Updox Certified Health IT Real World Testing Results

Updox, the leading healthcare communication platform for in-person and virtual care, is elated to provide software that is certified under the Office of the National Coordinator (ONC) for Health Information Technology to the public. You will find in Updox's Real World Testing Plan/Results all of the 2015 Edition and 2015 Cures Update Edition certification criteria subject to the Real World Testing Condition & Maintenance of Certification requirements at 45 CFR 170.405 that were certified as of August 31, 2023.

Within the RWT plan each Certified Health IT Module is organized the way the criteria are listed on ONC's Certified Health IT Product List (CHPL). In some cases, testing plans have been combined for efficiency to account for multiple Certified Health IT Modules where a criterion is certified under more than one certified Health IT module.

RWT plans and results involve the use of production activity data from actively using the Certified Health IT Modules. This production activity data is aggregated across clients and no protected health information (as defined by HIPAA) or client-specific identifiable information is used or contained in the information provided in our RWT plans or results.

Updox affirms that this Real-World Testing plan/results is complete with all required elements, including measures that address all certification criteria and care settings. All information in these plan/results is up to date and fully addresses Updox's Real World Testing requirements.

Kathy Howard, Director of Compliance
khoward@updox.com

DocuSigned by: *Kathy Howard* E475602A6C11412... Signature	1/24/2024 Date

Micah Grossman, SVP of Operations
mgrossman@everhealthsoftware.com

DocuSigned by: *Micah Grossman* 0B368FB9D2734BD... Signature	1/26/2024 Date

Developer Name:	**Updox LLC**
Product Name(s):	**Updox**
Version Number(s):	**2022.0 (Patient Portal 1)**
	2022.1 (Patient Portal 2)
Certified Health IT:	**December 30,2022**
Product List (CHPL) ID(s):	**(v2022.0)15.04.04.2484.Updo.20.01.1.21230**
Product List (CHPL) ID(s):	**(v2022.1)15.04.04.2484.Updo.21.02.1.221230**
Public URL:	**https://help.updox.com/help/tools-account-administration**

Real World Testing (RWT) was created so Certified Health IT developers could demonstrate conformance with the ONC Cure's Act Final Rule. As a Condition of Certification and Ongoing Maintenance of Certification developers must successfully test the "real-world" use of their certified products by using settings and scenarios in a production environment to demonstrate functionality and interoperability.

Per our RWT plan Updox was to test our Direct Secure Messaging send and receive capabilities with a minimum of 3 other HISPs or Customers per quarter. The second quarter of each year we will include the report from the DirectTrust "greenlight" testing which is performed in April. The DirectTrust Accredited Bundle Interoperability Results matrix along with other screen shots of messages sent and received including MDN's verify Direct Secure messages were sent and received as standards specify. Though Updox is not certified to § 170.315(b)(1) Send/Receive Transition of Care summaries, we do have customers that rely on software through Updox to meet their outcomes therefore we will be utilizing some of their reported measurements to demonstrate that TOC messages can successfully be exchanged (sent and received) with external organizations to demonstrate compliance and interoperability within our two Certification criteria.

There were no issues or problems found with the Updox send/receive functionality for DSM across the year during our testing. On occasion we would get notified of a problem but each time a problem occurred it was due to the sending party not having our current certificate uploaded in their system and once the issue was corrected all send/receive functionalities worked as designed.

Justification for Real World Approach

Updox will be demonstrating compliance and interoperability within two certification criteria. The first is the Patient Engagement §170.315 (e)(1) view, download and transmit to 3rd party and the second is Electronic Exchange §170.315 (h) (2) Direct Project, Edge Protocol, and XDR/XDM.

Measurement/Metric	Associated Certification Criteria
Conformance to this criterion by using the DT (DirectTrust) interoperability testing between HISPS performed annually in April. Conformance is also demonstrated by evidence of logs, screenshots, and reporting by customers and patients that utilize the view, download, and transmit functionalities within our Patient Portal.	Patient Engagement §170.315 (e)(1) view, download and transmit to 3rd party
Conformance to this criterion by using Direct Secure Messaging for sending "Transitions of Care" documents via secure messaging to a 3rd party.	Electronic Exchange §170.315 (h) (2) Direct Project, Edge Protocol, and XDR/XDM.

Updox primarily markets to EHR vendors (not end users) in order to integrate new and existing products into an HER system. Updox markets secure messaging products to our partners, which is a valuable tool that aligns with ONC's push for interoperability. Secure messaging allows providers to communicate securely with patients and other providers. This promotes interoperability, gives consumers and patients more control of their own health and follows Privacy and Security rules for keeping patient health information within a secure environment.

Care Setting	Justification
DirectTrust	*Promotes interoperability *Is a trusted and reliable source for exchange and reporting of Direct Secure Messaging *Continues to improve and work with regulating authorities to promote interoperability and reducing SDOH
EHR Vendors	*Demonstrates interoperability between HISPS and top EHR vendors *Primary target market for Updox *Proves interoperability between providers exchanging PHI/PII in secure environments

RWT Multiple Criteria

Updox has developed a system to ensure providers can share ePHI (electronic personal health information) of their patients in a secure environment in which messages and documents can be shared by using Direct Secure Messaging via our API, UI, Edge protocol or XDR/XDM. Through our patient portal, which is integrated into our Partners EHR systems, patients have the ability to view, download, and transmit ePHI/PII which is always encrypted and hashed to prevent unauthorized access or tampering. The encryption standard is AES 256. The hashing standard is SHA-2. TLS 1.2 is used when transmitting information over the internet. Updox is currently Web Content Accessibility supported by the Health IT Module: Web Content Accessibility Guideline (WCAG) 2.0, Level A Conformance as specified in § 170.204(a)(1).

Certification Criteria	Requirement
Patient Engagement §170.315 (e)(1) view, download and transmit to 3rd party	*(I)(B)(2) Download ambulatory summary or inpatient summary using CCD Template

	*(I)(C)(1) Transmit to third party
Electronic Exchange §170.315 (h) (2) Direct Project, Edge Protocol, and XDR/XDM.	*Applicability Statement for Secure Health Transport, (the "Direct Project" specification). *The ONC XDR and XDM for Direct Messaging Specification, including support for both limited and full XDS metadata profiles. *And both protocols in the ONC Implementation Guide for Direct Edge Protocols

Testing Procedure/Process between Accredited HISPs:

HISP to HISP testing with the Accredited Trust Bundle is used to assess potential interoperability issues and as a Condition of Certification with Direct Trust (DT). This testing is done once a year in the month of April. Results must be sent to DT. HISP to HISP Direct Secure Messaging includes both criteria, §170.314(e)(1), View/Download/Transmit and Electronic Exchange §170.315 (h) (2) Direct Project, Edge Protocol, and XDR/XDM. This testing is performed in "real-world" settings and promotes interoperability.

To initiate interoperability testing, Updox will send a wrapped, DT compliant message from our Updox Accredited Trust Bundle address to each HISP's interop testing address which will be in a production environment using a "test" account so that no ePHI is involved. Within the message and out of band, we will indicate that we are performing RWT and request a received & readable confirmation. When a message is received from another testing participant, we will reply to the message indicating whether the message was received and readable and (if receiving into an EMR system and a C-CDA was included in the message) whether the attached C-CDA could be incorporated into our system).

RESULTS OF SENDING FROM MY ADDRESS TO THE COUNTERPARTY ADDRESS:
•Message was sent to this counterparty (left my system without immediate fail) AND
•Processed MDN was Received and Usable by my system
ONLY IF DISPATCHED REQUESTED (Updox always requests Dispatched MDN):
Dispatched MDN was received and usable by my system.

Testing Process for testing with Partners/EHR vendors-

Testing is done on a daily basis by partner/customer use of our products. I receive a monthly log report categorized by each partner and broken down by inbound DSM, outbound DSM, and total DSM. I also receive a quarterly report that shows use of all VDT functionalities performed in both portals. As an added measure to show evidence that Updox "does what we say we do" I have also made test accounts in both portals which were used during our Cure's testing for Patient Engagement §170.315 (e)(1) view, download and transmit to 3rd party to show compliance with these measures and functionality of our product.

The Updox system includes these functionalities of interest:

      (A) Send Direct Secure message summaries

      (B) receive Direct Secure message summaries

      (C) Edge Protocol used for processing or if EHI was shared through the patient portal using downloads and encrypted or unencrypted transmissions.

Justification for Selected Measurement/Metric

The measurements selected demonstrate that chart summaries can successfully be viewed and downloaded by patients and exhibits the patient was successful in the process of transmitting to external parties.
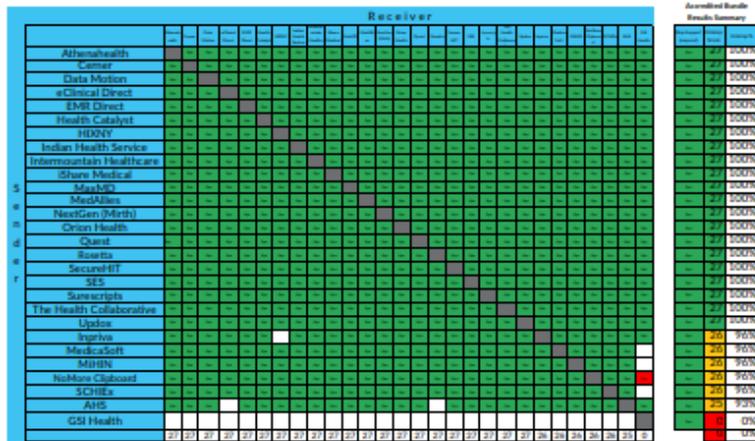
Test Methodology

We will utilize Patient portal 1 and 2 to access data related to the ability of clients to view, download, and transmit their data to external parties. Patient portal 1 and 2 utilizes log files to capture the relevant data points. If there's no record of client usage, we will utilize internal testing systems to demonstrate functionality and compliance.

	Sent	Received	Outcomes	Challenges Encountered
Qtr. 1-4 2023	Cantata-127, ChartPath 421, MedInformatix 388	Cantata-134, ChartPath-10, MedInformatix-11345	Success	No challenges were encountered.
Qtr. 2 2023	All 27 HISPs	All 27 HISPs	Success	No challenges were encountered.

DirectTrust

Metrics and Outcomes reported by Cantata Health:

Measurement/Metric	Criterion	Relied Upon Software	Outcomes	Challenges Encountered
TOC Sent	§ 170.315(b)(1)(i)(A) Send transition of care/referral summaries 2015 Edition Cures Update	Updox	Sent: 127	No challenges were encountered.
TOC Received	§ 170.315(b)(1) (i)(B) Receive transition of care/referral summaries 2015 Edition Cures Update	Updox	Received: 134	No challenges were encountered.

Developer Real World Testing Page URL:

TOC Sent: Number of successful CCDs provided to external organizations within a period.
TOC Received: Number of successful CCD retrievals from external organizations within a period.
Database tables within the certified product contain a record of all documents successfully sent to outbound processing and received from external sources.

Metrics and Outcomes reported by ChartPath:

Measurement/Metric	Criterion	Relied Upon Software	Outcomes	Challenges Encountered
TOC Sent	§ 170.315(b)(1)(i)(A) Send transition of care/referral summaries 2015 Edition Cures Update	Updox	Sent: 421	No challenges were encountered.
TOC Received	§ 170.315(b)(1) (i)(B) Receive transition of care/referral summaries 2015 Edition Cures Update	Updox	Received: 10	No challenges were encountered.

Developer Real World Testing Page URL: http://ChartPath.com/2015-cehrt

Measurement Description
This measure is tracking and counting how many C-CDAs are created and successfully sent from the EHR Module to a 3rd party via Direct messaging during a transition of care event over the course of a given interval.

Care Settings
Our EHR is primarily targeted at long-term and post-acute care (LTPAC) practices, and our measures were designed with this setting in mind.

Testing Results
Reporting Interval: 3 months
Testing Metric/Measurement: Number of C-CDA Successfully Sent
Total C-CDA Sent for all Practices: 421
This testing did confirm our 3rd party HISP Updox is fully integrated and working with our EHR.

Measurement Description
This measure is tracking and counting how many C-CDAs are successfully received and/or incorporated upon receipt from a 3rd party via Direct messaging during a transition of care event over the course of a given interval.

Care Settings
Our EHR is primarily targeted at long-term and post-acute care (LTPAC) practices, and our measures were designed with this setting in mind.

Testing Results
Reporting Interval: 3 months
Testing Metric/Measurement: Number of C-CDAs Received
Total C-CDA Received for all Practices: 10
This testing did confirm our 3rd party HISP Updox is fully integrated and working with our EHR.

Metrics and Outcomes reported by MedInformatix:

Criteria	Metric	Care Setting	Total TXNs	Successful TXNs	Success %
170.315(b)(1) Transitions of care	Number of CCDAs created	PCP	310	310	
		Radiology	1234	1234	
		Other	11422	11422	
		Total	12966	12966	

	Number of CCDAs sent via edge protocols	PCP	6	6	100%
		Radiology	5	5	100%
		Other	377	279	74%
		Total	388		
	Number of CCDAs received via edge protocols Inbound messages	PCP	9	9	100%
		Radiology			
		Other	11336	11336	100%
		Total	11345		

Developer Real World Testing Page URL:
https://www.medinformatix.com/ONC/CuresRWTPlan.html

Summative Test
The purpose of this test was to show that CDA documents can be created and exported. A query on historical audit logs for 90-day periods was performed for the 170.315(b)(1) criterion. The resulting totals show that this module was active throughout the period and therefore demonstrates a compliant result.

Justification
This criterion requires the ability of a certified Health IT module to create CCDAs according to specified standards and vocabulary code sets, as well as send and receive CCDAs via edge protocols. However, it is not possible to consistently and reliably demonstrate that all required standards and code sets were used because not all CCDAs created in a real-world setting contain all the necessary data elements. Furthermore, it is not feasible to obtain copies of CCDA documents from "outside" developers or providers who have no incentive to participate in this exercise. Therefore, we intend to demonstrate the required certified capabilities by demonstrating how often CCDAs are created and exchanged with other systems to demonstrate the certified capability is available and effective, regardless of the frequency it is used.

Assumptions for 170.315(b)(1) Transitions of care
Our expectation or assumption was that there will be moderate utilization by providers with a high success rate.

Results found
The data shows a low frequency count in Primary Care Physicians (PCP), the Radiology and "Other" specialties meets our expectation with a moderate utilization.

170.315(e)(1) View, download, and transmit to 3rd party - Results Analysis
Summative Test
The purpose of this test was to show that the EHR provides patients access to a patient portal with the ability to view, download, and send their health care records. A query on historical audit logs for 90-day periods was performed for the 170.315(e)(1) criterion. The resulting totals show that this module was active throughout the period and therefore demonstrates a compliant result.

Justification
This criterion requires the ability of a certified Health IT module to provide patients access to a patient portal with the ability to view, download, and send their health care records to other providers via encrypted or unencrypted transmission methods in CCDA format. We intend to record the frequency that patients are viewing, downloading, and transmitting their records from the portal using the certified capabilities to demonstrate the certified capability is available and effective, regardless of the frequency it is used.

Assumptions for 170.315(e)(1) View, download, and transmit to 3rd party
Our expectation is there will be moderate utilization by patients for view and lower utilization for download and transmit with a high success rate for all certified capabilities.

Results found
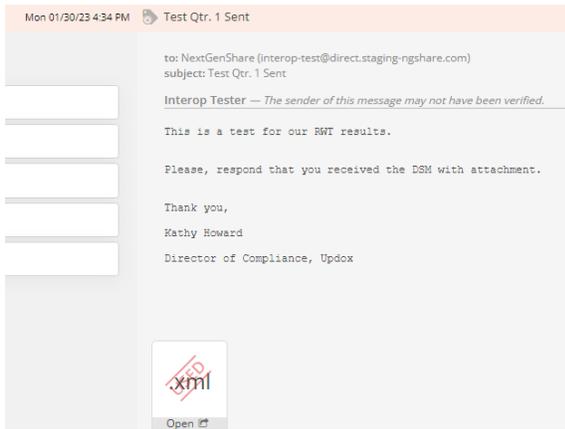The data shows a moderate utilization by patients with a high success rate.

Criteria	Metric	Care Setting	Total TXNs	Successful TXNs	Success %
170.315(e)(1) View, download, and transmit to 3rd party	Number of views of health information by a patient or authorized representative	PCP	3702		
		Radiology	5257		
		Other	3486		
		Total	12445		
		PCP	76		

Criteria	Metric	Care Setting	Total TXNs	Successful TXNs	Success %
	Number of downloads of health information by a patient or authorized representative	Radiology	123		
		Other	80		
		Total	279		

Developer Real World Testing Page URL:

https://www.medinformatix.com/ONC/CuresRWTPlan.html

Qtr. 1, 2023

Audit Trail For Test Qtr. 1 Sent

Interop Tester [Created]	Status	Date
Interop Tester	completed	1/30/23 4:32 PM

Direct nitor.test3@nitor.direct.hispdirect.com	Status	Date
System	Test Qtr. 1 Sent successfully sent to nitor.test3@nitor.direct.hispdirect.com	1/30/23 4:32 PM
System	MDN/DSN: dispatched: nitor.test3@nitor.direct.hispdirect.com	1/30/23 4:32 PM
System	MDN/DSN: processed: nitor.test3@nitor.direct.hispdirect.com	1/30/23 4:32 PM
Interop Tester	viewed	1/23/24 5:19 PM

Direct nitor.test3@nitor.direct.hispdirect.com	Status	Date
Interop Tester	View Test Qtr. 1 Sent	1/30/23 4:32 PM

Mon 01/30/23 4:32 PM Test Qtr. 1 Sent

to: Rosetta Health (nitor.test3@nitor.direct.hispdirect.com)
subject: Test Qtr. 1 Sent

Interop Tester — *The sender of this message may not have been verified.*

This is a test for our RWT results.

Please, respond that you received the DSM with attachment.

Thank you,

Kathy Howard

Director of Compliance, Updox

Audit Trail For Test Qtr. 1 Sent ✕

Interop Tester [Created]	Status	Date
Interop Tester	completed	1/30/23 4:32 PM

Direct nitor.test3@nitor.direct.hispdirect.com	Status	Date
System	Test Qtr. 1 Sent successfully sent to nitor.test3@nitor.direct.hispdirect.com	1/30/23 4:32 PM
System	MDN/DSN: dispatched: nitor.test3@nitor.direct.hispdirect.com	1/30/23 4:32 PM
System	MDN/DSN: processed: nitor.test3@nitor.direct.hispdirect.com	1/30/23 4:32 PM

Direct nitor.test3@nitor.direct.hispdirect.com	Status	Date
Interop Tester	View Test Qtr. 1 Sent	1/30/23 4:32 PM

Qtr. 2, 2023

Audit Trail For 2023 Greenlight testing (Updox) ✕

Interop Tester [Created]	Status	Date
Interop Tester	completed	4/24/23 11:23 AM

Direct interoptesting@operations.cernerdirect.com	Status	Date
System	2023 Greenlight testing (Updox) successfully sent to interoptesting@operations.cernerdirect.com	4/24/23 11:23 AM
System	MDN/DSN: processed: interoptesting@operations.cernerdirect.com	4/24/23 11:23 AM
System	MDN/DSN: dispatched: interoptesting@operations.cernerdirect.com	4/24/23 11:23 AM
System	MDN/DSN: displayed: updox@updox.updoxdirect.com	4/26/23 2:13 PM

Print Audit Trail 🖨

Mon 04/24/23 11:23 AM 2023 Greenlight testing (Updox)

to: interoptesting@operations.cernerdirect.com (interoptesting@...
subject: 2023 Greenlight testing (Updox)

Interop Tester — *The sender of this message may not have be...*

Your message has been received and is readable.

Thank you,

Kathy Howard

Updox Director of Compliance

Audit Trail For Re: 2023 Annual DT Greenlight testing/Inpriva

Interop Tester [Created]	Status	Date
Interop Tester	completed	4/21/23 1:06 PM

Direct interop@test.hdirect.net	Status	Date
System	Re: 2023 Annual DT Greenlight testing/Inpriva successfully sent to interop@test.hdirect.net	4/21/23 1:06 PM
System	MDN/DSN: processed: interop@test.hdirect.net	4/21/23 1:06 PM
System	MDN/DSN: dispatched: interop@test.hdirect.net	4/21/23 1:07 PM

Qtr. 3, 2023

Qtr. 4, 2023

Conclusion

Updox has included all documentation and results in our Real-World Testing Results Report.
The results submitted are based on and directly related to the 2023 plan and
address each required element in the plan.
Updox Developers did not discover any issues during Real World Testing. The methods,
measurements/metrics, and other approaches selected did produce the expected
outcome and no issues arose during the collection of data that would require a developer to adjust
their strategies. Updox is submitting the data derived from its original approaches.