

## REAL WORLD TESTING RESULTS REPORT

MEDITECH, as an Electronic Health Record (EHR) vendor, is fortunate to collaborate with many of our customers in facilitating the Real World Testing program established by the Office of the National Coordinator (ONC) as introduced with the 21st Century Cures Act. Under the ONC Health IT Certification Program, MEDITECH, as a Health IT developer conducts Real World Testing; ensuring validation of patient access, exchange, and use of Electronic Health Information (EHI). Organizations work with us directly in validating the Real World Testing Cures condition of certification, furthering MEDITECH's commitment to interoperability and advancing health data exchange for our entire customer base.

MEDITECH customers partnered with us in testing and collecting statistical data for Real World Testing results reporting — connecting with organizations on a quarterly basis and expediting metric collection in production environments which supports health data exchange capabilities with related Real World Testing criteria.

This 2022 Real World Testing Result document outlines the data review, demonstrating the interoperability universally of each associated care setting. Data was aggregated from a number of healthcare organizations, by product line, utilizing existing performance monitoring tools to demonstrate compliance with the conditions of certification. The information captured is metric-based and contains no Protected Health Information (PHI) data. Result reporting instances included verification for transitions of care, electronic prescribing, clinical information reconciliation and incorporation, clinical quality measures, public health interfaces, and Application Programming Interfaces (API).

### ATTESTATION

Authorized Representative Name: Geoff Smith

Authorized Representative Email: [gsmith@meditech.com](mailto:gsmith@meditech.com)

Authorized Representative Phone: 781-821-3000

Authorized Representative Signature:

A handwritten signature in dark ink, appearing to read "G Smith", with a long horizontal flourish extending to the right.

Date: March 1, 2023

### GENERAL INFORMATION

Name: Product Name(s): Medical Information Technology Expanse, 6.x

Version Number(s): 2.2, 2.1, 6.15, 6.1

Certified Health IT Product List (CHPL) Product Number(s):

Product/Version	Certificate Number
<b>6.1</b>	
MEDITECH 6.1 Electronic Health Record Core HCIS v6.15	15.04.04.2931.MEDI.HC.00.1.171220
MEDITECH 6.1 Emergency Department Management v6.15	15.04.04.2931.MEDI.15.00.1.171227
MEDITECH 6.1 Ambulatory Electronic Health Record v6.15	15.04.04.2931.MEDI.AM.00.1.171227
MEDITECH Continuity of Care Interface (CCD) v6.1	15.04.04.2931.MEDI.61.00.1.171220
MEDITECH Patient and Consumer Health Portal v2.0	15.04.04.2931.MEDI.02.00.1.171227
MEDITECH Public Health Interface Transmission to Immunization Registries v6.1	15.04.04.2931.MEDI.IR.00.1.171227
MEDITECH Public Health Interface for Syndromic Surveillance v6.1	15.04.04.2931.MEDI.PH.00.1.171226
MEDITECH Transmission of Reportable Laboratory Test and Values/Results v6.1	15.04.04.2931.MEDI.T6.00.1.171226
MEDITECH Cancer Case Reporting v6.1	15.04.04.2931.MEDI.61.00.1.171226
MEDITECH 6.1 Oncology v6.15	15.04.04.2931.MEDI.ON.00.1.180503
<b>Expanses 2.1</b>	
MEDITECH Expanses (6.16) Core HCIS v2.1	15.04.04.2931.MEDI.CO.00.1.171220
MEDITECH Expanses (6.16) Emergency Department Management v2.1	15.04.04.2931.MEDI.16.01.1.180503
MEDITECH Expanses (6.16) Ambulatory v2.1	15.04.04.2931.MEDI.16.01.1.180606
MEDITECH Continuity of Care Interface (CCD) v6.1	15.04.04.2931.MEDI.61.00.1.171220
MEDITECH Patient and Consumer Health Portal v2.0	15.04.04.2931.MEDI.02.00.1.171227
MEDITECH Public Health Interface Transmission to Immunization Registries v6.1	15.04.04.2931.MEDI.IR.00.1.171227
MEDITECH Public Health Interface for Syndromic Surveillance v6.1	15.04.04.2931.MEDI.PH.00.1.171226
MEDITECH Transmission of Reportable Laboratory Test and Values/Results v6.1	15.04.04.2931.MEDI.T6.00.1.171226
MEDITECH Cancer Case Reporting v6.1	15.04.04.2931.MEDI.61.00.1.171226
MEDITECH Expanses (6.16) Oncology v2.1	15.04.04.2931.MEDI.ON.01.1.190925

**Expanses 2.2**

**Certificate Number**

MEDITECH Expanses Core HCIS v2.2	15.04.04.2931.MEDI.CO.01.1.200828
MEDITECH Expanses Emergency Department Management v2.2	15.04.04.2931.MEDI.ED.02.1.200828
MEDITECH Expanses Ambulatory v2.2	15.04.04.2931.2931.02.02.1.200828
MEDITECH Continuity of Care Interface (CCD) v6.1	15.04.04.2931.MEDI.61.00.1.171220
MEDITECH Patient and Consumer Health Portal v2.0	15.04.04.2931.MEDI.02.00.1.171227
MEDITECH Public Health Interface Transmission to Immunization Registries v6.1	15.04.04.2931.MEDI.IR.00.1.171227
MEDITECH Public Health Interface for Syndromic Surveillance v6.1	15.04.04.2931.MEDI.PH.00.1.171226
MEDITECH Transmission of Reportable Laboratory Test and Values/Results v6.1	15.04.04.2931.MEDI.T6.00.1.171226
MEDITECH Cancer Case Reporting v6.1	15.04.04.2931.MEDI.61.00.1.171226
MEDITECH Expanses Oncology v2.2	15.04.04.2931.MEDI.ON.02.1.200828

Developer Real World Testing Plan and Testings Results Report Page URL:  
<https://home.meditech.com/en/d/regulatoryresources/pages/certification.htm>

**CHANGES TO ORIGINAL PLAN**

<p><b>Summary of Change</b>                      [Summarize each element that changed between the plan and actual execution of Real World Testing]</p>	<p><b>Reason</b>                      [Describe the reason this change occurred]</p>	<p><b>Impact</b>                      [Describe what impact this change had on the execution of your Real World Testing activities]</p>
<p>§170.315(f)(4) Transmission to Cancer Registries - testing method and metric for conformance has been validated via internal Certification environment with synthetic patient data simulating the interface for execution of Cancer Case reporting.</p>	<p>The alternate method was executed due to non-deployed capabilities in customer production environments with the associated criteria.</p>	<p>MEDITECH's capability to ensure transmissions are operating properly is unchanged having been confirmed throughout the year in all care settings. Due to lack of customer usability across Expanses releases, it was determined there is currently no execution of the Cancer registry criteria as frequency of use in customer production environments.</p>
<p>§ 170.315(b)(9) Care Plan (6.15 release only) - testing method and</p>	<p>The alternate method was executed due to non-deployed</p>	<p>MEDITECH's capability to ensure Care Plans are operating properly is</p>

<p>metric for conformance has been validated via internal Certification environment with synthetic patient data simulating the execution of creation of a data export file.</p>	<p>capabilities in customer production environments with the associated criteria.</p>	<p>unchanged having been confirmed via validation in the 6.15 Certification environment. Due to lack of customer usability across the 6.15 release, it was determined there is currently no execution of the Care Plan criteria as frequency of use in customer production environments.</p>
---	---	--

**WITHDRAWN PRODUCTS**

<b>Product Name(s):</b>	N/A
<b>Version Number(s):</b>	
<b>CHPL Product Number(s):</b>	
<b>Date(s) Withdrawn:</b>	
<p><b>Inclusion of Data in Results Report:</b>          [Provide a statement as to whether any data was captured on the withdrawn products. If so, this data should be identified in the results report.]</p>	

**SUMMARY OF TESTING METHODS AND KEY FINDINGS**

*The following testing methods were utilized to demonstrate real-word interoperability:*

- Quarterly review of Management Information System (MIS) interface logs for Expanse customers evaluating electronic health exchange (EHI) of Care Coordination, Patient Engagement, and Public Health criteria demonstrating a percentage of messages sent across the related interface. A sample of 257 Expanse customers were evaluated; the number of accepted messages well exceeds Promoting Interoperability measurements related to each criteria.
- Quarterly review of the SQL Server Management Studio (SSMS) for a sample of 33 Expanse customers were evaluated for Clinical Quality Measures (CQM) and Antimicrobial Use and Resistance (AUR) reporting for the successful submission of Quality Reporting Document Architecture (QRDA) files in a given timeframe. Challenges with AUR/CQM evaluations included timing of customer review, reports run, and QRDA submissions throughout the year. The number of CQM reports run and related QRDA submissions well exceeds Promoting Interoperability measurements related to each criteria.

- Quarterly execution of Application Programming Interface (API) conformance via customer production rings for each Expense release — An authorized user acting as the Health Care Organization’s System Administrator registered the API User client application with the MEDITECH API platform in order to demonstrate the facilitation of Application Access requests for Patient Selection, Data Category Requests, and Application Access - All Data Requests. Challenges involved customer participation for setup of authorized user, synthetic patient data, and Postman application review to validate all related criteria in each participating customer production environment
- Quarterly validation via internal Certification environment with synthetic patient data simulating the execution of creation of data export file(s) and cancer registry reporting for each Expense release. Challenges involved lack of customer participation resulting in alternate methods being utilized due to non-deployed capabilities in customer production environments with the associated criteria. This test methodology primarily tested the conformance of the implementation.

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

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>	N/A
<b>Updated certification criteria and associated product</b>	
<b>CHPL Product Number</b>	
<b>Conformance measure</b>	

**Care Setting(s)**

*Real World Testing was conducted across MEDITECH’s Acute, Ambulatory, Emergency Department, and Oncology care settings.*

### Metrics and Outcomes

Measurement /Metric	Associated Criterion(a)	Relied Upon Software (if applicable)	Outcomes	Challenges Encountered (if applicable)
<p>Sharing of Electronic Health Information:</p> <p>Interface metrics demonstrating Electronic Health Exchange of (1) Sending a Summary of Care, (2) Request/Accept</p> <p>Summary of Care, and (3) Clinical Information Reconciliation: Interfaces evaluated quarterly:</p> <ul style="list-style-type: none"> <li>• Clinical Document Architecture (CDA) Consume</li> <li>• Direct Message Inbound and Outbound (Request and Response)</li> <li>• Document Set Send and Retrieve</li> <li>• View, Download and Transmit</li> </ul>	<p>§170.315(b)(1) Transitions of care</p> <p>§170.315(b)(2) Clinical Information Reconciliation and Incorporation</p> <p>§170.315(b)(6) Data Export</p> <p>§170.315(e)(1) View, download, and transmit to 3rd parties.</p>	<p>IMO 2.0 (Intelligent Medical Objects)</p>	<p>In reviewing reports for Electronic Health Exchange (EHI), the number of accepted messages well exceeds Promoting Interoperability measurements related to each criteria. Result totals included 458,259,781 accepted messages with all interface types:</p> <p>Sent and Accepted messages for Clinical Document Architecture (CDA) files, Provide and Register Document Set, and Export files related to Transitions of Care, Clinical Information Reconciliation and Data Export criteria. 99.36% success rate.</p> <p>External view, download, and transmit messages including medication renewal requests, allergy, and full health summary views related to View,</p>	



			Download Transmit criteria - 100% success rate.	
ARRA Report Manager review of Clinical Quality Measures (CQM) and Antimicrobial Use and Resistance (AUR) reporting for the successful submission of Quality Reporting Document Architecture (QRDA) files — CQM reports run and total number of QRDA submissions for both Eligible Hospitals and Eligible Clinicians evaluated quarterly.	<p>§170.315(c)(1) Clinical Quality Measures - Record and Export</p> <p>§170.315(c)(2) Clinical Quality Measures - Import and Calculate</p> <p>§170.315(c)(3) Clinical Quality Measures - Report</p> <p>§170.315(f)(6) Transmission to Public Health Agencies - Antimicrobial Use and Resistance Reporting</p>	<p>Microsoft SQL Server AND IMO 2.0 (Intelligent Medical Objects)</p> <p>Microsoft SQL Server</p>	<p>Clinical Quality Measures were evaluated for a sample of Expanse customers quarterly with 643 reports compiled.</p> <p>Additionally, 214 QRDA files were submitted and accepted for both CQMs and AUR reporting attestation in this cross-check for Promoting Interoperability measurements.</p> <p>Findings included measures for both Eligible Hospitals and Eligible Clinicians.</p>	
Quarterly execution of Application Programming Interface (API) conformance via customer production rings for each Expanse release.	<p>§170.315(g)(7) Application Access - Patient Selection</p> <p>§170.315(g)(8) Application Access - Data Category Request</p> <p>§170.315(g)(9) Application Access - All Data</p>	N/A	<p>For each Expanse release and on a quarterly basis, MEDITECH facilitated API calls successfully using synthetic patient data in customer production environments.</p> <p>Quarterly validation resulted in 100% success rates with interoperability-specific</p>	

	Request		<p>application requests and responses for all API criteria categories from the patient identified by ID or token. Metrics included single patient identifiers, multiple category variables, ex (allergies/vital signs), and full CCD API calls for Application Programming Interface (API).</p> <p>Results included 12 successful unique API tokens responding to and returning full sets of data for each category across 3 customer production environments.</p>	
--	---------	--	--	--



<p>Quarterly execution of data export file(s) and cancer registry reporting for each Expanse release. This test methodology primarily tested the conformance of the implementation.</p>	<p>§170.315(b)(9) Care Plan (6.15 only)</p> <p>§170.315(f)(4) Transmission to Cancer Registries Associated Criterion(a)</p>		<p>For each associated Expanse release and on a quarterly basis, MEDITECH facilitated interface messages successfully using synthetic patient data in an internal environment.</p> <p>Validation included conformance with creation and export of a Care Plan.</p> <p>Results included 100% success rates with 36 accepted Cancer Event messages across 3 care settings for combined releases quarterly.</p>	<p>Lack of customer participation resulting in alternate methods being utilized due to non-deployed capabilities in customer production environments with the associated criteria.</p>
<p>Sharing of Electronic Health Information: Interface metrics demonstrating Public Health agencies — generating the associated interface messages:</p> <ul style="list-style-type: none"> <li>● Lab Results (Inbound and Outbound)</li> <li>● Immunization Query and Response</li> <li>● Admission,</li> </ul>	<p>§170.315(f)(1) Transmission to Immunization Registries</p> <p>§170.315(f)(2) Transmission to Public Health Agencies - Syndromic Surveillance</p> <p>§170.315(f)(3) Transmission to Public Health Agencies -</p>		<p>This measure assessed the functionality used to transmit the associated data for a patient population.</p> <p>In reviewing reports for Electronic Health Exchange (EHI), the number of accepted messages well exceeds Promoting Interoperability measurements related to each criteria. As</p>	



<p>Discharge, Transfer - Syndromic Surveillance (Inbound and Outbound)</p> <ul style="list-style-type: none"><li>• Prescription eligibility and external medication claim history</li></ul>	<p>Reportable Laboratory Tests and Value/Results</p> <p>§170.315(b)(3) Electronic Prescribing</p>	<p>DrFirst Rcopia (DrFirst) AND EPCS Gold (DrFirst) AND First Databank AND Medi-Span (Walters Kluwer)</p>	<p>noted above, result totals included 458,259,781 accepted messages with all interface types:</p> <p>Admission, Discharge, Transfer (ADT) patient events notifications related to Syndromic Surveillance criteria - 99.99% success rate.</p> <p>HL7 Observation Result (ORU) messages related to Lab reporting criteria - 99.97% success rate.</p> <p>Immunization queries related to registry reporting criteria - 99.85% success rate.</p> <p>Prescription eligibility/external medication claim history messages related to ePrescribing criteria - 99.53% success rate.</p>	
---	---	---	--	--

## KEY MILESTONES

Key Milestone	Care Setting	Date/Timeframe
Initiate collection of metrics for each group of criteria based on the reporting tools and utilities noted.	Acute Ambulatory	Quarterly – March, June, September, December 2022
Initiate conformance validation for criteria based on non-deployed capabilities (customer production or internal environments).	Acute Ambulatory Emergency Department Oncology	Quarterly – March, June, September, December 2022
Complete metric analysis and Real World Testing report	Acute Ambulatory Emergency Department Oncology	January, 2023

i Certified health IT continues to be compliant with the certification criteria, including the required technical standards and vocabulary codes sets; certified health IT is exchanging EHI in the care and practice settings for which it is marketed for use; and EHI is received by and used in the certified health IT. (85 FR 25766)

ii <https://www.federalregister.gov/d/2020-07419/p-3582>