

§ 170.315(j)(21) Subscriptions—clients

Test Procedure

This Test Procedure illustrates the test steps required to certify a Health IT Module to this criterion. Please consult the most recent ASTP/ONC Final Rule on the [Certification Regulations page](#) for a detailed description of the certification criterion with which these testing steps are associated. ASTP/ONC also encourages developers to consult the Certification Companion Guide in tandem with the test procedure as it provides clarifications that may be useful for product development and testing.

Note: The tests step order does not necessarily prescribe the order in which the tests should take place.

Revision History

| Version # | Description of Change | Version Date |
|-----------|-----------------------|--------------|
| 1.0 | Initial publication | 9/5/2025 |

Regulation Text

§ 170.315(j)(21) Subscriptions—client-

Support subscriptions as a client according to at least one of the implementation specifications in § 170.215(h), including the following:

- (i) Support the requirements in section “Topic-Based Subscriptions—FHIR R4.”
- (ii) Support the “R4/B Topic-Based Subscription” profile.
- (iii) Support the accompanying client capabilities for the minimum requirements included in the “R4 Topic-Based Subscription Server Capability Statement,” including support for “create,” “update,” and “delete” interactions for Subscription Resources.
- (iv) Receive subscription notifications according to section “Topic-Based Subscriptions—FHIR R4,” including support for consuming notifications via the “REST-Hook” channel as specified in the “Channels” section.

Standard(s) Referenced

Applies to entire criterion

§ 170.215(h)(1) [HL7® FHIR® Subscriptions R5 Backport Implementation Guide Version 1.1.0—Standard for Trial Use](#)

Required Tests

Paragraph (j)(21)

| System Under Test | Test Lab Verification |
|---|---|
| <p>The health IT developer demonstrates the Health IT Module supports the following capabilities as a client in accordance with an implementation specification at § 170.215(h):</p> <ol style="list-style-type: none"> 1. Identification of a server's supported subscription topics using the server's "R4 Topic-Based Subscription Server Capability Statement." 2. Creation, updating, and deletion of a subscription with a server. This subscription must use the "REST-hook" channel and be formatted according to the "R4/B Topic-Based Subscription" resource profile. 3. Query the status of a subscription with a server using the "\$status" operation. 4. Read (i.e., retrieve) a subscription from a server using the "id" of a "Subscription" resource. 5. The Health IT Module's "REST-hook" endpoint supports server subscription negotiation and processing including support for "handshake," "heartbeat," and "event-notification" transactions. | <p>The tester verifies the Health IT Module supports the following capabilities as a client in accordance with an implementation specification at § 170.215(h):</p> <ol style="list-style-type: none"> 1. Identification of a server's supported subscription topics using the server's "R4 Topic-Based Subscription Server Capability Statement." 2. Creation, updating, and deletion of a subscription with a server. This subscription must use the "REST-hook" channel and be formatted according to the "R4/B Topic-Based Subscription" resource profile. 3. Query the status of a subscription with a server using the "\$status" operation. 4. Read (i.e., retrieve) a subscription from a server using the "id" of a "Subscription" resource. <p>The Health IT Module's "REST-hook" endpoint supports server subscription negotiation and processing including support for "handshake," "heartbeat," and "event-notification" transactions.</p> |

Testing Tool

Inferno Framework (link to be provided at a later date)

Test Tool Documentation (link to be provided at a later date)