

# REAL WORLD TESTING RESULTS REPORT

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.

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**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/cur-es-act-real-world-testing/>

Developer Real World Testing Results Report Page URL [if different from above]:  
<http://clinigencehealth.com/cur-es-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
For Measure 2, one of the audit processes was not available: Automated Nightly Variance Checking. Manual checking was used instead.	Exception reporting logic is in the process of being updated and the Nightly Variance Checks were not being recorded or reported during the PY 2021 reporting period. So there was no automated variance checking available.	Manual checks during the reporting period were used periodically to ensure that extreme changes to the measure scores were not happening. This was not as convenient as the automated process and was not a nightly occurrence.

**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.*

The methods we used to demonstrate real-world interoperability were as outlined in the RWT Plan except where noted. The successful acceptance of 100% of our submissions by CMS proves that we were successful in a real-world environment.

**Measure 1:** Data Extraction and Import. Authorized users used our proprietary data extraction tools to consume data from various sources and formats and import that data into our database.

**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 were verified by working with the practice after an EP’s data was initially loaded, mapped, and calculated.
- Nightly Variance Checks (planned): *The automated checking was unavailable during the PY 2021 reporting period, periodic manual checks were used instead. Noted in the Changes to Plan section.*
- Quality Data Validation Audit Prior to Submission: Validated at least 3% of the TIN/NPIs submitted to CMS with at least 25% of the TIN/NPI's patients for a specific quality measure implemented for 2021. The audit was performed as soon as all data has been loaded and processed for all of the 2021 quality measures for each TIN/NPI implemented for 2021 submission.

**Measure 3:** Submitting Reports to CMS. Quality data via QRDA CAT III were submitted. Any errors found were tracked, analyzed, and corrected so that 100% of the MIPS submissions were accepted by CMS.

**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.

<b>Standard (and version)</b>	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.
<b>Updated certification criteria and associated product</b>	
<b>Health IT Module CHPL ID</b>	
<b>Conformance measure</b>	



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## 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.

Authorized users generated measure scores for each EP and generated 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.

(from 85 FR 25766)

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**ASSOCIATED CERTIFICATION CRITERIA**

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

<b>Certification Criteria</b>	<b>Requirement</b>
<p>§170.315(c)(3) Clinical Quality Measures (CQMs) – Report (Cures)</p>	<p>(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</p> <p>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</p> <p>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.</p>

**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
- Nightly 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 five TINs for PY2021 (MIPS and CPC+ 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	0993bec8-3700-4788-922c-c4e8a290ad99	MIPS 2021 Submitted as Qualified Registry	Redlands hosts the EMR. Clinigence extracts data directly from the EMR nightly.	From 1/1/2021 through 3/1/2022: Total: 1,345,780 files



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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	09a226af-376a-4db0-8857-7c43d2b6d72d	MIPS 2021 Submitted as Qualified Registry  *combination of QRDA CAT3 and JSON	Oakland hosts the EMR & sends Clinigence Excel data files to calculate measures	Three sets of 5 files covering the TIN's outpatient clinical data for 6 measures: Jan - Jun 2021 Jul - Sep 2021 Oct - Dec 2021  Total: 15 files
Reynoldsburg, OH	22792643	Completed	098ff761-d6c7-4d1f-82c0-0761fdcbee65	CPC+ 2021 (2/28/22 deadline) Submitted as APM staff role	Reynoldsburg hosts the EMR. Clinigence extracts data directly from the EMR nightly.	From 1/1/2021 through 1/31/2022:  Total: 164,799 files
Glasgow, KY	19950990	Completed	09c09a90-25ce-485e-97cd-e248443e1978	MIPS 2021 Submitted as Qualified Registry	Glasgow hosts the EMR. Clinigence extracts data directly from the EMR nightly.	From 1/1/2021 through 1/31/2022:  Total: 799,358 files
Cuyahoga Falls, OH	10952196	Completed	0993bec8-3700-4788-922c-c4e8a290ad99	MIPS 2021 Submitted as Qualified Registry	Western Reserve hosts the EMR. Clinigence extracts data directly from the EMR nightly.	From 1/1/2021 through 3/1/2022:  Total: 1,323,825 files

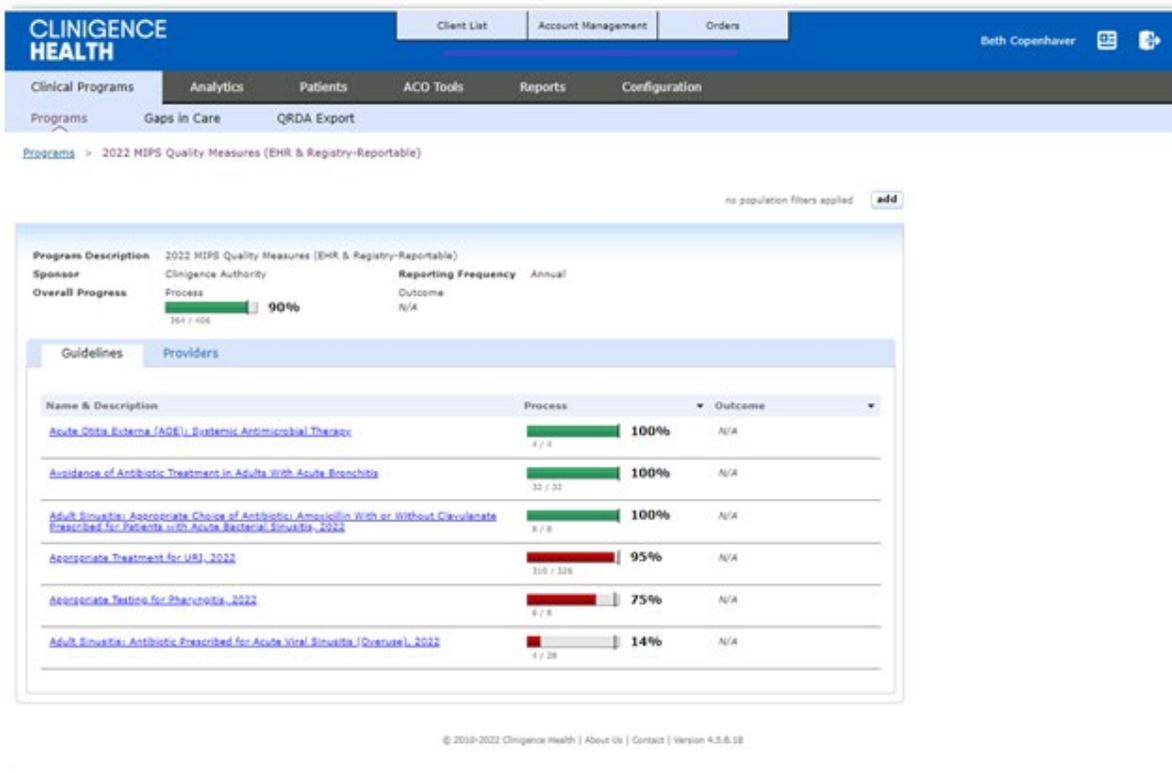
**MEASURE 2: CALCULATE AND VALIDATE**

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.
- Nightly Variance Checks - *The automated checking was unavailable during the PY 2021 reporting period, periodic manual checks were used instead. Noted in the Changes to Plan section.*
- 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 2021. The audit is performed as soon as all data has been loaded and processed for all of the 2021 quality measures for each TIN/NPI implemented for 2021 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
Beth Copenhaver

Clinical Programs
Analytics
Patients
ACD 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:

**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

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
✓	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**

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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 2021 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	Acute Otitis Externa (AOE): Systemic Antimicrobial Therapy - Avoidance of Inappropriate Use	Acute Otitis Externa (AOE): Systemic Antimicrobial Therapy - Avoidance of Inappropriate Use Qualify Date	Episode Key	Episode Date
29772887	AC	M	###/1991	30	Numerator	8/26/2021	607808122	8/26/2021
29899954	JD	F	###/2014	7	Numerator	1/10/2021	610377963	1/10/2021
30789595	WD	M	###/1984	37	Numerator	11/29/2021	612058955	11/29/2021
29899963	RV	F	###/1992	29	Numerator	3/27/2021	610378011	3/27/2021
29899960	GW	M	###/1961	60	Numerator	3/20/2021	610377993	3/20/2021

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

#### **NIGHTLY VARIANCE CHECKS**

Automated Nightly Variance Checks were not being recorded or reported during the PY 2021 reporting period. As there was no automated variance checking available, 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. This is noted in the Change to Plan section.

## QUALITY DATA VALIDATION AUDIT

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

Clinigence ID	Description	Data Received	Patient Audit Status	# Measures	Quality Data Submission Status	QPP Group Submission ID
18092320	Redlands, CA	From 1/1/2021 through 3/1/2022: Total: 1,345,780 files extracted	Audit attached to support ticket 11230. Customer did not respond or review patient audit (which was the case in previous program years).	6	Complete	0993bec8-3700-4788-922c-c4e8a290ad99
18829827	Oakland, MD	Three sets of 5 files covering the TIN's outpatient clinical data for 6 measures: Jan - Jun 2021, Jul - Sep 2021, Oct - Dec 2021 Total: 15 files	Discovered missing exception mappings for Adult Sinusitis: Appropriate Choice of Antibiotic: Amoxicillin With or Without Clavulanate Prescribed for Patients with Acute Bacterial Sinusitis, 2021 (QID 332) Syncing new mappings - was zero for exception. Expecting: 10 (9 pts, 10 episodes) Provided customer with detailed audit after exclusion data included in ticket 11187, no response from customer. An issue was found with exclusion data not being loaded. This was identified with the help of the customer and corrected, tickets 22500 and 24070.	2 EHR method (QRDA CAT III)	Complete	09a226af-376a-4db0-8857-7c43d2b6d72d
22792643	Reynoldsburg, OH	From 1/1/2021 through 1/31/2022: Total: 164,799 files	No formal audit performed, customer provided various feedback throughout the year on the two CPC+ measures including these support tickets: 10864, 10817, and 10816.	2	Complete	09c09a90-25ce-485e-97cd-e248443e1978
19950990	Glasgow, KY	From 1/1/2021 through 1/31/2022: Total: 799,358 files	No formal audit performed, customer provided various feedback throughout the year on their 2021 MIPS measures including these support tickets: 11205, 11195, 11083, 11079, 10966, 10943, 10942, 10935, 10918, 10813, 10811	9	Complete	09c09a90-25ce-485e-97cd-e248443e1978
10952196	Cuyahoga Falls, OH	From 1/1/2021	Audit attached to support ticket 11229. Customer did not respond or review patient	9	Complete	0993bec8-3700-4788-



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Clinigence ID	Description	Data Received	Patient Audit Status	# Measures	Quality Data Submission Status	QPP Group Submission ID
		through 3/1/2022: Total: 1,323,825 files	audit (which was the case in previous program years).			922c-c4e8a290ad99

**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	0993bec8-3700-4788-922c-c4e8a290ad99	Six eQCMs submitted in QRDA CAT III. No submission related issues.
Oakland, MD	09a226af-376a-4db0-8857-7c43d2b6d72d	Submitted combination of eQCMs and CQMs for this group/TIN. Two eQCMs included in QRDA CAT III submission. No issues with submissions.
Reynoldsburg, OH	098ff761-d6c7-4d1f-82c0-0761fdcbec65	Two CPC+ eQCMs submitted in single file. Various issues with CPC+ specific requirements in QRDA CATIII file. Resolved with the help of CPC+ support, <a href="mailto:CPCPlus@telligen.com">CPCPlus@telligen.com</a> . Most had to do with template ID versions.
Glasgow, KY	09c09a90-25ce-485e-97cd-e248443e1978	Nine eQCMs submitted in QRDA CAT III. No submission related issues.
Cuyahoga Falls, OH	0993bec8-3700-4788-922c-c4e8a290ad99	Nine eQCMs 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 12-31-2021 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: 09a226af-376a-4db0-8857-7c43d2b6d72d

**TIN:** [REDACTED] 11

Last Update: 03-14-2022 5:16 PM  
Submission ID: 09a226af-376a-4db0-8857-7c43d2b6d72d [?](#)

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**Traditional MIPS**

Each TINs Score is achieved by adding up the points earned in each Performance Category.

**Preliminary Registry Submission Score** **57.76** / 100

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**PERFORMANCE CATEGORY SCORES**

**Quality Measures** **52.42** / 65

Measures Submitted: 6  [Manage Data](#) ▼

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**Additional Awarded Bonus Points**

Complex Patient Bonus **5.34** / 10



**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, 2022 – Mar. 31, 2022
Calculate measure scores for Groups and EPs selected to participate in the RWT	All	Jan. 1, 2022 – Mar. 31, 2022
Validate the measure scores	All	Jan. 1, 2022 – Mar. 31, 2022
Generate the QRDA Cat III files	All	Jan. 1, 2022 – Mar. 31, 2022
Upload QDRA files to QPP portal and download submission reports	All	Jan. 1, 2022 – Mar. 31, 2022
Create RWT report	All	September 2022
Submit RWT report	All	December 2022

**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 Email: Beth.Copenhaver@clinigencehealth.com

Authorized Representative Signature:

Date: January 31, 2023