Real World Testing Plan

GENERAL INFORMATION

Plan Report ID Number:

Developer Name: Cyfluent

Product Name(s): Cyfluent

Version Number(s): 3.2

Certified Health IT Product List (CHPL) ID(s): 15.04.04.2975.Cyfl.03.00.1.190813

Version Number(s): 3.3

Certified Health IT Product List (CHPL) ID(s): 15.04.04.2975.Cyfl.03.01.1.241211

Developer Real World Testing Page URL: https://www.cyfluentphr.com/_Files/CURES/

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- § 170.315(b)(1) Transitions of care
    - § 170.315(b)(2) Clinical information reconciliation and incorporation
    - § 170.315(b)(7) Security tags - summary of care – send
    - § 170.315(b)(8) Security tags - summary of care - receive

Case 2:

- § 170.315(b)(3) Electronic prescribing

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- § 170.315(b)(6) Data export
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- § 170.315(f)(1) Transmission to immunization registries –
    - § 170.315(g)(9) Application access – all data request
    - § 170.315(b)(6) Data export

REAL WORLD TESTING SUMMARY – CASE 1

- Justification: The ability for patients and providers to not only share information within their ecosystem, but also share more seamlessly with external healthcare systems, is essential for patient care, and the main thrust behind the information blocking initiative.
- Test Methodology: Case management logs and system logs will be reviewed to ensure the export function is operating properly and to determine the frequency of use. Log files obtained during Real World Testing will be used for analysis in several areas to validate the proper operation of the export. This test methodology will primarily test the conformance of the implementation.
- Expected Outcome(s): It is expected that authorized users will be able to share PHI for a patient using the secure messaging function. Errors in transmission will be tracked and analyzed.

JUSTIFICATION FOR REAL WORLD TESTING APPROACH

Use Case 1 Overview: Secure Messaging. While sending messages between doctors and patients within the Cyfluent ecosystem (and also its Secure Messaging provider Secure Exchange Solutions) has proven to be a reliable user experience, messages that are sent to external providers who use different secure messaging domains/providers will often unreliably fail. This has given many of Cyfluent's user base pause in regard to using this newer technology. So much so, that many users are still using insecure faxes (especially in the small practice ambulatory world).

Cyfluent plans to improve the ability of its users to search for active Direct addresses, and work with a few of its customers to see how it can improve the reliability of this feature.

- Secure Direct messaging is a more safe and modern approach to transitions of care, however, if doctors do not choose to adopt its use, the efforts to comply with this standard will have no impact.
- The ability for patients and providers to not only share information within their ecosystem, but also share more seamlessly with external healthcare systems, is essential for patient care, and the main thrust behind the information blocking initiative.

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

Standard (and version)	All standards versions are those specified in USCDI v1
Method used for standard update	SVAP
Date of ONC-ACB notification	April 2022
Date of customer notification (SVAP only)	April 2022
USCDI-updated criteria	The plan documents the support of all USCDI v1 data elements.

MEASURES USED IN OVERALL APPROACH

Certification Criteria	Requirement
§ 170.315(b)(1) Transitions of care	*i. Send and receive*
	ii. Validate and display
	iii. Create

Associated Certification Criteria

Certification Criteria	Requirement
§ 170.315(b)(2) Clinical information reconciliation and incorporation	*i. General requirements* *ii. Correct patient* *iii. Reconciliation* *iv. System Verification*
§ 170.315(b)(7) Security tags - summary of care – send	*i. Document, section, and entry (data element) level OR* *ii. Document level for the period until December 31, 2022*
§ 170.315(b)(8) Security tags - summary of care - receive	*i. Enable to receive a summary record* *ii. Preserve privacy*

Justification for Selected Measurement/Metric

The direct protocol involves payload compliance, attachment format validation, and tracking of message transmission status. All of which will be further evaluated.

Expected Outcomes

- Updated messaging formats and compliance will be further confirmed.
- Reasons for occasional message rejection from external HIEs will be explored.

REAL WORLD TESTING SUMMARY – CASE 2

- Justification: Real World Testing is intended to verify that deployed Certified Health IT continues to perform as intended by demonstrating that certified capability for interoperability and data exchange is successfully utilized in the real world. We intend to demonstrate the required certified capabilities are effective by showing real time usage of eRx transactions by our providers which will be performed by examining reports from our eRx partner and comparing them to our logs.
- Test Methodology: Transmission logs from Change Healthcare will be reviewed in comparison to Cyfluent's transmission logs.
- Expected Outcome(s): We expect that there will be high utilization by our providers with high success rate.

JUSTIFICATION FOR REAL WORLD TESTING APPROACH

Use Case 2 Overview: E-Prescribing. Change Healthcare is Cyfluent's eRx provider. Real World Testing is intended to verify that deployed Certified Health IT continues to perform as intended by demonstrating that certified capability for interoperability and data exchange is successfully utilized in the real world.

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

Standard (and version)	2017071
Date of ONC-ACB notification	April 2022

MEASURES USED IN OVERALL APPROACH

Certification Criteria	Requirement
§ 170.315(b)(3) Electronic prescribing	*i. Create electronic prescriptions*
	ii. Authorize refills
	iii. Track Errors

Expected Outcomes

- Our expectation is there will be high utilization by providers with a high success rate.

REAL WORLD TESTING SUMMARY – CASES 3, 4, & 5

- Justification: The export of the health information associated with a patient population is another way to share health information with an external organization. It is typically used for research or quality purposes to look for specific trends on patient population. Export of a patient population is an administrative function only available to credentialed users. It is assumed that this function will be run as a scheduled activity as it will have significant impact on the Health IT Module. This will provide a metric on the use of the export of EHI for a patient population associated with the Health IT Module.
- Test Methodology: Case management logs and system logs will be reviewed to ensure the export function is operating properly and to determine the frequency of use. Log files obtained during Real World Testing will be used for analysis in several areas to validate the proper operation of the export. This test methodology will primarily test the conformance of the implementation.
- Expected Outcome(s): It is expected that authorized users will be able to share EHI for a patient population using the export function. Errors in transmission will be tracked and analyzed.

JUSTIFICATION FOR REAL WORLD TESTING APPROACH

Use Case 3 Overview: Application Programming Interfaces. Cyfluent's data extracts will be serviced indirectly by Planned Systems International.

Planned Systems International (PSI) is a leading healthcare and defense contractor for the federal government. As a part of their compliance needs, they need to be able to represent the ability to consume a modern/Cures-compliant API as a success story for future project initiatives. PSI has a

number of customers, concerning which they hope to be able to issue SVAP instructions/migration steps following this Real World Test. In addition, PSI hopes to build a sample API client that will work with any FHIR/USCDI API as a potential vehicle for revenue.

This client will also be made available to Cyfluent's customers, in case any tech-savvy customer would like to customize a data extract beyond the scenarios already supported. Such a client will also serve as a more secure option to ad-hoc reporting. All of this will allow Cyfluent to market itself more rigorously in the healthcare industry.

In the event no data extracts are requested by Cyfluent's customers during the relevant time window, Cyfluent will use a scrambled database for these tests as an emergency backup. Cyfluent already has NDAs, Business Associate Agreements, etc., in place with PSI.

- Cyfluent will bolster API performance and compliance because a third party (PSI) will be comparing its API consumption with other electronic healthcare vendors. This will help to highlight any variableness across implementations. This will also allow Cyfluent to better align itself with the spirit behind the information blocking rule set forth in CURES, which attempts to make all data exposure uniform.

The following outlines the measures that have been identified to best demonstrate conformance to multiple certification criteria that are relevant to PSI's efforts to build a universal API client:

As part of the Real World Testing requirements for § 170.315(b)(6), § 170.315(b)(9), § 170.315(g)(7), § 170.315(g)(8), § 170.315(g)(9), § 170.315(g)(10), § 170.315(f)(4), and § 170.315(f)(5), the developer has developed the following metrics for their testing plan:

Use Case 4 Single Patient: Payload Compliance and Sharing. API response payloads will be confirmed to not error out, not respond when credentials are missing, comply to new formatting standards, include new data concepts (especially in relation to Care Plan), and return in a timely manner that doesn't lock up the API's system from a scalability standpoint.

Use Case 5 Multiple Patients: The same as Use Case 3, only with multiple/bulk patient requests. Included in this use case is the ability to query a patient seen in a date range. This would validate the API's ability to meet the needs of any health information exchange.

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MEASURES USED IN OVERALL APPROACH

Certification Criteria	Requirement
§ 170.315(b)(6) Data Export -	*i. General requirements for export summary configuration*
	i. Creation
	ii. Timeframe configuration *iii. Location configuration*

Associated Certification Criteria

Certification Criteria	Requirement
§ 170.315(b)(9) Care plan	*i. Record, change, access* *ii. Create* *iii. Receive*
§ 170.315(g)(7) Application access— patient selection	*i. Receive, identify, return token* *ii. Document*
§ 170.315(g)(9) Application access— all data request	*i. Respond to request* *ii. Document*
§ 170.315(g)(10) - Standardized API for patient and population services	*i. Data response single patient* *ii. Data response multiple patient*

§170.315(f)(4): Transmission to Cancer Registries	*i.* *ii.*	*Create* *Transmit*
§170.315 (f)(5) Transmission to public health agencies – electronic case reporting	*i.* *ii.* *iii.*	*Consume, maintain, and determine reportability* *Create case report* *Transmit*

Justification for Selected Measurement/Metric

The export of the health information associated with a patient population is another way to share health information with an external organization. It is typically used for research or quality purposes to look for specific trends on patient population. Export of a patient population is an administrative function only available to credentialed users. It is assumed that this function will be run as a scheduled activity as it will have significant impact on the Health IT Module. This will provide a metric on the use of the export of EHI for a patient population associated with the Health IT Module.

Expected Outcomes

- Payload formatting will be confirmed.
- API compliance will be validated and compared to competing systems.
- Data extracts will be achieved via modern API in lieu of legacy monolithic code.

REAL WORLD TESTING SUMMARY – CASE 6

- Justification: The export of the health information associated with a patient population is another way to share health information with an external organization. It is typically used for research or quality purposes to look for specific trends on patient population. Such services are crucial for the public health.
- Test Methodology: System logs will be reviewed to ensure the export function is operating properly and to determine the frequency of use. Log files obtained during Real World Testing will be used for analysis in several areas to validate the proper operation of the export. This test methodology will primarily test the conformance of the implementation.
- Expected Outcome(s): It is expected that patient immunization data will be properly represented in VIIS in the most modern and compliant transmission payload. Errors will be tracked and analyzed.

JUSTIFICATION FOR REAL WORLD TESTING APPROACH

This scenario is a real-world testing plan for the public health criterion that Cyfluent complies with. Since Cyfluent no longer has any customers that report/treat cancerous situations, the only criterion that are relevant are § 170.315(f)(1) Transmission to immunization registries.

Use Case 6 Overview: Immunization Registries. The Virginia Immunization Information System (VIIS) is progressively updating their CDA payload requirements in order to keep up with new standards. Cyfluent will upgrade their transmission payload version and monitor the transmissions for proper receipt.

Measure 1: Proper Data. This is a percentage of the patient immunizations that are properly represented as payload data in transmission to the VIIS.

Measure 2: Received And Is Reported. This is a percentage of immunizations that are properly represented in the VIIS. This percentage will be pulled as a subset of data in order to allow for manual review.

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MEASURES USED IN OVERALL APPROACH

Certification Criteria	Requirement
§ 170.315(f)(1) Transmission to immunization registries -	*i. Create*
	ii. Request, access, display

Associated Certification Criteria

Certification Criteria	Requirement
§ 170.315(g)(9) Application access – all data request	*iv. Record, change, access* *v. Create* *vi. Receive*
§ 170.315(b)(6) Data export	*iii. Receive, identify, return token* *iv. Document*

Justification for Selected Measurement/Metric

The export of the health information associated with a patient population is another way to share health information with an external organization. It is typically used for research or quality purposes to look for specific trends on patient population. Such services are crucial for the public health.

Expected Outcomes

- Real World Testing will show that child vaccination records are properly displayed in the VIIS system.
- Real World Testing will show a less than 1% error rate.

CARE SETTING

Care Setting	Justification
Ambulatory Care	Cyfluent plans to work with an Ambulatory Care customer, who receives referrals for all of their business. This makes them a prime candidate for communication with external health information exchanges (HIE) using the Direct secure messaging protocol.

SCHEDULE OF KEY MILESTONES

Key Milestone	Date/Timeframe
Release of documentation for the Real-World Testing to be provided to authorized representatives and providers. This includes surveys, specific instructions on what to look for, how to record issues encountered, and Customer Agreements.	December 2024
Collection of information as laid out by the plan for the period.	January 2025
Planned System updates to allow for collection of data after a SVAP update.	March 2025
Follow-up with providers and authorized representatives to understand any issues arising with the data collection.	Quarterly 2025
End of Real World Testing period/final collection of all data for analysis	January 2026
Analysis and report creation	January 2026
Submit Real World Testing report to ACB (Drummond)	February 2026

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.

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Date: 1/29/2026