

## **Test Procedure for §170.314 (b)(9) Optional – clinical information reconciliation and incorporation (CIRI)**

This document describes the test procedure for evaluating conformance of electronic health record (EHR) technology to the certification criteria defined in 45 CFR Part 170 Electronic Health Record (EHR) Certification Criteria and the ONC HIT Certification Program; Regulatory Flexibilities, Improvements, and Enhanced Health Information Exchange, 2014 Edition, Release 2, Final Rule. 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 sent to:  
[ONC.Certification@hhs.gov](mailto:ONC.Certification@hhs.gov)

### **CERTIFICATION CRITERIA**

Refer to §170.314(b)(9) for the certification criteria.  
<http://www.gpo.gov/fdsys/pkg/FR-2014-09-11/pdf/2014-21633.pdf>

Per Section III.A.2 the Electronic Health Record (EHR) Certification Criteria and the ONC HIT Certification Program; Regulatory Flexibilities, Improvements, and Enhanced Health Information Exchange, 2014 Edition, Release 2, Final Rule issued September 11, 2014, this certification criterion is added to the 2014 Edition test method and is designated as “optional” in regulation.

### **2014 RELEASE 2 EDITION PREAMBLE LANGUAGE**

This certification criterion shifts the “incorporation” requirements into the “clinical information reconciliation and incorporation” (CIRI).

### **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 an EHR technology to enable a user to properly match a patient with a transition care summary/referral summary (C-CDA) received by the EHR technology; create a single, reconciled list of a patient’s active medications, a patient’s active problems, and a patient’s active medication allergies by electronically and simultaneously displaying data from at least two list sources (e.g., accessible within the EHR), allowing the user to see the data via a single view along with attributes, which include, at a minimum, identification of the source and the last modification date of the data; enable a user to review and validate the accuracy of a final set of data; finally upon confirmation, electronically incorporate patient’s active medications, patient’s active problems, and patients active medication allergies.

Clinical accuracy is not evaluated as part of this test. By providing the capability for an end-user to perform clinical information reconciliation for active medications, problems, or medication allergies, EHR technology must allow the capability to perform reconciliation for all three types of data elements.

ONC supplies the test data for this test procedure.

This test procedure is organized into two sections. The first section is entitled “Match patient” and the second section is divided into active medication list, active problem list, and active medication allergy list, each of which has three sub-sections. The Vendor may perform each of these three functions individually, in combination, or as a single function:

- Match Patient – evaluates the capability for a user to demonstrate that it properly matches transition of care summary/referral summary C-CDA documents received by the EHR technology to correct patients with existing records in the EHR technology.
- Display, Reconcile, and Incorporate – evaluates the capability for a user to electronically create a single reconciled list of data elements in a patient’s active medication list, a patient’s active problem list, and a patient’s active medication allergy list and incorporate information into the EHR.

#### **Match Patient**

- Evaluates the capability for a user to demonstrate that it properly matches transition of care summary/referral summary C-CDA documents received by the EHR technology to correct patients with existing record(s) within the EHR technology. This test does not evaluate the capability for EHR technology to receive transition of care summary/referral summary C-CDA documents from third parties (e.g. electronic exchange testing, transport testing). This test does not evaluate or specify patient matching requirements or functionality.

#### **For a patient’s active medication list:**

- Display – evaluates the capability for a user to view electronically the data in at least two medication lists simultaneously with attributes including, at a minimum, the source for each medication list and the last date each medication was documented, ordered, prescribed, refilled, or edited
  - The Vendor identifies a patient record in their EHR and populates that patient’s record with ONC-supplied medication test data in the medication list
  - The Vendor creates at least one additional medication list for this patient using ONC-supplied medication test data in the(se) medication list(s)
  - The Tester displays the two or more medication lists simultaneously in a single view
  - The Tester verifies that each of the medication lists displays the source of the medication list and the last date each medication was documented, ordered, prescribed, refilled, or edited
- Create a Reconciled List – evaluates the capability for a user to merge at least two medication lists into a single reconciled medication list, including the capability for a user to consolidate a medication from one medication list and an identical medication from one or more other medication lists into one

representation of that medication on a single reconciled medication list, and the capability to remove a medication from the single reconciled medication list (or mark for removal)

- The Tester merges the two or more medication lists from the Display test into a single reconciled medication list
  - The Tester consolidates identical medications from these medication lists into one representation of those medications on the single reconciled medication list
  - The Tester removes a medication from the single reconciled medication list
- Review, Validate, Confirm, and Incorporate– evaluates the capability for a user to review the single reconciled medication list, validate that the reconciled medications displayed are accurate and complete, confirm and submit the reconciled medication list to the EHR, and view the updated version of the active medication list in the patient’s EHR
    - The Tester displays the single reconciled medication list generated in the Merge test
    - The Tester reviews the reconciled medication list and validates that the data contained in the list are accurate and complete (view the reconciled list prior to committing it to update the active list)
    - The Tester confirms and incorporates the reconciled medication list to the patient’s record in the EHR
      - Medications according to RxNorm standard at a minimum,
    - The Tester views the patient’s active medication list and verifies that it includes all of the reconciled medications and that these medications are accurate and complete

**For a patient’s active problem list:**

- Display – evaluates the capability for a user to view electronically the data in at least two problem lists simultaneously with attributes including, at a minimum, the source for each problem list and the last date each problem was documented or edited
  - The Vendor identifies a patient record in their EHR and populates that patient’s record with ONC-supplied problem test data in the problem list
  - The Vendor creates at least one additional problem list for this patient using ONC-supplied problem test data in the(se) problem list(s)
  - The Tester displays the two or more problem lists simultaneously in a single view
  - The Tester verifies that each of the problem lists displays the source of the problem list and the last date each problem was documented or edited
- Create a Reconciled List – evaluates the capability for a user to merge at least two problem lists into a single reconciled problem list, including the capability for a user to consolidate a problem from one problem list and an identical problem from one or more other problem lists into one representation of that problem on a single reconciled problem list, and the capability to remove a problem from the single reconciled problem list (or mark for removal)
  - The Tester merges the two or more problem lists from the Display test into a single reconciled problem list
  - The Tester consolidates identical problems from these problem lists into one representation of those problems on the single reconciled problem list

- The Tester removes a problem from the single reconciled problem list
- **Review, Validate, Confirm, and Incorporate** – evaluates the capability for a user to review the single reconciled problem list, validate that the reconciled problems displayed are accurate and complete, confirm and submit the reconciled problem list to the EHR, and view the updated version of the active problem list in the patient’s EHR
  - The Tester displays the single reconciled problem list generated in the Merge test
  - The Tester reviews the reconciled problem list and validates that the data contained in the list are accurate and complete (view the reconciled list prior to committing it to update the active list)
  - The Tester confirms and incorporates the reconciled problem list to the patient’s record in the EHR
    - Problems according to the SNOMED CT standard at a minimum,
  - The Tester views the patient’s active problem list and verifies that it includes all of the reconciled problems and that these problems are accurate and complete

**For a patient’s active medication allergy list:**

- **Display** – evaluates the capability for a user to view electronically the data in at least two medication allergy lists simultaneously with attributes including, at a minimum, the source for each medication allergy list and the last date each medication allergy was documented, edited, or updated
  - The Vendor identifies a patient record in their EHR and populates that patient’s record with ONC-supplied medication allergy test data in the medication allergy list
  - The Vendor creates at least one additional medication allergy list for this patient using ONC-supplied medication allergy test data in the(se) medication allergy list(s)
  - The Tester displays the two or more medication allergy lists simultaneously in a single view
  - The Tester verifies that each of the medication allergy lists displays the source of the medication allergy list and the last date each medication allergy was documented, edited, or updated
- **Create a Reconciled List** – evaluates the capability for a user to merge at least two medication allergy lists into a single reconciled medication allergy list, including the capability for a user to consolidate a medication allergy from one medication allergy list and an identical medication allergy from one or more other medication allergy lists into one representation of that medication allergy on a single reconciled medication allergy list, and the capability to remove a medication allergy from the single reconciled medication allergy list (or mark for removal)
  - The Tester merges the two or more medication allergy lists from the Display test into a single reconciled medication allergy list
  - The Tester consolidates identical medication allergies from these medication allergy lists into one representation of those medication allergies on the single reconciled medication allergy list
  - The Tester removes a medication allergy from the single reconciled medication allergy list

- **Review, Validate, Confirm, and Incorporate** – evaluates the capability for a user to review the single reconciled medication allergy list, validate that the reconciled medication allergies displayed are accurate and complete, confirm and submit the reconciled medication allergy list to the EHR, and view the updated version of the active medication allergy list in the patient’s EHR
  - The Tester displays the single reconciled medication allergy list generated in the Merge test
  - The Tester reviews the reconciled medication allergy list and validates that the data contained in the list are accurate and complete (view the reconciled list prior to committing it to update the active list)
  - The Tester confirms and incorporates the reconciled medication allergy list to the patient’s record in the EHR
    - Medication allergies according to the RxNorm standard at a minimum
  - The Tester views the patient’s active medication allergy list and verifies that it includes all of the reconciled medication allergies and that these medication allergies are accurate and complete

## REFERENCED STANDARDS

§170.205 Content exchange standards and implementation specifications for exchanging electronic Regulatory Referenced Standard	Regulatory Referenced Standard
The Secretary adopts the following content exchange standards and associated implementation specifications:	
(a) Patient summary record. (3) Standard. HL7 Implementation Guide for Release 2: IHE Health Story Consolidation, (incorporated by reference in § 170.299). The use of the “unstructured document” document-level template is prohibited.	

§170.207 Vocabulary standards for representing electronic health information.	Regulatory Referenced Standard
The Secretary adopts the following code sets, terminology, and nomenclature as the vocabulary standards for the purpose of representing electronic health information:	
(a)(3) Standard. IHTSDO SNOMED CT International Release July 2012 (Incorporated reference in § 170.299) and US Extension to SNOMED March 2012 Release (incorporated by reference § 170.299).	
(d) Medications (2) Standard. RxNorm, a standardized nomenclature for clinical drugs produced by the United States National Library of Medicine, August 6, 2012 Release (incorporated by reference in § 170.299).	

## NORMATIVE TEST PROCEDURES

### Derived Test Requirements

#### Match Patient

DTR170.314(b)(9) – 1: Electronically match patient transition of care(TOC)/referral summary to existing patient

### **Active Medication List**

- DTR170.314(b)(9) – 2: Electronically and Simultaneously Display Medication List Data in a Single View
- DTR170.314(b)(9) – 3: Create a Single Reconciled Medication List
- DTR170.314(b)(9) – 4: Review, Validate, Confirm, and Incorporate the Final Reconciled Medication List

### **Active Problem List**

- DTR170.314(b)(9) – 5: Electronically and Simultaneously Display Problem List Data in a Single View
- DTR170.314(b)(9) – 6: Create a Single Reconciled Problem List
- DTR170.314(b)(9) – 7: Review, Validate, Confirm, and Incorporate the Final Reconciled Problem List

### **Active Medication Allergy List**

- DTR170.314(b)(9) – 8: Electronically and Simultaneously Display Medication Allergy List Data in a Single View
- DTR170.314(b)(9) – 9: Create a Single Reconciled Medication Allergy List
- DTR170.314(b)(9) – 10: Review, Validate, Confirm, and Incorporate the Final Reconciled Medication Allergy List

### **Match Patient**

#### **DTR170.314(b)(9) – 1: Electronically match patient transition of care(TOC)/referral summary to existing patient**

##### Required Vendor Information

- VE170.314(b)(9) – 1.01: Using ONC-supplied test data, the Vendor shall create a test patient with existing records in the EHR to be used for this test as indicated in TD170.314(b)(4) - 1
- VE170.314(b)(9) – 1.02: Using ONC-supplied test data, Vendor shall identify transition of care/referral summary document (C-CDA) that has been received by the EHR technology for the test patient identified in VE170.314(b)(9) – 1.01
- VE170.314(b)(9) – 1.03: Using ONC-supplied test data, Vendor shall identify transition of care/referral summary document (C-CDA) that has been received by the EHR technology for a patient other than the patient identified in VE170.314(b)(9) – 1.01
- VE170.314(b)(9) – 1.04: The Vendor shall identify a provider with authorized access to the test patient record
- VE170.314(b)(9) – 1.05: Vendor shall identify the EHR function(s) that are available for a provider to automatically match patient identifying information from transition of care/referral summary document with patient record within the EHR technology

### Required Test Procedures

- TE170.314(b)(9) – 1.01: Using the Vendor-identified EHR function(s), the Tester shall access the ONC-supplied test patient's record
- TE170.314(b)(9) – 1.02: Using the Vendor-identified EHR function(s), the Tester shall cause the EHR to match the received transition of care/referral summary (C-CDA) document with the correct patient's record
- TE170.314(b)(9) – 1.03: The Tester shall receive a transition of care/referral summary document for a patient that does not exist in the EHR

### Inspection Test Guide

- IN170.314(b)(9) – 1.01: The Tester shall verify that the transition of care/referral summary (C-CDA) document is matched with the correct patient's record and are stored as part of the correct patient's existing record

### **Active Medication List**

#### **DTR170.314(b)(9) – 2: Electronically and Simultaneously Display Medication List Data in a Single View**

#### Required Vendor Information

- VE170.314(b)(9) – 2.01: Vendor shall identify a patient record in the EHR to be used for this test, to include patient name, medical record number, and date of birth, and medication list data populated with TD170.314(b)(4) – 1, Test Data – Medication List #1
- VE170.314(b)(9) – 2.02: Vendor shall identify the transition of care/referral summary document matched with the patient's record in TE170.314(b)(9) – 1.02
- VE170.314(b)(9) – 2.03: Vendor shall identify the EHR function(s) that are available to display two or more medication lists at the same time on the EHR screen
- VE170.314(b)(9) – 2.04: Vendor shall identify the EHR function(s) available to merge at least two medication lists into a single reconciled medication list
- VE170.314(b)(9) – 2.05: Vendor shall identify the EHR function(s) available to consolidate identical medications from two or more medication lists into one representation of those medications on the single reconciled medication list
- VE170.314(b)(9) – 2.06: Vendor shall identify the EHR function(s) available to remove a medication from the single reconciled medication list
- VE170.314(b)(9) – 2.07: Vendor shall identify the EHR function(s) available to review, validate, confirm, and submit the reconciled medication list to the patient's record in the EHR

### Required Test Procedures

- TE170.314(b)(9) – 2.01: Tester shall log in to the EHR and shall select a patient record identified by the Vendor and populated with TD170.314(b)(4) – 1
- TE170.314(b)(9) – 2.02: Using the Vendor-identified EHR function(s), the Tester shall display two or more medication lists at the same time on the EHR screen using the medication list from the transition of care/referral summary document matched with the patient's record in TE170.314(b)(9) – 1.02
- TE170.314(b)(9) – 2.03: Using the Inspection Test Guide, the Tester shall verify that at least two medication lists are displayed in a manner that allows a user to view, at a

minimum, the source of the medication list and the last date each medication was documented, ordered, prescribed, refilled, or edited, correctly and accurately

### Inspection Test Guide

IN170.314(b)(9) – 2.01: Tester shall verify that at least two medication lists are displayed in a single view on the EHR screen

IN170.314(b)(9) – 2.02: Using TD170.314(b)(4) – 1, the Tester shall verify that each of the two or more medication lists displays, at a minimum, the source of the medication list and the last date each medication was documented, ordered, prescribed, refilled, or edited, correctly and accurately

### **DTR170.314(b)(9) – 3: Create a Single Reconciled Medication List**

#### Required Vendor Information

- As defined in DTR170.314(b)(9) – 1, no additional information is required

#### Required Test Procedures

TE170.314(b)(9) – 3.01: Using the Vendor-identified EHR function(s), the Tester shall merge the two or more medication lists displayed in TE170.314(b)(9) – 2.02 into a single reconciled medication list

TE170.314(b)(9) – 3.02: Using the Vendor-identified EHR function(s), the Tester shall consolidate identical medications from two or more medication lists into one representation of those medications on the single reconciled medication list

TE170.314(b)(9) – 3.03: Using the Vendor-identified EHR function(s), the Tester shall remove a medication from at least one of the medication lists from the single reconciled medication list (This may be accomplished via selecting medications to be consolidated and excluding the medication to be removed from the selection)

TE170.314(b)(9) – 3.04: Using the Inspection Test Guide, the Tester shall verify that the two medication lists are merged into a single reconciled medication list, that identical medications from the two or more medication lists are consolidated into one representation of those medications on the single reconciled medication list, and that the removed medication does not appear on the single reconciled medication list

### Inspection Test Guide

IN170.314(b)(9) – 3.01: Using TD170.314(b)(4) – 2, the Tester shall verify that at least two medication lists have been merged into a single reconciled medication list

IN170.314(b)(9) – 3.02: Using TD170.314(b)(4) – 2, the Tester shall verify that the two or more identical medications are consolidated into one representation of that medication on the single reconciled medication list

IN170.314(b)(9) – 3.03: Using TD170.314(b)(4) – 2, the Tester shall verify that the removed medication does not appear on the single reconciled medication list

### **DTR170.314(b)(9) – 4: Review, Validate, Confirm, and Incorporate the Final Reconciled Medication List**

#### Required Vendor Information

- As defined in DTR170.314(b)(9) – 1, no additional information is required



### Required Test Procedures

TE170.314(b)(9) – 4.01: Using the Vendor-identified EHR function(s), the Tester shall review the reconciled medications and validate that the reconciled medications displayed are accurate and complete

TE170.314(b)(9) – 4.02: Using the Vendor-identified EHR function(s), the Tester shall confirm and incorporate the reconciled medications to the patient's active medication list in the EHR in structured data format

TE170.314(b)(9) – 4.03: Using the Inspection Test Guide, the Tester shall verify that the patient's active medication list includes the newly reconciled medications in structured data format

### Inspection Test Guide

IN170.314(b)(9) – 4.01: Using TD170.314(b)(4) – 3, the Tester shall verify that the patient's medication list displays the reconciled medications correctly and accurately

IN170.314(b)(9) – 4.02: The Tester shall verify that medication list data is incorporated as structured and RxNorm coded data

### **Active Problem List**

#### **DTR170.314(b)(9) – 5: Electronically and Simultaneously Display Problem List Data in a Single View**

##### Required Vendor Information

VE170.314(b)(9) – 5.01: Vendor shall identify a patient record in the EHR to be used for this test, to include patient name, medical record number, and date of birth, and problem list data populated with TD170.314(b)(4) – 1, Test Data – Problem List #1

VE170.314(b)(9) – 5.02: Vendor shall identify the transition of care/referral summary document matched with the patient's record in TE170.314(b)(9) – 1.02

VE170.314(b)(9) – 5.03: Vendor shall identify the EHR function(s) that are available to display two or more problem lists at the same time on the EHR screen

VE170.314(b)(9) – 5.04: Vendor shall identify the EHR function(s) available to merge at least two problem lists into a single reconciled problem list

VE170.314(b)(9) – 5.05: Vendor shall identify the EHR function(s) available to consolidate identical problems from two or more problem lists into one representation of those problems on the single reconciled problem list

VE170.314(b)(9) – 5.06: Vendor shall identify the EHR function(s) available to remove a problem from the single reconciled problem list (This may be accomplished via selecting problems to be consolidated and excluding the problems to be removed from the selection)

VE170.314(b)(9) – 5.07: Vendor shall identify the EHR function(s) available to review, validate, confirm, and submit the reconciled problem list to the patient's record in the EHR

##### Required Test Procedures

TE170.314(b)(9) – 5.01: Tester shall log in to the EHR and shall select a patient record identified by the Vendor and populated with TD170.314(b)(4) – 4

TE170.314(b)(9) – 5.02: Using the Vendor-identified EHR function(s), the Tester shall display two or more problem lists at the same time on the EHR screen using the problem list from the

transition of care/referral summary document matched with the patient's record in TE170.314(b)(9) – 1.02

TE170.314(b)(9) – 5.03: Using the Inspection Test Guide, the Tester shall verify that at least two problem lists are displayed in a manner that allows a user to view, at a minimum, the source of the problem list and the last date each problem was documented or edited correctly and accurately

#### Inspection Test Guide

IN170.314(b)(9) – 5.01: Tester shall verify that at least two problem lists are displayed in a single view on the EHR screen

IN170.314(b)(9) – 5.02: Using TD170.314(b)(4) – 4, the Tester shall verify that each of the two or more problem lists displays, at a minimum, the source of the problem list and the last date each problem was documented or edited correctly and accurately

### **DTR170.314(b)(9) – 6: Create a Single Reconciled Problem List**

#### Required Vendor Information

- As defined in DTR170.314(b)(9) – 1 no additional information is required

#### Required Test Procedures

TE170.314(b)(9) – 6.01: Using the Vendor-identified EHR function(s), the Tester shall merge the two or more problem lists displayed in TE170.314(b)(9) – 5.02 into a single reconciled problem list

TE170.314(b)(9) – 6.02: Using the Vendor-identified EHR function(s), the Tester shall consolidate identical problems from two or more problem lists into one representation of those problems on the single reconciled problem list

TE170.314(b)(9) – 6.03: Using the Vendor-identified EHR function(s), the Tester shall remove a problem from the single reconciled problem list (This may be accomplished via selecting problems to be consolidated and excluding the problem to be removed from the selection)

TE170.314(b)(9) – 6.04: Using the Inspection Test Guide, the Tester shall verify that the two problem lists are merged into a single reconciled problem list, that identical problems from the two or more problem lists are consolidated into one representation of those problems on the single reconciled problem list, and that the removed problem does not appear on the single reconciled problem list

#### Inspection Test Guide

IN170.314(b)(9) – 6.01: Using TD170.314(b)(4) – 5, the Tester shall verify that at least two problem lists have been merged into a single reconciled problem list

IN170.314(b)(9) – 6.02: Using TD170.314(b)(4) – 5, the Tester shall verify that the two or more identical problems are consolidated into one representation of that problem on the single reconciled problem list

IN170.314(b)(9) – 6.03: Using TD170.314(b)(4) – 5, the Tester shall verify that the removed problem does not appear on the single reconciled problem list

### **DTR170.314(b)(9) – 7: Review, Validate, Confirm, and Incorporate the Final Reconciled Problem List**

### Required Vendor Information

- As defined in DTR170.314(b)(9) – 1 no additional information is required

### Required Test Procedures

TE170.314(b)(9) – 7.01: Using the Vendor-identified EHR function(s), the Tester shall review the reconciled problems and validate that the reconciled problems displayed are accurate and complete

TE170.314(b)(9) – 7.02: Using the Vendor-identified EHR function(s), the Tester shall confirm and incorporate the reconciled problems to the patient's active problem list in the EHR in structured data format

TE170.314(b)(9) – 7.03: Using the Inspection Test Guide, the Tester shall verify that the patient's active problem list includes the newly reconciled problems in structured data format

### Inspection Test Guide

IN170.314(b)(9) – 7.01: Using TD170.314(b)(4) – 6, the Tester shall verify that the patient's problem list displays the reconciled problems correctly and accurately

IN170.314(b)(9) – 7.02: The Tester shall verify that problem list data is incorporated as structured and SNOMED-CT coded data

## **Active Medication Allergy List**

### **DTR170.314(b)(9) – 8: Electronically and Simultaneously Display Medication Allergy List Data in a Single View**

#### Required Vendor Information

VE170.314(b)(9) – 8.01: Vendor shall identify a patient record in the EHR to be used for this test, to include patient name, medical record number, and date of birth, and medication allergy list data populated with TD170.314(b)(4) – 1, Test Data – Medication Allergy List #1

VE170.314(b)(9) – 8.02: Vendor shall identify the transition of care/referral summary document matched with the patient's record in TE170.314(b)(4) – 1.02

VE170.314(b)(9) – 8.03: Vendor shall identify the EHR function(s) that are available to display two or more medication allergy lists at the same time on the EHR screen

VE170.314(b)(9) – 8.04: Vendor shall identify the EHR function(s) available to merge at least two medication allergy lists into a single reconciled medication allergy list

VE170.314(b)(9) – 8.05: Vendor shall identify the EHR function(s) available to consolidate identical medication allergies from two or more medication allergy lists into one representation of those medication allergies on the single reconciled medication allergy list

VE170.314(b)(9) – 8.06: Vendor shall identify the EHR function(s) available to remove a medication allergy from the single reconciled medication allergy list (This may be accomplished via selecting medication allergies to be consolidated and excluding the medication allergy to be removed from the selection)

VE170.314(b)(9) – 8.07: Vendor shall identify the EHR function(s) available to review, validate, confirm, and submit the reconciled medication allergy list to the patient's record in the EHR

### Required Test Procedures

- TE170.314(b)(9) – 8.01: Tester shall log in to the EHR and shall select a patient record identified by the Vendor and populated with TD170.314(b)(4) – 7
- TE170.314(b)(9) – 8.02: Using the Vendor-identified EHR function(s), the Tester shall display two or more medication allergy lists at the same time on the EHR screen using the medication allergy list from the transition of care/referral summary document matched with the patient's record in TE170.314(b)(9) – 1.02
- TE170.314(b)(9) – 8.03: Using the Inspection Test Guide, the Tester shall verify that at least two medication allergy lists are displayed in a manner that allows a user to view, at a minimum, the source of the medication allergy list and the last date each medication allergy was documented, edited, or updated correctly and accurately

### Inspection Test Guide

- IN170.314(b)(9) – 8.01: Tester shall verify that at least two medication allergy lists display in a single view on the EHR screen
- IN170.314(b)(9) – 8.02: Using TD170.314(b)(4) – 7, the Tester shall verify that each of the two or more medication allergy lists displays, at a minimum, the source of the medication allergy list and the last date each medication allergy was documented, edited, or updated correctly and accurately

## **DTR170.314(b)(9) – 9: Create a Single Reconciled Medication Allergy List**

### Required Vendor Information

- As defined in DTR170.314(b)(9) – 1 no additional information is required

### Required Test Procedures

- TE170.314(b)(9) – 9.01: Using the Vendor-identified EHR function(s), the Tester shall merge the two or more medication allergy lists displayed in TE170.314(b)(9) – 8.02 into a single reconciled medication allergy list
- TE170.314(b)(9) – 9.02: Using the Vendor-identified EHR function(s), the Tester shall consolidate identical medication allergies from two or more medication allergy lists into one representation of those medication allergies on the single reconciled medication allergy list
- TE170.314(b)(9) – 9.03: Using the Vendor-identified EHR function(s), the Tester shall remove a medication allergy from the single reconciled medication allergy list (This may be accomplished via selecting medication allergies to be consolidated and excluding the medication allergy to be removed from the selection)
- TE170.314(b)(9) – 9.04: Using the Inspection Test Guide, the Tester shall verify that the two medication allergy lists are merged into a single reconciled medication allergy list, that identical medication allergies from the two or more medication allergy lists are consolidated into one representation of those medication allergies on the single reconciled medication allergy list, and that the removed medication allergy does not appear on the single reconciled medication allergy list

### Inspection Test Guide

- IN170.314(b)(9) – 9.01: Using TD170.314(b)(4) – 8, the Tester shall verify that at least two medication allergy lists have been merged into a single reconciled medication allergy list

IN170.314(b)(9) – 9.02: Using TD170.314(b)(4) – 8, the Tester shall verify that the two or more identical medication allergies are consolidated into one representation of that medication allergy on the single reconciled medication allergy list

IN170.314(b)(9) – 9.03: Using TD170.314(b)(4) – 8, the Tester shall verify that the removed medication allergy does not appear on the single reconciled medication allergy list

### **DTR170.314(b)(9) – 10: Review, Validate, Confirm, and Incorporate the Final Reconciled Medication Allergy List**

#### Required Vendor Information

- As defined in DTR170.314(b)(9) – 1 no additional information is required

#### Required Test Procedures

TE170.314(b)(9) – 10.01: Using the Vendor-identified EHR function(s), the Tester shall review the reconciled medication allergies and validate that the reconciled medication allergies displayed are accurate and complete

TE170.314(b)(9) – 10.02: Using the Vendor-identified EHR function(s), the Tester shall confirm and incorporate the reconciled medication allergies to the patient's active medication allergy list in the EHR in structured data format

TE170.314(b)(9) – 10.03: Using the Inspection Test Guide, the Tester shall verify that the patient's active medication allergy list includes the newly reconciled medication allergies in structured data format

#### Inspection Test Guide

IN170.314(b)(9) – 10.01: Using TD170.314(b)(4) – 9, the Tester shall verify that the patient's medication allergy list displays the reconciled medication allergies correctly and accurately

IN170.314(b)(9) – 10.02: The Tester shall verify that medication allergy list data is incorporated as structured and RxNorm coded data

## **TEST DATA**

ONC-supplied test data are provided with the test procedure to ensure that the applicable requirements identified in the criteria can be adequately evaluated for conformance, as well as to provide consistency in the testing process across multiple National Voluntary Laboratory Accreditation Program (NVLAP) Accredited Testing Labs (ATLs). The provided test data focus on evaluating the basic capabilities of required EHR technology, rather than exercising the full breadth/depth of capability that installed EHR technology might be expected to support. The test data are formatted for readability of use within the testing process. The format is not prescribing a particular end-user view or rendering. No additional requirements should be drawn from the format.

The Tester shall use and apply the provided test data during the test, without exception, unless one of the following conditions exists:

- The Tester determines that the Vendor product is sufficiently specialized that the provided test data needs to be modified in order to conduct an adequate test. Having made the determination that some modification to the provided test data are necessary, the Tester shall record the modifications made as part of the test documentation.

- The Tester determines that changes to the test data will improve the efficiency of the testing process; primarily through using consistent demographic data throughout the testing workflow. The Tester shall ensure that the applicable requirements identified in the criterion can be adequately evaluated for conformance and that the test data provides a comparable level of robustness. Having made the determination that some modification to the provided test data are necessary, the Tester shall record the modifications made as part of the test documentation.

Test Data for §170.314(b)(9) Clinical information reconciliation incorporation (CIRI) utilizes §170.314(b)(4) Clinical information reconciliation test data, available at <http://www.healthit.gov/certification> (navigation: 2014 Edition, Release 2, Test Method)

Any departure from the provided test data shall strictly focus on meeting the basic capabilities required of EHR technology relative to the certification criterion rather than exercising the full breadth/depth of capability that installed EHR technology might be expected to support.

The test procedures require 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.

## **CONFORMANCE TEST TOOLS**

None

## Document History

Version Number	Description of Change	Date Published
1.0	Released for Public Comment	October 8, 2014
1.1	Delivered for National Coordinator Approval	December 23, 2014
1.1	Posted Approved Test Procedure	December 24, 2014