To: Office of the National Coordinator (ONC)

From: National Committee for Quality Assurance (NCQA)

Re: Request for "ONC Testing Equivalency" for NCQA's eCQM Certification

Date: April 25, 2016

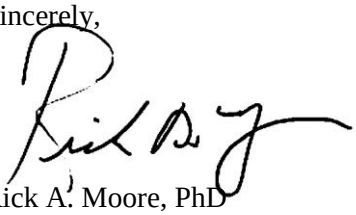
The National Committee for Quality Assurance (NCQA) has developed an eMeasures certification program that tests the ability of Health Information Technology (e.g., Electronic Health Records (EHRs) to accurately process data as defined in the CMS electronic clinical quality measure (eCQM) specifications. The NCQA eMeasure Certification program validates the targeted HIT system's ability to select the correct patient records as specified by the CMS eMeasure program and report the results via the CMS-specified Quality Reporting Document Architecture (QRDA) Category I and III formats. NCQA would like ONC to approve our eMeasure testing system program as an approved testing methodology of the eCQMs required of the ONC Certified EHR Technology Program.

As we have discussed, if our program is approved by ONC as a testing methodology, it would allow the Accredited Testing Laboratories (ATLs) to accept our certification as proof that eCQMs tested under our methodology are compliant with the certification standards. Validating NCQA's methodology would provide signals to the industry and facilitate our work with other measure developer stewards (e.g., The American Medical Association (AMA), and The Joint Commission (TJC)) to develop test decks for measures where NCQA is not the steward/owner.

This memo provides responses to the list of questions requested through e-mail (Nov 2015), by Daniel Chaput, and supplies additional information about NCQA's eMeasure testing process.

Please feel free to contact me with any further questions at 202-955-5171.

Sincerely,



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1. **Provide an outline of testing steps, with required and optional steps identified; Documentation tracing the testing steps to the certification criteria capabilities requirements.**

   Below is an outline of NCQA's required testing steps and the ONC certification criteria that align with each step.

ONC certification criteria capability	NCQA Required Testing Steps
Phase 1 – Verification of Import, Calculate and Electronic Submission VE170.314.c – 1.1.01 through VE170.314.c – 1.1.03	1. The vendor submits an application that identifies the product to be certificated and the measures to be tested
Phase 1 – Verification of Import, Calculate and Electronic Submission VE170.314.c – 1.1.03 through TE170.314.c – 1.1.09 and VE170.341.c – 1.2.05	2. NCQA generates and posts test decks to the NCQA eMeasure Certification online scoring program website for the vendor of target system to access, download, and consume
Phase 1 – Verification of Import, Calculate and Electronic Submission VE170.314.c – 1.2.01 through VE170.314.c – 1.2.03 and VE170.341.c – 1.2.06	3. Target system must import downloaded continuity of care documents (CCD) – hundreds of synthetic test cases per measure a. NCQA sends 1 CCD per patient b. The vendor imports each CCD and populates its database in the target system
Phase 1 – Verification of Import, Calculate and Electronic Submission VE170.314.c – 1.2.04 and VE170.341.c – 1.2.07	4. Execute quality measures a. Identify the initial population b. Identify the denominator c. Identify the denominator exclusions d. Identify the numerator (hits)
Phase 1 – Verification of Import, Calculate and Electronic Submission VE170.341.c – 1.3.01	5. Create QRDA III file a. Compile counts for each portion of the measure b. Create QRDA III file

Phase 1 – Verification of Import, Calculate and Electronic Submission VE170.341.c – 1.2.08	6. Create QRDA I files a. Compile service information for each patient b. Create QRDA I file for each patient
Phase 1 – Verification of Import, Calculate and Electronic Submission VE170.341.c – 1.2.08 through TE170.341.c – 1.3.07	7. The vendor uploads results to the NCQA website and scoring happens automatically. Results are immediately displayed on the website.

2. Provide an outline of attestation steps, with required and optional steps identified.

No steps allow attestation.

3. Provide documentation and test data used to verify that:

- **the testing steps evaluate all mandatory capabilities in the certification criteria**
- **the required testing steps are limited to those required in the ONC certification criteria; (note: optional certification criteria are allowed).**

All testing steps are listed in the table above and match ONC's certification criteria. Vendors must be able to import the data electronically; the datasets provided by NCQA are large enough that hand entry would not be feasible. The attached program guide (eMC 2016 Guide) includes details about the test deck format.

4. Provide documentation of an established versioning process that includes release notes.

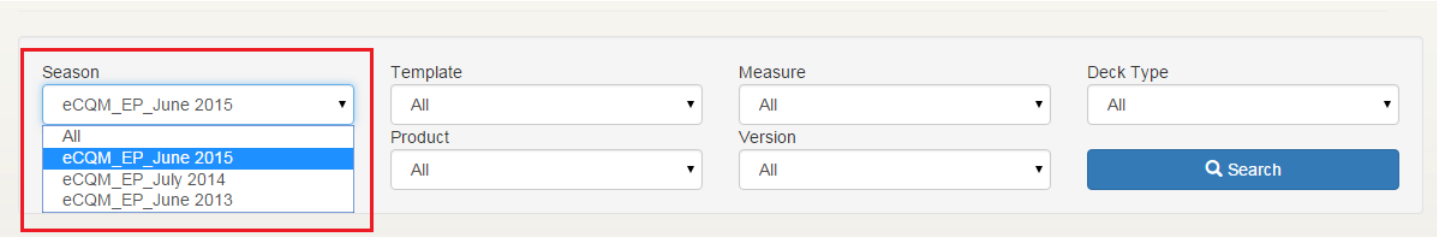
Each time a new version of a measure is released, NCQA updates the value sets and the flow diagrams used to create the measure (NCQA CFD_CMS165_CBP2014). We can then create test decks that meet the new measure requirements.

When a vendor contracts with NCQA to certify that version of the measure, they get access to our website. On the web interface, the vendor can see which version of the measures is available. The following screen shot displays the web interface drop down option that lists the available versions of the eCQM releases.

5. **Provide documentation of the ability to provide support for users during normal business hours with established downtime procedures.**

   NCQA provides customer support in several ways:

   1. MY NCQA – functionality on the NCQA website allows the end-user to submit questions to specific NCQA departments. For eMeasure Certification, there is a queue for vendors to submit questions. The queue and all questions are monitored daily.
   2. E-mail - NCQA clients can also send questions in through e-mail.
   3. Phone - NCQA can setup informal calls or conference calls to discuss issues. At the beginning and end of each testing season, we hold client calls: at the beginning of the season, we discuss changes to the program; at the end of the season, we ask for



   comments about the process to help us make improvements for the next year.

6. **We see that you worked with a number of organizations in developing the tool. Please document whether the tool was piloted or is the tool in production? Please provide documentation of a pilot of the test procedure with at least one ATL and one health IT developer.**

   In 2000, NCQA launched the HEDIS Measure Certification program—a certification program for measures in commercial software products that produce HEDIS results.

In 2014, NCQA pilot-tested the ability to extend our certification program to eMeasures. The eMeasures Certification program uses the same process for test deck development as the HEDIS Measure Certification program. We modified the test data to match the clinical data requirements for the eMeasures and provided the data to our pilot site, using a Continuity of Care Document (CCD) rather than our standard HEDIS format. We asked the vendor to import the CCDs and produce measure results for a quality measure based on the synthetic data.

We tested the following measures:

CMS165	Controlling High Blood Pressure
CMS124	Cervical Cancer Screening
CMS127	Pneumococcal Vaccine
CMS130	Colorectal Cancer Screening

We then tested the same measures with 2 more vendors, a data aggregator and a traditional EHR. In all cases, the vendors were able to import the data and match our results. On average, it took the vendors about 8 weeks to successfully import the data. After that, they were able to produce measure results fairly quickly. Keep in mind, this pilot test was not an area of focus for these vendors; a vendor with dedicated resources might be able to accomplish the import more quickly.

7. **Document whether public comment was sought, if so how was it sought and how was it incorporated.**

   Although we have no formal public comment process for our test data, we do make changes to our test decks based on feedback. Because our test decks come from the decision nodes in the flow diagram, if vendors identify data points or decisions that are not being tested, we add those tests to the flow diagram.

   Every year we beta test our flow diagrams with two vendors. This process allows us to correct any programming errors, as well as identify any tests we should incorporate into the flow diagram.

8. **Provide documentation on the ability to validate to the Common Clinical Data Set (where applicable).**

The table below indicates which of the Common Clinical Data Set elements are validated in NCQA's test data.

Common Clinical Data Set Element	Included in Test Data?
Patient name	Yes, included for all measures
Sex	Yes, included for all measures
Date of birth	Yes, included for all measures
Race	Yes, included for all measures
Ethnicity	Yes, included for all measures
Preferred language	Yes, system has the capability, but not currently required for any CQMs
Care team member(s)	Yes, included as needed for measure calculation
Medication Allergies	Yes, system has the capability, but not currently needed for CQMs we are testing. (see table in Appendix of eMeasures we are currently testing)
Medications	Yes, included as needed for measure calculation
Care plan field(s) should include goals and instructions	Yes, system has the capability, but not currently needed for CQMs we are testing. (see table in Appendix of eMeasures we are currently testing)
Problems	Yes, included as needed for measure calculation
Laboratory test(s)	Yes, included as needed for measure calculation
Laboratory value(s)/result(s)	Yes, included as needed for measure calculation
Procedures	Yes, included as needed for measure calculation
Smoking status	Yes, system has the capability, but not currently needed for CQMs we are testing. (see table in Appendix of eMeasures we are currently testing)
Vital signs	Yes, included as needed for measure calculation

9. **Are there any content exchange standards utilized; Any implementation specifications utilized?**

   NCQA sends patient data to the vendors in a Continuity of Care document. The vendors return measure results in a QRDA Category I or III file.

10. **Is there access to a downloadable version of the tool; Access to a practice instance or sandbox version of the tool?**

    NCQA makes sample test decks and answer keys available to each vendor participating in testing. Attached is a sample test deck and answer key (NCQA Sample Test Deck and Scorekey).

11. **Provide a "user guide" type documentation that illustrates:**

    - **The automated validation performed;**
    - **The test tool workflow instructions;**
    - **The standards and criteria that are validated using the test tool; and**
    - **Any validation not performed by the test tool that must be visually inspected.**

    Attached is a workflow diagram (Test Tool Workflow Diagram) and the program guide (eMC 2016 Guide) we provide to each vendor participating in testing.

12. **Specifically for test data please supply appropriate and clinically relevant test data that tests both positive and negative outcomes.**

    NCQA provides the ability to create an infinite number of test decks for each measure. Attached is a sample test deck and answer key (NCQA Sample Test Deck and Scorekey).

APPENDIX – Table of eMeasures NCQA Currently Tests

Electronic Clinical Quality Measures

Clinical Process/Effectiveness

CMS ID	Measure
CMS122	Diabetes: Hemoglobin A1c Poor Control
CMS123	Diabetes: Foot Exam
CMS124	Cervical Cancer Screening
CMS125	Breast Cancer Screening
CMS126	Use of Appropriate Medications for Asthma
CMS127	Pneumonia Vaccination Status for Older Adults
CMS128	Anti-depressant Medication Management
CMS130	Colorectal Cancer Screening
CMS131	Diabetes: Eye Exam
CMS134	Diabetes: Urine Protein Screening
CMS136	ADHD: Follow-Up Care for Children Prescribed Attention-Deficit/ Hyperactivity Disorder (ADHD) Medication
CMS137	Initiation and Engagement of Alcohol and Other Drug Dependence Treatment
CMS159	Depression Remission at Twelve Months
CMS160	Depression Utilization of the PHQ-9 Tool
CMS165	Controlling High Blood Pressure
CMS2	Preventive Care and Screening: Screening for Clinical Depression and Follow-Up Plan

Efficient Use of Healthcare Resources

CMS ID	Measure
CMS146	Appropriate Testing for Children with Pharyngitis
CMS154	Appropriate Treatment for Children with Upper Respiratory Infection
CMS166	Use of Imaging Studies for Low Back Pain

Patient Safety

CMS ID	Measure
CMS156	Use of High-Risk Medications in the Elderly

Population/Public Health

CMS ID	Measure
CMS117	Childhood Immunization Status
CMS153	Chlamydia Screening for Women
CMS155	Weight Assessment and Counseling for Nutrition and Physical Activity for Children and Adolescents