

## CY 2022 Real World Testing Report for Criterions

## **Executive Summary**

This is the test report for CY 2022 real world testing for Criterions Software, Inc certified EHR solution. This is the companion document to our CY 2022 real world test plan that described our approach for conducting real world testing in CY 2022 and the testing measures we employed.

Our findings show that EHR is working as it was certified as no errors or non-compliances were observed. Results do indicate the functionality that is widely used, like patient portal, electronic prescription, and immunization history querying verse that which is not used, such as QRDA Cat I importing and electronic canceling of prescriptions.

For each our CY 2022 Real World Testing Measures, we have recorded our results and findings. If any non-conformities or errors were encountered, we noted them.

Our signed attestation of compliance with the real world testing requirements is on the following page.



## **Developer Attestation**

This Real World Testing report is complete with all required elements. All information in this plan is up to date and fully addresses the health IT developer's Real World Testing requirements.

Authorized Representative Name: Mark Greenleaf

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DATE: 11/14/2022



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## **General Information**

Plan Report ID Number: Criterions-RWT-2022 Developer Name: Criterions Software Inc Product Name(s): Criterions EHR Version Numbers(s): 4 Certified Health IT Criteria: 315(b)(1)-(3), (b)(6), (c)(1)-(3), (e)(1), (f)(1), (f)(5), (g)(7)-(9) Product List (CHPL) ID(s) and Link(s):

- 15.04.04.2705.Crit.04.00.1.191111
- <u>https://chpl.healthit.gov/#/listing/10171</u>

Developer Real World Testing Page URL: <u>https://criterions.com/rwt</u>



## Timeline and Milestones for Real World Testing CY 2022

- <u>Milestone 1Q-2022</u>: Begin communication with clients to ask for their support and participation in real world testing. The goal is to have a sufficient number of clients committed for real world testing by the end of 1Q-2022.
  - o <u>STATUS:</u> MET
- <u>Milestone 2Q-3Q 2022.</u> During the 2<sup>nd</sup> and 3<sup>rd</sup> quarter of CY 2022, the real world testing with clients will be scheduled and performed. It is expected that a preparatory call will be done with clients to prepare them for testing activities. Results will be documented in the test results section of the test methods and ultimately used to build the test report. If any non-compliances are observed, we will notify the ONC-ACB of the findings and make the necessary changes required.
  - o <u>STATUS:</u> MET
- <u>Milestone 4Q-2022</u>. During the last quarter of the year, the CY 2023 real world test plan will be completed according to ONC and ONC-ACB requirements and expectations. Test plan will be prepared for submission before the end of the year.
  - o <u>STATUS:</u> MET
- <u>Milestone 1Q-2023.</u> Submit RWT Test Report to ONC-ACB.
  - o <u>STATUS:</u> MET



## Standards Version Advancement Process (SVAP) Updates

For CY 2022 RWT testing, we did not do any SVAP updates.

Standard (and version)	N/A
Updated certification criteria and associated product	N/A
Health IT Module CHPL ID	N/A
Method used for standard update	N/A
Date of ONC-ACB notification	N/A
Date of customer notification (SVAP only)	N/A
Conformance measure	N/A
USCDI-updated certification criteria (and USCDI version)	N/A



# RWT Measure #1. Number of Transition of Care C-CDAs Successfully Sent

Associated Criteria: 315(b)(1)

Testing Methodology: Reporting/Logging

Measurement Description

This measure is tracking and counting how many C-CDAs are created and successfully sent from the EHR Module to a 3<sup>rd</sup> party via Direct messaging during a transition of care event over the course of a given interval.

#### Care Settings and Number of Clients Site to Test

We designed this measure for all the ambulatory care settings that we support: orthopedics, primary care, dermatology, cardiology, neurology, OBGYN, ENT, pulmonology, pediatrics, and multispecialty, and the practices involved with this test covered most of these care settings. We worked with a minimum of ten (10) client practices to give an appropriate sample of our user base to effectively evaluate our product's interoperability and functionality of their criteria.

Testing Results Practices Queried: 10 Practices Reporting Results/Utilizing Certification Functionality: 6 Reporting Interval: 3 months (Apr 1, 2022 through June 30, 2022) Testing Metric/Measurement: Number of C-CDA Successfully Sent Average Result: 10,919 Median Result: 11,616

We used our phiMail Server to deliver our C-CDAs to the Healthix HIE for exchange, and it performed as initially certified and in accordance with ONC criteria.

#### Analysis and Key Findings

While not every client does share data through C-CDA, those who do send large volumes of patient records through C-CDAs, primarily through their HIE integration. Our results reveal our EHR Module functionality is working as expected.



#### Non-Conformities or Errors Discovered

During our testing, we did not discover any errors or criteria non-conformities.



## RWT Measure #2. Number of Different Destinations C-CDAs Successfully Sent

Associated Criteria: 315(b)(1)

Testing Methodology: Reporting/Logging

Measurement Description

This measure is tracking and counting how many different outbound destinations the EHR successfully sent C-CDAs via Direct messaging during a transition of care event over the course of a given time frame.

#### Care Settings and Number of Clients Site to Test

We designed this measure for all the ambulatory care settings that we support: orthopedics, primary care, dermatology, cardiology, neurology, OBGYN, ENT, pulmonology, pediatrics, and multispecialty, and the practices involved with this test covered most of these care settings. We worked with a minimum of ten (10) client practices to give an appropriate sample of our user base to effectively evaluate our product's interoperability and functionality of their criteria.

Testing Results Practices Queried: 10 Practices Reporting Results/Utilizing Certification Functionality: 6 Reporting Interval: 3 months (Apr 1, 2022 through June 30, 2022) Testing Metric/Measurement: Number of Different Destinations C-CDA Successfully Sent Average Result: 2 Median Result: 2

We used our phiMail Server to deliver our C-CDAs to the Healthix HIE for exchange, and it performed as initially certified and in accordance with ONC criteria.

#### Analysis and Key Findings

Of the clients who submit C-CDAs, they use an HIE to support their data interoperability exchange. Thus, their primary destination is the HIE who then does the routing of the C-CDAs to in interested parties. While numbers are of different exchange partners is small, results do show EHR can work with different health IT system for C-CDA exchange.



#### Non-Conformities or Errors Discovered During our testing, we did not discover any errors or criteria non-conformities.

Changes for this Measure from Original RWT Test Plan

We did not make any notable changes from our documented RWT Test Plan in our testing methods or metrics.



### RWT Measure #3. Number of C-CDAs Received and/or Incorporated

Associated Criteria: 315(b)(2)

Testing Methodology: Reporting/Logging

#### Measurement Description

This measure is tracking and counting how many C-CDAs are successfully received and/or incorporated upon receipt from a 3rd party via Direct messaging during a transition of care event over the course of a given time frame.

#### Care Settings and Number of Clients Site to Test

We designed this measure for all the ambulatory care settings that we support: orthopedics, primary care, dermatology, cardiology, neurology, OBGYN, ENT, pulmonology, pediatrics, and multispecialty, and the practices involved with this test covered most of these care settings. We worked with a minimum of ten (10) client practices to give an appropriate sample of our user base to effectively evaluate our product's interoperability and functionality of their criteria.

Testing Results Practices Queried: 10 Practices Reporting Results/Utilizing Certification Functionality: 8 Reporting Interval: 3 months (Apr 1, 2022 through June 30, 2022) Testing Metric/Measurement: Number of C-CDA Successfully Received/Incorporated Average Result: 25

Median Result: 3

#### Analysis and Key Findings

Our results reveal our EHR Module functionality is working as expected, but it also shows that this is not a feature our clients are regularly using in their day-to-day workflows.

#### Non-Conformities or Errors Discovered

During our testing, we did not discover any errors or criteria non-conformities.





## RWT Measure #4. Number of NewRx Prescriptions Messages Successfully Sent

Associated Criteria: 315(b)(3)

Testing Methodology: Reporting/Logging

Measurement Description

This measure is tracking and counting how many NewRx electronic prescriptions were created and successfully sent from the EHR Module to a pharmacy destination over the course of a given interval.

#### Care Settings and Number of Clients Site to Test

We designed this measure for all the ambulatory care settings that we support: orthopedics, primary care, dermatology, cardiology, neurology, OBGYN, ENT, pulmonology, pediatrics, and multispecialty, and the practices involved with this test covered most of these care settings. We worked with a minimum of ten (10) client practices to give an appropriate sample of our user base to effectively evaluate our product's interoperability and functionality of their criteria.

Testing Results Practices Queried: 10 Practices Reporting Results/Utilizing Certification Functionality: 9 Reporting Interval: 3 months (Apr 1, 2022 through June 30, 2022) Testing Metric/Measurement: Number of Electronic Prescription Messages Sent Average Result: 7,473 Median Result: 1983

#### Analysis and Key Findings

Electronic prescribing is a popular feature, and it is widely used by all times of specialties. RWT testing results reveals our EHR Module functionality is working as expected.

Non-Conformities or Errors Discovered During our testing, we did not discover any errors or criteria non-conformities.





## RWT Measure #5. Number of CancelRx Prescriptions Messages Successfully Sent

Associated Criteria: 315(b)(3)

Testing Methodology: Reporting/Logging

Measurement Description

This measure is tracking and counting how many CancelRx electronic prescriptions were created and successfully sent from the EHR Module to a pharmacy destination over the course of a given interval.

#### Care Settings and Number of Clients Site to Test

We designed this measure for all the ambulatory care settings that we support: orthopedics, primary care, dermatology, cardiology, neurology, OBGYN, ENT, pulmonology, pediatrics, and multispecialty, and the practices involved with this test covered most of these care settings. We worked with a minimum of ten (10) client practices to give an appropriate sample of our user base to effectively evaluate our product's interoperability and functionality of their criteria.

Testing Results Practices Queried: 10 Practices Reporting Results/Utilizing Certification Functionality: 0 Reporting Interval: 3 months (Apr 1, 2022 through June 30, 2022) Testing Metric/Measurement: Number of Cancel Prescriptions Electronically Sent Average Result: 0

Median Result: 0

#### Analysis and Key Findings

Unlike new prescriptions, the cancel prescription feature is not used by our clinicians in their normal practice as our results show.

Non-Conformities or Errors Discovered During our testing, we did not discover any errors or criteria non-conformities.





### RWT Measure #6. Number of Patient Batch Exports Run

Associated Criteria: 315(b)(6)

Testing Methodology: Reporting/Logging

Measurement Description

This measure is tracking and counting how many batch exports of C-CDAs were successfully performed by the EHR Module over the course of a given interval.

Care Settings and Number of Clients Site to Test

We designed this measure for all the ambulatory care settings that we support: orthopedics, primary care, dermatology, cardiology, neurology, OBGYN, ENT, pulmonology, pediatrics, and multispecialty, and the practices involved with this test covered most of these care settings. We worked with a minimum of ten (10) client practices to give an appropriate sample of our user base to effectively evaluate our product's interoperability and functionality of their criteria.

Testing Results Practices Queried: 10 Practices Reporting Results/Utilizing Certification Functionality: 0 Reporting Interval: 3 months (Apr 1, 2022 through June 30, 2022) Testing Metric/Measurement: Number of C-CDA Batch Exports Sent Average Result: 3 Practices (Daily) Median Result: 2 Practices (Daily)

Analysis and Key Findings

While we had not practices using our individual batch export functionality, we do have several sites who use batch exporting to create a daily bulk file to upload to their HIE.

Non-Conformities or Errors Discovered During our testing, we did not discover any errors or criteria non-conformities.





## RWT Measure #7. Number of Quality Measures Successfully Reported on to CMS

Associated Criteria: 315(c)(1)-(c)(3)

Testing Methodology: Reporting/Logging/Survey

Measurement Description

This measure is tracking and counting how many eCQM quality measures were successfully reported on by the EHR Module to CMS over the course of a given interval.

Care Settings and Number of Clients Site to Test

We designed this measure for all the ambulatory care settings that we support: orthopedics, primary care, dermatology, cardiology, neurology, OBGYN, ENT, pulmonology, pediatrics, and multispecialty, and the practices involved with this test covered most of these care settings. We worked with a minimum of ten (10) client practices to give an appropriate sample of our user base to effectively evaluate our product's interoperability and functionality of their criteria.

Testing Results Practices Queried: 10

Providers Reporting Results/Utilizing Certification Functionality: 16

Reporting Interval: 12 months (Jan 1, 2022 through December 31, 2022)

Testing Metric/Measurement: Number of eCQMs Calculated and Submitted to CMS

102 measure submissions across 16 different providers

14 different eCQMs submitted across 16 different providers

CMS 2, CMS 22, CMS 68, CMS 69, CMS 122, CMS 124, CMS 125, CMS 128, CMS 130, CMS 134, CMS 138, CMS 156, CMS 159, CMS 165

Providers submitted between 6-10 measures

Most common measures submitted was CMS 68 (Documentation of Current Medications in the Medical Record) and CMS 138 (Preventive Care and Screening: Tobacco Use: Screening and Cessation Intervention) by all 16 providers, CMS 69 (Preventive Care and Screening: Body Mass Index (BMI) Screening and Follow-Up Plan) by 15 providers, and CMS 22 (Preventive Care and Screening: Screening for High Blood Pressure and Follow-Up Documented) and CMS 156 (Use of High-Risk Medications in the Elderly) by 14 providers.



#### Analysis and Key Findings

Our results reveal our EHR Module functionality is working correctly as we no reported issues. It also reveals the measures which are the of the greatest interest to our community.

#### Non-Conformities or Errors Discovered

During our testing, we did not discover any errors or criteria non-conformities.



## RWT Measure #8. Number of Patients Who Accessed/Logged in to Portal

Associated Criteria: 315(e)(1)

Testing Methodology: Reporting/Logging

Measurement Description

This measure is tracking and counting how many patients are successfully logged into and accessed their patient portal account over the course of a given interval.

#### Care Settings and Number of Clients Site to Test

We designed this measure for all the ambulatory care settings that we support: orthopedics, primary care, dermatology, cardiology, neurology, OBGYN, ENT, pulmonology, pediatrics, and multispecialty, and the practices involved with this test covered most of these care settings. We worked with a minimum of ten (10) client practices to give an appropriate sample of our user base to effectively evaluate our product's interoperability and functionality of their criteria.

Testing Results Practices Queried: 10 Practices Reporting Results/Utilizing Certification Functionality: 10 Reporting Interval: 3 months (Apr 1, 2022 through June 30, 2022) Testing Metric/Measurement: Number of Patients Who Access or Logged into Patient Portal Average Result: 1,897 Median Result: 393

#### Analysis and Key Findings

Our results reveal our patient portal is extremely popular and widely used. It is also noteworthy the difference in average results verses the median. While every practice reporting showed at least some patients from their population using the portal, some practices had large number of patients accessing their portal (over 5000 over the time period) but some reported less than 50 patients accessing the portal.

#### Non-Conformities or Errors Discovered

During our testing, we did not discover any errors or criteria non-conformities.





## RWT Measure #9. Number of Immunization Messages Successfully Sent to IIS/Immunization Registries

Associated Criteria: 315(f)(1)

Testing Methodology: Reporting/Logging

Measurement Description

This measure is tracking and counting how many immunization messages are created and successfully sent from the EHR Module to an IIS/immunization registry over the course of a given interval.

#### Care Settings and Number of Clients Site to Test

We designed this measure for all the ambulatory care settings that we support: orthopedics, primary care, dermatology, cardiology, neurology, OBGYN, ENT, pulmonology, pediatrics, and multispecialty, and the practices involved with this test covered most of these care settings. We worked with a minimum of ten (10) client practices to give an appropriate sample of our user base to effectively evaluate our product's interoperability and functionality of their criteria.

Testing Results Practices Queried: 10 Practices Reporting Results/Utilizing Certification Functionality: 5 Reporting Interval: 3 months (Apr 1, 2022 through June 30, 2022) Testing Metric/Measurement: Number of Immunization Messages Successfully Sent Average Result: 327 Median Result: 57

#### Analysis and Key Findings

For practices connected to an immunization registry, they were able to share data with the registry. Most do not send a large number of immunization records, but one practice was an outlier with 1451 submission, more than the other combined.

Non-Conformities or Errors Discovered

During our testing, we did not discover any errors or criteria non-conformities.





## RWT Measure #10. Number of Patient Immunization History Queries Sent

Associated Criteria: 315(f)(1)

Testing Methodology: Reporting/Logging

Measurement Description

This measure is tracking and counting how many patient immunization history queries are created and successfully sent from the EHR Module to an IIS/immunization registry over the course of a given interval.

#### Care Settings and Number of Clients Site to Test

We designed this measure for all the ambulatory care settings that we support: orthopedics, primary care, dermatology, cardiology, neurology, OBGYN, ENT, pulmonology, pediatrics, and multispecialty, and the practices involved with this test covered most of these care settings. We worked with a minimum of ten (10) client practices to give an appropriate sample of our user base to effectively evaluate our product's interoperability and functionality of their criteria.

Testing Results Practices Queried: 10 Practices Reporting Results/Utilizing Certification Functionality: 5 Reporting Interval: 3 months (Apr 1, 2022 through June 30, 2022) Testing Metric/Measurement: Number of Patient Immunization History Queries Average Result: 1750 Median Result: 159

#### Analysis and Key Findings

Compared to our other immunization criteria test, this test indicated that our clinicians use immunization history query more often than immunization submission. For example, one practice that only sent 38 immunization messages to the state registry queried immunization history on 6281 patients. While that example is rather extreme, every practice reported doing more immunization history queries than new immunization record submissions.



#### Non-Conformities or Errors Discovered

During our testing, we did not discover any errors or criteria non-conformities.



### RWT Measure #11. Compliance of API Resource Query Support

Associated Criteria: 315(g)(7)-(g)(9)

Testing Methodology: Compliance and Tool

#### Measurement Description

This measure is tracking compliance of the EHR Module criteria functionality of support of API query of patient data resources.

#### Care Settings and Number of Clients Site to Test

This measure is applicable to all our targeted practice settings as the API capabilities work the same for all sites. Because this feature is not regularly used by our clients, we will test this capability in production-type system either with a physician client who is able or internally, but either way this will verify certified functionality is working for end users.

#### **Testing Results**

We tested the FHIR API functionality of 5 providers within a multispecialty practice. We used fake but realistic patient data and tested against the Inferno FHIR test tool. For each one, we reported 100% success across all test scenarios.

#### Analysis and Key Findings

While we do not yet have any FHIR applications using our APIs in production, our results indicate they should be able to successfully connect with our server.

#### Non-Conformities or Errors Discovered

During our testing, we did not discover any errors or criteria non-conformities.

#### Changes for this Measure from Original RWT Test Plan

We did not make any notable changes from our documented RWT Test Plan in our testing methods or metrics.



## RWT Measure #12. Do you import in QRDA Cat I files from other systems to use in your quality measure calculations?

Associated Criteria: 315(c)(1)-(c)(3)

Testing Methodology: Survey/Self-Test

Measurement Description This is a survey measure to determine how often you import in QRDA Cat I files for quality measure calculation.

Care Settings and Number of Clients Site to Test

Our intention is to survey an appropriate number of our user community to gauge an adequate sample size. We will look to speak with physicians across our various care settings to best understand the interoperability status of this feature.

Testing Results We survey 10 different practices, and each one indicated they never import in QRDA Cat I files for their CQM use.

Analysis and Key Findings Our results reveal this functionality is not currently needed by our user community.

Non-Conformities or Errors Discovered

From our survey, providers did not indicate they experienced any errors or criteria non-conformities.



# RWT Measure #13. Do your patients report problems using the portal?

Associated Criteria: 315(e)(1)

Testing Methodology: Survey/Self-Test

Measurement Description This is a survey measure to determine what kind of issues patients are reporting around using the patient portal.

Care Settings and Number of Clients Site to Test

Our intention is to survey an appropriate number of our user community to gauge an adequate sample size. We will look to speak with physicians across our various care settings to best understand the interoperability status of this feature.

#### Testing Results

We reviewed the portal access logs of 10 practices to determine errors encountered in accessing the log. All but 1 practice reported some errors with the average login failures of 27 per practice across a 3 month period.

None of these login errors were because of software failures but instead due to user errors, primarily involving wrong passwords or usernames.

#### Analysis and Key Findings

Our results reveal our EHR Module functionality is working as expected. Given the volume of patient portal use, this failure rate is very low.

Non-Conformities or Errors Discovered

From our survey, providers did not indicate they experienced any errors or criteria nonconformities.

#### Changes for this Measure from Original RWT Test Plan

We made a slight change in this measure from its original submission. Rather than survey users, we took log reports from their system to analyze. This gave us a better description of the problems encountered with portal use.



## RWT Measure #14. Do your patients report using the portal to transmit their health data to other parties and site?

Associated Criteria: 315(e)(1)

Testing Methodology: Survey/Self-Test

Measurement Description This is a survey measure to determine how often your patients are using the patient portal to transmit their health data to other parties.

Care Settings and Number of Clients Site to Test

Our intention is to survey an appropriate number of our user community to gauge an adequate sample size. We will look to speak with physicians across our various care settings to best understand the interoperability status of this feature.

Testing Results

We survey 10 different practices on their knowledge of patients using the portal to transmit their health data to other parties and sites. Their responses:

Yes, many of them do: 0 Yes, but only some: 1 A few but it is rare: 7 Don't know/have not heard of patients using: 2

#### Analysis and Key Findings

Our results reveal our transmission feature is working in our portal, but it is not widely reported to be used. However, the providers may not have full knowledge of their patient communities portal usage.

#### Non-Conformities or Errors Discovered

From our survey, providers did not indicate they experienced any errors or criteria nonconformities.





# RWT Measure #15. How many different electronic case public registries do you connect with?

Associated Criteria: 315(f)(5)

Testing Methodology: Survey

Measurement Description This is a survey measure to determine the number of electronic case public health registries you use.

Number of Clients Site to Test

Our intention is to survey an appropriate number of our user community to gauge an adequate sample size. We will look to speak with physicians across our various care settings to best understand the interoperability status of this feature.

Testing Results

We survey 11 different practices, and none reported using electronic case reporting or connected to a public health agency collecting case reporting.

Analysis and Key Findings

Our results reveal this functionality is not currently needed by our user community.

Non-Conformities or Errors Discovered

From our survey, providers did not indicate they experienced any errors or criteria non-conformities.