

2015 Edition §170.315(g)(9) Application Access – all data request					
Testing Components:					
				Data	
Test Procedure Version 1.1 – Last Updated 10/29/15					

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)(9)(i) Functional requirements

(A) Respond to requests for patient data for all of the data categories specified in the Common Clinical Data Set at one time and return such data (according to the specified standards, where applicable) in a summary record formatted according to the standard adopted at § 170.205(a)(4) following the CCD document template.

(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 Organisation (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.

Test Tool: [C-CDA Validator](#)

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 all data from the Common Clinical Data Set in a summary record formatted in accordance with the standard adopted at § 170.205(a)(4), HL7 CDA R2 Implementation Guide: Consolidated CDA Templates for Clinical Notes (US Realm) DSTU Release 2.1, following the CCD document template, which includes:</p> <ul style="list-style-type: none"> • Patient Name • Sex constrained including birth sex • Date of Birth • Race and Ethnicity 	<ol style="list-style-type: none"> 1. The tester verifies that the identified API routine(s) can respond to a request for “all patient data” and return all data in the Common Clinical Data Set in one document. 2. The tester verifies that the data returned from the identified API routine(s) is in a summary record formatted in accordance with the standard adopted at § 170.205(a)(4) using the CCD template. The tester uses the C-CDA Validator to verify that the summary record is formatted correctly.

Criteria ¶	System Under Test	Test Lab Verification
	<ul style="list-style-type: none"> • Preferred language • Smoking Status • Problems constrained • Medications constrained • Medication Allergies • Laboratory Tests constrained • Laboratory Values(s)/Result(s). • Vital Signs • Procedures constrained • Care Team Member(s) • Immunizations constrained • Unique Device Identifier(s) for a Patient’s Implantable Device(s) • Assessment and Plan of Treatment • Goals • Health Concerns <p>The complete list of the Common Clinical Data Set and associated standards can be referenced in Table 8 of the Final Rule.</p>	
(i)(B)	<ol style="list-style-type: none"> 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. 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. 	<ol style="list-style-type: none"> 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. 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.

(g)(9)(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, at a minimum:</p> <ul style="list-style-type: none"> • API syntax; • function names,; • required and optional parameters and their data types; • return variables and their types/structures; and • exceptions and exception handling methods and their returns. 	<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>
(ii)(B)	<p>The Health IT developer's identified accompanying documentation describing the Health IT module's API implementation requirements includes, at a minimum:</p> <ul style="list-style-type: none"> • 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). 	<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 that the Health IT module's API accompanying documentation contains the necessary software components and configurations.</p>

Criteria ¶	System Under Test	Test Lab Verification
(ii)(C)	<p>Evaluate that the Health IT module’s API includes in the accompanying documentation, at a minimum, all of the following:</p> <ul style="list-style-type: none"> The 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. 	<p>The tester verifies that 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 31, 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](#).