

## Test Procedure for §170.314 (b)(4) Clinical information reconciliation

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 Health Information Technology: Standards, Implementation Specifications, and Certification Criteria for Electronic Health Record Technology, 2014 Edition; Revisions to the Permanent Certification Program for Health Information Technology, Final Rule. The document<sup>1</sup> 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.

The Department of Health and Human Services (HHS)/Office of the National Coordinator for Health Information Technology (ONC) has defined the standards, implementation guides and certification criteria used in this test procedure. Applicability and interpretation of the standards, implementation guides and certification criteria to EHR technology is determined by ONC. Testing of EHR technology in the Permanent Certification Program, henceforth referred to as the ONC Health Information Technology (HIT) Certification Program<sup>2</sup>, is carried out by National Voluntary Laboratory Accreditation Program (NVLAP)-Accredited Testing Laboratories (ATLs) as set forth in the final rule establishing the Permanent Certification Program (*Establishment of the Permanent Certification Program for Health Information Technology, 45 CFR Part 170; February 7, 2011*).

Questions or concerns regarding the ONC HIT Certification Program should be directed to ONC at [ONC.Certification@hhs.gov](mailto:ONC.Certification@hhs.gov).

### CERTIFICATION CRITERIA

This certification criterion is from the Health Information Technology: Standards, Implementation Specifications, and Certification Criteria for Electronic Health Record Technology, 2014 Edition; Revisions to the Permanent Certification Program for Health Information Technology, Final Rule (September 4, 2012).

§170.314(b)(4) Clinical information reconciliation. Enable a user to electronically reconcile the data that represent a patient's active medication, problem, and medication allergy list as follows. For each list type:

- (i) Electronically and simultaneously display (that is, in a single view) the data from at least two list sources in a manner that allows a user to view the data and their attributes, which must include, at a minimum, the source and last modification date.
- (ii) Enable a user to create a single reconciled list of medications, medication allergies, or problems.

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<sup>1</sup> Disclaimer: Certain commercial products may be identified in this document. Such identification does not imply recommendation or endorsement by ONC.

<sup>2</sup> Health Information Technology: Standards, Implementation Specifications, and Certification Criteria for Electronic Health Record Technology, 2014 Edition; Revisions to the Permanent Certification Program for Health Information Technology, Final Rule.

- (iii) Enable a user to review and validate the accuracy of a final set of data and, upon a user's confirmation, automatically update the list.

Per Section III.A of the preamble of the Health Information Technology: Standards, Implementation Specifications, and Certification Criteria for Electronic Health Record Technology, 2014 Edition; Revisions to the Permanent Certification Program for Health Information Technology, Final Rule (September 4, 2012), the 2014 Edition of this Certification Criterion is classified as revised from the 2011 Edition. This certification criterion meets at least one of the three factors of revised certification criteria: (1) the certification criterion includes changes to capabilities that were specified in the previously adopted certification criterion, (2) the certification criterion has a new mandatory capability that was not included in the previously adopted certification criterion, or (3) the certification criterion was previously adopted as "optional" for a particular setting and is subsequently adopted as "mandatory" for that setting.

## 2014 EDITION PREAMBLE LANGUAGE

Per Section III.A of the preamble of the Health Information Technology: Standards, Implementation Specifications, and Certification Criteria for Electronic Health Record Technology, 2014 Edition; Revisions to the Permanent Certification Program for Health Information Technology, Final Rule (September 4, 2012) where the clinical information reconciliation certification criterion is discussed:

- "We intend for [medications, medication allergies, and problems] to be able to be incorporated from a transition of care/referral summary formatted according to the Consolidated CDA standard and subsequently available to use for reconciliation as part of this capability."
- "For the purpose of this certification criterion, 'last modification date' should be interpreted differently for each data type. For medications, it should be interpreted as the last date the medication was documented, ordered, prescribed, refilled, dispensed or edited. For problems, it should be interpreted as the last date the problem was documented or edited. For medication allergies, it should be interpreted as the date that the medication allergy was last documented, edited, or updated."
- "We interpret 'merge' to generally mean that EHR technology assists a user in creating a single list that is representative of the medications, medication allergies, or problems that are relevant to a patient. However, we believe that an approach using plain language to express the desired outcome would make this certification criterion clearer. It would also represent the many acceptable approaches we had in mind when we drafted this proposed certification criterion. Accordingly, we have modified § 170.314(b)(4)(ii) to state that EHR technology would need to enable a user to 'create a single reconciled list of medications, medication allergies, or problems.' How this would be accomplished is up to the EHR technology developer, but could include a user's ability to merge equivalent elements and remove/deactivate no longer relevant information."
- "Confirm is meant to apply to the single reconciled list (not each element) once it meets a user's satisfaction."

- “...enable a user to create a single reconciled list of medications, medication allergies, or problems. As in, there would be a single list for medications, a single list for medication allergies, and a single list for problems.”
- “...EHR technology should have the ability to simultaneously display the list type that is actively being reconciled [to eliminate the need for] a user to toggle between different views to reconcile data for one list type.”
- “In the event that data is in unstructured form, any method implemented by which the EHR is capable of assisting in reconciliation is acceptable...With respect to data received from a document formatted in accordance with the Consolidated CDA, we expect EHR technology to be tested on its ability to utilize structured data to assist in the reconciliation process.”

## 2011 EDITION PREAMBLE LANGUAGE

Per Section III.D of the preamble of the Health Information Technology: Initial Set of Standards, Implementation Specifications, and Certification Criteria for Electronic Health Record Technology, Final Rule (July 28, 2010) where the medication reconciliation certification criterion is discussed:

- “...we have revised this certification criterion to require that Certified EHR Technology be capable of providing a user with the ability to electronically compare two or more medication lists (For example, between an externally provided medication list and the current medication list in Certified EHR Technology). We expect that this could be done in a number of ways and we do not want to preclude EHR technology developers from innovating, provided that the desired outcome is reached. For example, a user could be presented with two electronic lists side-by-side and move medications from one list to the other and then select the final current list.”

## CHANGES FROM 2011 TO 2014 EDITION

Per Section III.A of the preamble of the Health Information Technology: Standards, Implementation Specifications, and Certification Criteria for Electronic Health Record Technology, 2014 Edition; Revisions to the Permanent Certification Program for Health Information Technology, Final Rule (September 4, 2012) where the clinical information reconciliation certification criterion is discussed:

- “In the Proposed Rule, we proposed to revise this certification criterion and adopt as part of the 2014 Edition EHR certification criteria an expanded version that focuses on the reconciliation of data in each of a patient’s medication, problem, and medication allergy lists.”
- “EHR technology would first need to be able to electronically display the data from two or more sources in a manner that allows a user to view the data and their attributes, which must include, at a minimum, the source and last modification date of the information.”
- “We proposed that the second specific capability EHR technology would need to include would be to enable a user to merge and remove individual data.”

- "... we proposed that EHR technology would need to enable a user to review and validate the accuracy of a final set of data elements and, upon a user's confirmation, automatically update the patient's medication, problem, and/or medication allergy list."
- "Accordingly, we have modified § 170.314(b)(4)(ii) to state that EHR technology would need to enable a user to 'create a single reconciled list of medications, medication allergies, or problems.'"
- "... we have modified the certification criterion, as commenters suggested, to say 'from at least two list sources.'"

## 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 create single, reconciled lists of a patient's active medications, a patient's active problems, or a patient's active medication allergies by electronically and simultaneously displaying data from at least two list sources, 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. 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 one section divided into three categories, each of which has three sub-sections. The Vendor may perform these functions in individually, in combination, or as a single function:

- Reconcile - 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

### **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** – 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 Submit** – 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 submits the reconciled medication list to the patient’s record in the EHR
  - 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** – 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 Submit – 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 submits the reconciled problem list to the patient’s record in the EHR
  - 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 – 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 Submit** – 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 submits the reconciled medication allergy list to the patient’s record in the EHR
  - 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

None

## NORMATIVE TEST PROCEDURES

### Derived Test Requirements

#### Active Medication List

DTR170.314(b)(4) – 1: Electronically and Simultaneously Display Medication List Data in a Single View

DTR170.314(b)(4) – 2: Create a Single Reconciled Medication List

DTR170.314(b)(4) – 3: Review, Validate, Confirm, and Submit the Final Reconciled Medication List

#### Active Problem List

DTR170.314(b)(4) – 4: Electronically and Simultaneously Display Problem List Data in a Single View

DTR170.314(b)(4) – 5: Create a Single Reconciled Problem List

DTR170.314(b)(4) – 6: Review, Validate, Confirm, and Submit the Final Reconciled Problem List

#### Active Medication Allergy List

DTR170.314(b)(4) – 7: Electronically and Simultaneously Display Medication Allergy List Data in a Single View

DTR170.314(b)(4) – 8: Create a Single Reconciled Medication Allergy List

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

## Active Medication List

### **DTR170.314(b)(4) – 1: Electronically and Simultaneously Display Medication List Data in a Single View**

#### Required Vendor Information

- VE170.314(b)(4) – 1.01: 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
- VE170.314(b)(4) – 1.02: Vendor shall populate the patient's record with TD170.314(b)(4) – 1, Test Data – Medication List #1 in the medication list
- VE170.314(b)(4) – 1.03: Vendor shall populate at least one additional medication list for this patient with TD170.314(b)(4) – 1, Test Data – Medication List #2
- VE170.314(b)(4) – 1.04: 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)(4) – 1.05: Vendor shall identify the EHR function(s) available to merge at least two medication lists into a single reconciled medication list
- VE170.314(b)(4) – 1.06: 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)(4) – 1.07: Vendor shall identify the EHR function(s) available to remove a medication from the single reconciled medication list
- VE170.314(b)(4) – 1.08: 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)(4) – 1.01: 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)(4) – 1.02: Using the Vendor-identified EHR function(s), the Tester shall display two or more medication lists at the same time on the EHR screen
- TE170.314(b)(4) – 1.03: 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)(4) – 1.01: Tester shall verify that at least two medication lists are displayed in a single view on the EHR screen
- IN170.314(b)(4) – 1.02: 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)(4) – 2: Create a Single Reconciled Medication List**

#### Required Vendor Information

- As defined in DTR170.314(b)(4) – 1, no additional information is required



### Required Test Procedures

TE170.314(b)(4) – 2.01: Using the Vendor-identified EHR function(s), the Tester shall merge at least two medication lists into a single reconciled medication list

TE170.314(b)(4) – 2.02: 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)(4) – 2.03: 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)(4) – 2.04: 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)(4) – 2.01: 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)(4) – 2.02: 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)(4) – 2.03: 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)(4) – 3: Review, Validate, Confirm, and Submit the Final Reconciled Medication List**

#### Required Vendor Information

- As defined in DTR170.314(b)(4) – 1, no additional information is required

### Required Test Procedures

TE170.314(b)(4) – 3.01: 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)(4) – 3.02: Using the Vendor-identified EHR function(s), the Tester shall confirm and submit the reconciled medications to the patient's active medication list in the EHR

TE170.314(b)(4) – 3.03: Using the Inspection Test Guide, the Tester shall verify that the patient's active medication list includes the newly reconciled medications

### Inspection Test Guide

IN170.314(b)(4) – 3.01: Using TD170.314(b)(4) – 3, the Tester shall verify that the patient's medication list displays the reconciled medications correctly and accurately

## Active Problem List

### **DTR170.314(b)(4) – 4: Electronically and Simultaneously Display Problem List Data in a Single View**

#### Required Vendor Information

- VE170.314(b)(4) – 4.01: 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
- VE170.314(b)(4) – 4.02: Vendor shall populate the patient's record with TD170.314(b)(4) – 4, Test Data – Problem List #1 in the problem list
- VE170.314(b)(4) – 4.03: Vendor shall populate at least one additional problem list for this patient with TD170.314(b)(4) – 4, Test Data – Problem List #2
- VE170.314(b)(4) – 4.04: 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)(4) – 4.05: Vendor shall identify the EHR function(s) available to merge at least two problem lists into a single reconciled problem list
- VE170.314(b)(4) – 4.06: 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)(4) – 4.07: 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)(4) – 4.08: 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)(4) – 4.01: 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)(4) – 4.02: Using the Vendor-identified EHR function(s), the Tester shall display two or more problem lists at the same time on the EHR screen
- TE170.314(b)(4) – 4.03: 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)(4) – 4.01: Tester shall verify that at least two problem lists are displayed in a single view on the EHR screen
- IN170.314(b)(4) – 4.02: 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)(4) – 5: Create a Single Reconciled Problem List**

#### Required Vendor Information

- As defined in DTR170.314(b)(4) – 4, no additional information is required

### Required Test Procedures

- TE170.314(b)(4) – 5.01: Using the Vendor-identified EHR function(s), the Tester shall merge at least two problem lists into a single reconciled problem list
- TE170.314(b)(4) – 5.02: 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)(4) – 5.03: 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)(4) – 5.04: 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)(4) – 5.01: 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)(4) – 5.02: 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)(4) – 5.03: 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)(4) – 6: Review, Validate, Confirm, and Submit the Final Reconciled Problem List**

#### Required Vendor Information

- As defined in DTR170.314(b)(4) – 4, no additional information is required

#### Required Test Procedures

- TE170.314(b)(4) – 6.01: 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)(4) – 6.02: Using the Vendor-identified EHR function(s), the Tester shall confirm and submit the reconciled problems to the patient's active problem list in the EHR
- TE170.314(b)(4) – 6.03: Using the Inspection Test Guide, the Tester shall verify that the patient's active problem list includes the newly reconciled problems

#### Inspection Test Guide

- IN170.314(b)(4) – 6.01: Using TD170.314(b)(4) – 6, the Tester shall verify that the patient's problem list displays the reconciled problems correctly and accurately

## Active Medication Allergy List

### DTR170.314(b)(4) – 7: Electronically and Simultaneously Display Medication Allergy List Data in a Single View

#### Required Vendor Information

- VE170.314(b)(4) – 7.01: 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
- VE170.314(b)(4) – 7.02: Vendor shall populate the patient's record with TD170.314(b)(4) – 7, Test Data – Medication Allergy List #1 in the medication allergy list
- VE170.314(b)(4) – 7.03: Vendor shall populate at least one additional medication allergy list for this patient with TD170.314(b)(4) – 7, Test Data – Medication Allergy List #2
- VE170.314(b)(4) – 7.04: 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)(4) – 7.05: 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)(4) – 7.06: 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)(4) – 7.07: 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)(4) – 7.08: 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)(4) – 7.01: 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)(4) – 7.02: 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
- TE170.314(b)(4) – 7.03: 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)(4) – 7.01: Tester shall verify that at least two medication allergy lists display in a single view on the EHR screen
- IN170.314(b)(4) – 7.02: 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)(4) – 8: Create a Single Reconciled Medication Allergy List**

### Required Vendor Information

- As defined in DTR170.314(b)(4) – 7, no additional information is required

### Required Test Procedures

- TE170.314(b)(4) – 8.01: Using the Vendor-identified EHR function(s), the Tester shall merge at least two medication allergy lists into a single reconciled medication allergy list
- TE170.314(b)(4) – 8.02: 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)(4) – 8.03: 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)(4) – 8.04: 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)(4) – 8.01: 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)(4) – 8.02: 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)(4) – 8.03: 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)(4) – 9: Review, Validate, Confirm, and Submit the Final Reconciled Medication Allergy List**

### Required Vendor Information

- As defined in DTR170.314(b)(4) – 7, no additional information is required

### Required Test Procedures

- TE170.314(b)(4) – 9.01: 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)(4) – 9.02: Using the Vendor-identified EHR function(s), the Tester shall confirm and submit the reconciled medication allergies to the patient's active medication allergy list in the EHR

TE170.314(b)(4) – 9.03: Using the Inspection Test Guide, the Tester shall verify that the patient's active medication allergy list includes the newly reconciled medication allergies

#### Inspection Test Guide

IN170.314(b)(4) – 9.01: 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

## 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)(4) ) Clinical information reconciliation available at <http://www.healthit.gov/certification> (navigation: 2014 Edition 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	November 19, 2012
1.1	Delivered for National Coordinator Approval	December 3, 2012
1.2	Posted Approved Test Procedure	December 14, 2012
1.3	Posted Updated Approved Test Procedure <ul style="list-style-type: none"><li>In Informative Test Description, changed “Vendor supplies the test data for this test procedure” to “ONC supplies the test data for this test procedure.”</li></ul>	January 16, 2013