

Indian Health Service (IHS)

Resource and Patient Management System | Electronic
Health Record

Public Health

Real World Test Results & Report 2022

January 13, 2023



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GENERAL INFORMATION

The information in this RWT results report is organized by specific criteria included in the **Public Health** category. This report contains sections, which explain/clarify how the RWT approach addressed each required element in the Real World Testing Plan. Use cases were executed by our Test sites utilizing the 2015 Resource and Patient Management System (RPMS) Electronic Health Record (EHR) at their respective care settings. Measures and metrics were gathered related to each use case scenario to demonstrate successful interoperability and use of the 2015 RPMS EHR.

Plan Report ID Number:	20211111IND
Developer Name:	The Indian Health Service
Product Name	Resource and Patient Management System Electronic Health Record (RPMS Suite (BCER))
Version Number	BCER v6.1 (current), v4.1, v5.0 and v6.0 (previous)
Certified Health IT Product List (CHPL) ID	15.02.05.1673.RPMS.01.04.1.220302 (current) 15.02.02.1673.A116.02.03.1.211001 (previous)
Developer Real World Testing Plan and Results Page URL	https://www.ihs.gov/promotinginteroperability/certificationoverview/real-world-testing/

The Indian Health Service (IHS) has combined similar criterion that falls into this specific definition of Public Health, which include: §170.315(f)(1) Transmission to immunization registries, §170.315(f)(2) Transmission to public health agencies — syndromic surveillance, §170.315(f)(3) Transmission to public health agencies — reportable laboratory tests and value/results, and §170.315(f)(5) Transmission to public health agencies — electronic case reporting.

Public Health ensures that the right technologies are used to improve the timely delivery of quality data and assist data-driven decision-making. It builds bridges across public health work areas by translating between these communities, creating opportunities for interoperable information pathways.

USE CASE 1: (§170.315(f)(1) TRANSMISSION TO IMMUNIZATION REGISTRIES

The IHS has developed an electronic health record system to ensure the timely transmission of immunization records within an ambulatory and inpatient setting. This Certified Health IT Module is for use in situations where documentation needs to be coordinated between providers within and outside of a healthcare organization.

SUMMARY OF TESTING METHODS AND KEY FINDINGS

The RWT method was to execute the functions users performed to demonstrate interoperability for the following activities:

- (f)(1) Create immunization information for electronic transmission

System logs were reviewed to determine the frequency and the transport mechanism used by providers to create immunization information and enable a user to request, access, and display the evaluated immunization history and forecast from an immunization registry for a patient. These system logs were used to validate the proper operation of the transport mechanisms and for the calculation of the metric. The RWT methodology demonstrated conformance of the system. As part of the RWT effort for CY 2022, no conformities were discovered for this criterion.

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

SVAP and/or USCDI were not applicable for this criterion.

Standard (and version)	N/A
Updated certification criteria and associated product	N/A
CHPL Product Number	N/A
Conformance measure	N/A

CARE SETTING(S)

This criterion was tested for both ambulatory and inpatient settings. The testing was done to obtain one metric that included interoperability for both settings.

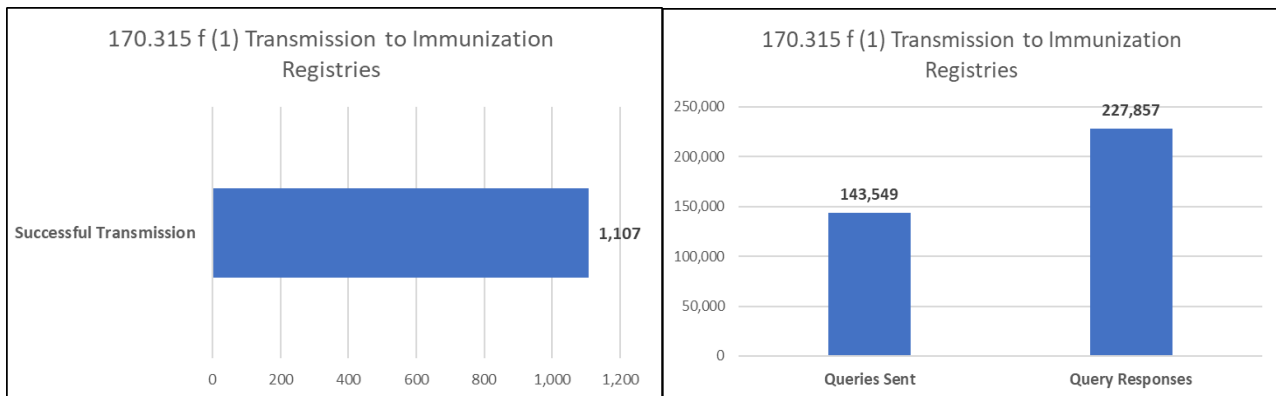
METRICS AND OUTCOMES

IHS is a Federal Health IT developer that serves Federal, Tribal, and Urban Health Care facilities. Deployment and implementation of the certified 2015 RPMS EHR is verified utilizing IHS Certified Electronic Record Checker (BCER). The verification of either BCER v4.1, 5.0 or 6.0 ensures that our volunteered testing facilities are:

1. Compliant with the certification criteria, including the required technical standards and vocabulary code sets;
2. 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.

Measurement /Metric	Associated Criterion(a)	Relied Upon Software	Outcomes	Challenges Encountered
Measure 1: §170.315(f)(1) Transmission to immunization registries	§170.315(f)(1) Transmission to immunization registries (i) create immunization information	N/A	1,107 exports were successfully transmitted to the State Immunization Registries without error. Two sites participated representing both ambulatory and inpatient settings.	N/A
Measure 1: §170.315(f)(1) Transmission to immunization registries	§170.315(f)(1) Transmission to immunization registries (ii) enables a user to request, access, and display the evaluated immunization history		143,549 query requests were sent to the state via the Immunization Forecaster and 227,549 responses were received successfully.	N/A

Chart 1: Transmission to Immunization Registries



USE CASE 2: §170.315(f)(2) TRANSMISSION TO PUBLIC HEALTH AGENCIES- SYNDROMIC SURVEILLANCE

The IHS has developed an electronic health record system to ensure the timely transmission of syndromic-based public health surveillance information. This Certified Health IT Module is for use in situations where documentation needs to be coordinated between providers within and outside of a healthcare organization.

SUMMARY OF TESTING METHODS AND KEY FINDINGS

The RWT method for this Public Health category executed the functions users performed to demonstrate interoperability for the following activity:

- (f)(2) Create syndrome-based public health surveillance information for electronic transmissions

System logs were reviewed for each period to determine the frequency of use. Providers demonstrated the ability to create syndrome-based public health surveillance information for electronic transmission to public health agencies. This test methodology and approach demonstrated conformance of the 2015 RPMS EHR.

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

SVAP and/or USCDI were not applicable for this criterion.

Standard (and version)	N/A
Updated certification criteria and associated product	N/A
CHPL Product Number	N/A
Conformance measure	N/A

CARE SETTING(S)

This criterion was tested for both ambulatory and inpatient settings. The testing was done to obtain one metric that included interoperability for both settings.

METRICS AND OUTCOMES

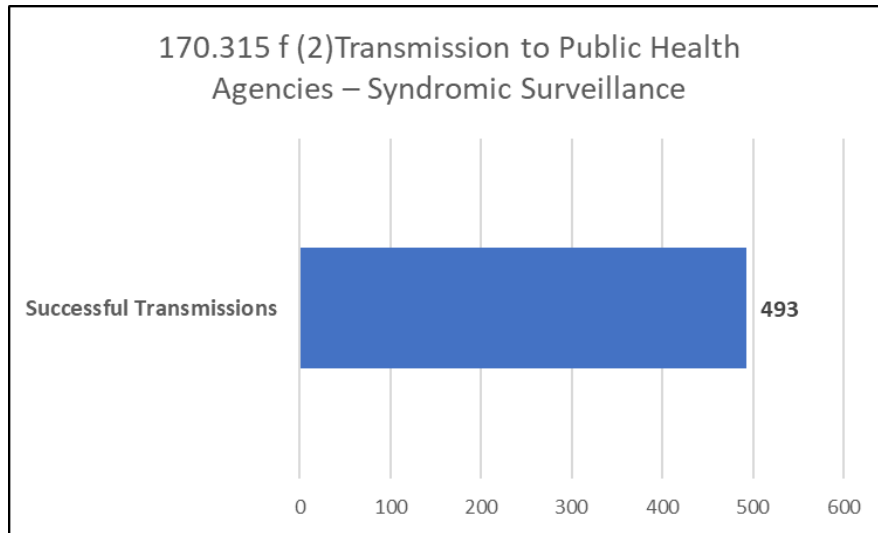
IHS is a Federal Health IT developer that serves Federal, Tribal, and Urban Health Care facilities. Deployment and implementation of the certified 2015 RPMS EHR is verified utilizing IHS Certified Electronic Record Checker (BCER). The verification of either BCER v4.1, 5.0 or 6.0 ensures that our volunteered testing facilities are:

1. Compliant with the certification criteria, including the required technical standards and vocabulary code sets;

2. 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.

Measurement /Metric	Associated Criterion(a)	Relied Upon Software	Outcomes	Challenges Encountered
Measure 2: §170.315(f)(2) Transmission to public health agencies – syndromic surveillance	§170.315(f)(2) Transmission to public health agencies – syndromic surveillance (i) Create syndrome-based public health surveillance information for electronic transmission to public health agencies.	N/A	493 Syndromic surveillance exports created and submitted electronically to public health agencies. Three facilities participated representing ambulatory and inpatient settings.	N/A

Chart 2: Transmission to Public Health Agencies – Syndromic Surveillance



Use Case 3: §170.315(f)(3) TRANSMISSION TO PUBLIC HEALTH AGENCIES – REPORTABLE LABORATORY TESTS AND VALUE/RESULTS

The IHS has developed an electronic health record system to ensure the creation of reportable laboratory tests and values/results. This Certified Health IT Module is for use in situations where documentation needs to be coordinated between providers within and outside of a healthcare organization.

SUMMARY OF TESTING METHODS AND KEY FINDINGS

The justification for this Public Health Category RWT approach is to execute the functions users perform to demonstrate interoperability for the following activities:

- (f)(3) Create reportable laboratory tests and values/results for electronic transmissions

System logs were reviewed to determine the frequency and the transport mechanism used by providers electronically create reportable laboratory tests and values/results messages which are transmitted to public health agencies. System log files validated the proper operation of the transport mechanisms and input for the calculation of the metric on the specific types of transport mechanisms used. The test methodology demonstrated conformance of the 2015 RPMS EHR.

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

SVAP and/or USCDI were not applicable for this criterion.

Standard (and version)	N/A
Updated certification criteria and associated product	N/A
CHPL Product Number	N/A
Conformance measure	N/A

CARE SETTING(S)

This criterion was tested for both ambulatory and inpatient settings. The testing was done to obtain one metric that included interoperability for both settings.

METRICS AND OUTCOMES

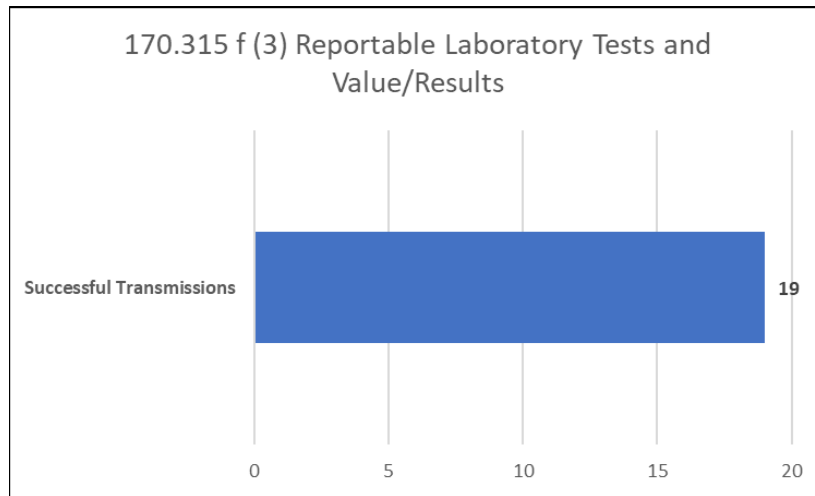
IHS is a Federal Health IT developer that serves Federal, Tribal, and Urban Health Care facilities. Deployment and implementation of the certified 2015 RPMS EHR is verified utilizing IHS Certified Electronic Record Checker (BCER). The verification of either BCER v4.1, 5.0 or 6.0 ensures that our volunteered testing facilities are:

1. Compliant with the certification criteria, including the required technical standards and vocabulary code sets;

2. 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.

Measurement/ Metric	Associated Criterion(a)	Relied Upon Software	Outcomes	Challenges Encountered
Measure 3: §170.315(f)(3) Transmission to public health agencies — reportable laboratory tests and value/results	§170.315(f)(3) Transmission to public health agencies — reportable laboratory tests and value/results (i) Electronically create reportable laboratory tests and values/results messages which can be transmitted to public health agencies (ii) Represent data in the reportable laboratory test message	N/A	RWT sites were able to successfully demonstrate the transmission of reportable lab test results with public health agencies for 19 patients. No errors were discovered during transmission. Two sites participated representing ambulatory and inpatient.	N/A

Chart 3: Reportable Laboratory Tests and Value/Results



USE CASE 4: §170.315(f)(5) TRANSMISSION TO PUBLIC HEALTH AGENCIES – ELECTRONIC CASE REPORTING

The IHS has developed an electronic health record system to ensure the consumption of trigger codes, in a table, to determine which encounters may be reportable. Matches patient visits or encounters to the trigger code based on parameters of the trigger code table. Creates a case report for electronic transmissions that include clinical data sets, encounter diagnoses, provider’s names/office contact information/reasons for visits, and an identifier representing the row and version of the trigger table that triggered the case report. This Certified Health IT Module is for use in situations where documentation needs to be coordinated between providers within and outside of a healthcare organization within an ambulatory and inpatient settings.

SUMMARY OF TESTING METHODS AND KEY FINDINGS

The RWT Method for this Public Health Category RWT approach is to execute the functions users perform to demonstrate interoperability for the following activity:

- (f)(5) Consume and maintain a table of trigger codes to determine which encounters may be reportable.
- (f)(5) Match a patient visit or encounter to the trigger code based on the parameters of the trigger code table.
- (f)(5) Case report creation: Create a case report for electronic transmission and submission to EPI.

System logs were reviewed for the time period to determine the frequency of use. Log files obtained validated the proper operation of the export and triggers. This test methodology demonstrated conformance of the criterion.

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

This criterion was certified with voluntary SVAP or USCDI standards.

Standard (and version)	§ 170.213 USCDI v1
Updated certification criteria and associated product	(f)(5): Transmission to Public Health Agencies - Electronic Case Reporting; USCDI v1
CHPL Product Number	15.02.05.1673.RPMS.01.04.1.220302
Conformance measure	§170.315(f)(5) Transmission to the public health agencies — electronic case reporting

CARE SETTING(S)

This criterion was tested for both ambulatory and inpatient settings. The testing was done to obtain one metric that included interoperability for both settings.

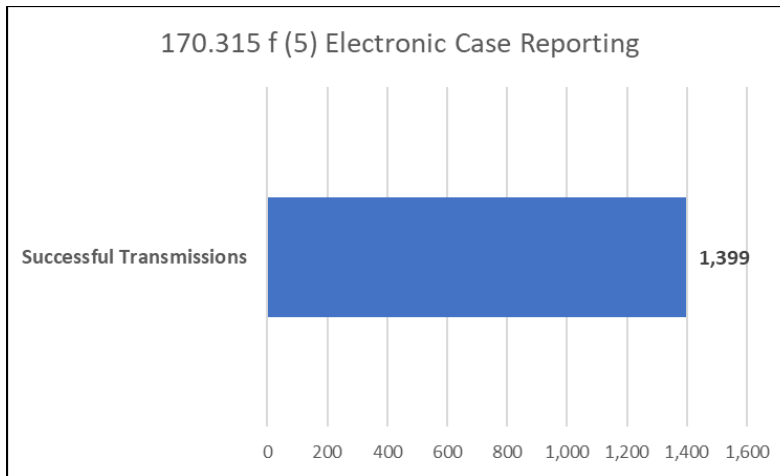
METRICS AND OUTCOMES

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1. Compliant with the certification criteria, including the required technical standards and vocabulary code sets;
2. 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.

Measurement /Metric	Associated Criterion(a)	Relied Upon Software	Outcomes	Challenges Encountered
Measure 4: §170.315(f)(5) Transmission to the public health agencies — electronic case reporting	§170.315(f)(5) Transmission to the public health agencies — electronic case reporting (i) Consume and maintain a table of trigger codes (ii) Match information recorded in a patient visit or encounter to a trigger code in the trigger code table. (iii) When a trigger is matched the Health IT Module electronically creates an initial case report	N/A	1,399 case reports were created and electronically transmitted to include health information coded to vocabulary standards for the 2015 RPMS EHR. Four sites participated representing ambulatory and inpatient settings.	N/A

Chart 4: Transmission to Public Health Agencies: Electronic Case Reporting



KEY MILESTONES

Real World Testing Key Milestones were met as indicated below.

Key Milestone	Care Setting	Date/Timeframe
Initial outreach for site participation.	Ambulatory/Inpatient	October 15, 2021
Release of documentation for the Real World Testing to be provided to authorized representatives/participants and providers. This includes surveys, specific instructions on what to look for, how to record issues encountered, and Customer Agreements.	Ambulatory/Inpatient	December 15, 2021
Begin collection of information as laid out by the plan for the period.	Ambulatory/Inpatient	January 5, 2022
Planned System updates to allow for collection of data any updates.	Ambulatory/Inpatient	Quarterly, 2022, as needed
Follow-up with authorized representatives/participants and providers on a regular basis to understand any issues arising with the data collection.	Ambulatory/Inpatient	Quarterly, 2022
End of Real World Testing period/participants submit the final collection of all data for analysis as real-world testing results to IHS.	Ambulatory/Inpatient	December 31, 2022
Analysis and Real World Testing results report creation.	Ambulatory/Inpatient	January 12, 2023
Real World Testing results submission to ACB.	Ambulatory/Inpatient	January 15, 2023



ATTESTATION

This Real World Testing Results Report is complete with all required elements, including measures and outcomes 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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