

# CY 2022 Real World Testing Plan for MicroFour

## Executive Summary

This is the real world test plan for CY 2022 for MicroFour PracticeStudio certified EHR solution. It provides the real world test measurements and metrics that meet the intent and objectives of ONC's Condition of Certification and Maintenance of Certification requirement for real world testing (§ 170.405 Real world testing) to evaluate compliance with the certification criteria and interoperability of exchanging electronic health information (EHI) within the care and practice setting which it is targeted for use.

As ONC has stated in its rule, "The objective of real world testing is to verify the extent to which certified health IT deployed in operational production settings is demonstrating continued compliance to certification criteria and functioning with the intended use cases as part of the overall maintenance of a health IT's certification." We have worked toward this objective in designing our test plan and its subsequent real world testing measurements and metrics.

This document builds toward the final testing measurements and metrics we will use to evaluate our product interoperability within production settings. Within each measure, we document planned testing methodology, associated ONC criteria, justification for measurement, expected outcomes from the testing, care settings applied for this measure, and if applicable the number of clients to use the our real world testing approach, including how our test cases were created, our selected methodology, the number of client/practice sites to use, and our general approach and justification for decisions.

We have included our timeline and milestones for completing the real world testing in CY 2022, and information about compliance with the Standards Version Advancement Process updates.

A table of contents with hyperlinks is provided later in the plan quick access to any document section, including the testing measurements and metrics found at the end of this document. Our signed attestation of compliance with the real world testing requirements is on the following page.

## Developer Attestation

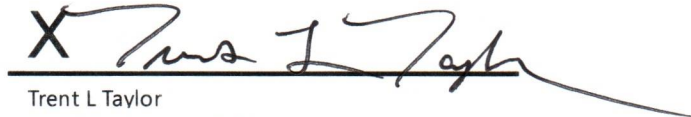
This Real World Testing plan is complete with all required elements, including measures that address all certification criteria and care settings. All information in this plan is up to date and fully addresses the health IT developer's Real World Testing requirements.

Authorized Representative Name: Trent L Taylor

Authorized Representative Email: [tltaylor@micro4.com](mailto:tltaylor@micro4.com)

Authorized Representative Phone: 806-463-7007

Authorized Representative Signature:



Trent L Taylor  
Chief Technology Officer

DATE

09/01/2021



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## General Information

Plan Report ID Number: PracticeStudio\_RWT\_2022

Developer Name: MicroFour

Product Name(s): PracticeStudio

Version Numbers(s): X20

Certified Health IT Criteria: 315(b)(1), (b)(2), (b)(3), (b)(6), (c)(1)-(c)(4), (e)(1), (g)(7)-(9), (h)(1)

Product List (CHPL) ID(s) and Link(s):

<https://chpl.healthit.gov/#/listing/9590>

15.04.04.1985.Prac.20.00.1.180810

Developer Real World Testing Page URL:

<https://www.practicestudio.net/Company/CompanyInformation/Certifications.aspx>



## Timeline and Milestones for Real World Testing CY 2022

- 1Q-2022: 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.
- 2Q-3Q 2022. 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.
- 4Q-2022. 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.

## Standards Version Advancement Process (SVAP) Updates

For CY 2022, we are not planning to make any version updates on approved standards through the SVAP process.

Standard (and version)	None
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

## Real World Testing Measurements

The measurements for our real world testing plan are described below. Each measurement contains:

- Associated ONC criteria
- Testing Methodology used
- Description of the measurement/metric
- Justification for the measurement/metric
- Expected outcomes in testing for the measurement/metric
- Number of client sites to use in testing (if applicable)
- Care settings which are targeted with the measurement/metric

In each measurement evaluate, we elaborate specifically on our justification for choosing this measure and the expected outcomes. All measurements were chosen to best evaluate compliance with the certification criteria and interoperability of exchanging electronic health information (EHI) within the certified EHR.

## Testing Methodologies

For each measurement, a testing methodology is used. For our test plan, we use the following methodologies.

**Reporting/Logging:** This methodology uses the logging or reporting capabilities of the EHR to examine functionality performed in the system. A typical example of this is the measure reporting done for the automate measure calculation required in 315(g)(2), but it can also be aspects of the audit log or customized reports from the EHR. This methodology often provides historical measurement reports which can be accessed at different times of the year and evaluate interoperability of EHR functionality, and it can serve as a benchmark for evaluating real world testing over multiple time intervals.

**Compliance and/or Tool:** This methodology uses inspection to evaluate if EHR is compliant to the ONC criteria requirements. It can be done through 1-v-1 inspection testing or utilize various tools to measure or evaluate compliance and interoperability. If an EHR Module capabilities is not widely used in production by current users, compliance inspection can provide assurance criteria is working as previously certified.

**Survey:** This methodology evaluates interoperability and compliance of EHR Module capabilities through feedback from users. This methodology can provide insight into how clinicians employ and use a feature which reveals actual value and impact of interoperability of the EHR Module.

## Number of Clients Sites

Within each measure, we note the minimum number of clients or client sites we plan to use for this measure evaluation. The numbers vary depending on the methodology as well as overall





use of the associated EHR Module criteria by our users. For criteria that are not widely used by our customer base, we may test the respective measure in our own production-sandbox environment given lack of customer experience with the criteria functionality.

## Care and Practice Settings Targeted

Our EHR is both locally hosted as well as cloud based, and it is used by medical practices in chiropractic, dermatology, orthopedic, and general ambulatory. The features work the same for all user types and process or workflow doesn't change for any of these settings. We developed our RWT measures to evaluate interoperability for all our care settings.



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

Associated Criteria: 315(b)(1), 315(h)(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.

The interval for this measure testing and counting will be for approximately one (1) calendar month during the year.

### Measurement Justification

This measure demonstrates interoperability use for both the 315(b)(1) Transition of Care criteria as well as the 315(h)(1) Direct messaging criteria. We will capture a numeric value to indicate both the how often this interoperability feature is being used, and this also reveals its compliance to the ONC criteria requirements.

An increment to this measure indicates that the EHR can create a C-CDA patient summary record, including ability to record all clinical data elements, and by sending the C-CDA patient summary record, the EHR demonstrates successful interoperability of an exchanged patient record with a 3<sup>rd</sup> party. This measurement shows support for Direct Edge protocol in connecting to a HISP for successful transmission.

While the use of Direct messaging it not widely used by most of our customers, some do use it, and this measure selection will be indicate the interoperability and compliance features available to all customers.

### Measurement Expected Outcome

The measurement will produce numeric results over a given interval. We will utilize either data base scripts or report like Automated Measure (315.g.2) reports to determine our measure count.

A successful measure increment indicates compliance to the underlying ONC criteria. It will show that the EHR can create the C-CDA patient summary record, including record required clinical data elements. In sending the C-CDA patient summary record, the EHR will demonstrate ability to confirm successful interoperability of an exchanged patient record with a 3<sup>rd</sup> party, including support for Direct Edge protocol in connecting to a HISP. Successfully completing this measure also implies users have a general understanding of the EHR functional operations for



this EHR Module and an overall support for the user experience while not completing this measure may indicate lack of understanding or possibly lack of use or need for this functionality.

We will use the measure count to establish a historic baseline of expected interoperability use so it can be used in subsequent real world testing efforts.

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

As our EHR functionality work the same for all user types and care settings, this RWT measure is applicable for all the care settings we target.

Given our customer base and product design, our intention is to select a minimum of one customer practice to use for the testing of this RWT measure.

**RWT Measure #2. 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 event over the course of a given interval.

The interval for this measure testing and counting will be for approximately one (1) calendar month during the year.

Measurement Justification

While some of our customers do record conciliation apart from the C-CDA, we do have some who utilize the C-CDA incorporation and reconciliation capabilities of the certified criteria. This measure will assist in determining how common of an event this is.

This measure will provide a numeric value to indicate both the how often this interoperability feature is being used as well as its compliance to the requirement. An increment to this measure indicates that the EHR can receive a C-CDA patient summary record, and by incorporating the C-CDA patient summary record, the EHR demonstrates successful interoperability of problems, medications, and medication allergies of patient record with a 3rd party.

Measurement Expected Outcome

The measurement will produce numeric results over a given interval. We will utilize either data base scripts or report like Automated Measure (315.g.2) reports to determine our measure count.

A successful measure increment indicates compliance to the underlying ONC criteria. It will show that the EHR can create the EHR can receive a C-CDA patient summary record. In incorporating the C-CDA patient summary record, the EHR will demonstrate successful interoperability of problems, medications, and medication allergies of patient record with a 3rd party, including support for Direct Edge protocol in connecting to a HISP. Successfully completing this measure also implies users have a general understanding of the EHR functional operations for this EHR Module and an overall support for the user experience while not completing this measure may indicate lack of understanding or possibly lack of use or need for this functionality.

We will use the measure count to establish a historic baseline of expected interoperability use so it can be used in subsequent real world testing efforts.



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

As our EHR functionality work the same for all user types and care settings, this RWT measure is applicable for all the care settings we target.

Given our customer base and product design, our intention is to select a minimum of one customer practice to use for the testing of this RWT measure.



### RWT Measure #3. 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.

The interval for this measure testing and counting will be for approximately one (1) calendar month during the year.

#### Measurement Justification

Electronic prescribing is a very common and widely used feature of our EHR, and this RWT measure will reveal how prevalent this event is. This measure will provide a numeric value to indicate both the how often this interoperability feature is being used as well as its compliance to the requirement. An increment to this measure indicates that the EHR can create a NewRx SCRIPT electronic prescription message and transmit it to a pharmacy, typically via the Surescripts Network.

#### Measurement Expected Outcome

The measurement will produce numeric results over a given interval. We will utilize either data base scripts or report like Automated Measure (315.g.2) reports to determine our measure count.

A successful measure increment indicates compliance to the underlying ONC criteria. It will show that the EHR can create a new electronic prescription (NewRx) message and send over a production network, like the Surescripts Network, to a pharmacy. Successfully completing this measure also implies users have a general understanding of the EHR functional operations for this EHR Module and an overall support for the user experience while not completing this measure may indicate lack of understanding or possibly lack of use or need for this functionality.

We will use the measure count to establish a historic baseline of expected interoperability use so it can be used in subsequent real world testing efforts.



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

As our EHR functionality work the same for all user types and care settings, this RWT measure is applicable for all the care settings we target.

Given our customer base and product design, our intention is to select a minimum of one customer practice to use for the testing of this RWT measure.

## RWT Measure #4. Number of Quality Measures Successfully Reported on to CMS

Associated Criteria: 315(c)(1)-(c)(4)

Testing Methodology: Reporting/Logging

### 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.

The measure interval will be for the yearly attestation submission to CMS.

### Measurement Justification

This measure will provide a count and list of the different electronic clinical quality measures (eCQMs) which are calculated and submitted to CMS for their MIPS program. Clinical quality measures are only used for the respective CMS programs and any production measures should utilize submission to CMS. Because CQM criteria, 315(c)(1)-(c)(4), all work collectively together in the eCQM functionality of the EHR Module, this measurement is used to evaluate the interoperability performance of all four.

### Measurement Expected Outcome

The measurement will create a count and list of eCQMs submitted to CMS for their annual submission process. We will utilize various reports and audit logs to determine our measure count or potentially inquire with the customer on the eCQMs they submitted.

A successful measure submission indicates compliance to the underlying ONC criteria. It proves that the EHR can do calculations on the eCQM and that they are accepted by CMS. Successfully completing this measure also implies users have a general understanding of the EHR functional operations for this EHR Module and an overall support for the user experience while not completing this measure may indicate lack of understanding or possibly lack of use or need for this functionality.

We will use the measure result to establish a historic baseline of expected interoperability use so it can be used in subsequent real world testing efforts.

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

As our EHR functionality work the same for all user types and care settings, this RWT measure is applicable for all the care settings we target.



Given our customer base and product design, our intention is to select a minimum of one customer practice to use for the testing of this RWT measure.



## RWT Measure #5. 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.

The interval for this measure testing and counting will be for approximately one (1) calendar month during the year.

### Measurement Justification

Our patient portal is widely used, and it is an important component of patient-provider engagement. We will measure the patient use of the portal by counting the number of different patients who actively logged into their portal account to use its various features.

This measure will provide a numeric value to indicate both the how often the portal is being used as well as its compliance to the VDT (315(e)(1)) criterion.

### Measurement Expected Outcome

The measurement will produce numeric results over a given interval. We will utilize various reports and audit logs, including Automated Measure (315.g.2) reports, to determine our measure count.

A successful measure increment indicates reveals that patients can log into their patient portal which allow them view, download, or transmit their health data.

Successfully completing this measure also implies patients have a general understanding of the EHR functional operations for this EHR Module and that clinician customers are enabling the portal.

We will use the measure count to establish a historic baseline of expected interoperability use so it can be used in subsequent real world testing efforts.

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

As our EHR functionality work the same for all user types and care settings, this RWT measure is applicable for all the care settings we target.

Given our customer base and product design, our intention is to select a minimum of one customer practice to use for the testing of this RWT measure.

## RWT Measure #6. 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.

### Measurement Justification

Our current information is that we don't have any customer sites utilizing their API capabilities with active client application connections. Because of this, we are not able to record a value of API queries in production.

However, we are confident our API functionality is working, and in this measure test, we will confirm the ability to connect to the EHR's API resources and query patient clinical data through the API. We will also query a sample patient's C-CDA through the API and evaluate it against the [ONC C-CDA Scorecard tool](#). The C-CDA scorecard is designed for production use and measures how artifacts created by health IT compare against the HL7 C-CDA implementation guide and HL7 best practices.

Because API criteria, 315(g)(7)-(g)(9), all work collectively together in the API functionality of the EHR Module, this measurement is used for all three.

To avoid disclosing PHI, we will only work with test patients from the actual production environment or an appropriately production-mirrored environments to best evaluate production capabilities available to end users.

### Measurement Expected Outcome

The user connects to the EHR through a client application via the API and is prompted for credentials and authentication according to the EHR's publicly available API documented specification. After supplying the correct credentials, the EHR returns a valid ID or token for the API Client to access the patient data. The user will query the patient clinical data resources via the API and receive access to them through the client application. Next, the user will query the C-CDA of the patient record and will run C-CDA through the Scorecard tool to obtain a result. We will also confirm the process and steps done by the user meet the criteria requirements of the EHR Module and works as expected in production as in a controlled test environment.



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

As our EHR functionality work the same for all user types and care settings, this RWT measure is applicable for all the care settings we target.

Given our customer base and product design, our intention is to select a minimum of one customer practice to use for the testing of this RWT measure.



## RWT Measure #7. Compliance of DirectTrust and Certificate Discovery/Authorization

Associated Criteria: 315(h)(1)

Testing Methodology: Compliance and Tool

### Measurement Description

This measure is tracking compliance of the EHR Module criteria functionality of compliance with DirectTrust network and certificate discovery/authorization.

### Measurement Justification

As we don't have many customers who regularly use Direct message, we will do RWT of this criteria by assessing compliance ability to connect to the DirectTrust network and send Direct message.

DirectTrust maintains a secure communication network based on a trust framework for EHRs and HISP and other entities to securely exchange patient health data. Virtually all production systems which utilize Direct messages utilize the DirectTrust network.

To avoid disclosing PHI, we will only work with test patients from the actual production environment or an appropriately production-mirrored environments to best evaluate production capabilities available to end users.

If our customers are unavailable to test this directly, we will utilize the [C-CDA Scorecard Direct messaging capability](#).

### Measurement Expected Outcome

The user will create a C-CDA from the patient record and select a destination containing a valid Direct address. Using our HISP partner, EMR Direct, we will authorize access through DirectTrust certificates and then securely deliver the message to the destination and then receive back a MDN success response. We will also confirm the process and steps done by the user meet the criteria requirements of the EHR Module and works as expected in production as in a controlled test environment.

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

As our EHR functionality work the same for all user types and care settings, this RWT measure is applicable for all the care settings we target.

Given our customer base and product design, our intention is to select a minimum of one customer practice to use for the testing of this RWT measure.





RWT Measure #8. Do you use batch patient data export to obtain large volumes of patient data?

Associated Criteria: 315(b)(6)

Testing Methodology: Survey

#### Measurement Description

This is a survey measure to determine how often you are using the batch patient data export feature.

#### Measurement Justification

It is our understanding that this is not a feature widely used, and it is also a difficult to measure event. Because of this, we have chosen to test this via customer survey attestation. We will survey users to determine real world interoperability and usability, specifically how often do clinicians use the batch patient export feature.

A survey can often provide more information on the impact and value of an interoperability element than a standard software test evaluation. Batch patient export can be used for various use cases, including supporting working a local HIE or registry as well as quality and population health metrics.

#### Measurement Expected Outcome

The user will be asked the survey question - Do you use batch patient data export to obtain large volumes of patient data? - and then by given the survey answer choices below:

- Regularly
- Sporadically
- Rarely
- Never
- Don't Know

We will also ask them to provide any additional feedback on the use of this functionality.

The answers will provide insight into how clinicians view both the use and value of this interoperability feature. For example, response may show that additional training is needed to better utilize the feature or that it is not currently utilized as currently designed. It will provide a benchmark for evaluate future surveys as well as to share insight into any new development for improvements or enhancements of the health IT system.



## Number of Clients Site to Test and Care Settings

As our EHR functionality work the same for all user types and care settings, this RWT measure is applicable for all the care settings we target.

Given our customer base and product design, our intention is to select a minimum of three customer practice to use for the survey testing of this RWT measure.