# CLINIGENCE REAL WORLD TESTING RESULTS REPORT 2023

Under the ONC Health IT Certification Program (Certification Program), health IT developers are required to conduct Real World Testing of their certified health IT (45 CFR 170.405). The Office of the National Coordinator for Health Information Technology (ONC) issues Real World Testing resources to clarify health IT developers' responsibilities for conducting Real World Testing, to identify topics and specific elements of Real World Testing that ONC considers a priority, and to assist health IT developers in developing their Real World Testing plans and results reports.

## GENERAL INFORMATION

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

Developer Name: Clinigence Health

Product Name(s): Clinigence Value Improvement Platform (VIP)

Certified Health IT Product List (CHPL) ID(s): 15.04.04.2696.Clin.05.00.0.181231

Developer Real World Testing Page URL: http://clinigencehealth.com/cures-act-real-world-testing/

Developer Real World Testing Results Report Page URL [if different from above]:
http://clinigencehealth.com/cures-act-real-world-testing/

## CHANGES TO ORIGINAL PLAN

Changes to the approach for Real World Testing that differ from what was outlined in the plan, are noted here.

| Summary of Change | Reason | Impact |
|---|---|---|
| No changes needed | | |

## SUMMARY OF TESTING METHODS AND KEY FINDINGS

*Summary of the Real World Testing methods deployed to demonstrate real-world interoperability, including any challenges or lessons learned from the chosen approach. Summarize how the results that will be shared in this report demonstrate real-world interoperability.*

### STANDARDS UPDATES (INCLUDING STANDARDS VERSION ADVANCEMENT PROCESS (SVAP) AND UNITED STATES CORE DATA FOR INTEROPERABILITY (USCDI))

*Both required and voluntary standards updates must be addressed in the Real World Testing plan. Real World Testing plans must include all certified health IT updated to newer versions of standards prior to August 31 of the year in which the updates were made.*

*Indicate as to whether optional standards, via SVAP and/or USCDI, are leveraged as part of the certification of your health IT product(s).*

- ☐ Yes, I have products certified with voluntary SVAP or USCDI standards. (If yes, please complete the table below.
- ☒ No, none of my products include these voluntary standards.

| | |
|---|---|
| **Standard (and version)** | The standards for §170.315(c)(3) Clinical Quality Measures (CQMs) – Report (Cures) were followed when we generated the QRDA CAT III reports that we uploaded to the QPP portal for MIPS reporting. |
| **Updated certification criteria and associated product** | |
| **Health IT Module CHPL ID** | |
| **Conformance measure** | |

**CARE SETTING(S)**

*Each care setting that was tested is listed below.*

| Care Setting | Justification |
|---|---|
| Group | Clinigence generated and submitted one file for all NPIs in The TIN (group). Scores were aggregated in the CAT III file for the entire group. |
| Individual | Clinigence generated and submitted one file for each provider. This can be for a single provider practice or multiple providers under the same TIN. One CAT III file was generated per NPI. |

**METRICS AND OUTCOMES**

*Outcomes from the testing that successfully demonstrate that the certified health IT:*

1. is compliant with the certification criteria, including the required technical standards and vocabulary codes sets;
2. is exchanging electronic health information (EHI) in the care and practice settings for which it is marketed for use; and/or,
3. EHI is received by and used in the certified health IT.

(from 85 FR 25766)

## ASSOCIATED CERTIFICATION CRITERIA

*List certification criteria associated with the measure and if updated to 2015 Edition Cures Update criteria.*

| Certification Criteria | Requirement |
|---|---|
| §170.315(c)(3) Clinical Quality Measures (CQMs) – Report (Cures) | (c )(3)Generate an aggregate report with calculated summary data for the patient population of the clinical quality measures calculated in the Execute test (§ 170.315(c)(2)), which at a minimum is in accordance with the standard specified in § 170.205(k)(3). CMS Implementation Guide for Quality Reporting Document Architecture: Category III; Eligible Clinicians and Eligible Professionals Programs; Implementation Guide for 2020<br><br>Generate a de-duplicated archive of patient documents in the CMS QRDA Category I IG format of the clinical quality measures calculated in the Execute test (§ 170.315(c)(2)), which at a minimum is in accordance with the standard specified in § 170.205(h)(3). CMS Implementation Guide for Quality Reporting Document Architecture: Category I; Hospital Quality Reporting; Implementation Guide for 2020<br><br>Submit the quality measurement data file consisting of the data created by the generation of the CMS QRDA Category III IG aggregate report(s) and the de-duplicated CMS QRDA Category I IG report(s) for verification. |

## EXPECTED OUTCOMES

It was expected that authorized users would be able to generate measure scores for each EP and generate the files needed to upload to the QPP portal for the yearly MIPS submission. Any errors found were tracked, analyzed, and corrected so that 100% of the MIPS submissions were accepted by CMS. These expectations were fully realized.

## DESCRIPTION OF MEASUREMENT/METRICS

The following outlines the three measures that were identified to best demonstrate conformance to multiple certification criteria concerning Clinical Quality Measures (170.315 (c)(1): Record and Export, 170.315 (c)(2): Import and Calculate, and 170.315 (c)(3): Report across the use cases demonstrated.

**Measure 1**: Data Extraction and Import.

**Measure 2**: Calculate and Validate. Clinigence will use the following audit processes for the quality data submission:

- Initial Implementation
- Variance Checks (planned)
- Quality Data Validation Audit Prior to Submission

**Measure 3**: Submitting Reports to CMS.

### MEASURE 1: DATA EXTRACTION AND IMPORT.

This measure demonstrates the ability to use our proprietary data extraction tools to consume data from various sources and formats and import that data into our database.

Quality data via QRDA CAT III were submitted for a total of four TINs for PY2022 (MIPS and programs). We've removed the TINs and organization names for privacy.

| Description | Clinigence ID | Quality Data Submission Status | QPP Group Submission ID | Program Reported | Method to Consume Data | Number of Data Files Extracted/Loaded |
|---|---|---|---|---|---|---|
| Redlands, CA | 18092320 | Completed | 0b6fd8b9-156b-43c1-92d5-775524ceba07 | MIPS 2022 Submitted as Qualified Registry | Redlands hosts the EMR. Clinigence extracts data directly from the EMR nightly. | From 1/1/2022 through 3/1/2023:<br><br>Total: 1,320,569 files |

| Description | Clinigence ID | Quality Data Submission Status | QPP Group Submission ID | Program Reported | Method to Consume Data | Number of Data Files Extracted/Loaded |
|---|---|---|---|---|---|---|
| Oakland, MD | 18829827 | Completed | 0b6fd50d-5349-4212-abb9-facd5364fe8e | MIPS 2022 Submitted as Qualified Registry<br>*combination of QRDA CAT3 and JSON | Oakland hosts the EMR & sends Clinigence Excel data files to calculate measures | From 1/1/2022 through 3/1/2023:<br>Total: 8 33 files |
| Cuyahoga Falls, OH | 10952196 | Completed | 0b6ffbaa-100d-42f2-b9a8-084553b24582 | MIPS 2022 Submitted as Qualified Registry | Cuyahoga Falls hosts the EMR. Clinigence extracts data directly from the EMR nightly. | From 1/1/2022 through 3/1/2023:<br>Total: 18,199 files |
| Bellingham, WA | 22241820 | Done | 0b6fda94-f164-479d-8b04-944f925a0a1d | MIPS 2022 Submitted as Qualified Registry | Bellingham hosts the EMR. Clinigence extracts data directly from the EMR yearly. | From 1/1/2022 through 3/1/2023:<br>Total: 155,537 files |

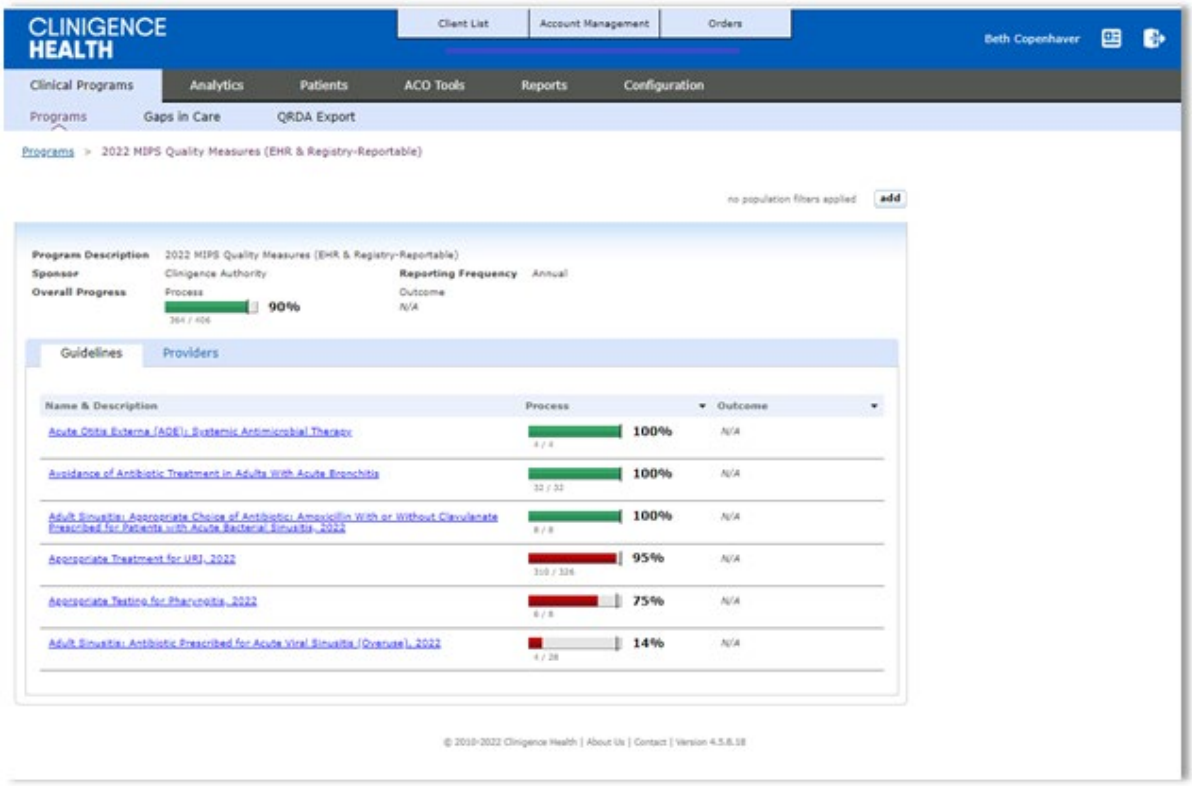
## MEASURE 2: CALCULATE AND VALIDATE

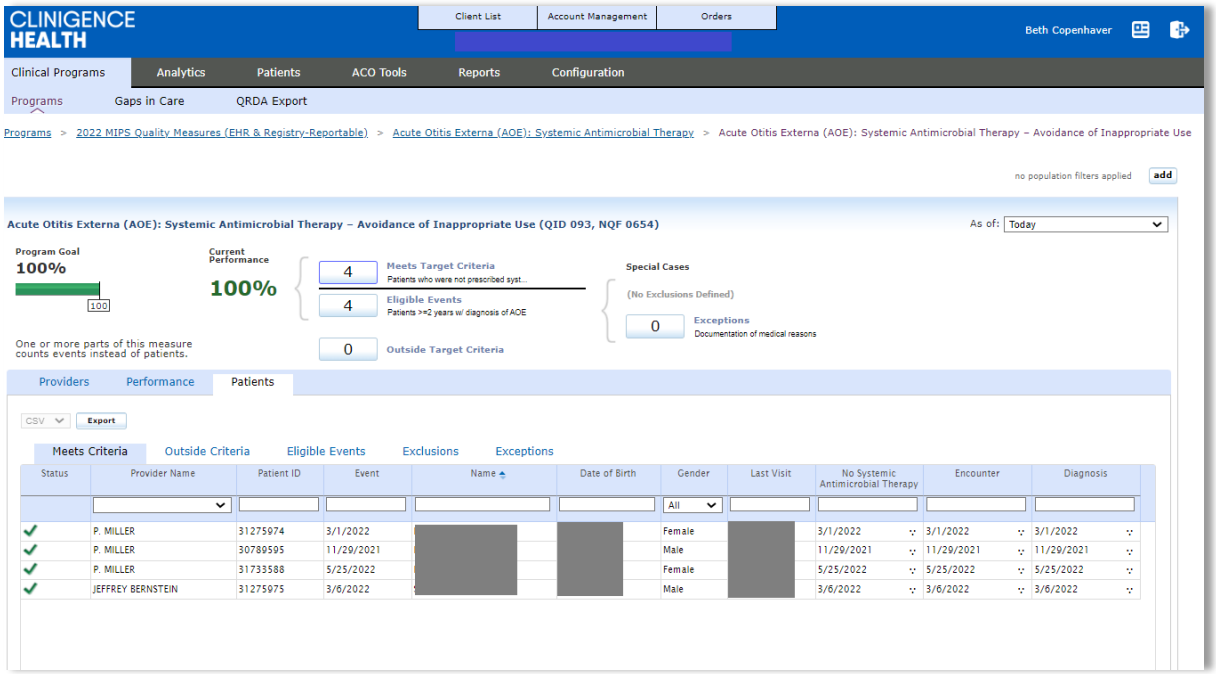
Clinigence used the following audit Processes for the Quality data submission:

- Initial Implementation – accuracy of numerator, denominator and exclusion criteria results are verified by working with the practice after an EP's data is initially loaded, mapped, and calculated.
- Variance Checks - Periodic manual checking for unusual variances in report results and, if found, notified Clinigence support and development teams.
- Quality Data Validation Audit Prior to Submission – At least 3% of the TIN/NPIs submitted to CMS (with a minimum of 10 or maximum of 50 TIN/NPIs), with at least 25% of the TIN/NPI's patients (with a minimum 5 patients or maximum sample of 50 patients) for a specific quality measure implemented for 2022. The audit is performed as soon as all data has been loaded and processed for all the 2022 quality measures for each TIN/NPI implemented for 2022 submission. (i.e., Results of the data validation/targeted audits, identifying calculation issues, why they occurred and what was done to remediate.)

### *INITIAL IMPLEMENTATION*

The Clinigence Health application implements each program via a Performance Dashboard that the customers can review and use to assist in validating the accuracy of the scores. Two views of the Performance Dashboard for Oakland are shown below.




CLINIGENCE HEALTH
Client List
Account Management
Orders
Beth Copenhaver
Clinical Programs
Analytics
Patients
ACO Tools
Reports
Configuration
Programs
Gaps in Care
QRDA Export
Programs > 2022 MIPS Quality Measures (EHR & Registry-Reportable) > Acute Otitis Externa (AOE): Systemic Antimicrobial Therapy > Acute Otitis Externa (AOE): Systemic Antimicrobial Therapy – Avoidance of Inappropriate Use
no population filters applied
add
Acute Otitis Externa (AOE): Systemic Antimicrobial Therapy – Avoidance of Inappropriate Use (QID 093, NQF 0654)
As of: Today
Program Goal
100%
100
Current Performance
100%
4
Meets Target Criteria
Patients who were not prescribed syst...
4
Eligible Events
Patients >=2 years w/ diagnosis of AOE
0
Outside Target Criteria
Special Cases
(No Exclusions Defined)
0
Exceptions
Documentation of medical reasons
One or more parts of this measure counts events instead of patients.
Providers
Performance
Patients
CSV
Export
Meets Criteria
Outside Criteria
Eligible Events
Exclusions
Exceptions
Status
Provider Name
Patient ID
Event
Name
Date of Birth
Gender
Last Visit
No Systemic Antimicrobial Therapy
Encounter
Diagnosis
All
P. MILLER 31275974 3/1/2022 Female 3/1/2022 3/1/2022 3/1/2022
P. MILLER 30789595 11/29/2021 Male 11/29/2021 11/29/2021 11/29/2021
P. MILLER 31733588 5/25/2022 Female 5/25/2022 5/25/2022 5/25/2022
JEFFREY BERNSTEIN 31275975 3/6/2022 Male 3/6/2022 3/6/2022 3/6/2022

### *VALIDATION PROCESS*

Validation worksheets were generated for the measures selected for reporting. A support ticket was created for each organization with boilerplate instructions:

*Customer,*

*I am attaching the validation worksheets for your 2022 MIPS measures. Since most of these are episodic measures, each has an individual report. The purpose of the validation worksheet is to ensure that the numbers for reporting are as accurate as possible. It requires someone to access the EMR directly to compare the data from the Clinigence performance dashboard with a sample of patient charts, so someone who is very familiar with the EMR would be best. The attached worksheets list the audited patients and their status for each measure (Not Eligible, Numerator, Complement, Exclusion). We need you to confirm that the patients are classified correctly. Please use our support site when sending any specific example patient data: https://support.clinigence.com.*

*Not Eligible - Patient does not meet the denominator requirements for the measure*
*Numerator - Patient meets the numerator requirements for the measure. The report includes the date the patient qualified if they are in the numerator.*
*Complement - Patient is eligible for the measure but does not meet the numerator requirements*
*Exclusion/Exception - Patient is excluded (limited life expectancy, in hospice, refused if applicable, etc)*

*You can edit the attached document and add any notes. For example, change to green if validated in the EMR or red if incorrect. If incorrect, please provide the documentation date (pneumonia vaccine documentation, smoking cessation, etc.) or note that there is no documentation in the EMR to support the Clinigence classification. We'll investigate any issues found.*

*Please let me know if you have any questions for validating the scores. Please respond within the 7 days with your findings so we can investigate and address any issues.*

*Thanks,*

Attached to the support ticket was the validation worksheet, an example (de-identified) shown here:

| Clinigence ID | PatientName | Gender | DateOfBirth | Age | Preventive Care & Screening: Screening for High BP and Follow-up Documented, 2022 | Preventive Care & Screening: Screening for High BP and Follow-up Documented, 2022 Qualify Date | Episode Key | Episode Date |
|---|---|---|---|---|---|---|---|---|
| 18466913 | AI | M | MM/DD/1962 | 60 | Complement | | 519153871 | 1/27/2022 |
| 18466913 | AI | M | MM/DD/1962 | 60 | Complement | | 519153871 | 1/27/2022 |
| 28800912 | ASM | F | MM/DD/1964 | 58 | Complement | | 521963680 | 3/3/2022 |
| 28800912 | ASM | F | MM/DD/1964 | 58 | Numerator | 6/2/2022 | 527847538 | 6/2/2022 |

Feedback with customer was handled in the support ticketing system to protect PHI.

### *VARIANCE CHECKS*

Periodic manual checks were performed to ensure that the measure scores did not show extreme changes from day to day while we were processing the data.

### *QUALITY DATA VALIDATION AUDIT*

The following table shows the details for the data validation and group submissions for four TINs:

| Clinigence ID | Description | Data Received | Patient Audit Status | # Measures | Quality Data Submission Status | QPP Group Submission ID |
|---|---|---|---|---|---|---|
| 18092320 | Redlands, CA | | Audit attached to support ticket 11622. Customer did not respond or review patient audit (which was the case in previous program years). | 7 | Complete | 0b6fd8b9-156b-43c1-92d5-775524ceba07 |
| 18829827 | Oakland, MD | | Discrepancy in how age handled for URI between the eCQM (3 months on first day of measurement period) and CQM (on date of encounter). Around 10 patients provided not qualifying for eCQM due to age on 1/1/2022.<br>Provided customer with detailed audit 11603, customer identified several patients they believed were incorrectly classified. We researched the possible issues and resolved all cases to the satisfaction of the customer. | 2 EHR method (QRDA CAT III) | Complete | 0b6fd50d-5349-4212-abb9-facd5364fe8e |
| 10952196 | Cuyahoga Falls, OH | | Audit attached to support ticket 11611. Customer did not respond or review patient audit (which was the case in previous program years). | 10 | Complete | 0b6ffbaa-100d-42f2-b9a8-084553b24582 |
| 22241820 | Bellingham, WA | | Issue found with HIV screen (not actually done at practice), dropped measure. Additional data was extracted after initial patient audit to include additional lab results.<br>Audit attached to support ticket 11655. Customer did not respond or review patient audit | 7 | Complete | 0b6fda94-f164-479d-8b04-944f925a0a1d |

## MEASURE 3: SUBMITTING REPORTS TO CMS

This measure demonstrated the ability to submit MIPS scores to CMS. We generated the required QRDA Cat III files, uploaded to CMS via the QPP portal, and downloaded the scores and submission ID.

| Description | QPP Submission ID | Submission Details |
|---|---|---|
| Redlands, CA | 0b6fd8b9-156b-43c1-92d5-775524ceba07 | Seven eCQMs submitted in QRDA CAT III. No submission related issues. |
| Oakland, MD | 0b6fd50d-5349-4212-abb9-facd5364fe8e | Submitted combination of eCQMs and CQMs for this group/TIN. Two eCQMs included in QRDA CAT III submission, four additional measures submitted in a JSON file. No issues with submissions. |
| Cuyahoga Falls, OH | 0b6ffbaa-100d-42f2-b9a8-084553b24582 | Ten eCQMs submitted in QRDA CAT III. No submission related issues. |
| Bellingham, WA | 0b6fda94-f164-479d-8b04-944f925a0a1d | Seven eCQMs submitted in QRDA CAT III. No submission related issues. |

### *EXAMPLE – OAKLAND, MD ORGNIZATION*

We chose the organization in Oakland, MD, to demonstrate the submission measure.

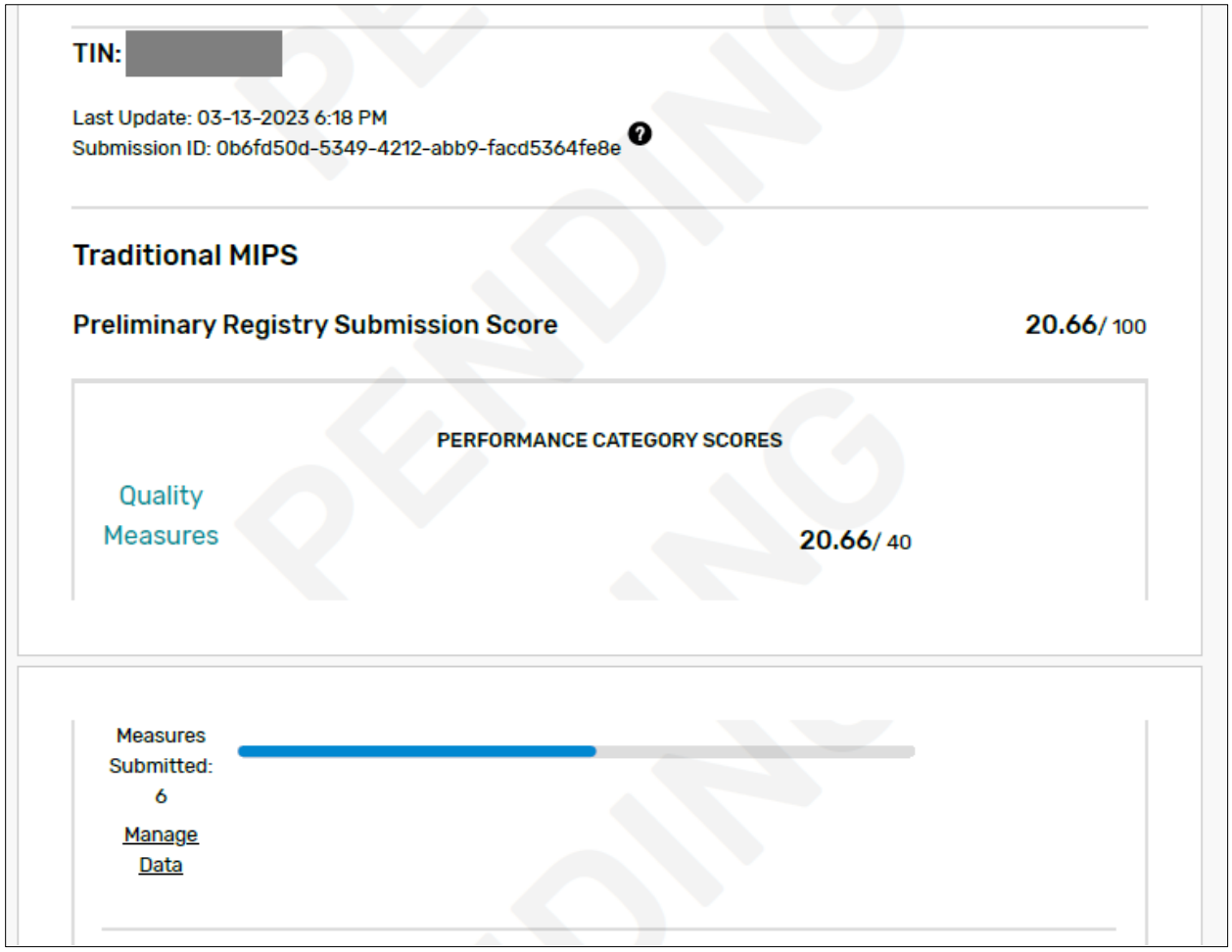
**Oakland Submission Details**

| Clinigence ID | Description | Validation Status? | Submission Status? |
|---|---|---|---|
| 18829827 | Oakland, MD | Generated scores as of 12-31-2022 compared to scores reported on QPP site - rates and submission data downloaded match. | Complete |

**Oakland Submission Files**

The CATIII files submitted for each practice contain PHI and were not included in this report. The group score as shown on the QPP site follows.

Submission ID: 0b6fd50d-5349-4212-abb9-facd5364fe8e



## KEY MILESTONES

*The list of key milestones that were met during the Real World Testing process. Includes details on how and when the developer implemented measures and collected data. Key milestones should be relevant and directly related to outcomes discussed.*

| Key Milestone | Care Setting | Date/Timeframe |
|---|---|---|
| Confirm data extraction and import for all EPs who have purchased the MIPS reporting service | All | Jan. 1, 2023 – Mar. 31, 2023 |
| Calculate measure scores for Groups and EPs selected to participate in the RWT | All | Jan. 1, 2023 – Mar. 31, 2023 |
| Validate the measure scores | All | Jan. 1, 2023 – Mar. 31, 2023 |
| Generate the QRDA Cat III files | All | Jan. 1, 2023 – Mar. 31, 2023 |
| Upload QDRA files to QPP portal and download submission reports | All | Jan. 1, 2023 – Mar. 31, 2023 |
| Create RWT report | All | January 2024 |
| Submit RWT report | All | January 2024 |

**ATTESTATION**

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

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Authorized Representative Signature: Beth Pate Copenhaver

Date: January 23, 2024