric: Total number of clients that require the import of a third party QRDA I file in the Denominator and total number of clients that can successfully calculate measures in the Numerator.

Justification: In the real world, clients who participate in the CMS QPP MIPS are required to create a QRDA III to report the clinical quality measurement data collected in 2022. Tracking customer usage and reported issues will test the readiness of the module. Furthermore, clients

that transition during the year to AdvancedMD need to have the data reconciled prior to reporting to CMS QPP.

- Expected Outcomes: Less than 1% of clients reporting to CMS will have a technical issue downloading a QRDA III for 2023 performance period and 100% of users will successfully attest to CMS QPP.
- SVAP: N/A

Real World Testing: Patient Engagement § 170.315(e)

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

Measurement: This measure will track the utilization of the Patient Portal Chart Summary screen where patients view, download, or electronically transmit a human readable CCDA.

Description: Patients have access to the patient portal 24/7 where they can view their medical record. The Chart Summary is where patients can View, Download and Transmit clinical data. Patients can view data within the USCDIv1 data set, download in PDF or XML and share clinical data using a secure direct messaging (Surescripts) or personal unsecure email.

Methodology: Tracking patient analytics with internal reporting tools for each segment (View, Download (PDF and XML) and Transmit to an unsecure email address or Secure Direct address.

- Metric: By using a subset/sample of 10 ambulatory practices we will report on the total number of active portal accounts in the Denominator and number of patients who have Viewed, Downloaded or Transmitted to a secure or unsecure address in the Numerator.

Justification: Tracking customer usage metrics such as low-touch segments and high-touch segments will determine customer engagement and needs. Data will be used to display trends in patient preference and ensure proper visibility of the certified criteria. Results will clarify if additional guidance/education is needed.

Expected Outcomes: It is expected that patients with active accounts will log into the portal and use the Chart Summary to view, download and/or transmit their records (target 75%). Target is reflective of having multiple resources for access to records.

SVAP: N/A

Real World Testing: Public Health § 170.315(f)

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

Measurement: Track immunization onboarding integration testing start date and go live date to determine if there delays due to non-conformity.

Description: When a practice requests an immunization interface with its state registry, AdvancedMD works with the state and practice to start the onboarding process. Live testing is conducted between the practice, AdvancedMD and the State Registry to ensure the interface is sending correct data in the correct format as well as returning data back to AdvancedMD. When errors are identified by the state, the errors are resolved with Iron Bridge as needed. Once the state registry confirms the live testing is complete and accurate, Iron Bridge and AdvancedMD set the client to go live in the portal allowing the client to submit data to the state registry with live patient data.

Methodology: Tracking the interface testing start date and go live date will be conducted in AdvancedMD's customer onboarding tracking case system. Data will determine the duration time to go live and the number of practices that successfully go live. An analysis of the findings will determine non-conformities that delay go live dates.

- Metric: We will report in the Denominator the total number of new practices/clinicians requesting a new interface for state immunization registry. We will report in the Numerator the total number of new practices/clinicians who went from testing/validation to sending live production data successfully within 30 days or less.

Justification: State registry integration testing is the first real world test for a bi-directional immunization registry interface. Onboarding a practice with a state immunization registry requires a series of live testing events with live data between the practice, AdvancedMD, the State Registry, and when needed Iron Bridge. Every state registry is different in what they test and how long testing will take. Only when the state registry determines that testing is completed and accurate will a client go live.

Expected Outcomes: It is expected that once immunization integration testing has started with the state, the practice go live date will be within 30 days.

SVAP: N/A

Real World Testing: Application Programming Interfaces § 170.315(g)

170.315 (g)(7): Application Access - Patient Selection
*170.315 (g)(8): Application Access - Data Category Request **
170.315 (g)(9): Application Access - All Data Request

Note*: As of December 1, 2022 AdvancedMD has certified for the new 170.315 (g)(10) Standardized API for patient and population services which will replace 170.315 (g)(8): Application Access - Data Category Request.

Measurement: The RWT method will focus on tracking live production API requests and responses from registered application.

Methodology: AdvancedMD uses Apigee Interface for Patient APIs. With reporting from Apigee Admin Analytics we will be able to track total traffic, traffic success and traffic errors under a real-world production environment. The data provided will track both patient and provider requests.

- Metric: The success rate of total API traffic. The denominator will be total traffic and numerator will be successful traffic (target = 95%+)

Justification: With the transition from the old non-standard Patient API to the new standardized FHIR API we hope to see more developer engagement. AdvancedMD will be actively engaging clinicians to work with the new standardized FHIR API to learn about end user best practices. All care settings will be included in the analysis.

Expected Results: 95% success rate of all API traffic. Target percentage includes possible technical downtimes and issues.

SVAP: N/A

Real World Testing: Transport Methods § 170.315(h)

170.315 (h)(1): Direct Project

Measurement: This measure will track the success rate and error rate for all inbound and outbound direct message transmissions.

Description: Clinicians use the Outbound Clinical Information Exchange (CIE) module where they can search for a patient, search for a provider within the direct network. Once created and reviewed, users can eSend the Transitions of Care document. For incoming transitions of care, Practices are notified that an inbound clinical information exchange file has been received via the Inbound CIE donut on the EHR dashboard.

Methodology: Utilizing Surescripts monthly audit messaging report we will determine the number of successful and failed transmissions within the specified time.

- Metric: Total number of Outbound exchanges attempted in the Denominator, and total number of errored Outbound exchanges in the Numerator.
- Metric: Total number of Inbound files received in the Denominator, and total number of errors with Inbound files received in the Numerator.

Justification: Tracking interoperability exchange success and error rate will highlight the importance of data interoperability and tracking errors will identify areas for improvement.

Expected Outcomes: It is expected that there will be less than 5% monthly error rate for each type of transmission, Outbound and Inbound.

SVAP: N/A

Testing Timelines and Key Milestones

Milestones	Dates/Timeframe
Collection of Data	Quarterly 2023
Analysis and report creation	January 1, 2024 – February 1, 2024
Submit Real World Testing Report to Drummond	February 2024

Relied Upon Software

AdvancedMD partners with *Surescripts*. The following criteria are supported by Surescripts:

- 170.315 (b)(1): Transitions of Care: Surescripts Clinical Direct Messaging
- 170.315 (e)(1): View, Download, and Transmit to 3rd Party: Surescripts Clinical Direct Messaging
- 170.315 (h)(1): Direct Project: Surescripts Clinical Direct Messaging
- 170.315 (b)(3): Electronic Prescribing: Surescripts ePrescribing

AdvancedMD partners with *Iron Bridge* for Immunization Registry Reporting.

- 170.315 (f)(1): Transmission to Immunization Registries

AdvancedMD uses *Apigee Edge* for API criteria

- 170.315 (g)(9): Application Access - All Data Request Apigee Edge version: 4.51.00
- 170.315 (g)(7): Application Access - Patient Selection Apigee Edge version: 4.51.00