

Test Procedure for §170.302 (n) Public health surveillance

This document describes the draft test procedure for evaluating conformance of complete EHRs or EHR modules to the certification criteria defined in 45 CFR Part 170 Subpart C of the Interim Final Rule (IFR) as published in the Federal Register on January 13, 2010. The document is organized by test procedure and derived test requirements with traceability to the normative certification criteria as described in the Overview document located at http://healthcare.nist.gov/docs/TestProcedureOverview_v1.pdf. These test procedures will be updated to reflect the certification criteria defined in the ONC Final Rule.

Note: This test procedure is scoped only to the criteria defined in 45 CFR Part 170 Subpart C of the Interim Final Rule (IFR) as published in the Federal Register on January 13, 2010. This test procedure will be updated to reflect updates to the criteria and standards as published in the ONC Final Rule. Questions about the criteria and standards should be directed to ONC.

CERTIFICATION CRITERIA

§170.302 (n) Public health surveillance. Electronically record, retrieve, and transmit syndrome based public health surveillance information to public health agencies in accordance with one of the standards specified in §170.205(g).

INFORMATIVE TEST DESCRIPTION

This section provides an informative description of how the test procedure is organized and conducted. It is not intended to provide normative statements of the certification requirements.

This test evaluates the capability for a Complete EHR or EHR Module¹ to electronically record, retrieve and transmit public health syndromic surveillance information to public health agencies in either HL7 2.3.1 or HL7 2.5.1 format. Per ONC guidance, this test procedure evaluates the capability of the EHR to transmit information to a local or state public health agency but does not specify the types of information to be conveyed, and does not evaluate conformance to a local or state-specified implementation guide. The Vendor identifies the HL7 message types and message content which the EHR supports for transmitting syndromic surveillance information to local or state public health agencies. The Tester verifies that the transmitted messages are syntactically conformant to the HL7 standard. The Vendor provides the test data for this test.

The test procedure is organized into three sections:

- Record – evaluates the capability of the EHR to record syndromic surveillance information as defined by the Vendor
 - Using EHR function(s) and test data supplied by the Vendor, the Tester will enter and store syndromic surveillance information into the HER

¹ Department of Health and Human Services, 45 CFR Part 170 Proposed Establishment of Certification Programs for Health Information Technology, Proposed Rule, March 10, 2010.

- **Retrieve** - evaluates the capability of the EHR to retrieve and display previously entered syndromic surveillance information as defined by the Vendor
 - Using EHR function(s) identified by the Vendor, the Tester will retrieve and display the syndromic surveillance information entered during the Record test and verify that it is complete and correct
- **Transmit** – evaluates the capability of the EHR to electronically transmit the Vendor-identified syndromic surveillance information in a syntactically conformant HL7 v2.3.1 or v2.5.1 message
 - Using EHR function(s) identified by the Vendor, the Tester will transmit the syndromic surveillance information entered during the Record test and verify that the transmitted message is syntactically conformant to the HL7 standard

REFERENCED STANDARDS

§170.205 Content exchange and vocabulary standards for exchanging electronic health information.

Regulatory Referenced Standard

(g) Electronic submission to public health agencies for surveillance or reporting. The Secretary adopts the following content exchange standards for electronic submission to public health agencies for surveillance or reporting:

(1) Standard. HL7 2.3.1(incorporated by reference in §170.299).

(2) Alternative standard. HL7 2.5.1(incorporated by reference in §170.299).

NORMATIVE TEST PROCEDURES

Derived Test Requirements

DTR170.302.n - 1: Electronically Record Public Health Syndromic Surveillance Information

DTR170.302.n - 2: Electronically Retrieve and Display Public Health Syndromic Surveillance Information

DTR170.302.n - 3: Electronically Transmit Public Health Syndromic Surveillance Information

DTR170.302.n - 1: Electronically Record Public Health Syndromic Surveillance Information

Required Vendor Information

VE170.302.n – 1.01: Vendor shall identify the EHR function(s) that are available to record, retrieve and transmit syndromic surveillance information to public health agencies

VE170.302.n – 1.02: Vendor shall identify an existing patient record in the EHR to be used for this test

VE170.302.n – 1.03: Vendor shall provide the syndromic surveillance test data for this test

Required Test Procedure

- TE170.302.n – 1.01: Using EHR function(s) and test data supplied by the Vendor, the Tester shall select the existing patient record and enter the syndromic surveillance test data into the EHR
- TE170.302.n – 1.02: Using the EHR function(s) identified by the Vendor and the NIST-supplied Inspection Test Guide, the Tester shall verify that the recorded syndromic surveillance information has been entered correctly and without omission

Inspection Test Guide

- IN170.302.n – 1.01: Tester shall verify that the syndromic surveillance test data are entered correctly and without omission
- IN170.302.n – 1.02: Tester shall verify that the syndromic surveillance test data entered during the test are stored in the patient's record

DTR170.302.n - 2: Electronically Retrieve and Display Public Health Syndromic Surveillance Information

Required Vendor Information

- As defined in DTR170.302.n - 1, no additional information is required

Required Test Procedure

- TE170.302.n – 2.01: Using EHR function(s) identified by the Vendor, the Tester shall select the existing patient record and retrieve and display the syndromic surveillance information entered during the Electronically Record Public Health Syndromic Surveillance Information test
- TE170.302.n – 2.02: Using the NIST-supplied Inspection Test Guide, the Tester shall verify that the syndromic surveillance information entered during the Record test is displayed correctly and without omission

Inspection Test Guide

- IN170.302.n – 2.01: Tester shall verify that the displayed syndromic surveillance information includes all of the test data entered during the Electronically Record Public Health Syndromic Surveillance Information test

DTR170.302.n - 3: Electronically Transmit Public Health Syndromic Surveillance Information

Required Vendor Information

- VE170.302.n – 3.01: Vendor shall identify the EHR function(s) available to transmit the public health syndromic surveillance information to a local or state public health agency

Required Test Procedure

TE170.302.n – 3.01: Using EHR functions identified by the Vendor, the Tester shall transmit the public health syndromic surveillance information

TE170.302.n – 3.02: The Tester shall verify that the transmitted laboratory test result message is syntactically conformant with the HL7 standard and contains the syndromic surveillance information entered into the EHR during the Electronically Record Public Health Syndromic Surveillance Information test

Inspection Test Guide

IN170.302.n – 3.01: The Tester shall visually verify syntactic conformance of the transmitted public health syndromic surveillance information to the applicable HL7 standards

IN170.302.n – 3.02: The Tester shall visually inspect the transmitted message to verify that the syndromic surveillance information entered into the EHR during the Electronically Record Public Health Syndromic Surveillance Information test are included in the message

EXAMPLE TEST DATA

Test Data is provided by the Vendor for this test

CONFORMANCE TEST TOOLS

None