

2015 Edition §170.315(g)(8) Application Access – Data Category Request					
Testing Components:					
					
Test Procedure Version 1.1 – Last Updated 10/30/15					

Please consult the Final Rule entitled: *2015 Edition Health Information Technology (Health IT) Certification Criteria, 2015 Edition Base Electronic Health Record (EHR) Definition, and ONC Health IT Certification Program Modifications* for a detailed description of the certification criterion with which these testing steps are associated. We also encourage developers to consult the Certification Companion Guide in tandem with the test procedure as they provide clarifications that may be useful for product development and testing.

*Note: The order in which the test steps are listed reflects the sequence of the certification criterion and does not necessarily prescribe the order in which the test should take place*

## Required Tests

The following technical outcome and conditions must be met through the demonstration of an application programming interface.

### (g)(8)(i) Functional requirements

- (A) Respond to requests for patient data for each of the individual data categories specified in the Common Clinical Data Set and return the full set of data for that data category (according to the specified standards, where applicable) in a computable format.
- (B) Respond to requests for patient data associated with a specific date as well as requests for patient data within a specified date range.

#### Standard(s):

- § 170.205(a)(4): [HL7 CDA R2 Implementation Guide: Consolidated CDA Templates for Clinical Notes \(US Realm\) Draft Standard for Trial Use Release 2.1](#)
- § 170.207(b)(3) [CDT](#)
- § 170.207(b)(2) [CPT-4](#)
- § 170.207(f)(2) [“Race & Ethnicity – CDC” code system in the PHIN Vocabulary Access and Distribution System \(VADS\), Release 3.3.9](#)
- § 170.207(e)(4) [National Drug Code Directory– Vaccine Codes, updates through August 3, 2015](#)
- § 170.207(b)(4) [ICD-10-PCS](#)
- § 170.207(i) [ICD-10-CM](#)
- § 170.207(p)(1) [IHE IT Infrastructure Technical Framework Volume 2b \(ITI TF-2b\)](#)
- § 170.207(e)(3) [HL7 Standard Code Set CVX—Vaccines Administered, updates through June 18, 2015](#)
- § 170.207(f)(1) [The Office of Management and Budget Standards for Maintaining, Collecting, and Presenting Federal Data on Race and Ethnicity, Statistical Policy Directive No. 15, as revised, October 30, 1997](#)
- § 170.207(c)(3) [Logical Observation Identifiers Names and Codes \(LOINC®\) Database version 2.52](#)
- § 170.207(m)(1) [The Unified Code of Units of Measure, Revision 1.9](#)
- § 170.207(g)(2) [Request for Comments \(RFC\) 5646: Tags for Identifying Languages](#)

§ 170.207(q)(1) [International Telecommunication Union E.123:Notation for national and international telephone numbers, e-mail addresses and web addresses and International](#) and [Telecommunication Union E. 164: The international public telecommunication numbering plan](#)

§ 170.207(a)(4) International Health Terminology Standards Development Organization (IHTSDO) Systematized Nomenclature of Medicine Clinical Terms (SNOMED CT®), U.S. Edition, September 2015 Release,

§ 170.207(d)(3) [RxNorm](#), a standardized nomenclature for clinical drugs produced by the United States National Library of Medicine, September 8, 2015 Release

§ 170.207(h) Smoking status must be coded in one of the following SNOMED CT® codes:

- (1) Current every day smoker. 449868002
- (2) Current some day smoker. 428041000124106
- (3) Former smoker. 8517006
- (4) Never smoker. 266919005
- (5) Smoker, current status unknown. 77176002
- (6) Unknown if ever smoked. 266927001
- (7) Heavy tobacco smoker. 428071000124103
- (8) Light tobacco smoker. 428061000124105

§ 170.207(n)(1) Birth sex must be coded in accordance with HL7 Version 3 attributed as follows:

- (i) Male. M
- (ii) Female. F
- (iii) Unknown. UNK**

Criteria ¶	System Under Test	Test Lab Verification
(i)(A)	<p>1. Using the Health IT Module’s identified API functions, the user demonstrates that the API responds to and returns the following data from the Common Clinical Data Set in a computable format to the developer-identified requesting application:</p> <ul style="list-style-type: none"> <li>• Patient Name</li> <li>• Date of Birth</li> <li>• Race</li> <li>• Ethnicity</li> <li>• Preferred Language</li> <li>• Smoking Status</li> <li>• Problems</li> <li>• Medications</li> <li>• Medication Allergies</li> <li>• Laboratory Tests</li> <li>• Laboratory Values(s)/Result(s)</li> <li>• Vital Signs</li> <li>• Procedures</li> <li>• Care Team Member(s)</li> <li>• Immunizations</li> <li>• Unique Device Identifier(s) for a Patient’s Implantable Device(s)</li> <li>• Assessment and Plan of Treatment</li> <li>• Goals</li> <li>• Health Concerns</li> </ul> <p>2. The Health IT module’s API returns the full set of data in accordance with the corresponding specified standard for that category. The complete list of the Common Clinical Data Set and associated standards can be referenced in <a href="#">Table 8</a> of the Final Rule.</p>	<p>1. The tester verifies that the identified API routine(s) can respond to a request for each of the Common Clinical Data Set categories. The tester verifies each category individually as well as combinations of data categories.</p> <p>2. The tester verifies that the data returned from the identified API routine(s) is in a computable format (e.g. xml or json).</p> <p>3. The tester verifies that the data returned from the identified API routine(s) is in accordance to the standard specified for the specific Common Clinical Data Element.</p>

Criteria ¶	System Under Test	Test Lab Verification
(i)(B)	<ol style="list-style-type: none"> <li>1. The Health IT module's identified API functions, return data to the developer-identified requesting application for a specific date the requesting application identifies.</li> <li>2. The Health IT module's identified API functions, return data to the developer-identified requesting application for a specific date range the requesting application identifies.</li> </ol>	<ol style="list-style-type: none"> <li>1. The tester verifies that the API routine(s) can respond to a request for patient data by a specific date, and that the patient data returned is accurate and without omission.</li> <li>2. The tester verifies that the API routine(s) can respond to a request for patient data for a date range, and that the patient data returned is accurate and without omission.</li> </ol>

## (ii) Documentation

The API must include accompanying documentation that contains, at a minimum:

- (A) API syntax, function names, required and optional parameters and their data types, return variables and their types/structures, exceptions and exception handling methods and their returns.
- (B) The software components and configurations that would be necessary for an application to implement in order to be able to successfully interact with the API and process its response(s).
- (C) Terms of use. The terms of use for the API must be provided, including, at a minimum, any associated developer policies and required developer agreements.

**Standard(s):** None

Criteria ¶	System Under Test	Test Lab Verification
(ii)(A)	<p>The Health IT developer provides accompanying documentation describing the Health IT module's API including:</p> <ul style="list-style-type: none"> <li>• API syntax;</li> <li>• function names;</li> <li>• required and optional parameters and their data types;</li> <li>• return variables and their types/structures; and</li> <li>• exceptions and exception handling methods and their returns.</li> </ul>	<p>The tester verifies that the identified documentation for the Health IT module's API definition is accurate and without omission, and that it matches the version of the software release.</p>

Criteria ¶	System Under Test	Test Lab Verification
(ii)(B)	<p>The Health IT developer provides accompanying documentation, for the intended audience of developers, describing the Health IT module's API implementation requirements including, at a minimum:</p> <ul style="list-style-type: none"> <li>The software components and configurations that would be necessary for an application to implement to be able to successfully interact with the API and process its response(s).</li> </ul>	<p>The tester verifies that the identified documentation for interfacing with the Health IT module's API (including both the software components and the configuration) is accurate and without omission and that it matches the version of the software release. The tester also verifies the accompanying documentation contains the necessary software components and configurations.</p>
(ii)(C)	<p>The Health IT module provides the accompanying Terms of Use including:</p> <ul style="list-style-type: none"> <li>The terms of use for the API;</li> <li>Any associated developer policies; and</li> <li>Required developer agreements.</li> </ul>	<p>The tester verifies the identified documentation contains The Terms of use and that it matches the version of the software release.</p>

### Document History

Version Number	Description of Change	Date
1.0	Released for Comment - NPRM	March 26, 2015
1.1	Released for Comment - FR	October 29, 2015

Dependencies: For all related and required criteria, please refer to the [Master Table of Related and Required Criteria](#).