

Real World Testing Plan - UDOC Technologies - EHI export capability (§170.315(b)(10))

General Information

- Developer Name: Udoc Technologies, LLC
- Product Name: Udoc
- Version Number: V1
- Certified Health IT Product List (CHPL) ID: 15.07.04.3132.Udoc.01.01.0.230213
- Developer Real World Testing Plan Page URL: <https://udoc.com/b10-realworldtestingplan.html>

Justification for Real World Testing Approach

Our approach to Real World Testing focuses on demonstrating that our EHI export capability (§170.315(b)(10)) functions effectively in real-world enterprise EMR deployment. The goal is to verify that our certified health IT continues to perform as intended by:

1. Supporting user-driven export requests without developer assistance
2. Providing timely and complete exports of EHI
3. Delivering data in standardized, computable formats (XML/JSON)
4. Meeting all requirements for both single patient and patient population exports
5. Operating through an automated hourly check-and-execute process that:
 - Checks for pending export requests every hour
 - Automatically initiates export generation when requests are found
 - Ensures systematic and predictable processing of all export requests

This approach will demonstrate both conformance to certification requirements and real-world interoperability through actual usage data and testing in production environments.

Standards Updates

Standard (and version): Not applicable - using documented export specification v1.01.001

Updated certification criteria: §170.315(b)(10) Electronic Health Information Export Health IT Module

CHPL ID: 15.07.04.3132.Udoc.01.01.0.230213

Date of ONC ACB notification: N/A - Initial certification

Date of customer notification: N/A - Initial certification

Conformance method: Testing of export functionality through user interface.

Care Settings

The EHI export functionality is implemented as an enterprise-wide feature in our EMR system. The export capability operates at the system level, providing a unified export mechanism that:

1. Functions consistently across the entire EMR system
2. Exports all available patient data from the system database and document storage
3. Operates independently of medical specialty or practice type
4. Is accessible through the EMR system interface to authorized users

For Real World Testing, we will test our EHI export functionality at the system level, validating that the export successfully processes and includes all available patient data from our EMR system.

Measurement/Metrics

Measure 1: Single Patient EHI Export

Description: This measure will test the conformance and performance of single patient EHI exports through the following metrics:

- Success rate of export attempts
- Export completion time
- Completeness of exported data
- Proper formatting of exports
- User ability to execute exports independently

Associated Certification Criteria:

§170.315(b)(10)(i)(A) - Create export file(s) in a timely manner

§170.315(b)(10)(i)(B) - Export all of a single patient's EHI

§170.315(b)(10)(i)(C) - Limited users ability to create export

§170.315(b)(10)(i)(D) - Create export in computable format

Relied Upon Software: None

Test Methodology:

- System process monitoring to verify:
 - Hourly execution of the export check process
 - Proper queuing and processing of export requests
 - Time between request submission and next hourly processing cycle
- Log files will be analyzed to track:
 - Number of successful vs. failed exports
 - Time taken for export completion
 - User roles executing exports
 - Export file sizes and contents
- Automated validation of export file format and structure
- Sample review of exported data for completeness

Care Setting: Enterprise EMR system level functionality, operating consistently across all system implementations and user access points.

Expected Outcomes:

1. Export Success Rate: 99% successful completion
2. The functionality runs requests in one hour periods
3. Timeliness: Average export completion <5 minutes
4. Data Completeness: Exports contain all required EHI elements
5. Format Compliance: 100% of exports conform to documented format specification
6. Process Timeliness: Export requests are processed within the next hourly execution cycle after submission
7. User Access: Only authorized users can initiate exports

Measure 2: Patient Population EHI Export

Description: This measure will test the system's ability to execute population-level EHI exports through the following metrics:

- Success rate of population export attempts
- Export completion time for 50-patient sample
- Completeness of exported population data
- Proper formatting of population exports
- System performance during large exports

Associated Certification Criteria: §170.315(b)(10)(ii) - Patient Population EHI export

Test Methodology:

- Execute population exports with 50-patient sample size
- Analysis of hourly processing cycles to verify:
 - Proper handling of multiple queued population export requests
 - System resource utilization during concurrent processing
 - Impact of population exports on hourly processing schedule
- Log analysis of:
 - Export completion success rates
 - Processing time for population exports
 - Server performance metrics during exports
- Validation of exported data completeness and format
- Monitoring of system resources during export process

Expected Outcomes:

1. Population Export Success: >95% successful completion
2. Timeliness: <30 minutes for 50-patient population export
3. Data Integrity: All patient records complete and properly formatted
4. System Stability: No performance degradation during export process

Schedule of Key Milestones

Key Milestone	Care Setting Date/Timeframe	
Begin collection of export metrics	EMR System January 1, 2025	
Initial analysis of single patient exports	EMR System March 31, 2025	
Begin population export testing	EMR System May 31, 2025	
Review of Q1-Q2 metrics and adjustments	EMR System August 30, 2025	
Complete data collection	EMR System October 31, 2025	
Analysis and report creation	N/A	January 31, 2026
Submit Real World Testing results	N/A	February 28, 2026

Overall Expected Outcomes

This Real World Testing will demonstrate that the UDOC EHI export capability:

1. Is compliant with §170.315(b)(10) certification criterion
2. Successfully exports EHI in production environments without developer assistance
3. Provides complete and accurate patient data in a timely manner
4. Functions effectively for both single patient and population exports
5. Maintains proper access controls and security measures

Our chosen metrics and testing approach will provide clear evidence of ongoing compliance and real-world functionality of our certified EHI export capability.