# **MEDITECH**

# Medical Information Technology 2024 Real World Testing Results Report

Expanse/6.1 Release Acute/Ambulatory/Emergency/Oncology Care Settings

#### Overview

MEDITECH, as an Electronic Health Record (EHR) vendor, is fortunate to collaborate with many of our customers in facilitating the ongoing Real World Testing program established by the Assistant Secretary for Technology Policy (ASTP). Under the ASTP 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 in validating the Real World Testing 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 quarterly and expediting metric collection in production environments, which supports health data exchange capabilities with related Real World Testing criteria.

This 2024 Real World Testing Result document outlines the data review, demonstrating the interoperability universally of each associated care setting, based on the corresponding Real World Testing plan. Data was aggregated from 273 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 EHI export, transitions of care (TOC), electronic prescribing (eRX), clinical information reconciliation and incorporation (CIRI), clinical quality measures (CQM), public health interfaces, view, download, transmit (VDT), and application programming interfaces (API).

## **Products and Certificate Numbers**

Product Name(s): Expanse, 6.1

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

#### **Products and Certificate Numbers**

#### Expanse 2.2

- MEDITECH Expanse Core HCIS v2.2c 15.04.04.2931.MEDI.CO.02.1.220630
- MEDITECH Expanse Emergency Department Management v2.2c 15.04.04.2931.MEDI.ED.03.1.220630
- MEDITECH Expanse Ambulatory v2.2c 15.04.04.2931.2931.02.03.1.220630
- MEDITECH Continuity of Care Interface (CCD) v6.1c 15.04.04.2931.MEDI.61.01.1.220630
- MEDITECH Patient and Consumer Health Portal v2.0c 15.04.04.2931.MEDI.02.01.1.220919
- 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

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- MEDITECH Cancer Case Reporting v6.1 15.04.04.2931.MEDI.61.00.1.171226
- MEDITECH Expanse Oncology v2.2c 15.04.04.2931.MEDI.ON.03.1.220630
- MEDITECH Public Health Interface Electronic Case Reporting v6.1 15.04.04.2931.Case.61.00.1.221001

#### Expanse 2.1

- MEDITECH Expanse 2.1 Core HCIS v2.1c 15.04.04.2931.MEDI.CO.01.1.220630
- MEDITECH Expanse 2.1 Emergency Department Management v2.1c 15.04.04.2931.MEDI.16.02.1.220630
- MEDITECH Expanse 2.1 Ambulatory v2.1c 15.04.04.2931.2931.16.02.1.220630
- MEDITECH Continuity of Care Interface (CCD) v6.1c 15.04.04.2931.MEDI.61.01.1.220630
- MEDITECH Patient and Consumer Health Portal v2.0c 15.04.04.2931.MEDI.02.01.1.220919
- 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
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- MEDITECH Cancer Case Reporting v6.1 15.04.04.2931.MEDI.61.00.1.171226
- MEDITECH Expanse 2.1 Oncology v2.1c 15.04.04.2931.MEDI.ON.02.1.220630
- MEDITECH Public Health Interface Electronic Case Reporting v6.1 15.04.04.2931.Case.61.00.1.221001

#### 6.1

- MEDITECH 6.1 Electronic Health Record Core HCIS v6.15c 15.04.04.2931.MEDI.HC.01.1.220630
- MEDITECH 6.1 Emergency Department Management v6.15c 15.04.04.2931.MEDI.15.01.1.220630
- MEDITECH 6.1 Ambulatory Electronic Health Record v6.15c 15.04.04.2931.MEDI.AM.01.1.220630
- MEDITECH Continuity of Care Interface (CCD) v6.1c 15.04.04.2931.MEDI.61.01.1.220630
- MEDITECH Patient and Consumer Health Portal v2.0c 15.04.04.2931.MEDI.02.01.1.220919
- MEDITECH Public Health Interface Transmission to Immunization Registries v6.1
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- MEDITECH Cancer Case Reporting v6.1 15.04.04.2931.MEDI.61.00.1.171226
- MEDITECH 6.1 Oncology v6.15c 15.04.04.2931.MEDI.ON.01.1.220630
- MEDITECH Public Health Interface Electronic Case Reporting v6.1 15.04.04.2931.Case.61.00.1.221001

## **Care Settings**

Real World Testing is demonstrated following typical physician workflow — providing care in Acute, Ambulatory, Emergency Department, or Oncology care settings. Scenarios incorporate certification criteria for testing purposes within the Care Coordination, Clinical Quality Measures, Patient Engagement, Public Health, and Health IT Design and Performance categories.

#### **Changes to Original Plan**

There are no modifications in testing from the original 2024 Real World Testing plan for the Expanse/6.1 platforms.

#### **Testing Methods**

Data has been aggregated from a number of healthcare organizations by product line, utilizing existing performance monitoring tools to demonstrate compliance with the conditions of certification. Interfaces have been tested for interoperability, universally of each care setting certified within the CHPL listings, for those criteria included within the Conditions and Maintenance of Certification: Real World Testing (170.405). The information captured is metric-based and

MEDITECH - 2 of 26 Last Updated: January 14, 2025 contains no Protected Health Information (PHI) data. The following testing methods were utilized to demonstrate real-world interoperability:

- Quarterly review of Management Information System (MIS) interface logs for Expanse/6.1 customers evaluating
  electronic health exchange (EHI) of Care Coordination, Patient Engagement, and Public Health criteria
  demonstrating a percentage of messages sent across the related interfaces. A sample of Expanse/6.1 customers
  was evaluated; the number of accepted messages well exceeds the measurements related to each criteria.
- Quarterly review of the SQL Server Management Studio (SSMS) for a sample of 118 Expanse/6.1 customers was
  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 reviews, reports run, and QRDA submissions throughout the year.
  - The number of CQM reports run and related QRDA submissions exceed measurements related to each criteria.
- Quarterly execution of Application Programming Interface (API) conformance via customer production rings for each release — quarterly execution of Application Programming Interface (API) conformance via SQL Server Management Studio (SSMS).
- Quarterly validation via internal Certification environment with synthetic patient data simulating the execution of cancer registry reporting for each Expanse/6.1 release.
  - Challenges involved a 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.

## Measures: Scenarios and Testing Elements: EHI

Sharing of Electronic Health Information - demonstrates MEDITECH's Health IT module conforms to the following certification criteria: §170.315(b)(1) Transitions of Care, (b)(10) EHI Export, and §170.315(e)(1) View, Download, and Transmit to 3rd party.

The chart below outlines the measures identified to best demonstrate conformance to multiple certification criteria concerning the sharing of Electronic Health Information across the two use cases demonstrated (single patient and population services).

Measure 1 – Sharing EHI	Method
§170.315(b)(1) Transitions of care	(i)(A) Send transition of care/referral summaries (i)(B) Receive transition of care/referral summaries
§170.315(e)(1) View, download, and transmit	(i)(B)(2) Download ambulatory summary or inpatient summary using CCD Template (i)(B)(3) (Inpatient setting only) Download of transition of care/referral summaries (i)(C)(1) Transmit to third party (i)(C)(2) (Inpatient setting only) Transmit transition of care/referral summaries

#### **Use Case**

Sharing of Electronic Health Information Use Case 1 (Single Patient Overview) MEDITECH's fully web-based solution is an integrated component of MEDITECH's enterprise-wide EHR consisting of advanced patient management; at the center of MEDITECH's EHR is a single electronic patient record. This Certified Health IT Module is utilized when documentation needs to be coordinated between providers and patients both internally and externally within a healthcare organization.

- MEDITECH demonstrates that both a limited and full set of data, as required in the United States Core Data for Interoperability (USCDIv1) standard, can be sent and received for Transition of Care (TOC) documentation for a single patient.
- The data can be shared externally using Edge protocol technology (Direct, SMTP email), exported, and shared directly with the patient through MEDITECH's Patient and Consumer Health Portal (PHM). This functionality provides the ability to view, download, and transmit data.
- TOC summaries provide essential clinical information for the receiving care team and help organize final clinical
  and administrative activities for the transferring care team. MEDITECH's enterprise-wide EHR ensures the timely
  availability of patient information within the Inpatient, Ambulatory, Emergency Department, and Oncology care
  settings.

United States Core Data for Interoperability (USCDIv1) standard can be sent and received on documentation for a single patient. The Inpatient, Ambulatory, Emergency Department, and Oncology settings include two capabilities for conformance: (1) Sending transition of care/referral summaries and (2) Receiving transition of care referral summaries.

- The Patient and Consumer Health Portal is a fully-integrated component of MEDITECH's IT module.
- Seamless exchange of information ensures patients and staff alike have access to accurate and timely data across care settings.
- Metrics provide details on the types of transmissions deployed and the frequency of usage.

## **Test Methodology**

MEDITECH reporting logs were utilized to monitor Management Information System (MIS) interfaces to determine the frequency and the transport workings used by providers for sending and receiving transitions of care and downloading or transmitting data via MEDITECH's PHMI.

- Logs obtained during real world testing were de-identified and used for analysis in several areas to validate the
  proper operation of the transport system and input for the calculation of the metric on the specific types of
  transport functionality utilized.
- The data metrics associated with criteria in these scenarios confirm the ability to create, receive, and properly consume interoperable documents using a common content and transport standard (e.g., Consolidated Clinical Document Architecture (C-CDA) that includes key health data accessible and available for exchange).

#### **Justification**

The Inpatient, Ambulatory, Emergency Department, and Oncology settings include two capabilities for conformance: (1) Sending transition of care/referral summaries and (2) Receiving transition of care referral summaries. Transitions of care (TOC) documents are shared using connection protocols (e.g., SMTP, Direct), while other data may be shared through MEDITECH's PHM using downloads and encrypted or unencrypted transmissions.

- The Patient and Consumer Health Portal is a fully-integrated component of MEDITECH's IT module.
- Seamless exchange of information ensures patients and staff alike have timely access to accurate and timely data across care settings.
- Quarterly metrics provided details on the types of transmissions deployed and the frequency of usage.

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## Final Outcome(s)

A total number of summary of care messages were generated for each transition of care request, either receiving or sending information upon receipt of a transition. The functionality of incorporating the summary of care information provides a seamless transition into or out of the MEDITECH EHR. Providers and patients (or their authorized representatives) share data using the transmission functionality provided for Medicare Eligible Hospitals (EHs), Critical Access Hospitals (CAHs), and Medicaid Eligible Professionals (EPs) to meet or surpass the requirements of programs related to coordination of care. Success and error rates were tracked and trended over time.

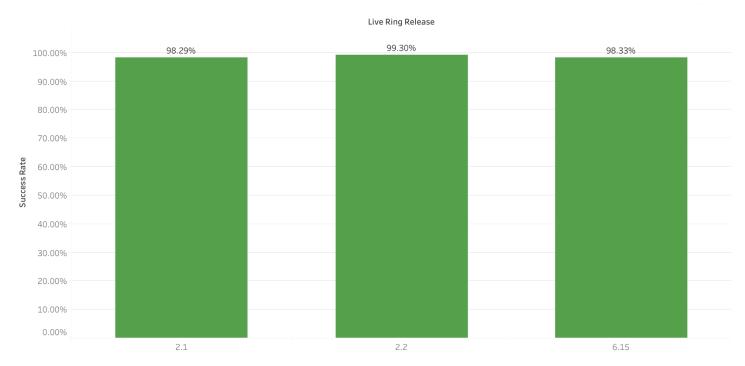
## Measurement/Metric Findings

In reviewing reports for Electronic Health Exchange (EHI), the number of accepted messages well exceeded measurements related to each criteria. Result totals included the following number of accepted messages for all related interface types with no challenges encountered:

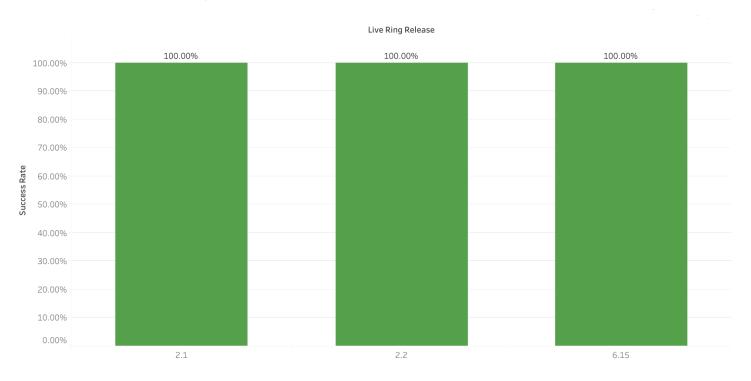
- > §170.315(b)(1) Transitions of care 50,597,393 total transactions demonstrating transmitting a set of documents and associated metadata for a combined 98.71% success rate
- > §170.315(e)(1) View, download, and transmit 2,185,534 patient portal transactions including medication renewal requests, allergy, and full health summary views related to VDT criteria were populated for a combined 100.00% success rate

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## MEDITECH Quarterly Success Rate TOC Group



## MEDITECH Quarterly Success Rate VDT Group



Measure 2 – Patient Export	Method
(b)(10) EHI Export	(i)(A) Create export file

	(i)(B) Execute this capability at any time the user chooses
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## **Test Methodology**

MEDITECH reporting logs were utilized to monitor Management Information System (MIS) interfaces to ensure the export function is operating properly and to determine the frequency of use. Logs obtained during Real World Testing were de-identified and utilized for analysis in several areas to validate the proper operation of the export. This test methodology primarily tests the conformance of the implementation.

### **Justification**

Exporting data associated with a patient population is an additional way to share health information with external organizations. The intent is to provide data research to analyze specific trends in the patient population, export of which is only available to authorized users. This provided a metric on the use of the export of data for a patient population associated with MEDITECH's Health IT Module.

#### **Final Outcomes**

The Internal system logs were reviewed to ensure the export function is operating properly and to determine the frequency of use. Logs obtained during Real World Testing were de-identified and utilized for analysis in several areas to validate the proper operation of the export. This test methodology primarily tests the conformance of the implementation. Transmissions were tracked and analyzed over time.

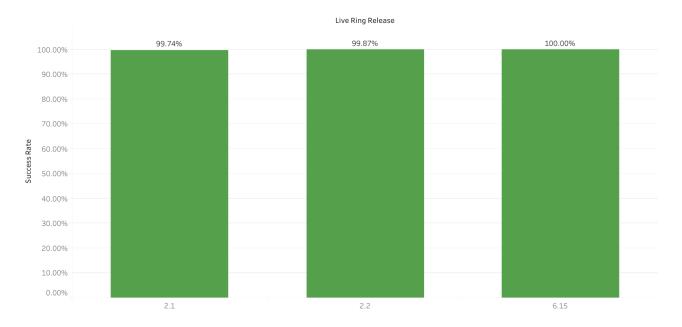
## **Measurement/Metric Findings**

In reviewing reports for Electronic Health Exchange (EHI) with Data Export, the number of accepted messages well exceeds Promoting Interoperability measurements related to the criteria. Result totals included the following accepted messages for the related interface type with no challenges encountered:

(b)(10) EHI Export Export 54,675,223 XML files with the Data Export routine message type for a combined 99.79% success rate

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#### M E D I T E C H Quarterly Success Rate EHI Export Group



# Measures: Scenarios and Testing Elements: Clinical Information Reconciliation and Incorporation (CIRI)

The chart below outlines the measures that have been identified to best demonstrate conformance to Clinical Information Reconciliation and Incorporation (CIRI) certification criteria concerning the ability to maintain and review accurate medication, allergy, and problem lists for a patient — enabling clinicians to make informed care decisions during office visits.

Clinical Information Reconciliation and Incorporation	Method
§170.315(b)(2) Clinical Information Reconciliation and Incorporation	(b)(2)(ii) transition of care summary/referral summary Consolidated-Clinical Document Architecture (C-CDA) document can be properly matched to a patient in the Health IT Module (automatically or manually). (b)(2)(iii)(B) user creates a single, reconciled list using the data reviewed from the multiple medications, problems, or medication allergies (b)(2)(iii)(D) user accepts the reconciled list

#### **Use Case**

MEDITECH demonstrates (CIRI) by comparing information from the MEDITECH system with information from external sources, such as discussions with the patient or a CCD to ensure the data on the patient's chart is up to date. An inbound CCD is received for patients and any unmatched CCD medications, allergies, or problems are displayed. Metrics provided details on the number of reconciliations deployed and the frequency of use.

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## **Test Methodology**

MEDITECH reporting logs were utilized to monitor Management Information System (MIS) interfaces to capture percentages for the Support Electronic Referral Loops by Receiving and Incorporating Health Information (Receive and Reconcile) measures. Variables capture the reconciliation percentage of imported problems, medications, or allergies. Logs obtained during Real World Testing were de-identified and used for analysis in several areas to validate the proper operation of (CIRI) transactions. The data metrics associated with the criteria in the above scenario confirm customers' ability to perform accurate clinical information reconciliation.

#### **Justification**

As part of the Real World Testing requirements for §170.315(b)(2) Clinical Information Reconciliation and Incorporation (CIRI), MEDITECH demonstrates that external medications, allergies, and problems are available for reconciliation to confirm all current data. MEDITECH's enterprise-wide EHR ensures the ongoing capabilities in reconciling patient information within the Inpatient, Ambulatory, Emergency Department, and Oncology care settings.

## Final Outcome(s)

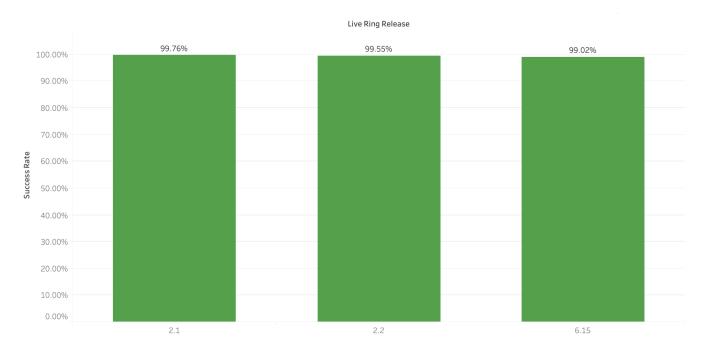
A total number of transitions or referrals receiving and incorporating Health Information (external medications, allergies, and problems) by performing a clinical information reconciliation were captured over a period for the Real World Test population of patients. This data exchange allows EHs/CAHs and Medicaid EPs to meet or surpass requirements of the Health Information Exchange objective Measure 3 - Clinical Information Reconciliation for threshold-based reporting and the Support Electronic Referral Loops by Receiving and Incorporating Health Information measure for performance-based reporting. Success and error rates were tracked and trended over time.

## Measurement/Metric Findings

A review of reports for Electronic Health Exchange (EHI) with CIRI found the number of accepted messages well exceeds Promoting Interoperability measurements related to the criteria. Result totals included the following accepted messages for the interface type with no challenges encountered:

> §170.315(b)(2) Clinical Information Reconciliation and Incorporation - 17,073,756 messages for Retrieve Document Set files with a combined 99.67% success rate

### MEDITECH Quarterly Success Rate CIRI Group



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## Measures: Scenarios and Testing Elements: Electronic Prescribing

As part of the Real World Testing requirements for §170.315(b)(3) Electronic Prescribing, MEDITECH demonstrates that an authorized user can be enabled to perform required prescription-related transactions in accordance with the standard. MEDITECH enables Electronic Prescribing and Order Communications from a single, central location. This Certified Health IT module is utilized when clinicians need to enter individual orders or multi-disciplinary order sets for prescription orders. The eRX orders are communicated in real-time to the receiving ancillary department's desktop, and clinicians can easily cancel, edit, renew, repeat, or hold orders at any time.

The chart below outlines the measures that have been identified to best demonstrate conformance to Electronic Prescribing (eRX) certification criteria concerning the ability to perform prescription-related transactions. This functionality includes creating new prescriptions, changing prescriptions, transmitting and receiving medication-associated diagnoses, and reasons for each prescription transaction.

Electronic Prescribing	Method
§170.315(b)(3) Electronic Prescribing	(b)(3)(ii)(A) send and receive specified prescription transactions electronically (all eRX transaction types) (b)(3)(ii) (C) send and receive the reason for the prescription (all eRX transaction types)

#### **Use Case**

MEDITECH's eRX capabilities are offered in collaboration with DrFirst. Functionality supported includes the ability to electronically submit prescriptions to outpatient pharmacies, review medication claim histories, electronically query a patient's prescription drug plan to ensure eligibility, and check the insurance formulary for covered medications.

## **Test Methodology**

Reports and interface logs were reviewed to determine the frequency of transaction transmissions, outbound requests, and inbound responses. Logs obtained during Real World Testing were de-identified and used for analysis in several areas to validate the proper operation of eRX transactions. The metrics associated with the criteria in the above scenario confirm customers' ability to generate and transmit permissible prescriptions electronically.

#### Justification

The Inpatient, Ambulatory, Emergency Department, and Oncology settings include the following capabilities for conformance: receiving and processing a number of electronic transactions for new prescriptions; requests to change, cancel, or refill prescriptions; and Medication History Information requests. Metrics provide details on the types of transactions deployed and the frequency of usage.

## Final Outcome(s)

Transaction types reconcile the corresponding number of new prescriptions; requests to change, cancel, or refill prescriptions; and Medication History Information requests. A total number of messages were generated for each eRX request either receiving or sending prescriptions for the Real World Test population of patients. Authorized users generate and transmit permissible discharge prescriptions electronically for EHs/CAHs and Medicaid EPs to meet or surpass (eRX) requirements for Promoting Interoperability criteria. Success and error rates were tracked and trended over time.

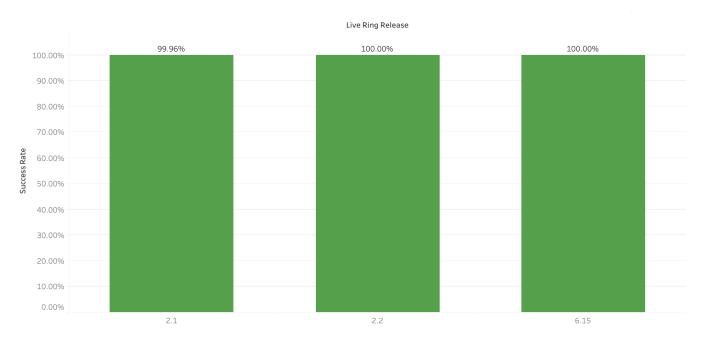
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## Measurement/Metric Findings

A review of reports for Electronic Prescribing found the number of accepted messages well exceeds Promoting Interoperability measurements related to the criteria. Result totals included the following accepted messages for the interface type with no challenges encountered:

§170.315(b)(3) Electronic Prescribing - 2,576,702 total messages for eRX categories with a combined 99.97% success rate

## M E D I T E C H Quarterly Success Rate eRX Group



## Measures: Scenarios and Testing Elements: Clinical Quality Measures

This Real World Testing scenario demonstrates that MEDITECH's Health IT Module conforms to the following certification criteria: \$170.315(c)(1) Clinical Quality Measures - Record and Export, \$170.315(c)(2) Clinical Quality Measures - Import and Calculate, and \$170.315(c)(3) Clinical Quality Measures - Report.

The chart below outlines the measures that have been identified to best demonstrate conformance to multiple certification criteria to capture the reporting and execution of QRDA files.

Clinical Quality Measures	Method
§170.315(c)(1) Clinical Quality Measures - Record and Export	(c)(1)(i) user demonstrates that they can record the specified data needed for each of the certified CQMs - Record Entry - Record Batch Entry (c)(1)(ii) user can export a file at any time the user chooses and without subsequent developer assistance.
§170.315(c)(2) Clinical Quality Measures - Import and Calculate	(c)(2)(i) user can execute the import capability described in (c)(2)(i) any time the user chooses and without

	subsequent developer assistance to operate. (c)(2)(ii) user calculates the aggregate reports for each of the CQMs for which they are seeking certification, based upon the imported and de-duplicated data set. The Health IT Module submits an aggregate report for each of the CQMs to be certified.
§170.315(c)(3) Clinical Quality Measures - Report	(c)(3)(i) (1) user can generate an aggregate report (QRDA Category III) (2) user can generate a de-duplicated archive of patient documents in the QRDA Category I format of the clinical quality measures calculated in the Execute test (§170.315(c) (3) The health IT developer submits the quality measurement data file consisting of the data created by the generation of the QRDA Category III aggregate report(s) and the de-duplicated QRDA Category I report(s) for verification.

#### **Use Case**

MEDITECH reporting is utilized to demonstrate that a user can export a QRDA Category I file(s) for a single patient at any time the user chooses (on-demand) and a list of SQL reports templates is available for customers, corresponding to each required Clinical Quality Measure report specifications and the QRDA Category 1 updates necessary for electronic reporting.

## **Test Methodology**

Reporting logs were reviewed to capture the number of clinical quality measure percentages over a period of time based on the specific measure being qualified. Logs obtained during Real World Testing were de-identified and used for analysis in several areas to validate the proper operation of QRDA transactions. The data metrics associated with the criteria in the above scenario confirm the ability of customers to facilitate accurate Clinical Quality Measure reporting.

#### Justification

MEDITECH's Report Manager is a web-based solution for executing MEDITECH's quality measure attestation reports, including variables that capture reporting and execution of QRDA files. The auditing functionality allows for an audit trail of the report execution and results to be saved in audit tables to be used for attestation runs. Metrics provided details on the number of transactions saved for attestation and the frequency of use.

## Final Outcome(s)

EHs/CAHs and Medicaid EPs meet or exceed requirements by attesting to measures. A total number of saved attestations are captured for a specific reporting period for the Real World Test population of patients and were tracked and trended over time.

## **Measurement/Metric Findings**

A review of reports for Clinical Quality Measures (CQM) reporting for the successful submission of Quality Reporting Document Architecture (QRDA) files — CQM reports run and the total number of QRDA submissions for both Eligible Hospitals and Eligible Clinicians are evaluated quarterly. Result totals included the following statistics for the criteria:

- > §170.315(c)(1) Clinical Quality Measures Record and Export
- > §170.315(c)(2) Clinical Quality Measures Import and Calculate

MEDITECH - 12 of 26 Last Updated: January 14, 2025 Clinical Quality Measures were evaluated for a sample of Expanse/6.1 customers quarterly with 9,715 combined reports compiled. Additionally, 288 QRDA files were submitted and accepted for CQM reporting attestation in this cross-check for Promoting Interoperability measurements. Findings included measures for both Eligible Hospitals and Eligible Providers/Clinicians.

Challenges with CQM evaluations included timing of customer reviews, reports run, and QRDA submissions throughout the year. The number of CQM reports run and related QRDA submissions well exceed measurements related to each criteria.

## Measures: Scenarios and Testing Elements: Public Health Interfaces

The Real World Testing scenario below demonstrates that MEDITECH's Health IT module conforms to the following certification criteria: §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.

The chart below outlines the measures that have been identified to best demonstrate conformance to multiple certification criteria concerning the sharing of registry data as demonstrated through the use case for population services.

Public Health Interfaces	Method
§170.315(f)(1) Transmission to Immunization Registries	(f)(1)(i) (1) generate the indicated HL7 v2.5.1 Z22 VXU immunization information message, (2) consume the associated acknowledgment message, (3) maintain historical vaccine records (f)(1)(ii) receive HL7 evaluated immunization history and forecast HL7 v2.5.1 Z42 RSP or HL7 v2.5.1 Z33 RSP response messages
§170.315(f)(2) Transmission to Public Health Agencies - Syndromic Surveillance	(f)(2) (2) generate the indicated HL7 v2.5.1 ADT message
§170.315(f)(3) Transmission to Public HealthAgencies - Reportable Laboratory Tests and Value/Results	(f)(3)(i) create Reportable Lab content and generate ELR message
§170.315(f)(5) Transmission to public health agencies – electronic case reporting	(f)(5)(3)(c) create a case report for electronic transmission.

#### **Use Case**

At the foundation of any effective population management solution is data, and MEDITECH's EHR brings it all together through reporting solutions in capturing public health criteria. Our EHR aggregates data across the continuum of care — from customer hospitals, physician practices, emergency departments, and long-term care facilities. MEDITECH's

Certified Health IT module provides functionality to track and store patient immunization information electronically, ensure hospitals possess the ability to report threat and outbreak information to public health agencies with Syndromic Surveillance data, reportable condition functionality where specific reportable laboratory tests and results are defined, as well as reportable condition functionality where specific reportable Reportability Response statuses are defined for eCase reporting.

## **Test Methodology**

MEDITECH reporting logs were utilized to monitor Management Information System (MIS) interfaces to capture percentages to ensure the transmissions are operating properly and to determine the frequency of use. Logs obtained during Real World Testing were de-identified and utilized for analysis in several areas to validate the proper operation of the Public Health interfaces. This test methodology primarily tests the conformance of the Implementation.

#### **Justification**

The transmission of Public Health data associated with a patient population using interface functionality provides data research to analyze specific trends in the patient population. With intuitive, web-based interfaces, MEDITECH's Public Health & Clinical Data Exchange functionality within the Inpatient, Ambulatory, and Emergency Department settings includes seamless and active engagement with public health agencies or clinical data registries to submit electronic public health data for conformance to this combined criteria. Interface messages provide metrics on the use and frequency of transmissions to state agencies for immunizations, syndromic surveillance, and reportable laboratory tests, value/results for a patient population associated with MEDITECH's Health IT Module.

## Final Outcome(s)

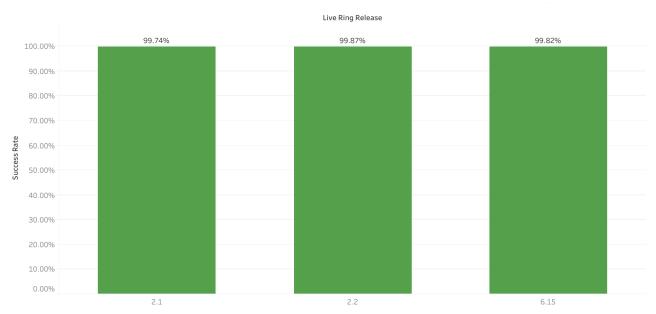
Public Health messages are processed and received via the interfaces used by the healthcare organization. Eligible hospitals or professionals are in active engagement with a public health agency using functionality provided to submit electronic public health data for EHs/CAHs and Medicaid EPs to meet or surpass requirements of Promoting Interoperability programs related to Public Health and Clinical Data Exchange objectives. Success and errors in transmission were tracked and analyzed over time.

## Measurement/Metric Findings

A review of sent messages for each public health interface was reviewed for result totals included in the following statistics for the criteria with no challenges encountered:

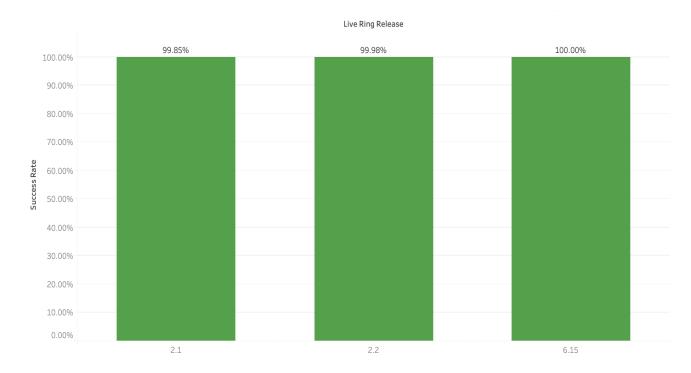
MEDITECH - 14 of 26 Last Updated: January 14, 2025 ➤ §170.315(f)(1) Transmission to Immunization Registries - Immunization Query and Response 80,091,798 messages with a combined 99.79% success rate

MEDITECH Quarterly Success Rate Immunizations Group



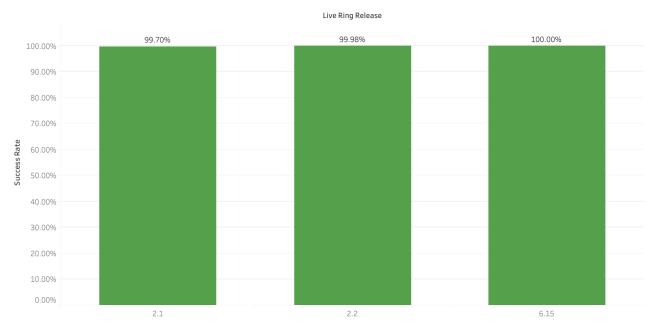
> §170.315(f)(2) Transmission to Public Health Agencies - Syndromic Surveillance Admission, Discharge, Transfer (Inbound and Outbound) 189,250,493 messages with a 99.93% combined success rate

M E D I T E C H Quarterly Success Rate SYND Group



> §170.315(f)(3) Transmission to Public Health Agencies - Reportable Laboratory Tests and Value/Results (Inbound and Outbound) 197,853,247 messages with a 99.86% combined success rate

#### MEDITECH Quarterly Success Rate Lab Group



- > §170.315(f)(5) Transmission to public health agencies electronic case reporting Challenges involved a lack of customer participation resulting in lower utilization due to non-deployed capabilities in customer production environments with the associated criteria.
- > 2,932 case entries with reportable triggers generated with a 100.00% combined success rate. Metrics were captured via the Electronic Case Monitor dashboard in customer onboarding Live environments. This test methodology primarily tested the conformance of the implementation.

#### Measures: Scenarios and Testing Elements: Cancer Registries

The chart below outlines the measures identified to best demonstrate conformance to §170.315(f)(4) Transmission to Cancer Registries criteria concerning the sharing of registry data as demonstrated through the use case for population services.

Public Health Interfaces: Cancer Case Reporting	Method
§170.315(f)(4) Transmission to Cancer Registries	(f)(4)(i) (2) create cancer case document, Reporting to Public Health Cancer Registries

#### **Use Case**

Cancer Event Reporting is incorporated into MEDITECH's workflow allowing organizations to use functionality in meeting the Merit-based Incentive Payment System (MIPS) criteria for Public Health Registry Reporting. MEDITECH's Cancer Registry interface generates outbound messages to meet this measure.

## **Test Methodology**

To effectively monitor cancer conditions and meet MIPS requirements, organizations must capture a variety of data elements that the system uses to populate cancer event reports. These data elements include patient demographics, provider and organization information, cancer diagnosis and details, laboratory and pathology results, and medication information. MEDITECH demonstrates the capability of generating a cancer event report when a testing patient is diagnosed with an ICD code recognized by the Centers for Disease Control (CDC) as a cancer condition.

#### **Justification**

As part of the Real World Testing requirements for §170.315(f)(4), MEDITECH demonstrates reporting to Public Health Cancer Registries via validation reports following standard workflow within dedicated internal platforms for Acute, Oncology, and Ambulatory settings.

## Final Outcome(s)

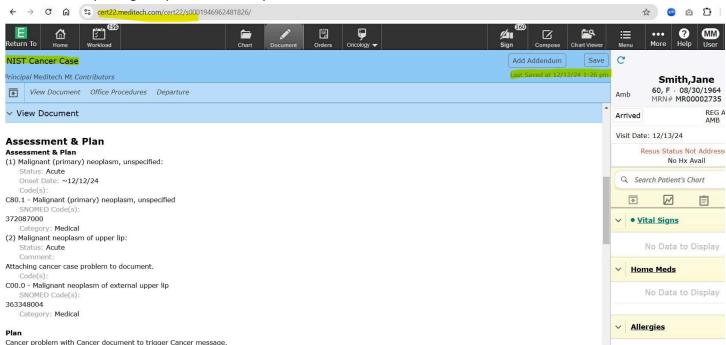
Using a dedicated internal platform, testing confirmed Cancer Case trigger routines respond to and generate a corresponding cancer event report. Visual inspection of success rates with MEDITECH's interface message generator was captured to demonstrate the capability with outbound messages for Cancer Case reporting. Negative testing to confirm diagnosis codes not matching the Cancer Case trigger was also validated quarterly.

## Measurement/Metric Findings

A review of sent messages for each cancer case event was reviewed for result totals included in the following statistics for the criteria with no challenges encountered:

§170.315(f)(4) Transmission to Cancer Registries - Results included 100% success rates with 55 accepted Cancer Event messages for combined releases quarterly.

Cancer Case Reporting Sample Q4 2024 - Expanse 2.2 Validation



## Measures: Scenarios and Testing Elements: Antimicrobial Use and Resistance Reporting

The chart below outlines the measures that have been identified to best demonstrate conformance to §170.315(f)(6) Transmission to Public Health Agencies - Antimicrobial Use and Resistance Reporting criteria concerning the sharing of registry data as demonstrated through the use case for population services.

Public Health Interfaces: AUR Reporting	Method
§170.315(f)(6) Transmission to Public Health Agencies - Antimicrobial Use and Resistance Reporting	(f)(6) (1) Health IT Module creates Antimicrobial use and resistance reporting information Antimicrobial Resistance Option Report (Numerator) Antimicrobial Resistance Option (ARO) Summary Report (Denominator) Antimicrobial Use (AUP) Summary Report (Numerator and Denominator)

#### **Use Case**

MEDITECH conforms to the Centers for Disease Control (CDC) specifications for Antimicrobial Use and Resistance Reporting. MEDITECH provides reporting related to generating electronic Microbiology antimicrobial resistance and antibiotic administration reports for transmission to the National Healthcare Safety Network (NHSN). Measures that have

been identified to best demonstrate conformance to the AUR reporting certification criteria include report functionality in success percentages for related objective measures.

## **Test Methodology**

Reporting logs were reviewed to capture the number of CDA files saved for submission over a period of time. Logs obtained during Real World Testing were de-identified and used for analysis in several areas to validate the execution of Antimicrobial Use and Resistance data. The metrics associated with the criteria in the above scenario confirm the ability of customers to facilitate the export of CDA XML files for accurate AUR reporting.

#### **Justification**

MEDITECH reporting capabilities provide a web-based solution for executing MEDITECH's quality measure attestation reports. AUR reporting includes variables that capture Numerator/Denominator values to assist customers in successfully submitting data to receive confirmation of compliance from NHSN. The auditing functionality allows for a history of the report execution and results to be saved in audit tables and used for attestation purposes.

## Final Outcome(s)

Authorized users generate electronic Microbiology antimicrobial resistance and antibiotic administration reports for transmission to the National Healthcare Safety Network for EHs/CAHs and Medicaid EPs to meet or surpass requirements related to Public Health and Clinical Data Exchange objectives. A total number of saved CDA XML files are captured for a specific reporting period for the Real World Test population of patients and tracked and trended over time.

## Measurement/Metric Findings

A review of reports for Antimicrobial Use and Resistance data for the successful submission of Quality Reporting Document Architecture (QRDA) files was evaluated for a sample of Expanse/6.1 customers — AUR reports run and a total number of QRDA submissions was evaluated quarterly. Result totals included the following statistics for the criteria:

> §170.315(f)(6) Transmission to Public Health Agencies - Antimicrobial Use and Resistance Reporting

Logs were evaluated for a sample of 82 Expanse/6.1 customers quarterly with 3,406 reports compiled. Additionally, 3,239 QRDA files were submitted and accepted for AUR reporting attestation in this cross-check for measurements.

Challenges with AUR evaluations included timing of customer reviews, reports run, and QRDA submissions throughout the year. The number of reports run and related QRDA submissions well exceeds measurements related to the criteria.

## **Measures: Scenarios and Testing Elements: Application Access**

The Real World Testing scenario below demonstrates that MEDITECH's Health IT module conforms to the following certification criteria: §170.315(g)(7) Application Access - Patient Selection, §170.315(g)(9) Application Access - All Data Request, and §170.315(g)(10) Application Access - Standardized API for Patient and Population Services.

The chart below outlines the measures that have been identified to best demonstrate conformance to multiple certification criteria to validate Application Programming Interface (API) interoperability-specific application requests and responses.

Public Health Interfaces: Application Access	Method
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§170.315(g)(7) Application Access - Patient Selection	(g)(7)(i) The health IT can receive a request with sufficient information to uniquely identify a patient and return an ID or other token that can be used by an application to subsequently execute requests for that patient's data.
§170.315(g)(9) Application Access - All Data Request	(g)(9)(i)(A) (2) user demonstrates that the API responds to and returns all data from the USCDI (g)(9)(i)(B) API functions return data to the developer-identified requesting application for a specific date that the requesting application identifies.
§170.315(g)(10) Application Access - Standardized API for Patient and Population Services	(g)(10)(i), (ii) Demonstrate Single Patient API (g)(10)(i), (ii), (iv) Demonstrate Multi-Patient Authorization and API

#### **Use Case**

Interoperability Services (IOPS), an Application Programming Interface (API) platform installed alongside the RESTful API Infrastructure, provides the MEDITECH EHR with next-generation interoperability capabilities. The platform runs interoperability-specific applications (collections of APIs) — enabling the MEDITECH EHR to take advantage of more advanced features and integrations. The MEDITECH API platform is an extension of the MEDITECH Health Care Information System (HCIS) which enables client applications to interact with MEDITECH's databases. Reporting logs track the register of API User clients with the MEDITECH API platform to demonstrate the facilitation of Application Access requests for all related criteria.

## **Test Methodology**

Reporting logs were reviewed to capture the number of Application Access requests for patient selection, category, and population requests over a period of time. Logs obtained during Real World Testing were de-identified and used for analysis in several areas to validate the execution of APIs. This test methodology primarily tests the conformance of the implementation.

#### **Justification**

MEDITECH remains at the forefront of the interoperability movement. As a contributing member of the CommonWell Health Alliance and a collaborator in Argonaut's Fast Healthcare Interoperability Resources (FHIR) project, we are committed to increasing our customers' data exchange avenues. Reporting logs reflect the number of successful transactions wherein one or more API routines respond to and return the full set of data for each data category from the USCDI for the unique patient identified by the ID or token.

## Final Outcome(s)

Reporting logs reflect the number of patient access (g7), full dataset (g9), and single/multiple patient (g10) requests returning full sets of data for each data category from the USCDI for the unique patient identified by the ID or token. Visual inspection of successful metrics was tracked and analyzed.

## **Measurement/Metric Findings**

A review of reports for Application Access data for the successful capture of API collections was evaluated for a sample of Expanse/6.1 customers (combined annual totals):

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- > §170.315(g)(7) Application Access Patient Selection patient identifier 5,131,745 (total # of patient events for the given ImplementationID)
- > §170.315(g)(9) Application Access All Data Request 2,018,965 (total # of events for the given ImplementationID specifically for (CDA)
- > §170.315(g)(10) Application Access Standardized API for Patient and Population Services 2,005,656 (total # of Globally Unique Identifiers (GUID) with events in more than 1 category for the given ImplementationID)

Relied-Upon Software		
Real World Testing Criteria	Relied-Upon Software	
§170.315(b)(1) Transitions of care	One of:  MEDITECH 6.1 Electronic Health Record Core HCIS (Version v6.15c) OR  MEDITECH Expanse 2.1 Core HCIS (Version v2.1c) OR  MEDITECH Expanse 2.2 Core HCIS (Version v2.2c)	
§170.315(b)(2) Clinical information Reconciliation	One of:  MEDITECH 6.1 Electronic Health Record Core HCIS (Version v6.15c) OR  MEDITECH Expanse 2.2 Core HCIS (Version v2.2c) OR  MEDITECH Expanse 2.1 Core HCIS (Version v2.1c) AND  IMO (Intelligent Medical Objects)	
§170.315(b)(3) Electronic Prescribing	<ul> <li>DrFirst Rcopia (DrFirst) AND</li> <li>EPCS Gold (DrFirst) AND</li> <li>First Databank AND</li> <li>Medi-Span (Wolters Kluwer) AND</li> <li>For Ambulatory and Emergency Department</li> <li>Management</li> <li>MEDITECH Expanse 2.2 Core HCIS (Version v2.2c) OR</li> <li>MEDITECH Expanse 2.1 Core HCIS (Version v2.1c) OR</li> <li>MEDITECH 6.1 Electronic Health Record Core HCIS (Version v6.15c)</li> </ul>	
§170.315(b)(10) Electronic Health Information Export	MEDITECH Continuity of Care Interface (CCD) (Version v6.1c) One of	

	<ul> <li>MEDITECH 6.1 Electronic Health Record Core HCIS (Version v6.15c) OR</li> <li>MEDITECH Expanse 2.1 Core HCIS (Version v2.1c) OR</li> <li>MEDITECH 6.1 Electronic Health Record Core HCIS (Version v2.2c)</li> </ul>
§170.315(c)(1) Clinical Quality Measures - Record and Export §170.315(c)(2): Clinical Quality Measures - Import and Calculate §170.315(c)(3): Clinical Quality Measures - Report	<ul> <li>PostgreSQL (for Expanse 2.2 only) OR Microsoft SQL Server AND</li> <li>IMO 2.0 (Intelligent Medical Objects) AND</li> <li>For Ambulatory, Emergency Department</li> <li>Management and Oncology</li> <li>MEDITECH Expanse 2.2 Core HCIS (Version v2.2c) OR</li> <li>MEDITECH Expanse 2.1 Core HCIS (Version v2.1c) OR</li> <li>MEDITECH 6.1 Electronic Health Record Core HCIS (Version v6.15c)</li> </ul>
§170.315(e)(1) View, download, and transmit to 3rd party	One of:  • MEDITECH 6.1 Electronic Health Record Core HCIS (Version v6.15c) OR  • MEDITECH Expanse 2.1 Core HCIS (Version v2.1c) OR  • MEDITECH Expanse 2.2 Core HCIS (Version v2.2c)
§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  §170.315(f)(4) Transmission to cancer registries  §170.315(f)(5) Transmission to public health agencies – electronic case reporting	One of:  • MEDITECH 6.1 Electronic Health Record Core HCIS (Version v6.15c) OR  • MEDITECH Expanse 2.1 Core HCIS (Version v2.1c) OR  • MEDITECH Expanse 2.2 Core HCIS (Version v2.2c)
§170.315(f)(6) Antimicrobial Use and Resistance Reporting	PostgreSQL (for Expanse 2.2 only) OR     Microsoft SQL Server

MEDITECH - 22 of 26 Last Updated: January 14, 2025 §170.315(g)(7) Application Access - Patient Selection §170.315(g)(9) Application Access - All Data Request

API for Patient and Population Services

§170.315(g)(10) Application Access - Standardized

For Ambulatory, Emergency Department Management

- MEDITECH Expanse 2.2 Core HCIS (Version v2.2c) OR
- MEDITECH Expanse 2.1 Core HCIS (Version v2.1c) OR
- MEDITECH 6.1 Electronic Health Record Core HCIS (Version v6.15c)

STANDARDS UPDATES (INCLUDING STANDARDS VERSION ADVANCEMENT PROCESS (SVAP) AND UNITED STATES CORE DATA FOR INTEROPERABILITY (USCDI))		
Standard (and version)	Quality Reporting Document Architecture Category I Quality Reporting Document Architecture: Category III	
Updated certification criteria and associated product	170.315(c)(3) - Clinical quality measures (CQMs) — report	
Health IT Module CHPL ID	MEDITECH Expanse 2.2 Ambulatory v2.2c	
	MEDITECH Expanse 2.2 Core HCIS v2.2c	
	MEDITECH Expanse 2.2 Emergency Department Management v2.2c	
	MEDITECH Expanse 2.2 Oncology v2.2c	
	MEDITECH Expanse 2.1 Oncology v2.1c	
	MEDITECH Expanse 2.1 Ambulatory v2.1c	
	MEDITECH Expanse 2.1 Core HCIS v2.1c	
	MEDITECH Expanse Emergency Department Management v2.1c	
	MEDITECH 6.1 Electronic Health Record Core HCIS v6.15c	
	MEDITECH 6.1 Oncology v6.15c	

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	MEDITECH 6.1 Emergency Department Management v6.15c	
	MEDITECH 6.1 Ambulatory Electronic Health Record v6.15c	
Method used for standard update	Certification Attestation	
Date of ASTP-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	

Care Settings	
Acute	MEDITECH's fully web-based Inpatient solution is an integrated component of MEDITECH's enterprise-wide EHR consisting of advanced patient management via Registration capturing details for public health interfaces and EHI export. Clinical workflows incorporate medication reconciliation and list medications, problems, and allergies. Inpatient EHI Export Exchange routines export single patient and/or bulk patient data files for continuity of care documents, discharge summaries, referral notes, and care plans.
Ambulatory	MEDITECH's Ambulatory solution is device-and browser-agnostic, specifically designed for use with touchscreen devices to provide more efficient patient care. Clinical functionality within MEDITECH's Ambulatory solution is optimized with over 40 tailorable specialty-specific workflows, including anesthesiology, behavioral health, general surgery, obstetrics and gynecology, orthopedics, and pediatrics.
	In the Ambulatory system, users can review and reconcile a patient's enterprise-wide allergy list via the Allergy/Adverse Reaction screen. The patient's active problem list can be reviewed in the Problems widget within the patient's chart, highlighted via a visual indicator. The External Data Available flag is displayed to reconcile the data for this patient. The patient's existing Problems, Medications, and Allergies are easily compared with those available from another source, and entries are reconciled.
Emergency	MEDITECH's Emergency Department Management solution assists ED staff with the

Department	critical task of treating patients quickly and efficiently. As an integrated component of MEDITECH's EHR, Emergency Department Management supports the seamless exchange of patient information between the acute care, ambulatory, and ED settings, expediting care and providing all clinicians with the complete information they need to make safer, more informed decisions.
Oncology	Specialty-driven workflows — along with modern tablet conventions like tap and swipe — increase provider productivity while streamlining transitions of care.  MEDITECH's Oncology delivers a full solution for managing the unique care requirements of oncology patients in ambulatory and inpatient settings.  Oncology workflow is integrated with the entire MEDITECH EHR to enhance communication across care teams and provide patients with the ensuring a safe and comforting care experience.
	Oncology incorporates queuing of new orders while reviewing or documenting in the patient's chart, simplifying health and disease management through integrated flowsheets and a shared problem list, and closed-loop medication management by integrating Oncology with Pharmacy, Order Management, and Patient Care.

## **Schedule of Key Milestones**

MEDITECH, following change control approval procedures, connected to a number of predetermined customer directories or dedicated internal environments gathering data for a specific period each quarter beginning in January 2024 and throughout the year to capture metrics for each criterion. These statistics substantiate the demonstration of interoperability and functionality of our Certified Health IT in the care settings and scenarios for the 2024 test plan as described in the above scenarios. As criteria tests have been conducted, authorized MEDITECH representatives analyzed the result outcomes.

The execution of the testing process, capturing data on a quarterly basis, was completed in December 2024 for an analysis of success rates over a period of time for submission of reporting results due by February 2025.

Key Milestone	Care Setting	Timeframes
Initial development of 2024 the Real World Testing plan designed by platform combination.	Acute Ambulatory Emergency Oncology	August - October 2023
Preparing reporting utilities to gather data for analysis.	Acute Ambulatory Emergency Oncology	August - October 2023
Submit 2024 final Real World Testing plan to Drummond Group.	Acute Ambulatory	October 13, 2023

	Emergency Oncology	
Post approved 2024 Real World Testing plan to external URL.		December 5, 2023
MEDITECH Initiated a collection of metrics for each group of criteria based on the reporting tools and utilities noted.	Acute Ambulatory	Quarterly - March, June, September, and December 2024
Met with designated testers and Certification group review for analysis of data collected.	Acute Ambulatory	March, June, September, and December 2024
Design 2024 Real World Testing Results Report	Acute Ambulatory	December 2024 - January 2025
Complete 2024 metric analysis and Real World Testing report completion.	Acute Ambulatory	January 2025
Submit 2024 Real World Testing report to Drummond Group.	Acute Ambulatory	By February 1, 2025

### **ATTESTATION**

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Authorized Representative Phone: 7781-774-4660

Date: January 14, 2025

Authorized Representative Signature:

#### **MEDITECH Proprietary:**

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