

Medical Information Technology 2024 Real World Testing Plan

MAGIC HCA Release Acute/Emergency Care Settings

Overview

This 2024 Real World Testing document outlines the process MEDITECH, as an Electronic Health Record (EHR) vendor, will take in facilitating the annual Real World Testing (RWT) program established by the Office of the National Coordinator (ONC). Organizations collaborate with us directly 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.

Products and Certificate Numbers

MAGIC HCA

- MEDITECH MAGIC HCA Electronic Health Record Core HCIS (without PatientKeeper) v5.67c 15.04.04.2931.MEDI.56.02.1.221111
- MEDITECH Public Health Interface Electronic Case Reporting v5.67 15.04.04.2931.Case.56.00.1.221001

Overall Approach

Data will be aggregated from a number of healthcare organizations by product line, utilizing existing performance monitoring tools to demonstrate compliance with the conditions of certification. Interfaces will be 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 will contain no Protected Health Information (PHI) data.

Care Settings

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

MEDITECH Real World Testing Page URL: <https://home.meditech.com/en/d/regulatoryresources/pages/certification.htm>

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) Electronic Health Information Export, and § 170.315(e)(1) View, Download, and Transmit to 3rd party.

The chart below outlines the measures that have been 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 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

United States Core Data for Interoperability (USCDIV1) standard can be sent and received on documentation for a single patient. The Inpatient and Emergency Department settings include two capabilities for conformance: (1) Sending transition of care/referral summaries and (2) Receiving transition of care referral summaries, including XDM processing. 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. Metrics provide details on the types of transmissions deployed and the frequency of usage.

Test Methodology

Management Information System interface logs will be reviewed to determine the frequency and the transport workings used by providers for sending and receiving transitions of care and downloading or transmitting data by patients using MEDITECH’s Patient Portal. Logs obtained during real world testing will be 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 the above 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 and Emergency Department 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 Patient Portal 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 provide details on the types of transmissions deployed and the frequency of usage.

Expected Outcome(s):

A total number of summary of care messages are 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. It is expected that providers and patients (or their authorized representatives) will be able to 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 Promoting Interoperability programs related to Coordination of Care. Success and error rates will be tracked and trended over time.

Measure 2 – Patient Export	Method
<p>(b)(6) Data Export - Time-limited until December 31, 2023 (b)(10) Electronic Health Information Export - certified as of December, 2023</p>	<p>MEDITECH will be incorporating (b)(10) criteria as the Test Methodology based on overlap and timing:</p> <p>(b)(10)(i)(A) timely create an export file(s) with all of a single patient’s electronic health information stored at the time of certification by the product, of which the Health IT Module is a part.) (b)(10)(i)(B) execute this capability at any time the user chooses and without subsequent developer assistance to operate. (b)(10)(i)(D) export files(s) created must be electronic and in a computable format.</p>

Use Case

MEDITECH’s EHI Export dashboard allows for the export of patient information on a single patient or population level. The EHI Export package includes related data classes and can be compiled by an end user from the EHI Export routine in HIM or from the Patient Portal. The export of data associated with a patient population is an additional way to share health information via authorized users. This method will provide a metric on the use of the export of data for a patient population associated with MEDITECH’s Health IT Module.

Test Methodology

With EHI Export, organizations have several options for configuring the Download Medical Record functionality. The EHI Export package includes previously generated CCDs as well as structured data. The CCD consists of a set of core data elements that represent the most relevant administrative, demographic, and clinical information about the patient.

Justification

It is expected that authorized users will be able to share data for a patient or population using the export functionality via the extraction of the electronic health record (EHR) from the MEDITECH system. Management Information System activity logs track EHI Export request statuses.

Expected Outcomes

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

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 will be received for patients and any unmatched CCD medications, allergies, or problems will be displayed. Metrics provide details on the number of reconciliations deployed and the frequency of usage.

Test Methodology

Interface reporting logs will be reviewed 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 will be 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 the ability of customers 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 in order to confirm all current data. MEDITECH’s enterprise-wide EHR ensures the ongoing capabilities in reconciling patient information within the Inpatient and Emergency Department care settings.

Expected 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 are 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 will be tracked and trended over time.

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 e-RX 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

Internal interface logs will be reviewed to determine the frequency of transaction transmissions, outbound requests, and inbound responses. Logs obtained during Real World Testing will be 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 the ability of customers to generate and transmit permissible prescriptions electronically.

Justification

The Inpatient and Emergency Department 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.

Expected 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 are generated for each eRX request either receiving or sending prescriptions for the Real World Test population of patients. It is expected that authorized users will 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 will be tracked and trended over time.

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) 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 Health Agencies - 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)(iii) 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, as well as reportable condition functionality where Reportability Response statuses are defined for eCase reporting.

Test Methodology

Internal interface and reporting logs will be reviewed to ensure the transmissions are operating properly and to determine the frequency of use. Logs obtained during Real World Testing will be de-identified and utilized for analysis in several areas to validate the proper operation of the Public Health interfaces. This test methodology will primarily test 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 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 will provide metrics on the use and frequency of transmissions to state agencies for immunizations, syndromic surveillance, reportable laboratory tests, and value/results, and electronic cases for a patient population associated with MEDITECH’s Health IT Module.

Expected Outcome(s):

Public Health messages are processed and received via the interfaces used by the healthcare organization. It is expected that eligible hospitals or professionals are in active engagement with a public health agency using functionality provided in order 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 will be tracked and analyzed over time. Internal logs will capture a number of electronic cases generated for Reportability Response statuses for public health reporting.

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
§170.315(g)(7) Application Access - Patient Selection	The health IT developer submits their self-declaration to the ONC-ATL.
§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 will track the register of API User clients with the MEDITECH API platform in order to demonstrate the facilitation of Application Access requests for all related criteria.

Test Methodology

Reporting logs will be 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 will be de-identified and used for analysis in several areas to validate the execution of APIs. This test methodology will primarily test 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 FHIR Project, we are committed to increasing our customers' data exchange avenues. Reporting logs will 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.

Expected Outcome(s):

It is expected that 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 will be tracked and analyzed.

Relied-Upon Software	
Criteria	Relied-Upon Software
§170.315(b)(3) Electronic Prescribing	<ul style="list-style-type: none">• DrFirst Rcopia (DrFirst)
§170.315(d)(13) Multi-factor authentication	<ul style="list-style-type: none">• SAML 2.0 compliant Identity Provider (IdP) including Forward Advantage Authello and• Imprivata Confirm ID

STANDARDS UPDATES (INCLUDING STANDARDS VERSION ADVANCEMENT PROCESS (SVAP) AND UNITED STATES CORE DATA FOR INTEROPERABILITY (USCDI))	
Standard (and version)	N/A
Updated certification criteria and associated product	N/A
Health IT Module CHPL ID	N/A
Method used for standard update	N/A
Date of ONC -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 data export. Clinical workflows incorporate medication reconciliation and list medications, problems, and allergies. Inpatient Data Export Exchange routines export single patient and/or bulk patient data files for Continuity of Care documents, Discharge Summaries, Referral Notes, and Care Plans.
Emergency Department	MEDITECH's Emergency Department Management solution assists ED staff with the 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 and ED settings, expediting care and providing all clinicians with the complete information they need to make safer, more informed decisions.

Schedule of Key Milestones

MEDITECH, following change control approval procedures, will connect to a number of predetermined customer directories or dedicated internal environments gathering data for a specific period each quarter beginning in January 2024 in order 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. Once all of the use case criteria tests have been conducted, authorized MEDITECH representatives will analyze the result outcomes. Upon completion of the Real World Testing results review, the Certification group will draft a final summary report for self-preparation and submission to the Drummond Group.

The execution of the testing process, capturing data on a quarterly basis, will be completed by year-end 2024 for an analysis of success rates over a period of time for submission of reporting results by March 2025.

Key Milestone	Care Setting	Timeframes
Initial development of the Real World Testing plans designed by platform combination.	Acute Emergency	August – October 2023

Development submission of reporting utilities to gather data for analysis.	Acute Emergency	August – October 2023
Submit final Real World Test plans to Drummond Group.	Acute Emergency	November 1, 2023
Post approved Real World Test Plan to external URL.		December 15, 2023
Initiate collection of metrics for each group of criteria based on the reporting tools and utilities noted.	Acute	Quarterly – March, June, September, December 2024
Meet with designated testers and Certification group review for analysis of data collected.	Acute	March, June, September, December 2024
Design Real World Testing Results Report	Acute	December 31, 2024
Complete metric analysis and Real World Testing report completion.	Acute	January 1 – February 1, 2025
Submit Real World Testing report to Drummond Group.	Acute	Date TBD by Drummond Group prior to March 15, 2025

ATTESTATION

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Date: October 12, 2023

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MEDITECH Proprietary:

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