Test Procedure for §170.314(f)(7) Optional – Ambulatory setting only— Transmission to public health agencies – syndromic surveillance

This document describes the test procedure for evaluating conformance of EHR technology to the certification criteria defined in 45 CFR Part 170 Subpart C of the 2014 Edition, Release 2 Electronic Health Record (EHR) Certification Criteria and the ONC HIT Certification Program; Regulatory Flexibilities, Improvements, and Enhanced Health Information Exchange Final Rule (insert publication date). The document[1] 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://www.healthit.gov/certification (navigation: 2014 Edition, Test Method). The test procedures may be updated to reflect on-going feedback received during the certification activities.

Questions or concerns regarding the ONC HIT Certification Program should be submitted at: http://jira.oncprojectracking.org/browse/CERT

CERTIFICATION CRITERIA

Refer to §170.314(f)(7) for the certification criterion.

Per Section III.A of the preamble of the 2014 Edition, Release 2 Electronic Health Record (EHR) Certification Criteria and the ONC HIT Certification Program; Regulatory Flexibilities, Improvements, and Enhanced Health Information Exchange Final Rule (September 11, 2014), this certification criterion is adopted as part of the 2014 Edition test method and is classified as "optional".

2014 EDITION RELEASE 2 PREAMBLE LANGUAGE

Additional language pertaining to this certification criterion can be found in Section III.A.2 of the 2014 Edition, Release 2 Electronic Health Record (EHR) Certification Criteria and the ONC HIT Certification Program; Regulatory Flexibilities, Improvements, and Enhanced Health Information Exchange Final Rule (September 11, 2014).

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 procedure evaluates the capability of ambulatory EHR technology to electronically create syndrome-based public health surveillance information for electronic submission (using any method or standard).

[1] Disclaimer: Certain commercial products may be identified in this document. Such identification does not imply recommendation or endorsement by ONC.

This test procedure also includes an *optional* test to evaluate the capability of an ambulatory EHR technology to electronically create syndrome-based public health surveillance information containing specific data elements.

The Vendor supplies test patients and test data for this test procedure.

The test procedure is organized into two sections:

- Create messages—evaluates the capability of the ambulatory EHR technology to electronically generate syndrome-based public health surveillance information for transmission (using any method or standard).
    - The Vendor identifies the EHR technology function(s) required to electronically generate syndrome-based public health surveillance information for transmission
    - To demonstrate the identified EHR technology function(s), the Vendor provides test data and test patient(s) inclusive of:
        - Test patient(s) for whom syndromic surveillance information is available
        - Test patient(s) for whom syndromic surveillance information is not available
    - Using the Vendor-identified EHR technology function(s) the Tester inputs the provided test patient(s) and syndromic surveillance test data, where applicable
    - Using the Vendor-identified EHR technology function(s) and provided test data, the Tester causes the EHR to generate syndromic surveillance message(s)
    - The Tester verifies that electronic syndromic surveillance message(s) were generated for test patient(s) for whom syndromic surveillance information was available
    - The Tester verifies that electronic syndromic surveillance message(s) were not generated for test patient(s) for whom no syndromic surveillance information was available

- Optional—Create data elements— evaluates the capability of the ambulatory EHR technology to electronically generate syndromic surveillance messages containing specific data elements.
    - The Tester inspects the syndromic surveillance message(s) generated in the “Create messages” section and verifies that the following data elements are present in the message(s):
        - Patient demographics
        - Provider specialty
        - Provider address
        - Problem list
        - Vital signs
        - Laboratory test values/results
        - Procedure
        - Medication list
        - Insurance

REFERENCED STANDARDS

None

NORMATIVE TEST PROCEDURES

Derived Test Requirements

DTR170.314(f)(7) – 1: Electronically Create Syndromic Surveillance Information

DTR170.314(f)(7) – 2: Optional—Electronically Create Syndromic Surveillance Data Elements

DTR170.314(f)(7) – 1: Electronically Create Syndromic Surveillance Information

Required Vendor Information

VE170.314(f)(7) – 1.01: The Vendor shall identify existing test patient records to be used for this test, including the following:

- Test patient(s) for whom syndromic surveillance information is available
- Test patient(s) for whom no syndromic surveillance information is available

VE170.314(f)(7) – 1.02: The Vendor shall instantiate the Vendor-supplied syndromic surveillance test data in the EHR for this test

VE170.314(f)(7) – 1.03: The Vendor shall identify the EHR function(s) required to create syndrome-based public health surveillance information

Required Test Procedures

TE170.314(f)(7) – 1.01: Using the Vendor-identified EHR function(s), the Tester shall select the existing test patient records to be used during the test and verify the presence of the syndromic surveillance test data in the EHR, where applicable

TE170.314(f)(7) – 1.02: Using the Vendor-identified EHR function(s) and the Vendor-supplied test data, the Tester shall cause the EHR to generate syndromic surveillance messages

TE170.314(f)(7) – 1.03: Using the Inspection Test Guide, the Tester shall verify that syndromic surveillance message(s) were generated for the appropriate test patient(s)

Inspection Test Guide

IN170.314(f)(7) – 1.01: The Tester shall verify the following:

- Syndromic surveillance message(s) were generated for test patient(s) for whom syndromic surveillance information was available
- Syndromic surveillance message(s) were not generated for test patient(s) for whom no syndromic surveillance information was available

DTR170.314(f)(7) – 2: Optional—Electronically Create Syndromic Surveillance Data Elements

Required Vendor Information

DTR170.314(f)(7) – 2 will utilize test data and test patients set up in DTR170.314(f)(7) – 1. Please see VE170.314(f)(7) – 1.01 to 1.03 for Required Vendor Information.

Required Test Procedures

TE170.314(f)(7) – 2.01: The Tester shall inspect the contents of the syndromic surveillance message(s) generated in TE170.314(f)(7) – 1.02 and use the Inspection Test Guide to validate the presence of the expected data elements within the generated message(s).

Inspection Test Guide

IN170.314(f)(7) – 2.01: The Tester shall verify that the syndromic surveillance message(s) generated in TE170.314(f)(7) – 1.02 contain the following data elements:

- Patient demographics
- Provider specialty
- Provider address
- Problem list
- Vital signs
- Laboratory test values/results
- Procedure
- Medication list
- Insurance

TEST DATA

The Vendor shall supply the test data for this test procedure.

The test procedure requires that the Tester enter the applicable test data into the EHR technology being evaluated for conformance. The intent is that the Tester fully controls the process of entering the test data in order to ensure that the data are correctly entered as specified in the test procedure. If a situation arises where it is impractical for a Tester to directly enter the test data, the Tester, at the Tester's discretion, may instruct the Vendor to enter the test data, so long as the Tester remains in full control of the testing process, directly observes the test data being entered by the Vendor, and validates that the test data are entered correctly as specified in the test procedure.

For Vendor supplied test data, the Tester shall address the following:

- Vendor-supplied test data shall ensure that the requirements identified in the criterion can be adequately evaluated for conformance.
- Vendor-supplied test data shall strictly focus on meeting the basic capabilities required of an EHR relative to the certification criterion rather than exercising the full breadth/depth of capability that an installed EHR might be expected to support.

- Tester shall record as part of the test documentation the specific Vendor-supplied test data that was utilized for testing.

CONFORMANCE TEST TOOLS

None

Document History

Version Number	Description of Change	Date Published
1.0	Released for public comment	October 2014