AdvancedMD Real World Test Results 2022
Plan Report ID Number: AdvancedMD2022RWTPR

Summary and key findings

To meet the ONC requirement for real-world interoperability testing of certified modules, AdvancedMD tracked usage/engagement, tracked messaging errors as well as conducted internal audits. After the first year of testing, we learned that some of our data collection tools did not collect, and report as expected and therefore we needed to make some minor measure adjustments. We learned that gathering the data on a regular cadence needs to be automated as much as possible. In reviewing the overall results, we found some unexpected low usage of interoperable modules that will help guide our training to better educate our clients. Other results, such as tracking e-Prescribing errors were expected as this monitoring has been on-going and is supported by a dedicated team. For 2023 and beyond, AdvancedMD will continue to evaluate the testing methods and measures to better serve our clients with meaningful data.

Product Name(s)/Versions:

1. AdvancedMD 21.3, 22.1, 22.2 and 22.3
   CHPL 5.04.04.2666.Adva.22.04.1.221212
2. AdvancedMD Mobile 4
   CHPL 15.04.04.2666.AdvM.04.01.1.201229

Developer Real World Testing Plan/Results Page URL:

www.advancedmd.com/emr-ehr-software/meaningful-use/ehr-certification

Withdrawn Product Name(s):

1. 170.315 (g)(8): Application Access - Data Category Request
   - Date(s) Withdrawn: 12/2022
   - Inclusion of Data in Results Report: Data is available in the report

SVAP: None of the products include voluntary SVAP standards

Schedule of Key Milestone:

Milestones	Dates/Timeframe
Collection of Data	Quarterly 2022
Analysis and report creation	January 2023

170.315 (e)(1): View, Download, and Transmit to 3rd Party
Relied Upon Software: Surescripts Clinical Messaging

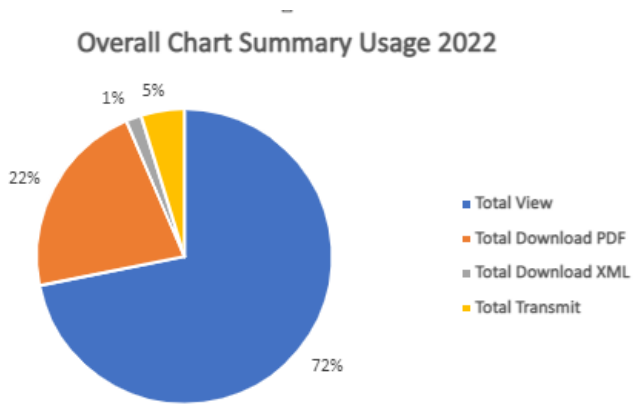
Care setting: All ambulatory specialties are included that AdvancedMD supports

Measure: This measure will track the utilization of the Chart Summary screen in the patient portal where patients are able to view, download and transmit data

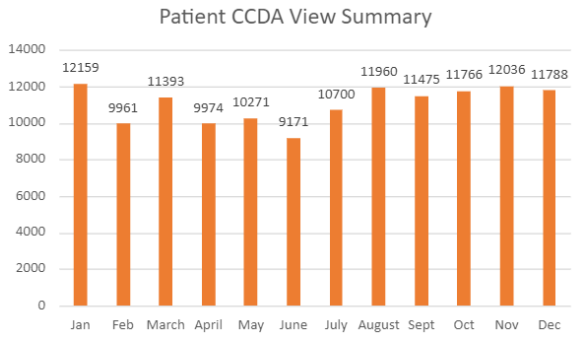
Change: Direct Transmit analytics were not able to be separated from all Direct Secure Transmit events and therefore not included in 170.315 (e)(1): View, Download, and Transmit to 3rd Party. Reason: Surescripts reports and internal reporting tools were unable to separate Clinical Direct Transmit messaging from the patient portal. Impact: Unknown usage of Secure Direct Messaging by patients in the patient portal.

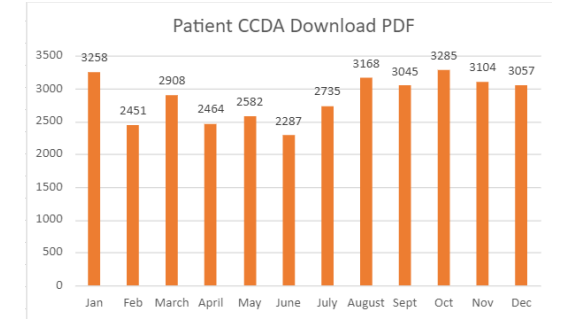
Expected Outcomes: It is expected that patients will log into the portal and use the Chart Summary to view, download and transmit their records. It is expected that patients will prefer to download a pdf file over the other options.

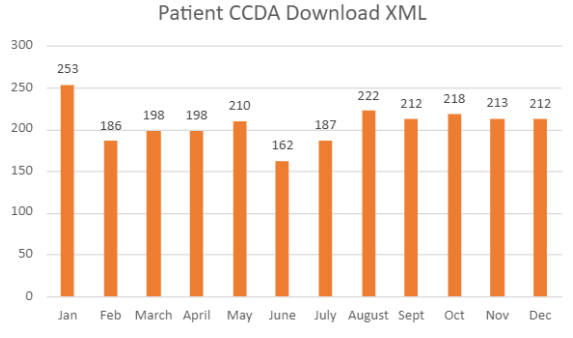
Results: In 2022, there were 141,681 patient portal chart summary events. 72% of the time, a patient selected View Chart Summary, followed by Download PDF (22%), Transmit (5%) and then Download XML (1%). The plan to track patient utilization demonstrates overall patient preference when accessing health care records. Most patients preferred to view the data and to not download or exchange the data.

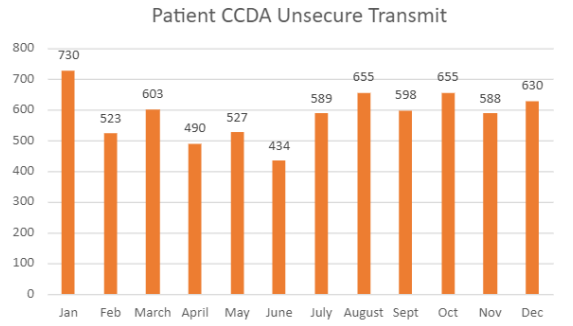


Patient Portal Utilization
View, Download, Transmit Monthly Events









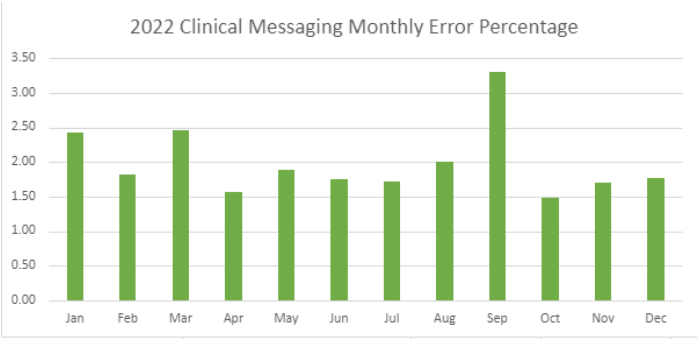
170.315 (b)(1): Transitions of Care / 170.315 (h)(1): Direct Project
Relied Upon Software: Surescripts Clinical Messaging

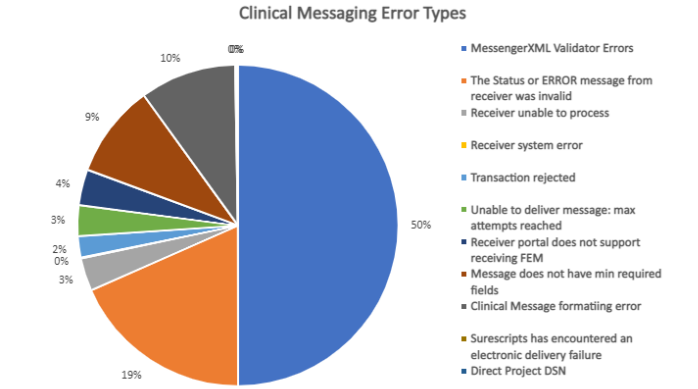
Care Settings: All ambulatory specialties are included that AdvancedMD supports

Measure: This measure will track delivery errors for inbound and outbound direct clinical message transmissions coming in and out of AdvancedMD.

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

Results: In 2022, the inbound/outbound direct messaging monthly error rate combined was less than 3.5%. There were approximately 500,000 inbound messages received and 15,000 outbound messages sent. The heavy inbound traffic resulted in 79% of the errors, and 21% were outbound errors. Tracking errors and total messaging transmissions display real world interoperability. Moving forward we intend to track the inbound/outbound messaging errors more granularly. Using Surescripts Clinical Messaging monthly reports, we were able to determine most errors were Message/XML validation errors. Common errors included "Gender element is incorrect," "Failover: ruleset determined that message does not have minimum required fields," "Email field is invalid," and "Invalid values for the different fields." AdvancedMD is working with Surescripts to better understand the errors and to correct them.





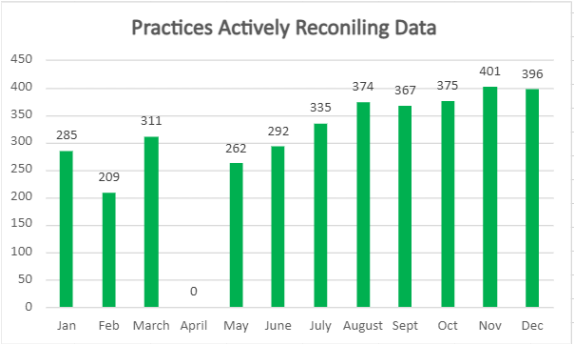
170.315 (b)(2): Clinical Information Reconciliation and Incorporation

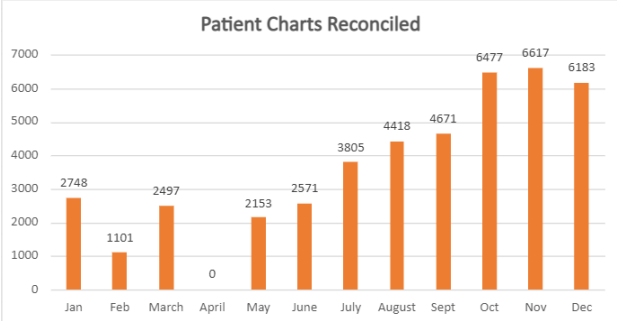
Care settings: All ambulatory practices supported in addition to practices participating in the CMS QPP MIPS Promoting Interoperability Category.

Measure: To determine engagement, this measure will track how often practices reconcile data into the EHR throughout the year.

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

Results: During 2022, we had an increase in practices using the Inbound CIE tool, although overall usage is less than expected. There was steady growth (39%) in practices that are actively using the CIE Inbound Reconciliation tool. Of those practices engaged, there was 125% increase in reconciled patient charts. Surescripts clinical messaging reports detailed approximately 500,000 inbound messages were received in 2022. In addition to referral documents, ADT and immunization alerts are also heavily received. With the heavy inbound messaging traffic, it was expected that more practices would be reconciling patient charts. Tracking usage displays real world interoperability, although the results show less engagement than expected.





Due to technical issues April data is not available

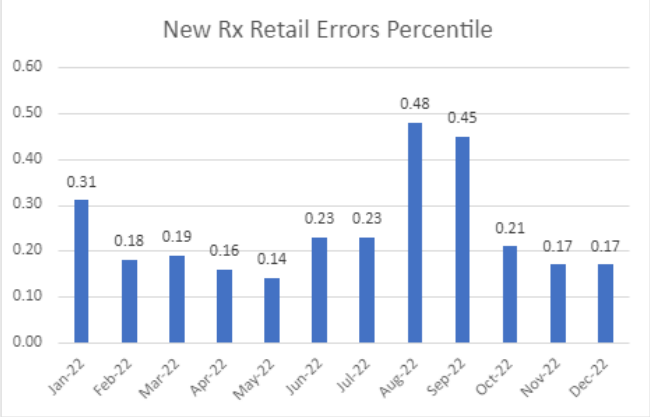
170.315 (b)(3): Electronic prescribing
Relied Upon Software: Surescripts Clinical Messaging

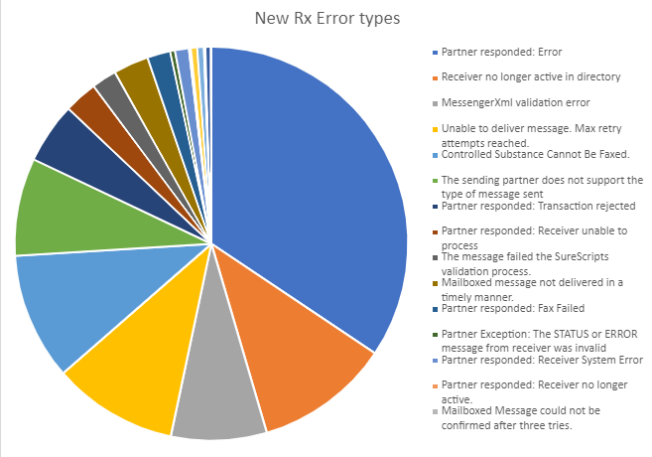
Care settings: All ambulatory specialty types are included that AdvancedMD supports.

Measure: Track the monthly average error rate of New Prescription (NewRx) Retail Messages sent from AdvancedMD EHR and AdvancedMD Mobile.

Expected Outcome: It is expected that authorized users will be able to send NewRx Retail prescriptions, and there will be less than 2% of errors reported monthly caused by technical interoperability issues.

Results: In 2022, there was less than 0.50% total error rate during the year with approximately 24,326,428 New eRx messages sent out of AdvancedMD. Most errors reported included "Partner Responded Errors" followed by "Receiver no longer active in directory" and "Messenger XML validation errors". AdvancedMD has a dedicated team supporting eRx and continues to monitor interoperability year-round.





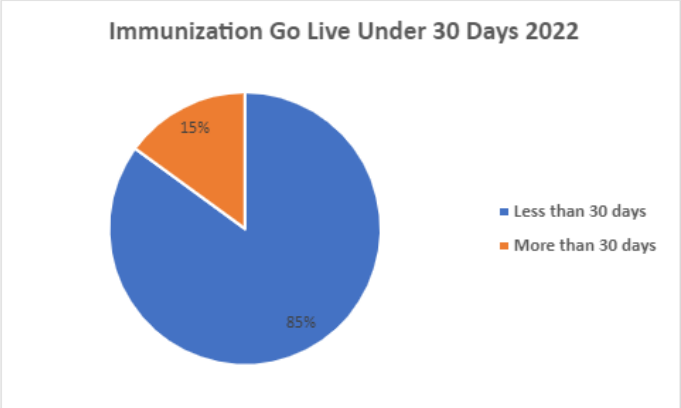
§170.315(f)(1) Transmission to Immunization Registries
Relied Upon Software: Iron Bridge Corp

Care settings: Family Practices and Pediatric care settings are the primary users of the immunization module.

Measure 1: Track immunization onboarding integration testing start date and go live date to determine if there are delays due to non-conformity.

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

Results: In 2022, there were 42 practices that contacted AdvancedMD for an immunization interface. Out of the 42 practices, only 20 were engaged and completed the requirements to go live. A total of 17 out of 20 (85%) started to send live data to the state registry in less than 30 days from engagement. 3 out of the 20 (15%) took more than 30 days before live data was sent to the state registry. Unique state requirements, and practice engagement contribute to delays in going live. Overall, AdvancedMD has 147 immunization interfaces with a growth of 13% in 2022. Interoperability is being tracked by engagement and successful transmissions.



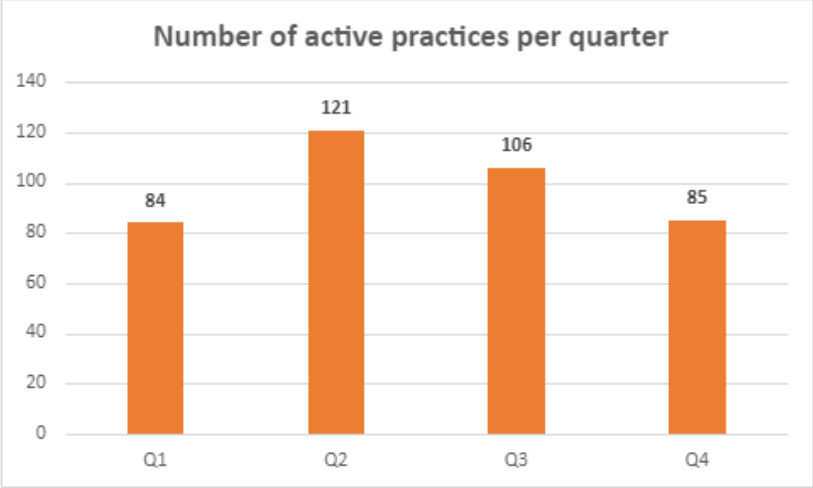
Measure 2: Track "Fetch from Registry" engagement by Daily Active Users and Monthly Active Users (DAU/MAU).

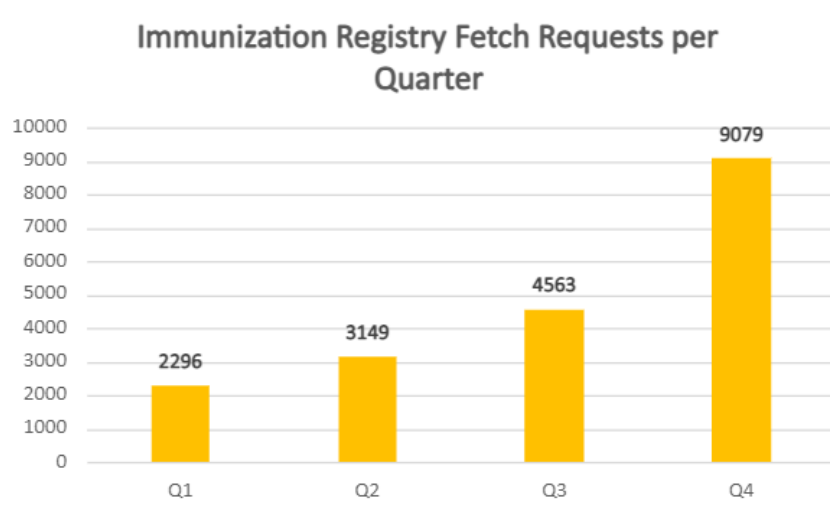
Expected Outcomes: It is expected that the standard DAU/MAU for the Fetch Immunization Registry ratio will be more than 10% of total practices.

Change: The metric tool to be used to collect immunization fetch data did not support the DAU/MAU requirements as expected. The measure will now track usage by practice and patient history by quarter.

§170.315(f)(1) Transmission to Immunization Registries
Relied Upon Software: Iron Bridge Corp

Results: AdvancedMD has approximately 147 active practices using the immunization registry module. The average number of practices requesting the bi-directional historical data from the state registry is 99 or 67% of practices. During 2022, the number of requests to fetch immunization history increased by 295%. The interoperability results show historical fetch events are increasing and being used regularly if not daily.





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
Relied Upon Software: Apigee

Care Setting: Providers interested in data exchange and providers participating in CMS QPP MIPS Promoting Interoperability category.

Measure: An internal audit of the API documentation requirements

Expected Outcome: During 2022, AdvancedMD had no active clients attempting to use the certified Patient API module. To date, no 3rd-party developer has used the Application Patient APIs. In November 2022, AdvancedMD certified for §170.315(g)(10) Standardized API for patient and population services and in doing so replaced § 170.315 (g)(8) Application access data category request. It was expected that interest in the patient API would continue to be insignificant in 2022 especially since the new FHIR API was being released. As the documentation requirement continues, an audit would confirm the information was accurate.

Results: An internal audit determined the website accurately displayed the documentation requirements presented. AdvancedMD continues to move forward with the new FHIRAPI and in 2023 will monitor usage via the Apigee Admin Dashboard.

	A1: The API must include accompanying documentation that contains, at a minimum: *API syntax, function names, required and optional parameters and their data types, return variables and their types/structures, exceptions and exception handling methods and their returns.*	A2: The API must include accompanying documentation that contains, at a minimum: *The software components and configurations that would be necessary for an application to implement in order to be able to successfully interact with the API and process its response(s).*	B: The documentation used to meet paragraph (g)(7)(ii)(A) of this section must be available via a publicly accessible hyperlink
170.315 (g)(7)	Confirmed	Confirmed	Confirmed
170.315 (g)(8)	Confirmed	Confirmed	Confirmed
170.315(g)(9)	Confirmed	Confirmed	Confirmed

170.315 (b)(6): Data Export

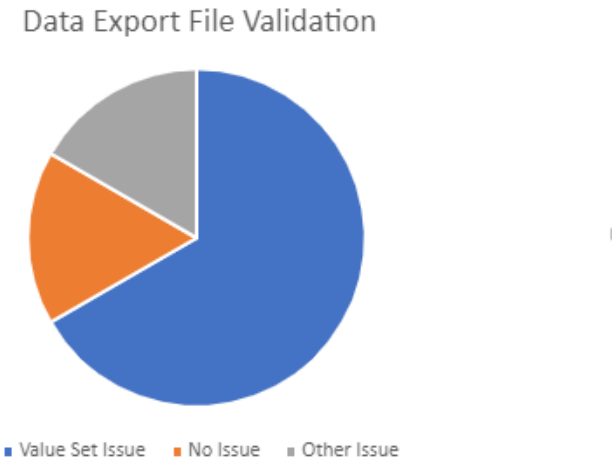
Care settings: Testing will include 6 different ambulatory specialties (Behavioral Health, Internal Medicine, Family Medicine, Physical Medicine, General Surgery, Pediatric)

Measure: Test that the created export summaries downloaded from production environment are formatted with the standard specified in §170.205(a)(4) and support the CCDS data element set.

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.

Results: Six practices from different specialties were randomly selected and audited for data export file errors. Using test patients from live production keys six data exports were generated and XML files were validated using the C-CDA R2.1 Message Validator for 2015 Edition Cures Update.

This interoperability real world test audited files and found errors caused by human error in saved data, Edge Test tool discrepancies, and value set discrepancies. Five files each had one error and one file had no errors. The audit showed the files are 99% to 100% accurate; however, 5/6 had a small discrepancy. The test patients selected were not populated with the complete common clinical data set so not every aspect was tested.



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

Care Settings: Practices participating in CMS QPP MIPS Quality category

Measure 1: Using the latest version of Cypress test all supported certified measures for (c)(1) and (c)(2) successfully.

Change: Updated the measure to state the latest version of Cypress

Expected Outcomes: It is expected that the Advanced Clinical Quality Reporting Module will successfully pass (c)(1) and (c)(2) testing

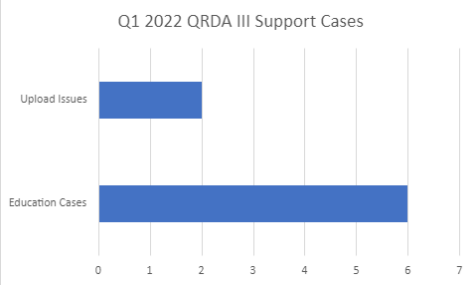
Results: AdvancedMD has a dedicated team supporting eCQM measure's annual updates and on-going support. Cypress testing is done annually and timely to ensure accurate performance rates are available for the full year. During 2022, AdvancedMD used the latest Cypress 7.0.2 and tested 49 eCQM measures successfully.

Vendor	Products	Passing
eCQM2023	49	49

Measure 2: During Q1 2022, track QRDA III usage and errors.

Expected Outcome: Less than 1% of clients reporting to CMS a QRDA III for 2021 performance period will have created a case.

Results: In reviewing our customer support metrics, 8 client cases were created during Q1 2022 that related to QRDA III files. Approximately 90 unique clients downloaded a QRDA III in Q1 2022 and 2 out of the 90 (1.8%) had file upload issues and 6 (6%) had educational questions. Real world interoperability is shown through the successful CMS attestation process



Attestation

This Real-World Testing Result 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 Results requirements.

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Authorized Representative