Healthfully

Real World Testing Results 2022

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Revision History

REVISION	DATE	NAME
Original 1.0	12/30/22	Kristen Hostetter
Revision 1.1	2/17/23	Kristen Hostetter

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Results Summary

This document outlines Healthfully's testing results measuring real world use cases of our interoperability and data exchange features certified and attested with the 2015 Edition and Cures Updated criteria.
Testing utilized organizations that cover the spectrum of care settings represented by our clients: inpatient & ambulatory.
The results and findings are outlined below.

General Information

Plan Report ID Number: 20211130hea
Developer Name: Healthfully Inc.
Product Name(s): Flagler Health + Anywhere, Healthhfully
Version Number(s): 17
Certified Health IT Product List (CHPL) ID(s): 15.05.05.3081.HEFY.01.00.0.201222, 15.05.05.3081.HEAL.01.00.0.201222
Developer Real World Testing Page URL: https://www.healthfully.io/about/certification-and-additional-costs

Justification for Real World Testing Approach

Our overall approach to real world testing is to synthesize, expand and operationalize key testing performed during our system, integration, and production gates.

In our case, real world testing applies to Patient Engagement, certification criterion 170.315(e)(1) View, download, and transmit to 3rd party. Our testing focus included:
1) Quality Assurance - using a known data set with expected outcomes
2) Patterning - captured statistics of data to pattern what is standard vs. non-conforming

For Real World Testing, we built out our tests in production to be applied for our continuous integration.

Standards Updates (SVAP and USCDI)

_✓___ No, none of my products include these voluntary standards

Standard (and version): N/A
Updated certification criteria and associated product: N/A (no standards were updated)
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

1 Measures Used in Overall Approach

1.1 Description of Measurement/Metric

Measurement/Metric	Description
Known Dataset	We used a known dataset with predictable outcomes for verification and validation
Statistic Capture	We captured statistics as data flows through and trended this data to ensure conformity

1.2 Associated Certification Criteria

Measurement/Metric	Associated Certification Criteria
Known Dataset	170.315(e)(1) View, download, and transmit to 3rd party
Statistic Capture	170.315(e)(1) View, download, and transmit to 3rd party

1.3 Justification for Selected Measurement/Metric

Measurement/Metric	Description
Known Dataset	170.315(e) requires content as specified https://www.healthit.gov/test-method/view-download-and-transmit-3rd-party. In order to prove that this content is supported, we created data sets specific to ensure completeness of the content
Statistic Capture	For our real world testing, we monitored production data flowing through and trended this data to ensure that it conformed to expectations and alerted on any potential non conformities to allow for investigation and reporting when applicable.

1.4 Summary of Change

Inpatient was added to the scope of the 2022 Real World Testing as the customer base allowed for this care setting testing.

Reason: The reason this care setting was included was to enhance the statistical capture and compare the volume across clients and enlighten the analysis of any potential discrepancies siloed to an individual care setting.

Impact: The impact of adding the inpatient care setting allowed a broader holistic view of the patient care setting population and statistical comparison.

1.5 Care Setting(s)

Care Setting	Description
Ambulatory	For the ambulatory setting, we used both 1) a known dataset to continuously confirm application conformance with requirements met per https://www.healthit.gov/test-method/view-download-and-transmit-3rd-party 2) statistical data captured, trended, monitored, and alerted to ensure that real patient data flowed through a patient's journey conformed to the anticipated trend. The Ambulatory Care Setting was chosen as the applicable care setting for real world testing as it represents one of the marketed care settings of the business.
In-Patient	For the in-patient setting, we used both 1) a known dataset to continuously confirm application conformance with requirements are met per https://www.healthit.gov/test-method/view-download-and-transmit-3rd-party 2) statistical data capture, trending, monitoring, and alerting to ensure that real patient data as it flows through a patient's journey conforms to the anticipated trend. The In-Patient Care Setting was chosen as the applicable care setting for real world testing as it represents one of the marketed care settings of the business.

1.5 Expected Outcomes

Measurement/Metric	Description
Known Dataset	Using a known dataset allows to have completely predictable outcome. This is how we test that the application is functional and meets quality assurance tests. Success is measured when there is 100% the same outcome time over time.
Statistic Capture	For a given population, the expectation is that over time there is established trends in the data along with acceptable margins. Once the trends and acceptable margins are defined, the expectation is that all data fall within these measures.

Key Milestones

Key Milestone	Care Setting	Date (Completed)
Define known dataset, build known dataset	Ambulatory In-Patient	4/10/2022

Define statistics for capture and process by which to capture statistics, develop and deploy	Ambulatory In-Patient	3/1/2022
Review data capture for given population and trend overtime, define acceptable margins	Ambulatory In-Patient	6/1/2022
Develop and deploy monitoring, reporting, and alerting mechanism based on defined trends and acceptable margins	Ambulatory In-Patient	7/1/2022
Build repeatable process to consume, analyze, and report on known dataset in production (note: this repeatable process will facilitate the ongoing compliance & adherence to the patient engagement criteria)	Ambulatory In-Patient	8/1/2022
Real World Testing Results	Ambulatory In-Patient	1/15/2022

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Real World Testing Results

*(Note: Summary of Testing Methods included. *All measures were implemented, and data collected 2 weeks before their respective completed dates. The data was retrieved directly from production data and audit logs.).*

Use Case 1 – During the course of ambulatory & in-patient care settings, patients (and their authorized representatives) receive the health record (CCD). They can view, download, and transmit the health record (CCD) as needed.

Known Dataset Defined: System/Audit Logs confirms the successful views, downloads & transmits of the CCD and concur with Patient & Authorized Representatives access to the CCD in the Production environment.

Justification: The patient portal expects to receive a CCD successfully and display the CCD for patients & their authorized representatives viewing.

Testing Method: System/Audit Logs was assessed to ensure the volume of specified CCDs concur with those received and viewed within the production environment for ambulatory & in-patient settings. Over time patterns may be established as a baseline for further testing during statistical data capture.

Expected Outcome: The definition of success for this measure includes validation of received & viewed CCDs (and associated error messages for those not successfully received/viewed).

Metric 1 – CCD Documents Received

Includes count of successful CCDs received accounting for unsuccessful import their associated error messages. Counts are for both distinct CCDs received and unique patients for at least one CCD was received in the time period in the production environment. The expectation is that all CCDs are received and imported, and the error count is 0 for all care settings and periods.

period	caresetting	measurement	documents	patients	errors
2022	Ambulatory	CCD Documents Received	1,124,410	53,179	0
2022	Inpatient	CCD Documents Received	43	4	0

Metric 2 – Patient Electronic Access to Health Information
Includes count of patients & authorized representatives' that successfully gained access to the CCD in the production environment. The expectation is that the error count is 0 for all care settings and periods. As the count by distinct patient, it is was expected that the successful access count would never exceed the distinct patients from Metric 1 (CCD Documents Received).

period	caresetting	measurement	successful	errors
2022	Ambulatory	Patient Electronic Access to Health Information	27,523	0
2022	Inpatient	Patient Electronic Access to Health Information	3	0

Metric 3 – View, Download, Transmit
Includes count of successfully viewed, downloaded, and transmitted CCDs. The successful count includes patients and their authorized representatives. View, download, and transmit counts do not discriminate by format and count by distinct patient. Therefore, the count should never exceed distinct patients from Metric 2 (Patient Electronic Access to Health Information). The error count is 0 for all care settings and periods.

period	caresetting	measurement	successful	errors
2022	Ambulatory	View, Download, Transmit	9,129	0
2022	Inpatient	View, Download, Transmit	0	0

Statistic Capture Defined: Data was gathered from client organizations that best represented ambulatory & in-patient care settings. The data included the count of views, downloads, and transmissions of CCDs over a timeframe of 1 year.

Review of data captured showed anticipated trends:

- Decreased volume from CCDs Received to Patient Electronic Access to Health Information.
- Decreased volume from Patient Electronic Access to Health Information to View, Download, Transmit
- No errors were encountered in the receipt of CCD, Patient Access to Electronic Health Information or Download, View, and Transmit measures.

Acceptable Margins: No errors are to be encountered for any process.

Monitoring: The method of monitoring includes annual reports that trends data as described in the statistic capture that shows patterns over time and acceptable margins. Any data that falls outside of the acceptable margins is reviewed as a plausible outlier. This approach satisfies a repeatable pattern that can be extended to visual patterns over a 1-year period and each consecutive year of testing and monitoring conformity.

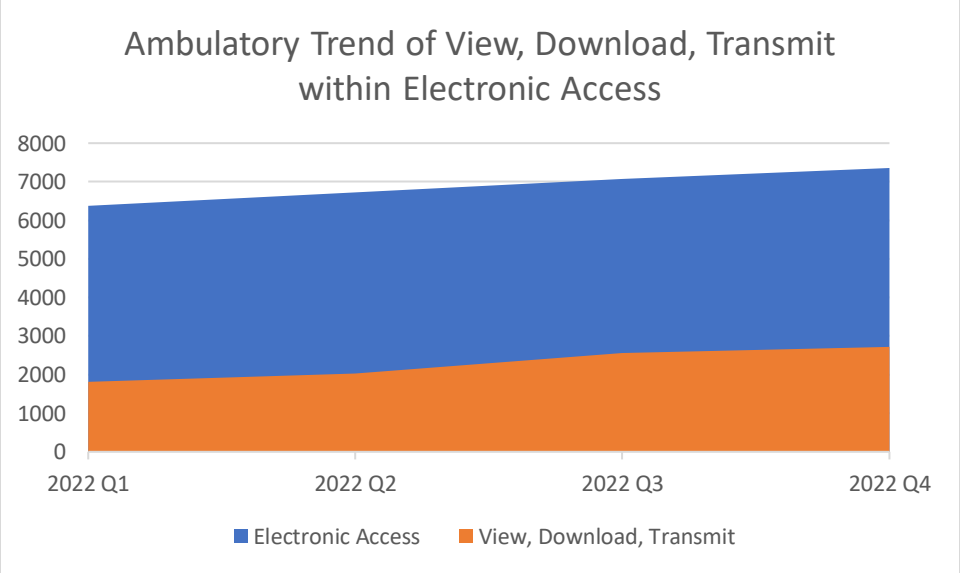

Figure 1. 2022 Ambulatory Trend of View, Download, and Transmit within Electronic Access

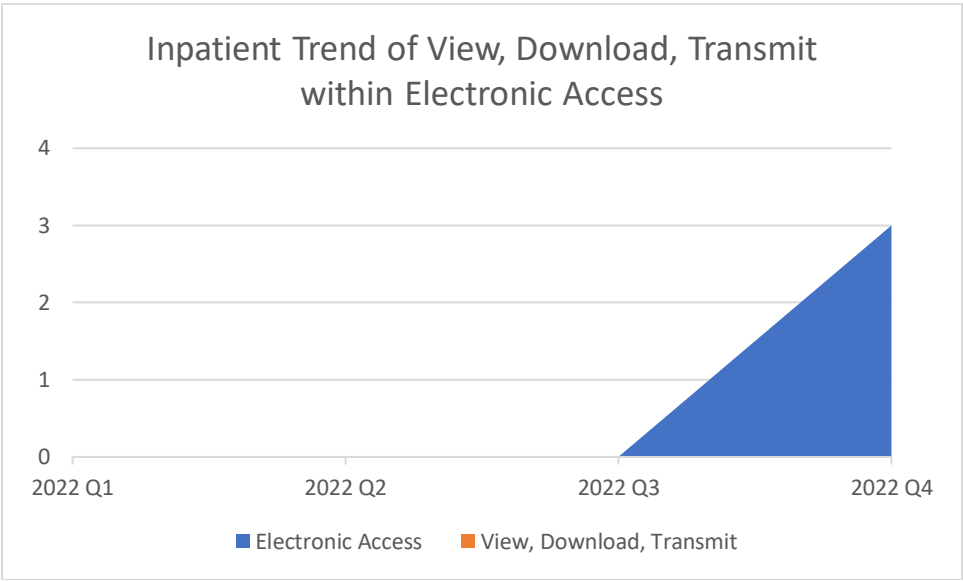

Figure 2. Figure 1. 2022 Inpatient Trend of View, Download, and Transmit within Electronic Access

Key Findings

Reviewing the statistical data we captured, it shows that within the Ambulatory care setting, as Patient Electronic Access to Health Information increases, so does the successful use of View, Download, and Transmit. This trend is not yet shown for the Inpatient care setting as not enough data has been gathered due to the recent implementation of this care setting. It is anticipated that this care setting will show the same trend as Ambulatory as we continue to monitor and trend.

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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