

## Test Procedure for §170.302 (c) Maintain active medication list

### Certification Criteria

§170.302 (c) Maintain Active Medication List. Enable a user to electronically record, modify, and retrieve a patient's active medication list as well as medication history for longitudinal care in accordance with the standard specified in §170.205(a)(2)(iv).

### Informative Test Description

This test evaluates the capability for a Complete EHR or combination of EHR Modules to enable a user to electronically record, modify, and retrieve a patient's active medication list over multiple visits with the same provider. The test also evaluates conformance to the medication list vocabulary standards. This test procedure is organized into three sections:

Record - evaluates the capability to enter patient active medication data into the EHR to create the patient active medication list

- The Tester enters the NIST-supplied patient active medication test data. The Inspection Test Guide describes several methods by which the EHR can demonstrate conformance with the vocabulary requirement.

Modify – evaluates the capability to edit patient medication data that have been previously entered into the EHR

- The Tester displays the patient active medication list data entered during the Record Patient Active Medications test
- The Tester edits the previously entered active medication data using NIST-supplied medication data

## Test Procedure for §170.302 (c) Maintain active medication list

### Informative Test Description (cont)

Retrieve – evaluates the capability to display and view the patient medication list data that have been previously entered into the EHR, including the capability to display the patient medication list as recorded during multiple visits

- The Tester displays the patient active medication data entered during the test
- The Tester displays the patient medication list as recorded during multiple visits
- The Tester validates that the displayed medication list data are accurate and complete
- The Tester displays the patient medication history
- The Tester validates that the patient medication history includes the medications that were discontinued during the Modify test.

# Test Procedure for §170.302 (c) Maintain active medication list

## Referenced Standards

§170.205(a)(2)(iv)Medication list..	Regulatory Referenced Standard
<p>(A) <u>Standard</u>. Any code set by an RxNorm drug data source provider that is identified by the United States National Library of Medicine as being a complete data set integrated within RxNorm.</p>	<p>January 13, 2010 Federal Register Page 2031 Footnote 17: According to the most recent <i>RxNorm Release Documentation File Full Release</i> (11/2/09) published by the National Library of Medicine, the following RxNorm drug data source providers with a complete data set integrated within RxNorm are identified at the end of section 11.1 located at <a href="http://www.nlm.nih.gov/research/umls/rxnorm/docs/2009/rxnorm_doco_full11022009.html">http://www.nlm.nih.gov/research/umls/rxnorm/docs/2009/rxnorm_doco_full11022009.html</a></p> <p>GS - 10/01/2009 (Gold Standard Alchemy); MDDB - 10/07/2009 (Master Drug Data Base. Medi-Span, a division of Wolters Kluwer Health); MMSL - 10/01/2009 (Multum MediSource Lexicon); MMX - 09/28/2009 (Micromedex DRUGDEX); MSH - 08/17/2009 (Medical Subject Headings (MeSH)); MTHFDA - 8/28/2009 (FDA National Drug Code Directory); MTHSPL - 10/28/2009 (FDA Structured Product Labels); NDDF - 10/02/2009 (First DataBank NDDF Plus Source Vocabulary); SNOMED CT -07/31/2009 (SNOMED Clinical Terms (drug information) SNOMED International); VANDF - 10/07/2009(Veterans Health Administration National Drug File). We note that FDA Unique Ingredient Identifiers(UNII) are a component of RxNorm</p>
<hr/> <p>(B) [Reserved]</p> <hr/>	

# Test Procedure for §170.302 (c) Maintain active medication list

## Normative Test Procedure

### Derived Test Requirement:

DTR170.302.c – 1: Electronically Record Patient Active Medication List

### Required Vendor Information

VE170.302.c – 1.01: Vendor shall identify a patient with an existing record in the EHR containing patient medications entered during multiple prior visits to be used for this test

VE170.302.c – 1.02: Vendor shall identify the EHR function(s) that are available to: 1) select the patient, 2) enter patient active medications, 3) modify (correct/update) patient medications, 4) retrieve patient active medication list, and 5) retrieve medication history

VE170.302.c – 1.03: Vendor shall identify the medications vocabulary implemented in the EHR that is identified by the United States National Library of Medicine as being a complete data set integrated within RxNorm.

### Required Test Procedure:

TE170.302.c – 1.01: Tester shall select patient active medication data from NIST-supplied test data sets

TE170.302.c – 1.02: Using the EHR function(s) identified by the Vendor, the Tester shall select the patient's existing record and enter patient active medications data from the test data sets

TE170.302.c – 1.03: Using the NIST-supplied Inspection Test Guide, the Tester shall verify that the patient active medication test data have been entered correctly, without omission and in conformance with the RxNorm vocabulary standard

# Test Procedure for §170.302 (c) Maintain active medication list

## DTR170.302.c – 1: Electronically Record Patient Active Medication List (cont)

### Inspection Test Guide

IN170.302.c – 1.01: Tester shall verify that the medications vocabulary implemented in the EHR is included in the list published on page 2031 footnote 17 of the January 13 2010 Federal Register:

According to the most recent *RxNorm Release Documentation File Full Release* (11/2/09) published by the National Library of Medicine, the following RxNorm drug data source providers with a complete data set integrated within RxNorm are identified at the end of section 11.1 located at

[http://www.nlm.nih.gov/research/umls/rxnorm/docs/2009/rxnorm\\_doco\\_full11022009.html](http://www.nlm.nih.gov/research/umls/rxnorm/docs/2009/rxnorm_doco_full11022009.html)  
GS - 10/01/2009 (Gold Standard Alchemy); MDDB - 10/07/2009 (Master Drug Data Base. Medi-Span, a division of Wolters Kluwer Health); MMSL - 10/01/2009 (Multum MediSource Lexicon); MMX - 09/28/2009 (Micromedex DRUGDEX); MSH - 08/17/2009 (Medical Subject Headings (MeSH)); MTHFDA - 8/28/2009 (FDA National Drug Code Directory); MTHSPL - 10/28/2009 (FDA Structured Product Labels); NDDF - 10/02/2009 (First DataBank NDDF Plus Source Vocabulary); SNOMED CT - 07/31/2009 (SNOMED Clinical Terms (drug information) SNOMED International); VANDF - 10/07/2009 (Veterans Health Administration National Drug File). We note that FDA Unique Ingredient Identifiers (UNII) are a component of RxNorm

If the medications vocabulary implemented in the EHR is not listed above, the Tester will record the source, version and title of the implemented vocabulary as part of the test report, and continue the test.

IN170.302.c – 1.02: Tester shall verify that the patient active medication list test data are entered correctly and without omission

IN170.302.c – 1.03: Tester shall verify that the patient medication list data are stored in the patient's record

## Test Procedure for §170.302 (c) Maintain active medication list

### Derived Test Requirement:

#### DTR170.302.c – 2: Electronically Modify Patient Active Medication List

### Required Vendor Information:

No additional information required

### Required Test Procedure:

- TE170.302.c – 2.01: Tester shall select patient medication test data from NIST-supplied test data sets
- TE170.302.c – 2.02: Using the EHR function(s) identified by the Vendor, the Tester shall select the patient's existing record, shall display the patient active medication list data entered during the Record Patient Active Medication test, and shall edit (correct/update) the previously entered patient medication list data
- TE170.302.c – 2.03: Using the NIST-supplied Inspection Test Guide, the Tester shall verify that the patient medication list data entered in the Modify Patient Active Medication test have been entered correctly and without omission

### Inspection Test Guide:

- IN170.302.c – 2.01: Tester shall verify that the patient active medication data entered during the Record Patient Active Medication test can be accessed and edited (corrected/updated)
- IN170.302.c – 2.02: Tester shall verify that the modified medication list data are stored in the patient's record

# Test Procedure for §170.302 (c) Maintain active medication list

## Derived Test Requirement

### DTR170.302.c – 3: Electronically Retrieve Patient Active Medication List and Medication History

#### Required Vendor Information

No additional information required

#### Required Test Procedure:

- TE170.302.c – 3.01: Using the EHR function(s) identified by the Vendor, the Tester shall select the patient's existing record and shall display and view the patient active medication data entered during the Record and Modify Patient Active Medication tests
- TE170.302.c – 3.02: Using the EHR function(s) identified by the Vendor, the Tester shall select the patient's existing record and shall display and view the patient medication history from prior visits
- TE170.302.c – 3.03: Using the NIST-supplied Inspection Test Guide, the Tester shall verify that the patient active medication test list data and the patient medication history display correctly and without omission

#### Inspection Test Guide

- IN170.302.c – 3.01: Tester shall verify that the patient active medication list data entered in the Record Patient Active Medication test and edited in the Modify Patient Active Medication tests display correctly and without omission
- IN170.302.c – 3.02: Tester shall verify that the patient medication history data from prior visits display correctly and without omission

## Test Procedure for §170.302 (c) Maintain active medication list

### Example Test Data

#### Record Active Medication List

RxNorm Code	Medication Brand Name (generic name)	Dose	Form	Route	Frequency	Date Started	Date Stopped
205875	Diabeta (glyburide)	2.5 mg	Tablet	By mouth (po)	every morning	9/16/09	
617314	Lipitor (atorvastatin calcium)	10 mg	Tablet	By mouth (po)	daily	5/5/08	
200801	Lasix (furosemide)	20 mg	Tablet	By mouth (po)	2 times per day	5/5/08	
628958	Klor-Con (potassium chloride)	10 mEq	Tablet	By Mouth (po)	2 times per day	5/5/08	

## Test Procedure for §170.302 (c) Maintain active medication list

### Example Test Data

#### Modify Active Medication List

Add a Stopped Date to Lipitor.

Modify the Frequency of Lasix.

Modify the Frequency of Klor-Con.

RxNorm Code	Medication Brand Name (generic name)	Dose	Form	Route	Frequency	Date Started	Date Stopped
617314	Lipitor (atorvastatin calcium)	10 mg	Tablet	By mouth (po)	daily	5/5/08	<b>(Today's Date)</b>
200801	Lasix (furosemide)	20 mg	Tablet	By mouth (po)	<b>1 time per day</b>	<b>(Today's Date)</b>	
628958	Klor-Con (potassium chloride)	10 mEq	Tablet	By Mouth (po)	<b>1 time per day</b>	<b>(Today's Date)</b>	

## Test Procedure for §170.302 (c) Maintain active medication list

### Example Test Data

#### Retrieve Active Medication List

RxNorm Code	Medication Brand Name (generic name)	Dose	Form	Route	Frequency	Date Started	Date Stopped
205875	Diabeta (glyburide)	2.5 mg	Tablet	By mouth (po)	every morning	9/16/09	
200801	Lasix (furosemide)	20 mg	Tablet	By mouth (po)	1 time per day	<b>(Today's Date)</b>	
628958	Klor-Con (potassium chloride)	10 mEq	Tablet	By Mouth (po)	1 time per day	<b>(Today's Date)</b>	

## Test Procedure for §170.302 (c) Maintain active medication list

### Example Test Data

#### Retrieve Patient Medication History

RxNorm Code	Medication Brand Name (generic name)	Dose	Form	Route	Frequency	Date Started	Date Stopped
205875	Diabeta (glyburide)	2.5 mg	Tablet	By mouth (po)	every morning	9/16/09	
617314	Lipitor (atorvastatin calcium)	10 mg	Tablet	By mouth (po)	daily	5/5/08	<b>(Today's Date)</b>
200801	Lasix (furosemide)	20 mg	Tablet	By mouth (po)	1 time per day		<b>(Today's Date)</b>
628958	Klor-Con (potassium chloride)	10 mEq	Tablet	By Mouth (po)	1 time per day		<b>(Today's Date)</b>

### Conformance Test Tools

None

*Test procedure based on HHS/ONC Interim Final Rule (IFR) published in the Federal Register on January 13, 2010.*

DRAFT Version 0.5 ■ February 26, 2010