eMC 2016

NCQA eMeasure Certification Supporting HEDIS Supplemental Data Guide

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Introduction

As a healthcare IT company, you know that identifying and verifying the integrity of electronic health record (EHR) data is important for you and your clients. Your participation in NCQA's eMeasure Certification program ensures the highest level of measure logic review for measures that use EHR data. NCQA's eMeasure Certification adds a higher degree of reliability to performance measurement and enables health care organizations to provide consumers and purchasers with consistent and comparable information.

NCQA's *eMeasure Certification Supporting HEDIS Supplemental Data Guide* contains the policies and procedures for the NCQA eMeasure Certification program. Use it as you complete certification. The first step is completing and submitting your application. After NCQA reviews and accepts your application, you receive a License Agreement. After you execute your License Agreement, you may begin the certification process.

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Background

eCQM

Electronic clinical quality measures (eCQM) track the quality of healthcare services by using data from electronic health records (EHR) and other health information technology systems. NCQA's Healthcare Effectiveness Data and Information Set (HEDIS) and the Centers for Medicare & Medicaid Services (CMS) Medicare Stars reporting programs can use certified eCQM data for performance measurement.

HEDIS Compliance Audit™

The HEDIS Compliance Audit™ promotes plan-to-plan comparison across many dimensions of health care organization performance. To supplement claims data for calculating HEDIS measures, organizations may use data sources other than claims and encounters to collect data about their members and about delivery of health services to their members. Validation of EHR supplemental data sources requires an expensive chart review process. With certified EHR data, health plans can be "preapproved" for some HEDIS and Medicare Stars measures audit requirements. This will allow plans to decrease the number of costly chart reviews.

NCQA eMeasure Certification℠

Certified HEDIS Compliance Auditors, health plans and companies that use EHR supplemental data for calculating HEDIS measures all spend time reviewing charts. Yet, even under the best circumstances, reviewing charts, mapping and code logic for a large and complex program is not sufficient to guarantee accuracy.

This year, NCQA launched its eMeasure Certification program—a certification program for eCQMs programmed in commercial software products that extract EHR data and produce Quality Reporting Document Architecture (QRDA) Category I and III reports. The automated testing processes used in the program increase the rigor of eCQM data review and improve the accuracy of QRDA reporting based on complex logic.

Program Overview

For each measure, NCQA generates random, unique sets of patient-level test data ("test decks") that are in Continuity of Care Documents (CCD) encoded in Extensible Markup Language (XML). Vendors process the CCDs using their measure logic and report their results in QRDA Category I and III reports, which are also encoded in XML. *Refer to Appendices F, G*. NCQA compares measure results with expected results and determines if the measure logic computes according to measure and program specifications. Multiple test decks are available for each measure, giving vendors the opportunity to correct inaccuracies in each round of testing. A tested measure receives a final status of Pass, Pass With Qualifications or Fail. *Refer to Certification Status and Deadlines.*

Measures are "NCQA Certified" when they pass. NCQA issues a Certification Report specifying each measure's certification status, the measure identifier and the date when the status was achieved. The report should be distributed to clients, prospects, health plans and auditors, and the appropriate NCQA eMeasure Certification seal and language may be used in marketing and advertising materials.

Beginning Certification

Participation in NCQA's eMeasure Certification begins with completing an application and signing a NCQA eMeasure Certification License Agreement.

Application

Applications are available upon request through Policy/Program Clarification Support (PCS) (https://my.ncqa.org/). Select **eMeasure Certification** for the Product/Program Type and choose **Request Application** from the General Content Area menu. *Refer to Appendix E.*

The application requests company and contact details; information on the product that contains measures; and a list of measures to be certified. Your completed application must be submitted to eMeasure Certification through PCS.

New applicants pay NCQA a one-time, nonrefundable fee of $500, which is credited toward the certification fee.

Certification agreement

New applicants receive an NCQA eMeasure Certification License Agreement ("Agreement") after NCQA receives the completed application.

Return one signed copy of the Agreement as an attachment through PCS with an e-signature. NCQA signs and sends you a copy of the fully executed agreement for your records.

Certification fees

Certification fees are based on the information in your application and are calculated using the certification fee structure. *Refer to Appendix B.* They include three testing rounds per measure; an additional 3 rounds of testing can be purchased for the applicable testing cycle per measure fee.

All testing rounds are distributed according to the time frame and procedures described in *Certification Testing.*

Invoices are sent within 10 business days of contract execution. All fees are due within 30 days.

Vendors are charged a late payment service fee for each payment received more than 30 days after the due date. Access to test decks is granted after all fees are received.

Press release dates

NCQA will publish two press releases to announce the list of vendors seeking eMeasure certification and a list of those who successfully completed certification. Press release deadlines are:

- *First press release:* Return application and sign contract by **October 30, 2015.**
- *Second press release:* Complete certification by **February 29, 2016.**

Certification Testing

Measures that are in the Adult and Child Meaningful Use core set and overlap with HEDIS are tested first. The Learning Collaborative depression measures will also be tested during the initial program launch. The program will expand to include other NCQA measure sets, such as the PCMH measures and eCQMs that do not overlap with HEDIS. Test decks will be posted online after they have passed through beta-testing.

Actual eCQM testing starts on November 2 and continues through February 29 of the next year. Testing start and end dates are flexible for the first year of the program. After testing is complete, certification statuses will be posted on NCQA's Web site.

Beta testing eligibility...

NCQA selects two vendors to participate as beta-testers. Depending on the number of vendors applying, beta-testers are rotated every two years.

To be eligible as a beta-tester, vendors must meet the following criteria:

- Show ability to begin testing measures before the reporting year.
- Show ability to begin beta-testing 3 – 4 months before test decks are posted to the OSP.
- Can run multiple test decks for each measure, even if the first round passed.
- Can access NCQA's SharePoint site to share test decks and results with NCQA.
- Return results for any measure within five business days after NCQA releases the test deck.

Measure specifications

The eCQM specifications for Eligible Professionals, released July 2014 and June 2015 will be available for testing.

Note: *Annual specification updates can be found on the eCQM Library Web site: http://www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/eCQM_Library.html*

File layout standards

The CCD layout contains information on the data that NCQA sends to you for processing. *Refer to Appendix F.*

The QRDA Category I and III layouts show how results are returned to NCQA. *Refer to Appendix G.*

You must follow the QRDA layouts for the Online Scoring Program (OSP) to run accurately.

OSP

Online Scoring Program. A Web-based tool that compares your results with NCQA's expected results and generates a report showing discrepancies.

Sample and test rounds Test decks contain 1 CCD for each patient. There are typically 800–1,000 patients per test deck.

Sample decks also contain "score keys" or answers/expected QRDA results for that deck's data files and testing scenarios. One sample deck is available for each measure. We recommend that you work with these sample decks until your results match the score keys before you begin to work on the testing decks. Sample decks may be scored through the OSP.

Roadmap The Roadmap (Record of Administration, Data Management and Processes) is available each October. Vendors must complete the *Supplemental Data* section for clients and may be asked to submit a copy to NCQA. If applicable, you may use the same Roadmap answers for all clients.

Unique measure identifier NCQA requires vendors to assign a unique identifier to the certified code for each measure. The identifier should be visible to the system user any time the measure is run. The unique measure identifier must change if certified measure code changes.

Example The unique identifier must be in a Globally Unique Identifier (GUID) format, which is a 128-bit value, presented as 32 hexadecimal digits, with groups separated by hyphens:

xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx

Customer support

eMeasure Certification Support Questions regarding certification and testing (e.g., test decks, test patients, and the OSP), select the "eMeasure Certification" product/program type in the PCS system at https://my.ncqa.org/. *Refer to Appendix E.*

Technical eCQM Specifications Clarification Submit technical questions on the eCQM specifications (e.g., logic, code sets, and measure intent) to the "CQM Issue Tracker" project in the ONC Issue Tracking System using a JIRA login at: http://oncprojectracking.org/.

Certification Status and Deadlines

When you have completed the program, or on the program deadline, NCQA assigns a status (Pass, Pass With Qualifications, Fail) to each tested measure that has a vendor-assigned unique identifier. Untested measures are listed on the certification report as "NA" Certified Compliance Auditors can request code for uncertified measures on behalf of their clients. On the testing deadline, access to uncertified test decks will be revoked.

For vendors without clients who are reporting performance measures, the testing deadline is negotiable.

eMeasure Certification testing concludes.. **February 29, 2016**

Measure status decisions are based on a measure's detected errors. NCQA explains a status of Pass With Qualifications or Fail. All tested measure statuses are contained in the final Certification Report.

Pass	Your output matches the scoring output.
Pass With Qualifications	Your output does not match the scoring output, but the error is unlikely to occur in a production run.
Fail	Your output does not match the scoring output and the generated errors are likely to occur in a production run.
NA	You do not want to test a particular measure or it was not certified by the deadline.

Certification Report and Seal

When you complete certification, NCQA sends you a Certification Report that lists all the measures tested, the final vendor-assigned unique measure identifier, the status for each measure and the date. Provide this report to your clients and other entities who may need it. You may use the Certification Seal and Report to market your software product. (Refer to Appendix D.)

Note: *You must notify NCQA if certified measure code changes or the vendor-assigned unique identifier changes, regardless of the reason.*

Certification Timeline

Beta-testing begins	**July 10**
eMeasure certification testing begins	**November 2**
eMeasure certification testing concludes	**February 29**

NCQA Compliance Audit

Benefits of certified measures:	With certified data, health plans can be “preapproved” for some HEDIS and Medicare Stars measures audit requirements. Extensive chart review is required when measures are reported with supplemental data. Health plans that obtain EHR data using a vendor that has certified measures will be able to reduce the number of costly chart reviews required for reporting supplemental data.

APPENDIX A

Measures in the Scope of eMeasure Certification (Exhibit A)

Electronic Clinical Quality Measures

Clinical Process/Effectiveness

CMS ID	HEDIS Abbreviation	Measure
CMS122v3	CDC	Diabetes: Hemoglobin A1c Poor Control
CMS123v3	CDC	Diabetes: Foot Exam
CMS124v3	CCS	Cervical Cancer Screening
CMS125v3	BCS	Breast Cancer Screening
CMS126v3	ASM	Use of Appropriate Medications for Asthma
CMS127v3	PNU	Pneumonia Vaccination Status for Older Adults
CMS128v3	AMM	Anti-depressant Medication Management
CMS130v3	COL	Colorectal Cancer Screening
CMS131v3	CDC	Diabetes: Eye Exam
CMS134v3	CDC	Diabetes: Urine Protein Screening
CMS136v4	ADD	ADHD: Follow-Up Care for Children Prescribed Attention-Deficit/ Hyperactivity Disorder (ADHD) Medication
CMS137v3	IET	Initiation and Engagement of Alcohol and Other Drug Dependence Treatment
CMS159v3	DRR	Depression Remission at Twelve Months
CMS160v3	DMS	Depression Utilization of the PHQ-9 Tool
CMS165v3	CBP	Controlling High Blood Pressure
CMS2v4	DSF	Preventive Care and Screening: Screening for Clinical Depression and Follow-Up Plan

Efficient Use of Healthcare Resources

CMS ID	HEDIS Abbreviation	Measure
CMS146v3	CWP	Appropriate Testing for Children with Pharyngitis
CMS154v3	URI	Appropriate Treatment for Children with Upper Respiratory Infection
CMS166v4	LBP	Use of Imaging Studies for Low Back Pain

Patient Safety

CMS ID	HEDIS Abbreviation	Measure
CMS156v3	DAE	Use of High-Risk Medications in the Elderly

Population/Public Health

CMS ID	HEDIS Abbreviation	Measure
CMS117v3	CIS	Childhood Immunization Status
CMS153v3	CHL	Chlamydia Screening for Women
CMS155v3	WCC	Weight Assessment and Counseling for Nutrition and Physical Activity for Children and Adolescents

APPENDIX B

The Certification Fee Structure (Exhibit B)

The certification fee has two cycle types. The first cycle testing fee is for new vendors, who are testing a measure for the first time, where each measure costs $2,000. The subsequent cycles testing fee is for returning vendors, who are seeking to update their previously certified code or test a new measure. If a vendor is updating a measure that has limited changes, the fee will be $1,500 per measure. If there are major changes to a measure or the returning vendor is testing a completely new measure, then the fee is $2,000 for each measure. If a vendor exceeds the provided 3 testing rounds per measure, the applicable testing cycle per measure fee can be purchased to receive 3 additional testing rounds.

A non-refundable $500 application fee is processed at the time the application is submitted for new vendors. The application fee is then credited toward the certification fee.

Invoices are sent within 10 business days of contract execution. All fees are due within 30 days and are nonrefundable upon payment.

Measure Testing Fees	Cost Per Measure
First Cycle – New Vendor	$2,000
Subsequent Cycles – Returning Vendor	
1. Yearly Updates	
a. Limited Changes (e.g., dates and value sets)	$1,500
b. Major Changes	$2,000
2. New Measures	$2,000

APPENDIX C

Online Scoring Program

Sample and Test Decks

Sample decks Sample decks let vendors test the code before running a production deck. Vendors can upload sample results to the OSP as many times as needed to match NCQA results, or can use the sample score key and their own process to compare their results to NCQA's.

Test decks Test decks contain the CCD files for each patient needed to process each measure. Test decks do not contain a score key and results can only be submitted once. A vendor that does not pass the first time must process the next deck.

Data file layout Uploaded files must conform to the QRDA report layouts for the measure. *Refer to Appendix G.*

Status

Pass & Date Testing for a measure is complete.

Review Discrepancies were found. You must view the report and apply fixes to your product. The next deck will automatically become available. However, we encourage you to submit a PCS case to the "eMeasure Certification" product/program type, if you have any questions or need clarification, prior to testing the next deck.

Technical Support

Send all inquiries to PCS via the "eMeasure Certification" product/program type. *Refer to Appendix E.*

Note: Do not submit test deck questions to ONC Issue Tracking System using a JIRA. Only submit testing questions to PCS.

APPENDIX D

Guidelines for Marketing and Advertising

These guidelines constitute part of NCQA's Administrative Policies for eMeasure Certification and may be revised by NCQA at its sole discretion. They are designed to protect the integrity of NCQA's programs and allow all participants to benefit from their achievement fairly and accurately.

We encourage you to publicize your achievement and have developed the following Marketing and Advertising Guidelines to help you get the most out of your NCQA status.

References to the terms "advertising," "advertising material" or "advertising and marketing materials" in the following document encompass all external and internal communications including, but not limited to:

- All printed material
- TV ads
- Radio ads
- Posters
- Annual reports
- Billboards
- Press releases
- Newsletters
- RFPs
- RFIs
- HEDIS® Report Cards
- Durable products (e.g., mugs, t-shirts)
- Letters to employers
- Letters to practitioners
- Letters to providers
- Letters to consumers
- Letters to insurance brokers
- Marketing and sales brochures
- Web sites or other electronic material
- Any other promotional material

Using the NCQA Logo

The use and reproduction of NCQA's logo is strictly prohibited. An organization that received Accreditation, Certification, Recognition or other distinction from NCQA is prohibited from using the NCQA logo in any marketing or advertising materials including Web sites, emails and other Web-based applications. If you would like to provide a link to NCQA's Web site, please use www.ncqa.org.

Links to NCQA Web Site

NCQA encourages an organization that received Accreditation, Certification, Recognition, Distinction or other NCQA status to use the NCQA Web site as a resource and provide a link to the NCQA Web site.

Compliance

It is the responsibility of the organization to follow and conform to all applicable NCQA Marketing and Advertising Guidelines. The information referring to your NCQA status or product must be accurate and not misleading. Only the organization that obtained the NCQA status can advertise such status and use the corresponding seal. The organizations' affiliates, including delegated entities, contractors and partners, are not allowed to use the NCQA status or seal. Failure to comply with these guidelines may jeopardize the organization's NCQA status.

In addition, NCQA will conduct periodic audits of customers' marketing and advertising materials to ensure that marketing materials are true, not misleading and that the organization's NCQA status is represented correctly. Failure to participate in the NCQA audit, or refusal to comply with NCQA's request to address inaccuracies in information related to NCQA, NCQA status and product in your

marketing and advertising materials, constitutes a violation of NCQA's advertising guidelines and may result in, at NCQA's discretion, a revocation of an organization's NCQA status.

The organization must maintain all copies of the marketing and advertising materials that refer to NCQA statuses and products released or used in the past six months.

NCQA reserves the right to require an organization to withdraw the advertising materials from distribution immediately, or to publish, at the organization's cost, a retraction or clarification in connection with any false or misleading statements or any violation of all applicable NCQA Marketing and Advertising Guidelines. Each organization agrees in advance to remedy such violations with the action deemed appropriate by NCQA.

How to Advertise NCQA eMeasure Certification℠

- Vendors that received an NCQA seal and certification report listing the certified measures may advertise or market that the software contains certified measures.
- Reference to an NCQA-Certified status must clearly indicate:
  1. Vendor name.
  2. Number of certified measures.
  3. Type of specification.
  4. Specification release date.
  5. Product name.

  For example:

  Vendor 123 is NCQA-Certified for 15 measures for eCQM released July 2014, Product123
- Vendors may distribute the Certification Report only in its entirety.
- Vendors may not refer to excerpts or portions of their Certification Report in marketing materials with the exception of measures that passed.
- Vendors may list measures that passed certification in marketing materials.
- Certification may not be referred to as a "rank" or "ranking."
- Vendors may not engage in advertising that features competitive comparisons with other vendors regarding the percent of measures that passed.

NCQA eMeasure Certification Seal

NCQA issues seals for vendors with NCQA eMeasure Certification. Only vendors with NCQA-Certified eCQMs may display the seal in advertising and marketing materials in accordance with the following guidelines:

- Seals must not be manipulated in any way.
- Seals may be printed in one-color or two-color format.
- Seals should be displayed in a readable format, and the overall depiction should be consistent with NCQA's graphical image.
- Seals may be used only in conjunction with a reference to the certified product.

NCQA grants organizations with certified measures a nonexclusive right to use NCQA eMeasure Certification seals on, or in connection with, promotional activities, as long as certified measures are commercially available or until NCQA revokes the measure's certification status. NCQA's eMeasure

Certification seals are the property of NCQA; organizations may use the seals only in accordance with these Guidelines for Advertising.

Organizations should be aware that NCQA Accreditation, Certification, Recognition, Distinction or other NCQA status can change, which may affect the statement on durable goods (e.g., a trade show display that is no longer accurate must be corrected). It is the organization's responsibility to maintain and update accurate marketing materials. If status changes, the organization is responsible for updating all promotional items, and must cease distribution of all materials with incorrect status information. Updating of Web site and other distributed materials should take place within 30 days of the status change.

All marketing materials must follow NCQA's Marketing and Advertising Guidelines as described on the NCQA Web page (www.ncqa.org/marketing.aspx).

Recommended Language

Vendors with certified measures may use the following statements, alone or in combination, to identify or describe NCQA, the eMeasure Certification process or HEDIS®, and may reference the NCQA Web site at www.ncqa.org.

Descriptions of NCQA

- The National Committee for Quality Assurance (NCQA) Web site (www.ncqa.org) contains information to help consumers, employers and others make more-informed health care choices.

The National Committee for Quality Assurance (NCQA), or NCQA is:

- …a private, non-profit organization dedicated to improving health care quality
- …an independent, not-for-profit organization dedicated to assessing and reporting on the quality of managed care plans, managed behavioral healthcare organizations, preferred provider organizations, new health plans, physician organizations, credentials verification organizations, disease management programs and other health-related programs.
- …governed by a board of directors that includes employers, consumer representatives, health plans, quality experts, policy makers and representatives from organized medicine.

Descriptions of NCQA eMeasure CertificationSM

- NCQA's eMeasure Certification is precise, automated testing that verifies compliance with eCQM specifications and the ability to report eCQMs using the Quality Reporting Document Architecture (QRDA) Categories I and III.
- Automating testing logic increases the rigor of measure review and improves the accuracy of reporting measures that are based on complex software logic.
- eMeasure Certification improves the precision and efficiency of supplemental data reporting, reduces the primary source review requirements, and ultimately decreases the need for reporting by the hybrid method and promotes further consistency of eCQM data.

Descriptions of HEDIS®

- Since its introduction in 1993, the Healthcare Effectiveness Data and Information Set (HEDIS®) has evolved to become the gold standard in managed care performance measurement.
- Conceived as a way to streamline measurement efforts and promote accountability in managed care, HEDIS® measures are now used by approximately 90 percent of all MCOs to evaluate performance in areas ranging from preventive care and consumer experience to heart disease and cancer.
- HEDIS® is a set of standardized performance measures designed to make sure purchasers and consumers have the information they need to reliably compare the performance of managed health care organizations.

NCQA Trademarks

HEDIS®

The Healthcare Effectiveness Data and Information Set (HEDIS®) is a registered trademark of NCQA. Apply the symbol directly after the word "HEDIS":

- When it is used in a title/headline, ***and***
- At the first reference in the body.

Subsequent mention does not need a registered trademark.

The footnote text goes at the bottom of the page of the first mention:

"*HEDIS® is a registered trademark of the National Committee for Quality Assurance (NCQA).*"

NCQA eMeasure Certification℠

NCQA eMeasure Certification℠ is a service mark of NCQA. Apply the symbol directly after the word "Certification":

- When it is used in a title/headline, ***and***
- At the first reference in the body.

Subsequent mention does not need a service mark.

The footnote text goes at the bottom of the page of the first mention:

"NCQA eMeasure Certification℠ is a service mark of the National Committee for Quality Assurance (NCQA)."

HEDIS Compliance Audit™

NCQA HEDIS Compliance Audit™ is a trademark of NCQA. Apply the symbol directly after the word "Audit":

- When it is used in a title/headline, ***and***
- At the first reference in the body.

Subsequent mention does not need a trademark.

The footnote text goes at the bottom of the page of the first mention:

"NCQA HEDIS Compliance Audit™ is a trademark of the National Committee for Quality Assurance (NCQA)."

Quality Compass®

Quality Compass is a registered trademark of NCQA. Apply the symbol directly after the word "Compass":

- When it is used in a title/headline, and
- At the first reference in the body.

Subsequent mention does not need a registered trademark.

The footnote text goes at the bottom of the page of the first mention:

"Quality Compass® is a registered trademark of the National Committee for Quality Assurance (NCQA)."

APPENDIX E

How to Submit eMeasure Certification Questions

Step 1 Access the Policy/Program Clarification Support (PCS) system at (https://my.ncqa.org/).

A. First-time users must create an account.

LOGIN

Email Address

Password

Login Forgot Password

A. Don't have an account? Create one now.

B. New users register as an eMeasure Certification Vendor under **Organization Type***.

CREATE NEW ACCOUNT

First Name*

Last Name*

Title

Phone Number*

Email Address*

Password*

Confirm Password*

Organization Name*

B. Organization Type*

Organization Street Address 1*

Organization Street Address 2

Organization City*

Organization State*

Organization Zip Code*

Create Cancel

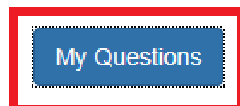
Step 2 C. Click **My Questions**.

My Questions

View your questions in an easy and convenient way.

- Ask a question
- View responses
- See a history of past questions
- Upload file feature

C.



D. Click **Ask a Question.**

QUESTIONS D. Ask a Question

Open Closed

10 records per page Search:

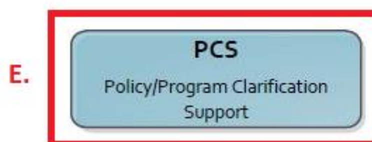
Subject	Type	Product/Program	Status	Case	Modified
You have no Open Questions					

Open Questions Found: 0 ← Previous Next →

E. Click **PCS Policy/Program Clarification Support** in the list of categories.

Select the category that best matches your question.

E.



Step 3 F. From the **Policy/Program Type** drop-down menu, click **eMeasure Certification**.

G. From the **General Content Area** drop-down menu, click the category that corresponds to your question.

H. From the **Specific Area** drop-down menu:

- For *General eMeasure Certification questions:* Select **eCQM** or **Other**.
- For *eCQM Sample or Test Deck questions:* Select the measure you are inquiring about. Measures are listed by CSM ID.
- For *Application Requests* select: **eCQM.**

NEW QUESTION

First, help us route your question to the right expert by selecting from the following:

Product/Program Type:

eMeasure Certification F.

General Content Area:

--None--
eCQM Sample Deck
eCQM Test Deck
General eMeasure Certification
Request Application
G.

Specific Area:

--None-- H.

What Publication Year does your question relate to?

Select Year I.

Subject

J.

Question

K.

Submit Your Question L.

I. Click the year that correlates to the eCQM release date for the specifications you are referencing under **What Publication Year does your question relate to?**

   For example, for the *eCQM Specifications for Eligible Professionals Update*, released in May 2015, click **2015** as the publication year.

J. Enter a brief description of your question in the **Subject** field (e.g., "Extra patients in Initial Patient Population," "General question").

K. Enter your question in the **Question** field. Include all pertinent details. You may attach a file to a question only **after** it is submitted. *Refer to step 4.*

   If you are inquiring about a test or sample deck, include the patient ID and your reason for including/excluding the patient from your QRDA report.

L. When all drop-down options and text boxes are complete, click **Submit Your Question**.

Step 4 M. You can view your submitted question on the **My Questions** page. Submitted questions are listed under "Open" or "Closed."

> ***Note:*** *You can add additional information or attach a file to an <u>open</u> question. You must submit a follow-up question to a closed question.*

N. Click your case to add information.

QUESTIONS Ask a Question

Open Closed **M.**

10 records per page Search:

Subject	Type	Product/Program	Status	Case	Modified
PNU Initial Patient Population Criteria **N.**	PCS	eMeasure Certification	New	00061563	5/7/2015

Open Questions Found: 1 ← Previous 1 Next →

O. After you select your case, a window displays where you can enter additional comments or attach a file.

EDIT QUESTION

Subject Areas

PCS
eMeasure Certification
eCQM Test Deck
CMS127 - PNU - Pneumonia Vaccination Status for Older Adults
Publication Year:2015

Additional Information About Your Question

If you need to add information about your question or if NCQA requests additional information, enter it in the field below. Although NCQA will use this field to request information and discuss your question before it is resolved, NCQA's official response to your question will be sent to you via e-mail.

500 characters remaining

Submit Comment

Attach a File

A comment and an attachment cannot be submitted at the same time. If you wish to send a comment that relates to an attachment, first submit the comment, return to the page and submit the attachment. Please ensure that none of the information included in the attachment includes PHI (Protected Health Information).

Browse...

Attach File

Cancel

Submit a Follow-Up Question About a Closed Case

Step 1 A. Click **Closed.**

B. Click the case for which you want to ask a follow up question.

QUESTIONS Ask a Question

Open Closed A.

10 records per page Search:

Subject	Type	Product/Program	Status	Case	Modified
CMS165 - Denominator Issue B.	PCS	eMeasure Certification	Closed	00061555	5/7/2015

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EDIT QUESTION

Question

CMS165 - Denominator Issue

Testing issue

Answer

Done Testing

Status: Closed
Created: 05/07/2015
Modified: 05/07/2015
Case: 00061555

Subject Areas

PCS
eMeasure Certification
General eMeasure Certification
eCQM
Publication Year:2015

Comments

To ask a question about this case click here. C.

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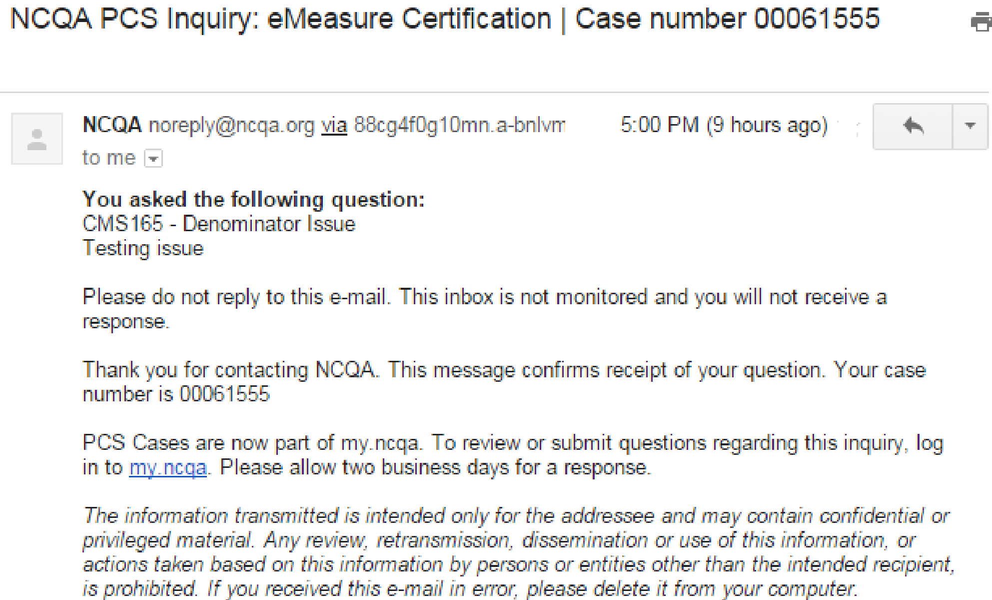
After you submit a question, you will receive an e-mail with the subject line:

NCQA PCS Inquiry: eMeasure Certification | Case Number: [XXXXXXXX]

The e-mail contains the text of the question you submitted and a link to the PCS system, where you can review the question or submit additional information; for example:


NCQA PCS Inquiry: eMeasure Certification | Case number 00061555

NCQA noreply@ncqa.org via 88cg4f0g10mn.a-bnlvm 5:00 PM (9 hours ago)
to me

You asked the following question:
CMS165 - Denominator Issue
Testing issue

Please do not reply to this e-mail. This inbox is not monitored and you will not receive a response.

Thank you for contacting NCQA. This message confirms receipt of your question. Your case number is 00061555

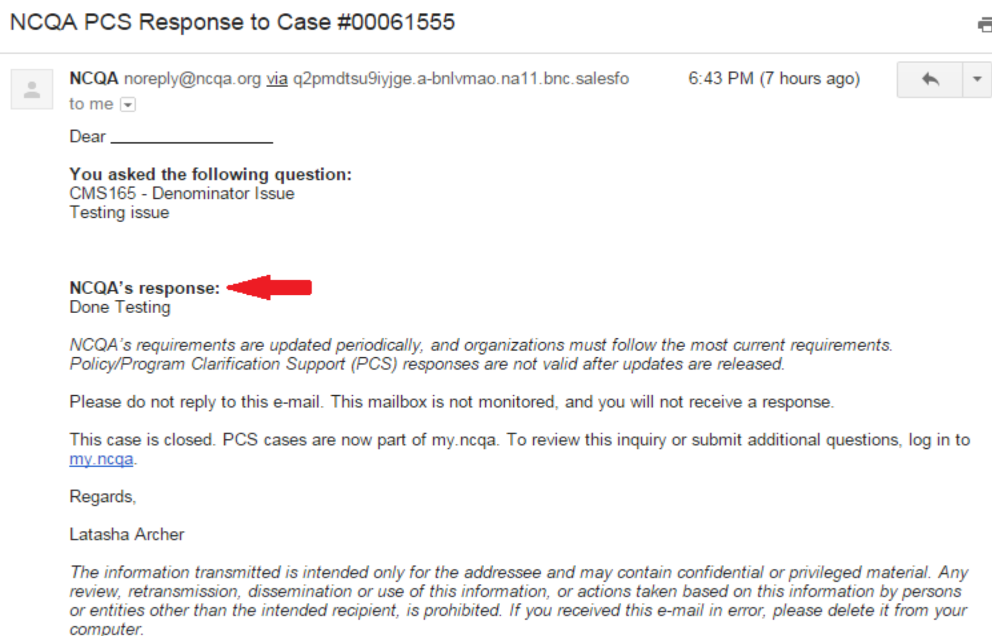
PCS Cases are now part of my.ncqa. To review or submit questions regarding this inquiry, log in to my.ncqa. Please allow two business days for a response.

The information transmitted is intended only for the addressee and may contain confidential or privileged material. Any review, retransmission, dissemination or use of this information, or actions taken based on this information by persons or entities other than the intended recipient, is prohibited. If you received this e-mail in error, please delete it from your computer.

Note: *eMeasure certification questions are answered within two business days of submission.*

Your response will arrive in an e-mail with the subject line:

NCQA PCS Response to Case #[XXXXXXXX]


NCQA PCS Response to Case #00061555

NCQA noreply@ncqa.org via q2pmdtsu9iyjge.a-bnlvmao.na11.bnc.salesfo 6:43 PM (7 hours ago)
to me

Dear ________________

You asked the following question:
CMS165 - Denominator Issue
Testing issue

NCQA's response:
Done Testing

NCQA's requirements are updated periodically, and organizations must follow the most current requirements. Policy/Program Clarification Support (PCS) responses are not valid after updates are released.

Please do not reply to this e-mail. This mailbox is not monitored, and you will not receive a response.

This case is closed. PCS cases are now part of my.ncqa. To review this inquiry or submit additional questions, log in to my.ncqa.

Regards,

Latasha Archer

The information transmitted is intended only for the addressee and may contain confidential or privileged material. Any review, retransmission, dissemination or use of this information, or actions taken based on this information by persons or entities other than the intended recipient, is prohibited. If you received this e-mail in error, please delete it from your computer.

APPENDIX F

Continuity of Care (CCD) File Layouts

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CCD

This specification outlines the key fields included in the CCD file found in each test deck. There is one CCD file for each patient in the test deck. The generated CCD is based on C-CDA R1.1[1] and the document produced conforms with MU2 requirements. Sections without data include a nullFlavor of No Information (NI) at the section level. *Refer to Table 1: Supported CCD Templates.*

[1]http://www.hl7.org/documentcenter/private/standards/cda/CDAR2_IG_IHE_CONSOL_DSTU_R1dot1_2012JUL.zip

Table 1: Supported C-CDA Templates

Template Title	Template Type	Template ID
US Realm Header	header	2.16.840.1.113883.10.20.22.1.1
Continuity of Care Document (CCD)	document	2.16.840.1.113883.10.20.22.1.2
Encounters Section (entries optional)	section	2.16.840.1.113883.10.20.22.2.22
Encounters Section (entries required)	section	2.16.840.1.113883.10.20.22.2.22.1
Encounter Activities	entry	2.16.840.1.113883.10.20.22.4.49
Immunizations Section (entries optional)	section	2.16.840.1.113883.10.20.22.2.2
Immunizations Section (entries required)	section	2.16.840.1.113883.10.20.22.2.2.1
Immunization Activity	entry	2.16.840.1.113883.10.20.22.4.52
Immunization Medication Information	entry	2.16.840.1.113883.10.20.22.4.54
Medications Section (entries optional)	section	2.16.840.1.113883.10.20.22.2.1
Medications Section (entries required)	section	2.16.840.1.113883.10.20.22.2.1.1
Medication Activity	entry	2.16.840.1.113883.10.20.22.4.16
Medication Dispense	entry	2.16.840.1.113883.10.20.22.4.18
Medication Information	entry	2.16.840.1.113883.10.20.22.4.23
Medication Supply Order	entry	2.16.840.1.113883.10.20.22.4.17
Payers Section	section	2.16.840.1.113883.10.20.22.2.18
Coverage Activity	entry	2.16.840.1.113883.10.20.22.4.60
Policy Activity	entry	2.16.840.1.113883.10.20.22.4.61
Problem Section (entries optional)	section	2.16.840.1.113883.10.20.22.2.5
Problem Section (entries required)	section	2.16.840.1.113883.10.20.22.2.5.1
Problem Concern Act (Condition)	entry	2.16.840.1.113883.10.20.22.4.3
Problem Observation	entry	2.16.840.1.113883.10.20.22.4.4
Procedures Section (entries optional)	section	2.16.840.1.113883.10.20.22.2.7
Procedures Section (entries required)	section	2.16.840.1.113883.10.20.22.2.7.1
Procedure Activity Act	entry	2.16.840.1.113883.10.20.22.4.12
Results Section (entries optional)	section	2.16.840.1.113883.10.20.22.2.3
Results Section (entries required)	section	2.16.840.1.113883.10.20.22.2.3.1
Result Observation	entry	2.16.840.1.113883.10.20.22.4.2
Result Organizer	entry	2.16.840.1.113883.10.20.22.4.1
Vital Signs Section (entries optional)	section	2.16.840.1.113883.10.20.22.2.4
Vital Signs Section (entries required)	section	2.16.840.1.113883.10.20.22.2.4.1
Vital Sign Observation	entry	2.16.840.1.113883.10.20.22.4.27
Vital Signs Organizer	entry	2.16.840.1.113883.10.20.22.4.26

Continuity of Care Document (CCD) Header

The CDA header contains key metadata about the document to support patient retrieval and storage. This particular document is a Continuity of Care Document.

Table 2: CCD Header Constraints Overview

	Card	Fixed/ Dynamic	C-CDA Mapping
	1..1	F	<realmCode code="US"/>
	1..1	F	<typeId root="2.16.840.1.113883.1.3" extension="POCD_HD000040"/>
	1..1	F	<templateId root="2.16.840.1.113883.10.20.22.1.1"/>
	1..1	F	<templateId root="2.16.840.1.113883.10.20.22.1.2"/>
Unique document ID	1..1	D	id
	1..1	F	<code code="34133-9" codeSystem="2.16.840.1.113883.6.1" displayName="Summarization of episode note"/>
Measure Name + Deck Version	1..1	D	title
	1..1	D	effectiveTime/@value
	1..1	F	<confidentialityCode code="N" codeSystem="2.16.840.1.113883.5.25"/>
	1..1	F	languageCode/@code
demographic			recordTarget/patientRole/
ID	1..1	D	ID with NCQA OID 2.16.840.1.113883.3.464.1005.1
Fixed CDA value	1..*	D	addr
Mailing Address 1/ Mailing Address 2	1..4	D	addr/streetAddressLine
City	1..1	D	addr/city
State	0..1	D	addr/state
Zip	0..1	D	addr/postalCode
	0..1	F	<country>US</country>
Telephone Number	1..*	D	telecom
Member First Name	1..*	D	patient/name/family
Member Last Name	1..*	D	patient/name/given
Gender	1..1	D	patient/administrativeGenderCode patient/codeSystem="2.16.840.1.113883.5.1"
Date of Birth	1..1	D	patient/birthTime
Race	1..1	D	patient/raceCode@code patient/raceCode@codeSystem="2.16.840.1.113883.6.238"
Ethnicity	1..1	D	ethnicGroupCode/@code ethnicGroupCode/@codeSystem="2.16.840.1.113883.6.238"
	1..*	F	<languageCommunication> <languageCode code="eng"/> </languageCommunication>
author	1..*	F	/author/
	1..1	F	functionCode - fixed to PCP
	1..1	D	time
	1..1	F	assignedAuthor/id

	Card	Fixed/ Dynamic	C-CDA Mapping
	1..*	F	assignedAuthor/addr
	0..4	F	assignedEntity/addr
	0..1	F	assignedEntity/addr/streetAddressLine
	0..1	F	assignedEntity/addr/city
	0..1	F	assignedEntity/addr/state
	0..1	F	assignedEntity/addr/postalCode
	0..*	F	assignedEntity/addr/country
	1..*	F	assignedAuthor/telecom
	1..1	F	assignedAuthor/assignedPerson/name/given
	1..1	F	assignedAuthor/assignedPerson/name/family
custodian	1..1	F	custodian/assignedCustodian/ representedCustodianOrganization/…
	1..*	F	id
	1..1	F	name
	1..1	F	telecom
	1..*	F	addr
	0..4	F	assignedEntity/addr
	0..1	F	assignedEntity/addr/streetAddressLine
	0..1	F	assignedEntity/addr/city
	0..1	F	assignedEntity/addr/state
	0..1	F	assignedEntity/addr/postalCode
	0..*	F	assignedEntity/addr/country
serviceEvent	0..*	F	documentationOf/serviceEvent/
	0..*	F	serviceEvent@classCode="PCPR"
	0..*	D	effectiveTime/low@value
	0..*	D	effectiveTime/high@value

Figure 1: CCD Header example


```
<ClinicalDocument xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
                  xmlns="urn:hl7-org:v3" xmlns:voc="urn:hl7-org:v3/voc">
  <realmCode code="US"/>
  <typeId root="2.16.840.1.113883.1.3" extension="POCD_HD000040"/>
  <!-- US General Header Template -->
  <templateId root="2.16.840.1.113883.10.20.22.1.1"/>

  <!-- *** Note: The next templateId signifies conformance with CCD *** -->
  <templateId root="2.16.840.1.113883.10.20.22.1.2"/>
  <!-- unique id for the document -->
  <id extension="TT988" root="2.16.840.1.113883.19.5.99999.1"/>
  <code codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"
        code="34133-9"
        displayName="Summarization of Episode Note"/>

  <!-- Title of the measure will be added to flat file and placed here as
       title.  -->
  <title>NCQA CCD High Risk Medications in the Elderly measure</title>
  <!-- Time the document was created - we will generate -->
  <effectiveTime value="201209150000-0400"/>
  <confidentialityCode code="N" codeSystem="2.16.840.1.113883.5.25"/>
  <languageCode code="en-US"/>
  <recordTarget>
    <patientRole>
      <id root="2.16.840.1.113883.3.464.1005.1" extension="23423"/>
      <!-- Fake ID using NCQA Patient OID. -->
      <addr>
        <streetAddressLine>1357 Amber Drive</streetAddressLine>
        <city>Beaverton</city>
        <state>OR</state>
        <postalCode>97867</postalCode>
        <country>US</country>
        <!-- US is "United States" from ISO 3166-1 -->
      </addr>
      <telecom value="tel:(816)276-6909"/>
      <patient>
        <name>
          <given>Isabella</given>
          <family>Jones</family>
        </name>
        <administrativeGenderCode code="F" codeSystem="2.16.840.1.113883.5.1"
          displayName="Female"/>
        <birthTime value="19750501"/>
        <!-- CDC Race and Ethnicity code set contains the minimum race and
                 ethnicity categories defined by OMB Standards for Race and
                 Ethnicity -->
        <raceCode code="2106-3" displayName="White"
                  codeSystem="2.16.840.1.113883.6.238"
                  codeSystemName="Race &amp; Ethnicity - CDC"/>
        <ethnicGroupCode code="2186-5" displayName="Not Hispanic or Latino"
          codeSystem="2.16.840.1.113883.6.238"
          codeSystemName="Race &amp; Ethnicity - CDC"/>
        <birthplace>
          <place>
            <addr>
              <city>Beaverton</city>
              <state>OR</state>
```

```
            <postalCode>97867</postalCode>
            <country>US</country>
          </addr>
        </place>
      </birthplace>
      <languageCommunication>
        <languageCode code="eng"/>
      </languageCommunication>
    </patient>
  </patientRole>
</recordTarget>
<author>
  <functionCode code="PCP" codeSystem="2.16.840.1.113883.5.88"
                codeSystemName="Provider Role"
                displayName="Primary Care Provider"/>
  <time value="20050329224411+0500"/>
  <assignedAuthor>
    <id extension="99999999" root="2.16.840.1.113883.4.6"/>
    <code code="200000000X" codeSystem="2.16.840.1.113883.6.101"
      displayName="Allopathic &amp; Osteopathic Physicians"/>
    <addr>
      <streetAddressLine>1002 Healthcare Drive </streetAddressLine>
      <city>Portland</city>
      <state>OR</state>
      <postalCode>99123</postalCode>
      <country>US</country>
    </addr>
    <telecom use="WP" value="tel:555-555-1002"/>
    <assignedPerson>
      <name>
        <given>Henry</given>
        <family>Seven</family>
      </name>
    </assignedPerson>
  </assignedAuthor>
</author>
<custodian>
  <assignedCustodian>
    <representedCustodianOrganization>
      <!-- NCQA OID -->
      <id root="2.16.840.1.113883.3.464"/>
      <name>National Committee for Quality Assurance (NCQA)</name>
      <telecom value="tel: 202-955-3500" use="WP"/>
      <addr use="WP">
        <streetAddressLine>1100 13th St., NW Suite 1000</streetAddressLine>
        <city>Washington</city>
        <state>DC</state>
        <postalCode>20005</postalCode>
        <country>US</country>
      </addr>
    </representedCustodianOrganization>
  </assignedCustodian>
</custodian>
<documentationOf>
  <serviceEvent classCode="PCPR">
    <!-- NCQA Time? -->
    <effectiveTime>
      <low value="201209080000-0400"/>
      <high value="201209150000-0400"/>
```

```
        </effectiveTime>
        <performer typeCode="PRF">
          <functionCode code="PCP" codeSystem="2.16.840.1.113883.5.88"
                        codeSystemName="Provider Role"
                        displayName="Primary Care Provider"/>
          <assignedEntity>
            <!-- Provider NPI "PseudoMD-1" -->
            <id extension="99999999" root="2.16.840.1.113883.4.6"/>
            <code code="200000000X" codeSystem="2.16.840.1.113883.6.101"
              displayName="Allopathic &amp; Osteopathic Physicians"/>
            <addr>
              <streetAddressLine>1002 Healthcare Drive </streetAddressLine>
              <city>Portland</city>
              <state>OR</state>
              <postalCode>99123</postalCode>
              <country>US</country>
            </addr>
            <telecom use="WP" value="tel:555-555-1002"/>
            <assignedPerson>
              <name>
                <given>Henry</given>
                <family>Seven</family>
              </name>
            </assignedPerson>
          </assignedEntity>
        </performer>
      </serviceEvent>
    </documentationOf>
  ...
```

Encounters Section

The *Encounters* section lists and describes any health care encounter pertinent to the patient's current health status or health history.

Table 3: Encounters Section Constraints Overview

Key Fields	Card	Fixed/ Dynamic	C-CDA Mapping
Section	1..*	F	component/structuredBody/component/section
	1..*	F	<templateId root="2.16.840.1.113883.10.20.22.2.22"/>
	1..*	F	<templateId root="2.16.840.1.113883.10.20.22.2.22.1"/>
	1..1	F	<code code="46240-8" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="Encounters"/>
	1..1	F	<title>ENCOUNTERS</title>
Code Text	1..1	D	text
	1..*	F	/entry/
	1..1	F	<encounter classCode="ENC" moodCode="EVN">
	1..*	F	<templateId root="2.16.840.1.113883.10.20.22.4.49"/>
	1..1	D	<id root="2.16.840.1.113883.3.464.1005.7" extension=""/>
Activity Type	1..1	D	<code code="99241" displayName="Office consultation - 15 minutes" codeSystemName="CPT" codeSystem="2.16.840.1.113883.6.12" codeSystemVersion="4"> [code could be SNOMED or HCPCS]
Service Date and End Date	1..1	D	<effectiveTime> <low value="[Service Date]"/> <high value="[End Date]"/> </effectiveTime>

Figure 2: Encounters section example

```
...
<section>
    <templateId root=“2.16.840.1.113883.10.20.22.2.22.1”/>
    <code code=“46240-8” codeSystem=“2.16.840.1.113883.6.1”
          codeSystemName=“LOINC” displayName=“History of Encounters”/>
    <title>ENCOUNTERS</title>
    <text>Encounters...</text>
    <entry typeCode=“DRIV”>
        <encounter classCode=“ENC” moodCode=“EVN”>
            <templateId root=“2.16.840.1.113883.10.20.22.4.49”/>
            <id root=“2.16.840.1.113883.3.464.1005.1” extension=“95005”/>
            <code code=“108311000” codeSystem=“2.16.840.1.113883.6.96”
                  codeSystemName=“SNOMED-CT”
                  displayName=“Psychiatricprocedure”/>
            <effectiveTime>
                <low value=“19821203”/>
                <high value=“19821203”/>
            </effectiveTime>
        </encounter>
    </entry>
    <entry typeCode=“DRIV”>
        <encounter classCode=“ENC” moodCode=“EVN”>
            <templateId root=“2.16.840.1.113883.10.20.22.4.49”/>
            <id root=“2.16.840.1.113883.3.464.1005.1” extension=“95005”/>
            <code code=“99386” codeSystem=“2.16.840.1.113883.6.12”
                  codeSystemName=“CPT” displayName=“Unknown Encounter Code”/>
            <effectiveTime>
                <low value=“20120519”/>
                <high value=“20120519”/>
            </effectiveTime>
        </encounter>
    </entry>
...
```

Immunizations Section

The *Immunizations* section defines a patient's current immunization status and pertinent immunization history.

Table 4: Immunizations Section Constraints Overview

Key Fields	Card	Fixed/ Dynamic	C-CDA Mapping
Section	1..*		component/structuredBody/component/section
	1..*	F	<templateId root="2.16.840.1.113883.10.20.22.2.2"/>
	1..*	F	<templateId root="2.16.840.1.113883.10.20.22.2.2.1"/>
	1..1	F	<code code="11369-6" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="Immunizations"/>
title@text	1..1	F	<title>Immunizations</title>
Code Text	1..1	D	text
	1..*	F	/entry/
	1..1	F	<substanceAdministration classCode="SBADM" moodCode="EVN" negationInd="false">
	1..*	F	<templateId root="2.16.840.1.113883.10.20.22.4.52"/>
	1..1	D	<id root="cdbd33f0-6cde-11db-9fe1-0800200c9a66"/>
	1..1	F	<statusCode code="completed"/>
Immunization Date	1..1	D	<effectiveTime value=[Immunization Date]/>
	1..1	F	<consumable> <manufacturedProduct classCode="MANU">
	1..*	F	<templateId root="2.16.840.1.113883.10.20.22.4.54"/>
	1..1	F	<manufacturedMaterial>
Immunization Code	1..1	D	<code code=[Drug code] codeSystem="2.16.840.1.113883.12.292" displayName="anthrax" codeSystemName="CVX">

Figure 3: Immunizations section example

```
...
<section>
    <!-- conforms to Immunizations section with entries optional -->
    <templateId root="2.16.840.1.113883.10.20.22.2.2"/>
    <!-- Immunizations section with entries required -->
    <templateId root="2.16.840.1.113883.10.20.22.2.2.1"/>
    <code code="11369-6" codeSystem="2.16.840.1.113883.6.1"
          codeSystemName="LOINC"
          displayName="History of immunizations"/>
    <title>IMMUNIZATIONS</title>
    <text>Vaccine...  </text>
        <entry typeCode="DRIV">
          <substanceAdministration classCode="SBADM" moodCode="EVN"
            negationInd="false">
            <!-- ** Immunization activity ** -->
            <templateId root="2.16.840.1.113883.10.20.22.4.52"/>
            <id root="e6f1ba43-c0ed-4b9b-9f12-f435d8ad8f92"/>
            <statusCode code="completed"/>
            <effectiveTime value="199911"/>
            <consumable>
                <manufacturedProduct classCode="MANU">
                    <!-- ** Immunization medication information ** -->
                    <templateId root="2.16.840.1.113883.10.20.22.4.54"/>
                    <manufacturedMaterial>
                        <code code="88" codeSystem="2.16.840.1.113883.12.292"
                            displayName="Influenza virus vaccine"
                            codeSystemName="CVX"/>
                    </manufacturedMaterial>
                </manufacturedProduct>
            </consumable>
          </substanceAdministration>
    </entry>
...
```

Medications Section

The *Medications* section defines a patient's current medications and pertinent medication history.

Table 5: Medications Section Constraints Overview

Key Fields	Card	Fixed/ Dynamic	C-CDA Mapping
Section	1..*		component/structuredBody/component/section
	1..*	F	<templateId root="2.16.840.1.113883.10.20.22.2.1"/>
	1..*	F	<templateId root="2.16.840.1.113883.10.20.22.2.1.1"/>
	1..1	F	<code code="10160-0" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="History of Medication Use"/>
title@text	1..1	F	<title>MEDICATIONS</title>
Code Text	1..1	D	text
	1..*	F	/entry/
	1..1	F	<substanceAdministration classCode="SBADM" moodCode="EVN">
	1..*	F	<templateId root="2.16.840.1.113883.10.20.22.4.16"/>
	1..1	D	<id root="cdbd33f0-6cde-11db-9fe1-0800200c9a66"/>
	1..1	F	<statusCode code="completed"/>
Start Date/End Date/Frequency	1..1	D	<effectiveTime xsi:type="IVL_TS"> <low nullFlavor=[start date]/> <high nullFlavor=[end date]/> </effectiveTime> <effectiveTime xsi:type="PIVL_TS" institutionSpecified="true" operator="A"> <period value=[24/Frequency] unit="h"/> </effectiveTime>
	1..1	F	<consumable> <manufacturedProduct classCode="MANU">
	1..*	F	<templateId root="2.16.840.1.113883.10.20.22.4.23"/>
	1..1	F	<manufacturedMaterial>
Drug Code	1..1	D	<code code=[Drug code] codeSystem="2.16.840.1.113883.6.88" displayName="Proventil HFA" codeSystemName="RxNorm">
Start of Medication Supply Order	1..1	F	<entryRelationship typeCode="REFR"> <supply classCode="SPLY" moodCode="EVN">
	1..*	F	<templateId root="2.16.840.1.113883.10.20.22.4.17"/>
	1..1	F	<id nullFlavor="NI"/>
	1..1	F	<statusCode code="completed"/>

Key Fields	Card	Fixed/ Dynamic	C-CDA Mapping
Order Date	1..1	D	<effectiveTime xsi:type="IVL_TS"> <low value=[Order Date]/> <high nullFlavor="UNK"/> </effectiveTime>
	1..1	F	<product> <manufacturedProduct classCode="MANU">
	1..*	F	<id nullFlavor="NI"/>
	1..1	F	<manufacturedMaterial>
Drug Code	1..1	D	<code code=[Drug code] codeSystem="2.16.840.1.113883.6.88" displayName="Proventil HFA" codeSystemName="RxNorm">
Start of Medication Dispense	1..1	F	<entryRelationship typeCode="REFR"> <supply classCode="SPLY" moodCode="EVN">
	1..*	F	<templateId root="2.16.840.1.113883.10.20.22.4.18"/>
	1..1	F	<id nullFlavor="NI"/>
	1..1	F	<statusCode code="completed"/>
Dispense Date	1..1	D	<effectiveTime value=[dispense date]/>
	1..1	D	<product> <manufacturedProduct classCode="MANU">
	1..*	F	<templateId root="2.16.840.1.113883.10.20.22.4.23"/>
	1..1	F	<manufacturedMaterial>
Drug Code	1..1	D	<code code=[Drug code] codeSystem="2.16.840.1.113883.6.88" displayName="Proventil HFA" codeSystemName="RxNorm">

Figure 4: Medications section example

```
...
<section>
    <!-- conforms to Medications section with entries optional -->
    <templateId root="2.16.840.1.113883.10.20.22.2.1"/>
    <!-- Medications section with entries required -->
    <templateId root="2.16.840.1.113883.10.20.22.2.1.1"/>
    <code code="10160-0" codeSystem="2.16.840.1.113883.6.1"
          codeSystemName="LOINC"
        displayName="HISTORY OF MEDICATION USE"/>
    <title>MEDICATIONS</title>
    <text>Medication...</text>
    <entry typeCode="DRIV">
        <substanceAdministration classCode="SBADM" moodCode="EVN">
            <!-- ** Medication activity ** -->
            <templateId root="2.16.840.1.113883.10.20.22.4.16"/>
            <id root="cdbd33f0-6cde-11db-9fe1-0800200c9a66"/>
            <statusCode code="completed"/>
            <effectiveTime xsi:type="IVL_TS">
                <low value="20070103"/>
                <high value="20120515"/>
            </effectiveTime>
            <effectiveTime xsi:type="PIVL_TS" institutionSpecified="true"
                           operator="A">
                <period value="24" unit="h"/>
            </effectiveTime>
            <consumable>
                <manufacturedProduct classCode="MANU">
                    <!-- ** Medication information ** -->
                    <templateId root="2.16.840.1.113883.10.20.22.4.23"/>
                    <manufacturedMaterial>
                        <code code="1168631"
                              codeSystem="2.16.840.1.113883.6.88"
                              displayName="Bayer Aspirin Pill"/>
                    </manufacturedMaterial>
                </manufacturedProduct>
            </consumable>
            <!-- Intent to supply patient with Medication. -->
            <entryRelationship typeCode="REFR">
                <supply classCode="SPLY" moodCode="INT">
                    <!-- ** Medication supply order ** -->
                    <templateId root="2.16.840.1.113883.10.20.22.4.17"/>
                    <id nullFlavor="NI"/>
                    <statusCode code="completed"/>
                    <effectiveTime xsi:type="IVL_TS">
                        <low value="20070103"/>
                        <high nullFlavor="UNK"/>
                    </effectiveTime>
                    <product>
                        <manufacturedProduct classCode="MANU">
                            <!-- ** Medication information ** -->
                            <templateId
                                      root="2.16.840.1.113883.10.20.22.4.23"/>
                            <id nullFlavor="NI"/>
                            <manufacturedMaterial>
                                <code code="573621"
                                      codeSystem="2.16.840.1.113883.6.88"
                                    displayName="Proventil 0.09
                                                 MG/ACTUAT inhalant solution"
```

```
                                    codeSystemName="RxNorm"/>
                            </manufacturedMaterial>
                        </manufacturedProduct>
                    </product>
                </supply>
            </entryRelationship>
            <!-- Recording dispense of Medication. -->
            <entryRelationship typeCode="REFR">
                <supply classCode="SPLY" moodCode="EVN">
                    <!-- ** Medication dispense ** -->
                    <templateId root="2.16.840.1.113883.10.20.22.4.18"/>
                    <id nullFlavor="NI"/>
                    <statusCode code="completed"/>
                    <effectiveTime value="20070103"/>
                    <product>
                        <manufacturedProduct classCode="MANU">
                            <!-- ** Medication information ** -->
                            <templateId
                                root="2.16.840.1.113883.10.20.22.4.23"/>
                            <id root="2a620155-9d11-439e-92b3-5d9815ff4ee8"/>
                            <manufacturedMaterial>
                                <code code="573621"
                                      codeSystem="2.16.840.1.113883.6.88"
                                    displayName="Proventil 0.09
                                                 MG/ACTUAT inhalant solution"
                                    codeSystemName="RxNorm"/>
                            </manufacturedMaterial>
                        </manufacturedProduct>
                    </product>
                </supply>
            </entryRelationship>
        </substanceAdministration>
    </entry>
...
```

Payers Section

The *Payers* section describes the relevant payer at the time the document is generated.

Table 6: Payers Section Constraints Overview

Key Fields	Card	Fixed/ Dynamic	C-CDA Mapping
Section	1..*	F	component/structuredBody/component/section
	1..*	F	<templateId root="2.16.840.1.113883.10.20.22.2.18"/>
	1..1	F	<code code="48768-6" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="PAYERS"/>
	1..1	F	<title>PAYERS</title>
Code Text	1..1	D	text
	1..1	F	/entry/
	1..*	F	<act classCode="ACT" moodCode="EVN">
	1..1	F	<templateId root="2.16.840.1.113883.10.20.22.4.60"/>
	1..*	D	<id root='generated id'/>
	1..1	F	<code code="48768-6" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="Payment sources"/>
	1..1	F	<statusCode code="completed"/>
	1..1	F	<entryRelationship typeCode="COMP">
	1..1	F	<act classCode="ACT" moodCode="EVN">
	1..1	F	<templateId root="2.16.840.1.113883.10.20.22.4.61"/>
	1..1	F	<id root="ab1791b0-5c71-11db-b0de-0800200c9a66"/>
Payer	1..1	D	<code code="1" codeSystemName="Source of Payment Typology" codeSystem="2.16.840.1.113883.3.221.5" displayName="MEDICARE"/>
	1..1	F	<performer typeCode="PRF"> <templateId root="2.16.840.1.113883.10.20.22.4.87"/> <assignedEntity> <id nullFlavor="NA"/> </assignedEntity> </performer> <participant typeCode="COV"> <!-- Covered Party Participant --> <templateId root="2.16.840.1.113883.10.20.22.4.89"/> <participantRole classCode="PAT"> <!-- Health plan ID for patient. --> <id nullFlavor="NI"/> <code code="SELF" codeSystem="2.16.840.1.113883.5.111" displayName="Self"/> </participantRole> </participant> <entryRelationship typeCode="REFR"> <act classCode="ACT" moodCode="EVN"> <!-- ** Authorization activity ** -->

Key Fields	Card	Fixed/ Dynamic	C-CDA Mapping
			<templateId root=“2.16.840.1.113883.10.20.1.19”/> <id nullFlavor=“NI”/> <code nullFlavor=“NA”/> <entryRelationship typeCode=“SUBJ”> <procedure classCode=“PROC” moodCode=“PRMS”> <code nullFlavor=“NI”/> </procedure>

Figure 5: Payers section example

```
...
<section>
    <templateId root="2.16.840.1.113883.10.20.22.2.18"/>
    <code code="48768-6" codeSystem="2.16.840.1.113883.6.1"
                         codeSystemName="LOINC" displayName="Payer"/>
    <title>INSURANCE PROVIDERS</title>
    <text>Insurance Provide...</text>
    <entry typeCode="DRIV">
        <act classCode="ACT" moodCode="EVN">
            <templateId root="2.16.840.1.113883.10.20.22.4.60"/>
            <id root="57df6978-5af2-4371-adad-ac9f08163fcd"/>
            <code code="48768-6" codeSystem="2.16.840.1.113883.6.1"
                  codeSystemName="LOINC" displayName="Payer"/>
            <statusCode code="completed"/>
            <entryRelationship typeCode="COMP">
                <act classCode="ACT" moodCode="EVN">
                    <templateId root="2.16.840.1.113883.10.20.22.4.61"/>
                    <id root="46076ef7-5119-4074-9a5d-93e97cd366fa"/>
                    <code code="3212"
                          codeSystem="2.16.840.1.114222.4.11.3591"
                          codeSystemName="Source of Payment Typology"
                          displayName="Indirect Care--
                                       Care provided outside VA facilities"/>
                    <statusCode code="completed"/>
                    <performer typeCode="PRF">
                        <templateId root="2.16.840.1.113883.10.20.22.4.87"/>
                        <assignedEntity>
                            <id nullFlavor="NA"/>
                        </assignedEntity>
                    </performer>
                    <participant typeCode="COV">
                        <templateId root="2.16.840.1.113883.10.20.22.4.89"/>
                        <participantRole classCode="PAT">
                            <id nullFlavor="NI"/>
                            <code code="SELF"
                                  codeSystem="2.16.840.1.113883.5.111"
```

```
                                        codeSystemName="RoleCode"
                                        displayName="Self"/>
                              </participantRole>
                          </participant>
                          <entryRelationship typeCode="REFR">
                              <act classCode="ACT" moodCode="EVN">
                                  <templateId root="2.16.840.1.113883.10.20.1.19"/>
                                  <id nullFlavor="NI"/>
                                  <code nullFlavor="NA"/>
                                  <entryRelationship typeCode="SUBJ">
                                      <procedure classCode="PROC" moodCode="PRMS">
                                          <code nullFlavor="NI"/>
                                      </procedure>
                                  </entryRelationship>
                              </act>
                          </entryRelationship>
                      </act>
                  </entryRelationship>
              </act>
          </entry>
      ...
```

Problems Section

The *Problems* section lists and describes all relevant clinical problems at the time the document is generated.

Table 7: Problems Section Constraints Overview

Key Fields	Card	Fixed/ Dynamic	C-CDA Mapping
Section	1..*	F	component/structuredBody/component/section
	1..*	F	<templateId root=“2.16.840.1.113883.10.20.22.2.5”/>
	1..*	F	<templateId root=“2.16.840.1.113883.10.20.22.2.5.1”/>
	1..1	F	<code code=“11450-4” codeSystem=“2.16.840.1.113883.6.1” codeSystemName=“LOINC” displayName=“PROBLEM LIST”/>
	1..1	F	<title>PROBLEMS - DIAGNOSES</title>
Code Text	1..1	D	text
	1..*	F	/entry/
	1..1	F	<act classCode=“ACT” moodCode=“EVN”>
	1..*	F	<templateId root=“2.16.840.1.113883.10.20.22.4.3”/>
	1..1	F	<id nullFlavor=“NI”/>
	1..1	F	<code code=“CONC” codeSystem=“2.16.840.1.113883.5.6” displayName=“Concern”/>
Active or completed problem	1..1	D	<statusCode code=“<active OR completed”/>
Start Date	1..1	F	<effectiveTime> <low value=“YYYYMMDD”/> <high value=“YYYYMMDD”/> </effectiveTime>
	1..1	F	<entryRelationship typeCode=“SUBJ”>
	1..1	F	<observation classCode=“OBS” moodCode=“EVN”>
	1..*	F	<templateId root=“2.16.840.1.113883.10.20.22.4.4”/>
	1..1	D	<id root=“ab1791b0-5c71-11db-b0de-0800200c9a66”/>
	1..1	F	<code code=“55607006” codeSystem=“2.16.840.1.113883.6.96” displayName=“Problem”/>
	1..1	F	<statusCode code=“completed”/>
Start Date and End Date	1..1	D	<effectiveTime> <low value=“YYYYMMDD”/> <high value=“YYYYMMDD'/> </effectiveTime>
Problem Code	1..1	D	Common case: <value xsi:type=“CD” code=“233604007” codeSystem=“2.16.840.1.113883.6.96” displayName=“Pneumonia”/> Exceptional Case: <value xsi:type=“CD” nullFlavor=“OTH” codeSystemName=“SNOMED” codeSystem=“2.16.840.1.113883.6.96”>
Additional Problem code	1..*	D	<translation code=“786.5” codeSystem=“2.16.840.1.113883.6.104” displayName=“Chest Pain”/>

Figure 6: Problems section example

```
...
<section>
    <templateId root="2.16.840.1.113883.10.20.22.2.5.1"/>
    <code code="11450-4" codeSystem="2.16.840.1.113883.6.1"
          codeSystemName="LOINC" displayName="PROBLEM LIST"/>
    <title>PROBLEMS - DIAGNOSES</title>
    <text>Problems...</text>
    <entry typeCode="DRIV">
        <act classCode="ACT" moodCode="EVN">
            <templateId root="2.16.840.1.113883.10.20.22.4.3"/>
            <id nullFlavor="NI"/>
            <code code="CONC" codeSystem="2.16.840.1.113883.5.6"
                  codeSystemName="HL7ActClass" displayName="Concern"/>
            <statusCode code="active"/>
            <effectiveTime xsi:type="IVL_TS">
                <low value="20120630"/>
            </effectiveTime>
            <entryRelationship typeCode="SUBJ">
                <observation classCode="OBS" moodCode="EVN">
                    <templateId root="2.16.840.1.113883.10.20.22.4.4"/>
                    <id root="2.16.840.1.113883.3.464.1005.1"
                        extension="95005"/>
                    <code code="55607006" codeSystem="2.16.840.1.113883.6.96"
                          codeSystemName="SNOMED-CT" displayName="Problem"/>
                    <statusCode code="completed"/>
                    <effectiveTime xsi:type="IVL_TS">
                      <low value="20120630"/>
                    </effectiveTime>
                    <value xsi:type="CD" nullFlavor="OTH"
                           codeSystem="2.16.840.1.113883.6.96"
                           codeSystemName="SNOMED-CT">
                        <translation code="401.9"
                                     codeSystem="2.16.840.1.113883.6.103"
```

```
                                        codeSystemName="ICD-9-CM"
                                  displayName="EssentialhypertensionUnspecified"/>
                        </value>
                    </observation>
                </entryRelationship>
            </act>
        </entry>
        <entry typeCode="DRIV">
            <act classCode="ACT" moodCode="EVN">
                <templateId root="2.16.840.1.113883.10.20.22.4.3"/>
                <id nullFlavor="NI"/>
                <code code="CONC" codeSystem="2.16.840.1.113883.5.6"
                      codeSystemName="HL7ActClass" displayName="Concern"/>
                <statusCode code="active"/>
                <effectiveTime xsi:type="IVL_TS"><low value="20120622"/>
                </effectiveTime>
                <entryRelationship typeCode="SUBJ">
                    <observation classCode="OBS" moodCode="EVN">
                        <templateId root="2.16.840.1.113883.10.20.22.4.4"/>
                        <id root="2.16.840.1.113883.3.464.1005.1"
                            extension="95005"/>
                        <code code="55607006" codeSystem="2.16.840.1.113883.6.96"
                              codeSystemName="SNOMED-CT" displayName="Problem"/>
                        <statusCode code="completed"/>
                        <effectiveTime xsi:type="IVL_TS">
                          <low value="20120622"/>
                        </effectiveTime>
                        <value xsi:type="CD" code="433146000"
                               codeSystem="2.16.840.1.113883.6.96"
                               codeSystemName="SNOMED-CT"
                               displayName="Chronickidneydiseasestage5disorder"/>
                    </observation>
                </entryRelationship>
            </act>
        </entry>
    ...
```

Procedures Section

The *Procedures* section defines all interventional, surgical, diagnostic and or therapeutic procedures or treatments pertinent to the patient’s history at the time the document is generated.

Table 8: Procedures Section Constraints Overview

Key Fields	Card	Fixed/ Dynamic	C-CDA Mapping
Section	1..*	F	component/structuredBody/component/section
	1..*	F	<templateId root=“2.16.840.1.113883.10.20.22.2.7”/>
	1..*	F	<templateId root=“2.16.840.1.113883.10.20.22.2.7.1”/>
	1..1	F	<code code=“47519-4” codeSystem=“2.16.840.1.113883.6.1” codeSystemName=“LOINC” displayName=“History of Procedures”/>
	1..1	F	<title>PROCEDURES</title>
Code Text	1..1	D	text
	1..*	F	/entry/
Planned (INT) or completed Procedure (EVN)	1..1	D	<procedure classCode=“PROC” moodCode=“[INT or EVN]”>
	1..*	F	<templateId root=“2.16.840.1.113883.10.20.22.4.14”/>
	1..1	D	<id root=“[Unique ID]”/>
Procedure Code	1..1	D	<code code=“80146002” displayName=“Appendectomy” codeSystemName=“SNOMED CT” codeSystem=“2.16.840.1.113883.6.96”> [code could be CPT or HCPCS]
Procedure Statues	1..1	F	<statusCode code=“[active or completed]”/>
Procedure start and end date	1..1	D	<effectiveTime> <low value=“[Service Date]”/> <high value=“[End Date]”/> </effectiveTime>

Figure 7: Procedures section example

```
...
<section>
    <!-- conforms to Procedures section with entries optional -->
    <templateId root="2.16.840.1.113883.10.20.22.2.7"/>
    <!-- Procedures section with entries required -->
    <templateId root="2.16.840.1.113883.10.20.22.2.7.1"/>
    <code code="47519-4" codeSystem="2.16.840.1.113883.6.1"
          codeSystemName="LOINC"
          displayName="HISTORY OF PROCEDURES"/>
    <title>PROCEDURES</title>
    <text>Procedure...</text>
    <entry typeCode="DRIV">
        <procedure classCode="PROC" moodCode="EVN">
            <!-- ** Procedure activity procedure ** -->
            <templateId root="2.16.840.1.113883.10.20.22.4.14"/>
            <id root="d68b7e32-7810-4f5b-9cc2-acd54b0fd85d"/>
            <code code="73761001" codeSystem="2.16.840.1.113883.6.96"
                  codeSystemName="SNOMED CT"
                displayName="Colonoscopy"/>
            <statusCode code="completed"/>
            <effectiveTime>
                <low value="201405010800"/>
                <high value="201405010900"/>
            </effectiveTime>
        </procedure>
    </entry>
...
```

Results Section

The *Results* section contains the results of observations generated by laboratories and imaging and other procedures.

Table 9: Results Section Constraints Overview

Key Fields	Card	Fixed/ Dynamic	C-CDA Mapping
Section	1..*		component/structuredBody/component/section
	1..*	F	<templateId root="2.16.840.1.113883.10.20.22.2.3"/>
	1..*	F	<templateId root="2.16.840.1.113883.10.20.22.2.3.1"/>
	1..1	F	<code code="30954-2" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="Relevant diagnostic tests and/or laboratory data "/>
title@text	1..1	F	<title>RESULTS</title>
Code Text	1..1	D	Text
lab	1..*	F	/entry/
	1..1	F	<organizer classCode="CLUSTER" moodCode="EVN">
	1..*	F	<templateId root="2.16.840.1.113883.10.20.22.4.1"/>
	1..*	F/D	<id nullFlavor="UNK"/>
	1..1	F/D	<code nullFlavor="UNK"/>
	1..1	F/D	<statusCode code="completed"/>
	1..*	F	<component>
	1..1	F	<observation classCode="OBS" moodCode="EVN">
	1..1	F	<templateId root="2.16.840.1.113883.10.20.22.4.2"/>
	1..*	D	<id root="cdbd33f0-6cde-11db-9fe1-0800200c9a66"/>
Test	1..1	D	<code code="30313-1" displayName="Hgb BldA-mCnc" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"/> [code could be from CPT]
Status	1..1	F	<statusCode code="completed"/>
Observation Date End Date	1..1	D	<effectiveTime> <low value="[Observation Date]"/> <high value="[End Date]"/> </effectiveTime>
value and units	1..1	D	<value xsi:type="PQ" value="[value]" unit="[units]" />

Figure 8: Results section example

```
...
<section>
    <!-- conforms to Results section with entries optional -->
    <templateId root="2.16.840.1.113883.10.20.22.2.3"/>
    <!-- Results section with entries required -->
    <templateId root="2.16.840.1.113883.10.20.22.2.3.1"/>
    <code code="30954-2" codeSystem="2.16.840.1.113883.6.1"
          codeSystemName="LOINC"
        displayName="RESULTS"/>
    <title>RESULTS</title>
    <text>Results...</text>
    <entry typeCode="DRIV">
        <organizer classCode="BATTERY" moodCode="EVN">
            <!-- ** Result organizer ** -->
            <templateId root="2.16.840.1.113883.10.20.22.4.1"/>
            <id nullFlavor="UNK"/>
            <code nullFlavor="UNK"/>
            <statusCode code="completed"/>
            <component>
                <observation classCode="OBS" moodCode="EVN">
                    <!-- ** Result observation ** -->
                    <templateId root="2.16.840.1.113883.10.20.22.4.2"/>
                    <id root="107c2dc0-67a5-11db-bd13-0800200c9a66"/>
                    <code code="30313-1" displayName="HGB"
                          codeSystem="2.16.840.1.113883.6.1"
                        codeSystemName="LOINC"/>
                    <statusCode code="completed"/>
                    <effectiveTime>
                        <low value="20140601800"/>
                        <high value="20140601810"/>
                    </effectiveTime>
                    <value xsi:type="PQ" value="13.2" unit="g/dl"/>
                </observation>
            </component>
...
```

Vital Signs Section

The Vital Signs section lists and describes any healthcare encounters pertinent to the patient's current health status or health history.

Table 10: Vitals Signs Section Constraints Overview

Key Fields	Card	Fixed/ Dynamic	C-CDA Mapping
Section	1..*		component/structuredBody/component/section
	1..*	F	<templateId root="2.16.840.1.113883.10.20.22.2.4"/>
	1..*	F	<templateId root="2.16.840.1.113883.10.20.22.2.4.1"/>
	1..1	F	<code code="8716-3" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="Vital Signs"/>
title@text	1..1	F	<title>Vital Signs</title>
Code Text	1..1	D	text
lab	1..*	F	/entry/
	1..1	F	<organizer classCode="CLUSTER" moodCode="EVN">
	1..*	F	<templateId root="2.16.840.1.113883.10.20.22.4.26"/>
	1..*	F	<id nullFlavor="UNK"/>
	1..1	F	<code code="46680005" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED-CT" displayName="Vital signs" />
	1..1	F	<statusCode code="completed"/>
	1..*	F	<component>
	1..1	F	<observation classCode="OBS" moodCode="EVN">
	1..1	F	<templateId root="2.16.840.1.113883.10.20.22.4.27"/>
	1..*	D	<id root="cdbd33f0-6cde-11db-9fe1-0800200c9a66"/>
Test	1..1	D	<code code="8302-2" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="Height" /> [code could be from CPT]
Status	1..1	F	<statusCode code="completed"/>
Oberservation Date	1..1	D	<effectiveTime value=[Observation Date]/>
value and units	1..1	D	<value xsi:type="PQ" value="[value]" unit="[units]" />

Figure 9: Vital Signs section example

```
...
<section>
    <!-- conforms to Vital Signs section with entries optional -->
    <templateId root="2.16.840.1.113883.10.20.22.2.4"/>
    <!-- Vital Signs section with entries required -->
    <templateId root="2.16.840.1.113883.10.20.22.2.4.1"/>
    <code code="8716-3" codeSystem="2.16.840.1.113883.6.1"
          codeSystemName="LOINC"
        displayName="VITAL SIGNS"/>
    <title>VITAL SIGNS</title>
    <text>Vital Sign...</text>
    <entry typeCode="DRIV">
        <organizer classCode="CLUSTER" moodCode="EVN">
            <!-- ** Vital signs organizer ** -->
            <templateId root="2.16.840.1.113883.10.20.22.4.26"/>
            <id nullFlavor='UNK'/>
            <code code="46680005" codeSystem="2.16.840.1.113883.6.96"
                  codeSystemName="SNOMED-CT"
                  displayName="Vital signs"/>
            <statusCode code="completed"/>
            <effectiveTime value="19991114"/>
            <component>
                <observation classCode="OBS" moodCode="EVN">
                    <!-- ** Vital sign observation ** -->
                    <templateId root="2.16.840.1.113883.10.20.22.4.27"/>
                    <id root="c6f88321-67ad-11db-bd13-0800200c9a66"/>
                    <code code="8302-2" codeSystem="2.16.840.1.113883.6.1"
                          codeSystemName="LOINC"
                        displayName="Height"/>
                    <statusCode code="completed"/>
                    <effectiveTime value="19991114"/>
                    <value xsi:type="PQ" value="177" unit="cm"/>
                </observation>
            </component>
         </organizer>
    </entry>
...
```

No Information

The CCD will include a nullFlavor of No Information (‘NI’) at the section level when no information is pertinent for a section.

Any section not relevant to the measure being tested will include this nullFlavor. The HL7 SDWG approved this approach after publication of C-CDA R1.1; the MU2 SITE validator (http://sitenv.org/) supports this change.

Figure 10: No Information section example

```
...
<section nullFlavor=“NI”>
    <templateId root=“2.16.840.1.113883.10.20.22.2.6.1”/>
    <code code=“48765-2” codeSystem=“2.16.840.1.113883.6.1”
          codeSystemName=“LOINC” displayName=“Allergies”/>
    <title>ALLERGIES, ADVERSE EVENTS and ALERTS</title>
    <text>No Allergies Information</text>
</section>
...
```

APPENDIX G

Quality Reporting Document Architecture (QRDA) Category I & III Report Layouts

QRDA Category I File Layouts

QRDA Category I……………………………………………………………………………TBD

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QRDA Category III

This specification outlines the key fields to include in your QRDA Category III report for scoring.

Table 11: Supported QRDA Category III Report Layout Templates

Template Title	Template Type	Template ID
QRDA Category III Report	document	2.16.840.1.113883.10.20.27.1.1
Reporting Parameters	section	2.16.840.1.113883.10.20.27.2.2
Reporting Parameters Act	entry	2.16.840.1.113883.10.20.17.3.8
Measure Section	section	2.16.840.1.113883.10.20.27.2.1
Measure Reference and Results	entry/organizer	2.16.840.1.113883.10.20.27.3.1
Measure Data	entry	2.16.840.1.113883.10.20.27.3.
Aggregate Count	entry	2.16.840.1.113883.10.20.27.3.24
Ethnicity Supplemental Data Element	entry	2.16.840.1.113883.10.20.27.3.22
**Aggregate Count*	*entry*	*2.16.840.1.113883.10.20.27.3.24*
Race Supplemental Data Element	entry	2.16.840.1.113883.10.20.27.3.19
**Aggregate Count*	*entry*	*2.16.840.1.113883.10.20.27.3.24*
Sex Supplemental Data Element	entry	2.16.840.1.113883.10.20.27.3.21
**Aggregate Count*	*entry*	*2.16.840.1.113883.10.20.27.3.24*
Payer Supplemental Data Element	entry	2.16.840.1.113883.10.20.27.3.18
**Aggregate Count*	*entry*	*2.16.840.1.113883.10.20.27.3.24*

**These are stratified aggregate counts for the supplemental data elements, which use the same aggregate count template that is described after Measure Data.*

QRDA Category III Document Header

The QRDA Category III header contains information on the report attributes (e.g. date/time, clinical document type) and roles (who/what created the report, provider(s) submitting data, and the EHR software that processed the report data).

Table 2: QRDA Category III Header Constraints Overview

Key Fields	Card	Fixed/ Dynamic	Fixed Value/Format
ClinicalDocument		F	<?xml version="1.0"?> <ClinicalDocument xmlns:sdtc="urn:hl7-org:sdtc" xmlns:cda="urn:hl7-org:v3" xmlns="urn:hl7-org:v3" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
		F	<realmCode code="US"/>
		F	<typeId extension="POCD_HD000040" root="2.16.840.1.113883.1.3"/>
		F	<templateId root="2.16.840.1.113883.10.20.27.1.1"/>
Unique document ID		D	<id root="**[System Generated]**"/>
		F	<code code="55184-6" displayName="Quality Reporting Document Architecture Calculated Summary Report" codeSystemName="LOINC" codeSystem="2.16.840.1.113883.6.1"/>
Measure Title CMS ID + Release Version #		D	<title> QRDA Calculated Summary Report for **Measure Title CMSID Version Number**</title>
		D	<effectiveTime value="**YYYYMMDD**"/>
		F	<confidentialityCode code="N" codeSystem="2.16.840.1.113883.5.25"/>
		F	<languageCode code="en-US"/>
Release Version #		D	<versionNumber value="**Version Number**"/>
recordTarget		F	<recordTarget> <patientRole> <id nullFlavor="NA"/> </patientRole> </recordTarget>
author		F	<author>
		D	<time value="**YYYYMMDDHHMMSS**"/>
		D	<assignedAuthor> <!-- **VENDOR OID** --> <id root="[**System Generated**]"/>
Authoring Device		D	<assignedAuthoringDevice> <softwareName>**Vendor's Software Name**</softwareName> </assignedAuthoringDevice>
Organization		D	<representedOrganization> <!-- **VENDOR OID** --> <id root="**2.16.840.1.113883.3.464**"/>
		D	<name>**Vendor's Company Name**</name>
		D	<telecom value="**tel: 202-955-3500**" use="WP"/>

Note: *Bolded values in the table indicate that the item should be updated by the vendor.*

Key Fields	Card	Fixed/ Dynamic	Fixed Value/Format
Organization’s Address		D	<addr use="WP"> <streetAddressLine>**Vendor’s Street Address**</streetAddressLine> <city>**Vendor’s City**</city> <state>**Vendor State**</state> <postalCode>**Vendor Zip**</postalCode> <country>**US**</country> </addr> </representedOrganization> </assignedAuthor> </author>
custodian		F	<custodian>
		D	<assignedCustodian> <representedCustodianOrganization> <**!-- CLIENT OID** --> <id root="**2.16.840.1.113883.3.464**"/>
		F	<name>**National Committee for Quality Assurance (NCQA)**</name>
		F	<telecom value="**tel: 202-955-3500**" use="WP"/>
		F	<addr use="WP"> <streetAddressLine>**1100 13th St., NW Suite 1000**</streetAddressLine> <city>**Washington**</city> <state>**DC**</state> <postalCode>**20005**</postalCode> <country>**US**</country> </addr> </representedCustodianOrganization> </assignedCustodian> </Custodian>
legalAuthenticator		F	<legalAuthenticator>
		D	<time value="**YYYYMMDDHHMMSS + TimeZone**"/>
		F	<signatureCode code="S"/>
		D	<assignedEntity> <!-- **Vendor OID** --> <id root="**2.16.840.1.113883.3.464**"/>
		D	<representedOrganization>
		D	<name>**Vendor Company Name**</name>
		D	<telecom value="**tel: 202-955-3500**" use="WP"/>

Note: *Bolded values in the table indicate that the item should be updated by the vendor.*

Key Fields	Card	Fixed/ Dynamic	Fixed Value/Format
		D	<addr use="WP"> <streetAddressLine>**Vendor's Street Address** </streetAddressLine> <city>**Vendor City**</city> <state>**Vendor State**</state> <postalCode>**Vendor Zip**</postalCode> <country>**US**</country> </addr> </representedOrganization> </assignedEntity> </legalAuthenticator >

Note: *Bolded values in the table indicate that the item should be updated by the vendor.*

Figure 1: QRDA Category III Header Example

```
  <?xml version="1.0"?>
- <ClinicalDocument xmlns:sdtc="urn:hl7-org:sdtc" xmlns:cda="urn:hl7-org:v3" xmlns="urn:hl7-org:v3"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
     <realmCode code="US"/>
     <typeId extension="POCD_HD000040" root="2.16.840.1.113883.1.3"/>
     <templateId root="2.16.840.1.113883.10.20.27.1.1"/>
     <id root="a28e5fcf-1717-4864-9db6-554a53ee1ccf"/>
     <code code="55184-6" displayName="Quality Reporting Document Architecture Calculated Summary
        Report" codeSystemName="LOINC" codeSystem="2.16.840.1.113883.6.1"/>
     <title>QRDA Calculated Summary Report for Controlling High Blood Pressure CMS165v3</title>
     <effectiveTime value="20150820"/>
     <confidentialityCode code="N" codeSystem="2.16.840.1.113883.5.25"/>
     <languageCode code="en-US"/>
     <versionNumber value="1"/>
   - <recordTarget>
      - <patientRole>
           <id nullFlavor="NA"/>
        </patientRole>
     </recordTarget>
   - <author>
        <time value="20150820124343"/>
      - <assignedAuthor>
              <!-- NCQA OID -->
           <id root="2.16.840.1.113883.3.464"/>
         - <assignedAuthoringDevice>
              <softwareName>NCQA QRDA Category III Generator</softwareName>
           </assignedAuthoringDevice>
         - <representedOrganization>
                 <!-- NCQA OID -->
              <id root="2.16.840.1.113883.3.464"/>
              <name>National Committee for Quality Assurance (NCQA)</name>
              <telecom value="tel: 202-955-3500" use="WP"/>
            - <addr use="WP">
                 <streetAddressLine>1100 13th St., NW Suite 1000</streetAddressLine>
                 <city>Washington</city>
                 <state>DC</state>
                 <postalCode>20005</postalCode>
                 <country>US</country>
              </addr>
           </representedOrganization>
        </assignedAuthor>
     </author>
```

```
- <custodian>
  - <assignedCustodian>
    - <representedCustodianOrganization>
          <!-- NCQA OID -->
        <id root="2.16.840.1.113883.3.464"/>
        <name>National Committee for Quality Assurance (NCQA)</name>
        <telecom value="tel: 202-955-3500" use="WP"/>
      - <addr use="WP">
          <streetAddressLine>1100 13th St., NW Suite 1000</streetAddressLine>
          <city>Washington</city>
          <state>DC</state>
          <postalCode>20005</postalCode>
          <country>US</country>
        </addr>
      </representedCustodianOrganization>
    </assignedCustodian>
  </custodian>
- <legalAuthenticator>
    <time value="20150820124343"/>
    <signatureCode code="S"/>
  - <assignedEntity>
        <!-- NCQA OID -->
      <id root="2.16.840.1.113883.3.464"/>
    - <representedOrganization>
        <name>National Committee for Quality Assurance (NCQA)</name>
        <telecom value="tel: 202-955-3500" use="WP"/>
      - <addr use="WP">
          <streetAddressLine>1100 13th St., NW Suite 1000</streetAddressLine>
          <city>Washington</city>
          <state>DC</state>
          <postalCode>20005</postalCode>
          <country>US</country>
        </addr>
      </representedOrganization>
    </assignedEntity>
  </legalAuthenticator>
```

Reporting Parameters Section

The *Reporting Parameters Section* lists information on the time interval for the reporting period.

Table 3: Reporting Parameters Section Constraints Overview

Key Fields	Card	Fixed/ Dynamic	Fixed Value/Format
Section	1..*	F	component/structuredBody/component/section
	1..1	F	<templateId root="2.16.840.1.113883.10.20.17.2.1"/>
	1..1	F	<templateId root="2.16.840.1.113883.10.20.27.2.2"/>
	1..1	F	<code code="55187-9" codeSystemName="LOINC" codeSystem=" 2.16.840.1.113883.6.1"/>
	1..1	F	<title>Reporting Parameters</title>
SectionText	1..1	D	<text>Reporting Period:**1/1/YYYY-12/31/YYYY**</text>
	1..*	F	<entry typeCode="DRIV">
Reporting Parameters Act	1..1	F	<act classCode="ACT" moodCode="EVN">
	1..1	F	<templateId root="2.16.840.1.113883.10.20.17.3.8"/>
	1..*	D	<id root="**[System Identifier]** ' extension="**[Unique ID]**"/> or <id root="**[Global Unique ID]**"/>
Activity Type	1..1	F	<code code="252116004" displayName="Observation Parameters" codeSystemName="SNOMED CT" codeSystem="2.16.840.1.113883.6.96"
Effective Time	1..1	D	<effectiveTime> <low value="[**YYYY0101**]"/> <high value="[**YYYY1231**]"/> </effectiveTime>

Note: *Bolded values in the table indicate that the item should be updated by the vendor.*

Figure 2: Reporting Parameters Section Example

```
- <section>
    <templateId root="2.16.840.1.113883.10.20.17.2.1"/>
    <templateId root="2.16.840.1.113883.10.20.27.2.2"/>
    <code code="55187-9" codeSystemName="LOINC" codeSystem="2.16.840.1.113883.6.1"/>
    <title>Reporting Parameters</title>
    <text>Reporting Period:1/1/2012-12/31/2012</text>
  - <entry typeCode="DRIV">
    - <act moodCode="EVN" classCode="ACT">
        <templateId root="2.16.840.1.113883.10.20.17.3.8"/>
        <id root="a09cd841-21b5-4c1a-8639-167011496d18"/>
        <code code="252116004" displayName="Observation Parameters"
          codeSystemName="SNOMED-CT" codeSystem="2.16.840.1.113883.6.96"/>
      - <effectiveTime>
          <low value="20120101"/>
          <high value="20121231"/>
        </effectiveTime>
      </act>
    </entry>
  </section>
```

Measure Section

The *Measure Section* provides information on the measure being reported. This section encompasses the entries for the Measure Data section and its aggregate counts, as well as each Supplemental Data Elements' stratified aggregate counts.

Table 4: Measure Section Constraints Overview

Key Fields	Card	Fixed/ Dynamic	Fixed Value/Format
Section	1..*	F	component/structuredBody/component/section
	1..1	F	<templateId root=“ 2.16.840.1.113883.10.20.24.2.2”/>
	1..1	F	<templateId root=“2.16.840.1.113883.10.20.27.2.1”/>
	1..1	F	<code code=“ 55186-1” codeSystemName=“LOINC” codeSystem=“ 2.16.840.1.113883.6.1”/>
	1..1	F	<title>Measure Section</title>
Measure Section Text	1..1	D	<text> <table width="100%" border="1"> <thead> <tr> <th>Population</th> <th>Count</th> </tr> </thead> <tbody> <tr> <td> <content ID="pop1">**IPP**</content> </td> <td> <content ID="count1">**417**</content> </td> <tr> <td> <content ID="pop2">**DENOM**</content> </td> <td> <content ID="count2">**417**</content> </td> <tr> <td> <content ID="pop3">**DENEX**</content> </td> <td> <content ID="count3">**17**</content> </td> <tr> <td> <content ID="pop4">**NUMER**</content> </td> <td> <content ID="count4">**47**</content> </td>

Note: *Bolded values in the table indicate that the item should be updated by the vendor.*

Key Fields	Card	Fixed/ Dynamic	Fixed Value/Format
	1..1	F	<entry>
Measure Reference and Results	1..*	F	<organizer classCode="CLUSTER" moodCode="EVN">
	1..1	F	<templateId root="2.16.840.1.113883.10.20.24.3.98"/>
	1..1	F	<templateId root="2.16.840.1.113883.10.20.27.3.1"/>
	1..1	F	<statusCode code="completed"/>
	1..1	F	<reference typeCode="REFR">
	1..1	F	<externalDocument classCode="DOC" moodCode="EVN" >
	1..*	D	<id root= 2.16.840.1.113883.4.738 extension="**Measure Version GUID**"/>
	1..1	F	<code code="57024-2" displayName="Health Quality Measure Document" codeSystemName="LOINC" codeSystem="2.16.840.1.113883.6.1"
	1..1	D	<text>**Measure Title**</text> <versionNumber value="**Measure Version Number**"/>

Note: *Bolded values in the table indicate that the item should be updated by the vendor.*

Figure 3: Measure Section Example


```
- <component>
  - <section>
      <templateId root="2.16.840.1.113883.10.20.24.2.2"/>
      <templateId root="2.16.840.1.113883.10.20.27.2.1"/>
      <code code="55186-1" codeSystemName="LOINC" codeSystem="2.16.840.1.113883.6.1"/>
      <title>Measure Section</title>
    - <text>
      - <table width="100%" border="1">
        - <thead>
          - <tr>
              <th>Population</th>
              <th>Count</th>
            </tr>
          </thead>
        - <tbody>
          - <tr>
            - <td>
                <content ID="pop1">IPP</content>
              </td>
            - <td>
                <content ID="count1">417</content>
              </td>
            </tr>
          - <tr>
            - <td>
                <content ID="pop2">DENOM</content>
              </td>
            - <td>
                <content ID="count2">417</content>
              </td>
            </tr>
          - <tr>
            - <td>
                <content ID="pop3">DENEX</content>
              </td>
            - <td>
                <content ID="count3">140</content>
              </td>
            </tr>
          - <tr>
            - <td>
                <content ID="pop4">NUMER</content>
              </td>
            - <td>
                <content ID="count4">35</content>
              </td>
            </tr>
          </tbody>
        </table>
      </text>
    - <entry>
      - <organizer moodCode="EVN" classCode="CLUSTER">
          <templateId root="2.16.840.1.113883.10.20.24.3.98"/>
          <templateId root="2.16.840.1.113883.10.20.27.3.1"/>
          <statusCode code="completed"/>
        - <reference typeCode="REFR">
          - <externalDocument moodCode="EVN" classCode="DOC">
              <id extension="40280381-3d61-56a7-013e-66bc02da4dee" root="2.16.840.1.113883.4.738"/>
              <code code="57024-2" displayName="Health Quality Measure Document" codeSystemName="LOINC"
                codeSystem="2.16.840.1.113883.6.1"/>
              <text>Controlling High Blood Pressure</text>
              <versionNumber value="1"/>
            </externalDocument>
          </reference>
        - <component>
```

Measure Data

The *Measure Data* contains a single measure population count. For example, there is one measure data component for the measure's initial patient population (IPP), denominator (DENOM), denominator exclusions (DENEX), and numerator (NUM). The stratified aggregated counts for the supplemental data elements are listed for each population. There should be only one node for each supplemental data element's entire stratified count per population.

Table 5: Measure Data Constraints Overview

Key Fields	Card	Fixed/ Dynamic	Fixed Value/Format
observation	1..*	F	component/observation
	1..1	F	<observation classCode="OBS" moodCode="EVN">
	1..1	F	<templateId root="2.16.840.1.113883.10.20.27.3.5"/>
	1..1	F	<code code="ASSERTION" displayName="Assertion" codeSystemName="ActCode" codeSystem="2.16.840.1.113883.5.4"/>
	1..1	F	<statusCode code="completed"/>
	1..1	D	<value code="**IPP**" displayName="**initial patient population**" codeSystemName="ObservationValue" codeSystem="2.16.840.1.113883.5.1063" xsi:type="CD"/>
		F	<entryRelationship typeCode="SUBJ" inversionInd="true">
Aggregate Count		*D*	***!-- Aggregate Count Template Follows --!***

Note: *Bolded values in the table indicate that the item should be updated by the vendor.*

Figure 4: Measure Data Example

```
- <component>
  - <observation moodCode="EVN" classCode="OBS">
      <templateId root="2.16.840.1.113883.10.20.27.3.5"/>
      <code code="ASSERTION" displayName="Assertion" codeSystemName="ActCode" codeSystem="2.16.840.1.113883.5.4"/>
      <statusCode code="completed"/>
      <value code="IPP" displayName="initial patient population" codeSystemName="ObservationValue"
         codeSystem="2.16.840.1.113883.5.1063" xsi:type="CD"/>
    - <entryRelationship typeCode="SUBJ" inversionInd="true">
```

Aggregate Count

The *Aggregate Count* lists the aggregated numbers for the parent template (e.g. the number of patients in the IPP, DENOM, DENEX, NUM, and Supplemental Data Elements).

Table 6: Aggregate Count Constraints Overview

Key Fields	Card	Fixed/ Dynamic	Fixed Value/Format
observation	1..*	F	component/observation
	1..1	F	<observation classCode="OBS" moodCode="EVN">
	1..1	F	<templateId root="2.16.840.1.113883.10.20.27.3.3"/>
	1..1	F	<code code="MSRAGG" displayName="rate aggregation" codeSystemName="ActCode" codeSystem="2.16.840.1.113883.5.4"/>
	1..1	D	<value xsi:type="INT" value="**417**"/>
	1..1	F	<methodCode code="COUNT" displayName="count" codeSystemName="ObservationMethod" codeSystem="2.16.840.1.113883.5.84"/>

Note: *Bolded values in the table indicate that the item should be updated by the vendor.*

Figure 5: Aggregate Count Example

```
- <observation moodCode="EVN" classCode="OBS">
    <templateId root="2.16.840.1.113883.10.20.27.3.3"/>
    <code code="MSRAGG" displayName="rate aggregation" codeSystemName="ActCode"
      codeSystem="2.16.840.1.113883.5.4"/>
    <value value="417" xsi:type="INT"/>
    <methodCode code="COUNT" displayName="count" codeSystemName="ObservationMethod"
      codeSystem="2.16.840.1.113883.5.84"/>
  </observation>
```

Ethnicity Supplemental Data Element

The *Ethnicity Supplemental Data Element* provides the number of patients in the population that are Hispanic or not Hispanic.

Table 7: Ethnicity Supplemental Data Element Constraints Overview

Key Fields	Card	Fixed/ Dynamic	Fixed Value/Format
observation	1..1	F	component/observation
	1..1	F	<observation classCode=“OBS” moodCode=“EVN”>
	1..1	F	<templateId root="2.16.840.1.113883.10.20.27.3.7"/>
	1..1	F	<code code="364699009" displayName="Ethnic Group" codeSystemName="SNOMED-CT" codeSystem="2.16.840.1.113883.6.96"/>
	1..1	F	<statusCode code="completed"/>
	1..1	D	<value code="**2135-2**" displayName="**Hispanic or Latino**" codeSystemName="Race & Ethnicity - CDC" codeSystem="2.16.840.1.113883.6.238" xsi:type="CD"/>
	1..1	F	<entryRelationship typeCode="SUBJ" inversionInd="true">
Aggregate Count	1..1		***!-- Aggregate Count Template Follows --!***

Note: *Bolded values in the table indicate that the item should be updated by the vendor.*

Figure 6: Ethnicity Supplemental Data Element Example

```
- <observation moodCode="EVN" classCode="OBS">
    <templateId root="2.16.840.1.113883.10.20.27.3.7"/>
    <code code="364699009" displayName="Ethnic Group" codeSystemName="SNOMED-CT"
      codeSystem="2.16.840.1.113883.6.96"/>
    <statusCode code="completed"/>
    <value code="2135-2" displayName="Hispanic or Latino" codeSystemName="Race & Ethnicity - CDC"
      codeSystem="2.16.840.1.113883.6.238" xsi:type="CD"/>
  - <entryRelationship typeCode="SUBJ" inversionInd="true">
    - <observation moodCode="EVN" classCode="OBS">
        <templateId root="2.16.840.1.113883.10.20.27.3.3"/>
        <code code="MSRAGG" displayName="rate aggregation" codeSystemName="ActCode"
          codeSystem="2.16.840.1.113883.5.4"/>
        <value value="123" xsi:type="INT"/>
        <methodCode code="COUNT" displayName="count" codeSystemName="ObservationMethod"
          codeSystem="2.16.840.1.113883.5.84"/>
      </observation>
```

Race Supplemental Data Element

The *Race Supplemental Data Element* provides the number of patients in the population that report a race category. For CMS EP programs, all codes in the value set must be reported, even if the count is zero (e.g. Counts for American Indian or Alaska Native, Asian, Black or African American, Native Hawaiian or Other Pacific Islander, and White must all be listed).

Table 8: Race Supplemental Data Element Constraints Overview

Key Fields	Card	Fixed/ Dynamic	Fixed Value/Format
observation	1..1	F	component/observation
	1..1	F	<observation classCode="OBS" moodCode="EVN">
	1..1	F	<templateId root="2.16.840.1.113883.10.20.27.3.8"/>
	1..1	F	<code code="103579009" displayName="Race" codeSystemName="SNOMED-CT" codeSystem="2.16.840.1.113883.6.96"/>
	1..1	F	<statusCode code="completed"/>
	1..1	D	<value code="**2076-8**" displayName="**Native Hawaiian or Other Pacific Islander**" codeSystemName="Race & Ethnicity - CDC" codeSystem="2.16.840.1.113883.6.238" xsi:type="CD"/>
	1..1	F	<entryRelationship typeCode="SUBJ" inversionInd="true">
Aggregate Count	1..1	D	***!-- Aggregate Count Template Follows --!***

Note: *Bolded values in the table indicate that the item should be updated by the vendor.*

Figure 7: Race Supplemental Data Element Example

```
- <observation moodCode="EVN" classCode="OBS">
    <templateId root="2.16.840.1.113883.10.20.27.3.8"/>
    <code code="103579009" displayName="Race" codeSystemName="SNOMED-CT"
      codeSystem="2.16.840.1.113883.6.96"/>
    <statusCode code="completed"/>
    <value code="2076-8" displayName="Native Hawaiian or Other Pacific Islander" codeSystemName="Race & Ethnicity
      - CDC" codeSystem="2.16.840.1.113883.6.238" xsi:type="CD"/>
  - <entryRelationship typeCode="SUBJ" inversionInd="true">
```

Sex Supplemental Data Element

The *Sex Supplemental Data Element* provides the number of patients in the population that are a particular sex (e.g. the number of patients who are male, female, or unknown).

Table 9: Sex Supplemental Data Element Constraints Overview

Key Fields	Card	Fixed/ Dynamic	Fixed Value/Format
observation	1..1	F	component/observation
	1..1	F	<observation classCode="OBS" moodCode="EVN">
	1..1	F	<templateId root="2.16.840.1.113883.10.20.27.3.6"/>
	1..1	F	<code code="184100006" displayName="patient sex" codeSystemName="SNOMED-CT" codeSystem="2.16.840.1.113883.6.96"/>
	1..1	F	<statusCode code="completed"/>
	1..1	D	<value code="**M**" displayName="**Male**" codeSystemName="HL7AdministrativeGenderCode" codeSystem="2.16.840.1.113883.5.1" xsi:type="CD"/>
	1..1	F	<entryRelationship typeCode="SUBJ" inversionInd="true">
Aggregate Count	1..1	D	***!-- Aggregate Count Template Follows --!***

Note: *Bolded values in the table indicate that the item should be updated by the vendor.*

Figure 8: Sex Supplemental Data Element Example

```
- <observation moodCode="EVN" classCode="OBS">
    <templateId root="2.16.840.1.113883.10.20.27.3.6"/>
    <code code="184100006" displayName="patient sex" codeSystemName="SNOMED-CT"
      codeSystem="2.16.840.1.113883.6.96"/>
    <statusCode code="completed"/>
    <value code="M" displayName="Male" codeSystemName="HL7AdministrativeGenderCode"
      codeSystem="2.16.840.1.113883.5.1" xsi:type="CD"/>
  - <entryRelationship typeCode="SUBJ" inversionInd="true">
    - <observation moodCode="EVN" classCode="OBS">
        <templateId root="2.16.840.1.113883.10.20.27.3.3"/>
        <code code="MSRAGG" displayName="rate aggregation" codeSystemName="ActCode"
          codeSystem="2.16.840.1.113883.5.4"/>
        <value value="135" xsi:type="INT"/>
        <methodCode code="COUNT" displayName="count" codeSystemName="ObservationMethod"
          codeSystem="2.16.840.1.113883.5.84"/>
      </observation>
```

Payer Supplemental Data Element

The *Payer Supplemental Data Element* provides the number of patients in the population that are covered by a particular policy or program. All payer codes present for the patients in the population should be reported.

Table 10: Payer Supplemental Data Element Constraints Overview

Key Fields	Card	Fixed/ Dynamic	Fixed Value/Format
observation	1..1	F	component/observation
	1..1	F	<observation classCode="OBS" moodCode="EVN">
	1..1	F	<templateId root="2.16.840.1.113883.10.20.24.3.55"/>
	1..1	F	<templateId root="2.16.840.1.113883.10.20.27.3.9"/>
	1..1	D	<id nullFlavor="NA""/>
	1..1	F	<code code="48768-6" displayName="Payment source" codeSystemName="LOINC" codeSystem="2.16.840.1.113883.6.1"/>
	1..1	F	<statusCode code="completed"/>
	1..1	D	<value code="**3711**" displayName="**HMO**" codeSystemName="Source of Payment Typology" codeSystem="2.16.840.1.114222.4.11.3591" xsi:type="CD"/>
	1..1	F	<entryRelationship typeCode="SUBJ" inversionInd="true">
Aggregate Count	1..1	D	**!-- Aggregate Count Template Follows --!**

Note: *Bolded values in the table indicate that the item should be updated by the vendor.*

Figure 9: Payer Supplemental Data Element Example

```
- <observation moodCode="EVN" classCode="OBS">
    <templateId root="2.16.840.1.113883.10.20.24.3.55"/>
    <templateId root="2.16.840.1.113883.10.20.27.3.9"/>
    <id root="13033ef3-8d59-45ec-84bf-c3b125801365"/>
    <code code="48768-6" displayName="Payment source" codeSystemName="LOINC"
      codeSystem="2.16.840.1.113883.6.1"/>
    <statusCode code="completed"/>
    <value code="3711" displayName="HMO" codeSystemName="Source of Payment Typology"
      codeSystem="2.16.840.1.114222.4.11.3591" xsi:type="CD"/>
  - <entryRelationship typeCode="SUBJ" inversionInd="true">
    - <observation moodCode="EVN" classCode="OBS">
        <templateId root="2.16.840.1.113883.10.20.27.3.3"/>
        <code code="MSRAGG" displayName="rate aggregation" codeSystemName="ActCode"
          codeSystem="2.16.840.1.113883.5.4"/>
        <value value="33" xsi:type="INT"/>
        <methodCode code="COUNT" displayName="count" codeSystemName="ObservationMethod"
          codeSystem="2.16.840.1.113883.5.84"/>
      </observation>
```

APPENDIX H

Resource Links

eCQM

CMS eCQM Library

- http://www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/eCQM_Library.html

CMS Guide for Reading eCQMs

- http://www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/Downloads/eMeasures_GuidetoReading.pdf

CCD

Journal of American Medical Informatics Association (JAMIA)—Health Level 7 (HL7) Clinical Document Architecture, Release 2

- http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1380194/

QRDA

QRDA Informative Document

- http://www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/Downloads/Guide_QRDA_2014eCQM.pdf

CMS Implementation Guide for QRDA Category I and III

- http://www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/Downloads/QRDA_EP_HQR_Guide_2015.pdf

2014 CMS QRDA I Implementation Guides for Eligible Professionals Clinical Quality Measures

- http://www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/Downloads/QRDA_I_CMS_EP_2014_v40.zip

2014 CMS QRDA III Implementation Guides for Eligible Professionals Clinical Quality Measures

- http://www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/Downloads/QRDA_III_CMS_EP_2014_IG_Vol1.zip