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2015 Edition §170.315(c)(4) Clinical Quality Measures—Filter

NCQA will use the ONC Cypress gold standard test procedures and tools for testing the following measures. For these specific measures, vendors will follow the testing steps as outlined in the most current version of the § 170.315(c)(4) Test Procedure found at <https://www.healthit.gov/policy-researchers-implementers/2015-edition-test-method>.

2018 Performance Period eQMs Tested with Cypress				
CMS22v6	CMS75v6	CMS142v6	CMS161v6	CMS347v1
CMS52v6	CMS129v7	CMS143v6	CMS167v6	CMS645V1
CMS56v6	CMS132v6	CMS157v6	CMS169v6	
CMS66v6	CMS133v6	CMS158v6	CMS177v6	
2019 Performance Period eQMs Tested with Cypress				
CMS22v7	CMS132v7	CMS143v7	CMS161v7	CMS645v2
CMS52v7	CMS133v7	CMS157v7	CMS167v7	
CMS129v8	CMS142v7	CMS158v7	CMS169v7	
2020 Performance Period eQMs Tested with Cypress				
CMS22v8	CMS129v9	CMS249v2	CMS645v3	CMS771v1

NCQA will use their own test decks and [Online Scoring Program](#) for testing the following measures. Vendors will follow the testing steps outlined below.

2018 Performance Period eQMs Tested with NCQA				
CMS2v7	CMS117v6	CMS131v6	CMS145v6	CMS159v6
CMS50v6	CMS122v6	CMS134v6	CMS146v6	CMS160v6
CMS65v7	CMS123v6	CMS135v6	CMS147v7	CMS164v6
CMS68v7	CMS124v6	CMS136v7	CMS149v6	CMS165v6
CMS69v6	CMS125v6	CMS137v6	CMS153v6	CMS166v7
CMS74v7	CMS127v6	CMS138v6	CMS154v6	
CMS82v5	CMS128v6	CMS139v6	CMS155v6	
CMS90v7	CMS130v6	CMS144v6	CMS156v6	
2019 Performance Period eQMs Tested with NCQA				
CMS2v8	CMS82v6	CMS130v7	CMS144v7	CMS156v7
CMS50v7	CMS90v8	CMS131v7	CMS145v7	CMS159v7
CMS56v7	CMS117v7	CMS134v7	CMS146v7	CMS160v7
CMS66v7	CMS122v7	CMS135v7	CMS147v8	CMS165v7
CMS68v8	CMS124v7	CMS136v8	CMS149v7	CMS177v7
CMS69v7	CMS125v7	CMS137v7	CMS153v7	CMS347v2
CMS74v8	CMS127v7	CMS138v7	CMS154v7	
CMS75v7	CMS128v7	CMS139v7	CMS155v7	
2020 Performance Period eQMs Tested with NCQA				
CMS2v9	CMS117v8	CMS134v8	CMS145v8	CMS159v8
CMS50v8	CMS122v8	CMS135v8	CMS146v8	CMS161v8
CMS56v8	CMS124v8	CMS136v9	CMS147v9	CMS165v8
CMS66v8	CMS125v8	CMS137v8	CMS149v8	CMS177v8
CMS68v9	CMS127v8	CMS138v8	CMS153v8	CMS347v3
CMS69v8	CMS128v8	CMS139v8	CMS154v8	CMS 349v2
CMS74v9	CMS130v8	CMS142v8	CMS155v8	
CMS75v8	CMS131v8	CMS143v8	CMS156v8	
CMS90v9	CMS133v8	CMS144v8	CMS157v8	

Steps for Testing Measures Using NCQA Test Decks

Please consult the Final Rule entitled: *2015 Edition Health Information Technology (Health IT) Certification Criteria, 2015 Edition Base Electronic Health Record (EHR) Definition, and ONC Health IT Certification Program Modifications* for a detailed description of the certification criterion with which these testing steps are associated. We also encourage developers to consult the [eCQM Testing Guide](#) in tandem with the test procedure as it provides clarifications that may be useful for testing.

Note: The order in which the test steps are listed reflects the sequence of the certification criterion and does not necessarily prescribe the order in which the test should take place.

Regulation Text:

§170.315 (c)(4) *Clinical quality measures—filter—*

- (i) Record the data listed in paragraph (c)(4)(iii) of this section in accordance with the identified standards, where specified.
- (ii) Filter CQM results at the patient and aggregate levels by each one and any combination of the data listed in paragraph (c)(4)(iii) of this section and be able to:
 - (A) Create a data file of the filtered data in accordance with the standards adopted in § 170.205(h)(2) and § 170.205(k)(1) and (2); and
 - (B) Display the filtered data results in human readable format.
- (iii) *Data.*
 - (A) Taxpayer Identification Number.
 - (B) National Provider Identifier.
 - (C) Provider type in accordance with, at a minimum, the standard specified in § 170.207(r)(1).
 - (D) Practice site address.
 - (E) Patient insurance in accordance with, at a minimum, the standard specified in § 170.207(s)(1).
 - (F) Patient age.
 - (G) Patient sex in accordance with, at a minimum, the version of the standard specified in § 170.207(n)(1).
 - (H) Patient race and ethnicity in accordance with, at a minimum, the version of the standard specified in § 170.207(f)(2).
 - (I) Patient problem list data in accordance with, at a minimum, the version of the standard specified in § 170.207(a)(4).

Standard(s) Referenced:

Paragraph (c)(4)(i)

Refer to paragraph (c)(4)(iii) below for standards where specified.

Paragraph (c)(4)(ii)

§ 170.205(h)(2) [HL7 CDA® Release 2 Implementation Guide for: Quality Reporting Document Architecture – Category I \(QRDA I\); Release 1, DSTU Release 3 \(US Realm\), Volume 1 Web Site Disclaimers](#)

§ 170.205(k)(1) [Quality Reporting Document Architecture Category III, Implementation Guide for CDA Release 2 Web Site Disclaimers](#)

§ 170.205(k)(2) [Errata to the HL7 Implementation Guide for CDA® Release 2: Quality Reporting Document Architecture—Category III, DSTU Release 1 \(US Realm\), September 2014 Web Site Disclaimers](#)

Paragraph (c)(4)(iii)(C) Provider Type

§ 170.207(r)(1) [Crosswalk: Medicare Provider/Supplier to Healthcare Provider Taxonomy, April 2, 2015](#)

Paragraph (c)(4)(iii)(E) Patient insurance

§ 170.207(s)(1) [Public Health Data Standards Consortium Source of Payment Typology Code Set Version 5.0 \(October 2011\) Web Site Disclaimers](#)

Paragraph (c)(4)(iii)(G) Patient sex

§ 170.207(n)(1) Birth sex must be coded in accordance with [HL7 Version 3 Standard Web Site Disclaimers](#), Value Sets for [Administrative Gender Web Site Disclaimers](#) and [Null Flavor Web Site Disclaimers](#) attributed as follows:

- (i) Male. M
- (ii) Female. F
- (iii) Unknown. Null Flavor UNK

Paragraph (c)(4)(iii)(H) Patient race and ethnicity

§ 170.207(f)(2) [CDC Race and Ethnicity Code Set Version 1.0 \(March 2000\)](#)

Paragraph (c)(4)(iii)(I) Patient problem list

§ 170.207(a)(4) [International Health Terminology Standards Development Organisation \(IHTSDO\) Systematized Nomenclature of Medicine Clinical Terms \(SNOMED CT®\), U.S. Edition, September 2015 Release](#)

Test Tool: [NCQA Online Scoring Program](#)

Paragraph (c)(4)(i)

System Under Test	Test Lab Verification
<p><u>Record</u></p> <p>1. For each quality measure being certified, the user records the data elements used to filter the Clinical Quality Measure(s) (CQM) data specified in (c)(4)(iii) in accordance with the identified standards where specified into a patient record:</p> <ul style="list-style-type: none"> a. Taxpayer Identification Number b. National Provider Identifier c. Provider type in accordance with, at a minimum, the standard specified in § 170.207(r)(1), Crosswalk: Medicare Provider/Supplier to Healthcare Provider Taxonomy, April 2, 2015 d. Practice site address e. Patient insurance in accordance with the standard specified in § 170.207(s)(1) Public Health Data Standards Consortium Source of Payment Typology Code Set Version 5.0 (October 2011) f. Patient age (Calculated from the Patient Date of Birth) g. Patient sex in accordance with the version of the standard specified in § 170.207(n)(1), Birth sex must be coded in accordance with HL7 Version 3 Value Sets for AdministrativeGender and NullFlavor attributed as follows: <ul style="list-style-type: none"> (i) Male. M (ii) Female. F (iii) Unknown. NullFlavor UNK h. Patient race and ethnicity in accordance with, at a minimum, the version of the standard specified in § 170.207(f)(2), CDC Race & Ethnicity Code Set Version 1.0 (March 2000) i. Patient problem list data as defined by the CQM value sets in the certified CQMs. Patient problem list data should support the version of the standard specified in § 170.207(a)(4) SNOMED-CT® 	<p><u>Record</u></p> <p>1. The tester verifies that all the CQM data can be recorded by the Health IT Module, in accordance with the identified standards, where specified in (c)(4)(iii).</p> <p><u>Packaging of Results</u></p> <p>2. Upon completion of the test, the tester generates a test artifact containing:</p> <ul style="list-style-type: none"> a. All the test data used to test (c)(4)(ii)(A); b. All the data generated by the Health IT Module; and c. Any additional notes that the tester deems important into a single archive file.

Paragraph (c)(4)(ii)(A)

System Under Test	Test Lab Verification
<p>Setup</p> <p>1. The Health IT Module provides the following information on the application form:</p> <ol style="list-style-type: none"> a. Name of the health IT developer; b. Name of the Product; c. List of CQMs to be certified; <p>Import</p> <p>2. The user imports all the data needed to calculate each of the clinical quality measures (CQMs) presented for testing, for one or multiple patients, supplied by the NCQA Online Scoring Program in CCD format.</p> <p>Filter</p> <p>3. For each CQM being certified: The user applies the filters against the same patient data imported in step 2 above to demonstrate the ability to filter the CQM results at the patient and aggregate levels by each one and any combination of the CQM data elements specified in (C)(4)(iii):</p> <ol style="list-style-type: none"> a. Taxpayer Identification Number b. National Provider Identifier c. Provider type d. Practice site address e. Patient insurance f. Patient age (calculated from Patient date of birth) g. Patient sex h. Patient race and ethnicity i. Patient problem list. <p>This includes the following types of filtering:</p> <ul style="list-style-type: none"> ▪ Filter by individual data elements; ▪ Filter with any combination of filter data elements. 	<p>Verification of Filtered Aggregate Reports</p> <ol style="list-style-type: none"> 1. Using the NCQA Online Scoring Program, the tester: <ol style="list-style-type: none"> a. Uploads the NCQA test deck to the Online Scoring Program; and b. Displays and evaluates the accuracy of the submitted CQM results. 2. The verification should include at least: <ol style="list-style-type: none"> a. Two multi-factor (at least two criteria) filter tests based on patient information; b. Two multi-factor (at least two criteria) filter tests based on provider information; and c. A filter test based on patient problem list. 3. The tester uses the NCQA Online Scoring Program to verify that the Health IT Module can create a filtered CQM results data file at the patient and aggregate levels, in accordance with at a minimum the standards adopted in §170.205(h)(2), and § 170.205(k)(1) and (2) and that the CQM filtered results data file from step 7 of the SUT was submitted and the results are accurate. The tester ensures that all data and results are archived from the Online Scoring Program.

<p><u>Calculate Filtered Aggregate Reports</u></p> <ol style="list-style-type: none"> 4. The user calculates the aggregate reports (as specified in(c)(2)(ii)) for each filter applied using the imported data set in step 2. 5. The Health IT Module submits a set of aggregate reports which includes the aggregate reports for all the filtered CQMs on the Online Scoring Program. 6. The user creates a CQM results data file based upon the filtered data in (c)(4)(ii) step 1, in accordance with the standards adopted in § 170.205(h)(2) HL7 CDA® Release 2 Implementation Guide for: Quality Reporting Document Architecture – Category I (QRDA I); Release 1, DSTU Release 3, Volume 1 for one or more patients with one or more quality measures; using at a minimum, § 170.205(k)(1) Quality Reporting Document Architecture Category III, Implementation Guide for CDA Release 2 and § 170.205(k)(2) Errata to the HL7 Implementation Guide for CDA® Release 2: Quality Reporting Document Architecture—Category III, DSTU Release 1 for calculation of the CQMs containing a calculated summary of one or more quality measures for a specific population. 7. The Health IT Module submits the CQM results data file. 	
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Paragraph (c)(4)(ii)(B)

System Under Test	Test Lab Verification
<p><u>Display Filtered Data Results</u></p> <ol style="list-style-type: none"> 1. Using the Health IT Module and the filtered data created in(c)(4)(ii)(A) step 3, the user can display the filtered data results in human readable format including the display of the following information for each of the measures: <ol style="list-style-type: none"> a. patient population; b. denominator; c. numerator; d. exclusions; and e. exceptions. 	<p><u>Display Filtered Data Results</u></p> <ol style="list-style-type: none"> 1. The tester visually verifies that the system can filter and display the data in human readable format. 2. The filtered data presented in (c)(4)(ii)(B) SUT step 1 is compared to the NCQA aggregate report; comparing the denominator, numerator and exclusions with the expected results.

Paragraph (c)(4)(iii)

System Under Test	Test Lab Verification
<p>The following data elements are used to filter the CQM Results using the health IT developer- identified health IT function(s) in accordance with the identified standards, where specified.</p> <ul style="list-style-type: none"> a. Taxpayer Identification Number b. National Provider Identifier c. Provider type in accordance with, at a minimum, the standard specified in §170.207(r)(1) Crosswalk: Medicare Provider/Supplier to Healthcare Provider Taxonomy, April 2, 2015 d. Practice site address e. Patient insurance in accordance with the standard specified in § 170.207(s)(1) Public Health Data Standards Consortium Source of Payment Typology Code Set Version 5.0 (October 2011) f. Patient age (Calculated from the Patient Date of Birth) g. Patient sex in accordance with the version of the standard specified in § 170.207(n)(1), Birth sex must be coded in accordance with HL7 Version 3 Value Sets for AdministrativeGender and NullFlavor attributed as follows: <ul style="list-style-type: none"> (i) Male. M (ii) Female. F (iii) Unknown. UNK h. Patient race and ethnicity in accordance with, at a minimum, the version of the standard specified in § 170.207(f)(2) CDC Race and Ethnicity Code Set Version 1.0 (March 2000) i. Patient problem list data in accordance with, at a minimum, the version of the standard specified in § 170.207(a)(4), SNOMED-CT®. 	<p>The tester verifies that the Health IT Module supports all the CQM data elements specified in (c)(4)(iii) in accordance with the identified standards, where specified through the verification of: (c)(4)(i), (c)(4)(ii)(A) and (c)(4)(ii)(B).</p> <p>Note: There is no expectation that the tester verifies all combinations, rather demonstrate that the filtering ability includes filtering any combination of the data values.</p>

Revision History

Version	Primary Author(s)	Description of Version	Date Completed
0.1	Anne Marie Smith	Initial Draft Version	5/1/2017
1.0	Anne Marie Smith	First Published Version	6/23/2017
2.0	Tess Rayle	Added 2020 Measures to the NCQA and Cypress Tables	12/18/2019
3.0	Lisa Anderson	Updated tables to reflect changes to the ONC language	12/23/2019
4.0	Lisa Anderson	Removed 2017 Performance Period eQMs from tables	2/6/2020