



**Centers for Medicare & Medicaid Services**

**CMS Eligible Professionals Programs  
Quality Reporting Document Architecture  
Category III, Release 1**

**Implementation Guide for 2014  
Volume 2 – Templates and Supporting Materials**

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# 1. Document-Level Templates

## 1.1 QRDA Category III Report - CMS EP

[ClinicalDocument: templateId 2.16.840.1.113883.10.20.27.1.2 (open)]

Table 1: QRDA Category III Report - CMS EP Contexts

Contained By	Contains
	<a href="#">QRDA Category III Measure Section (CMS EP)</a> <a href="#">QRDA Category III Reporting Parameters Section (CMS EP)</a>

This template describes constraints that apply to the Quality Reporting Document Architecture (QRDA) Document Category III Report for CMS Eligible Professionals (EP) Programs including the Comprehensive Primary Care (CPC) initiative, EHR Incentive Program (Meaningful Use), and Physician Quality Reporting System (PQRS).

Document-level templates describe the rules for constructing a conforming CDA document. They include constraints on the CDA header and identify contained section-level templates. The document-level template contains the following information:

- Description and explanatory narrative
- Template metadata (e.g., templateId, etc.)
- Header constraints
- Required section-level templates

1. Conforms to QRDA Category III Report template (2.16.840.1.113883.10.20.27.1.1).
2. **SHALL** contain exactly one [1..1] **realmCode** (CONF:17226).
  - a. This realmCode **SHALL** contain exactly one [1..1] **@code="US"** (CONF:17227).
3. **SHALL** contain exactly one [1..1] **typeId** (CONF:18186).
  - a. This typeId **SHALL** contain exactly one [1..1] **@root="2.16.840.1.113883.1.3"** (CONF:18187).
  - b. This typeId **SHALL** contain exactly one [1..1] **@extension="POCD\_HD000040"** (CONF:18188).
4. **SHALL** contain exactly one [1..1] **templateId** (CONF:17208) such that it

- a. **SHALL** contain exactly one [1..1] `@root="2.16.840.1.113883.10.20.27.1.2"` (CONF:711195).
- 5. **SHALL** contain exactly one [1..1] `id` (CONF:17236).
  - a. This `id` **SHALL** be a globally unique identifier for the document (CONF:17242).
- 6. **SHALL** contain exactly one [1..1] `code` (CodeSystem: LOINC 2.16.840.1.113883.6.1 **STATIC**) (CONF:17210).
  - a. This `code` **SHALL** contain exactly one [1..1] `@code="55184-6" "Quality Reporting Document Architecture Calculated Summary Report` (CodeSystem: LOINC 2.16.840.1.113883.6.1) (CONF:19549).
- 7. **SHALL** contain exactly one [1..1] `title` (CONF:17211).
- 8. **SHALL** contain exactly one [1..1] `effectiveTime` (CONF:17237).
  - a. The content **SHALL** be a conformant US Realm Date and Time (DTM.US.FIELDDED) (2.16.840.1.113883.10.20.22.5.4) (CONF:18189).
- 9. **SHALL** contain exactly one [1..1] `confidentialityCode` (CONF:711174).
  - a. This `confidentialityCode` **SHALL** contain exactly one [1..1] `@code="N" Normal` (CodeSystem: ConfidentialityCode 2.16.840.1.113883.5.25 **STATIC**) (CONF:711246).
- 10. **SHALL** contain exactly one [1..1] `languageCode` (CONF:711173).
  - a. This `languageCode` **SHALL** contain exactly one [1..1] `@code="en" English` (CodeSystem: Language 2.16.840.1.113883.6.121) (CONF:711247).

### 1.1.1 recordTarget

QRDA III is an aggregate summary report. Therefore CDA's required recordTarget/id is nulled. The recordTarget element is designed for single patient data and is required in all CDA documents. In this case, the document does not contain results for a single patient, but rather for groups of patients, and thus the recordTarget ID in QRDA Category III documents contains a nullFlavor attribute (is nulled).

- 11. **SHALL** contain exactly one [1..1] `recordTarget` (CONF:17212).
  - a. This `recordTarget` **SHALL** contain exactly one [1..1] `patientRole` (CONF:17232) such that it
    - i. **SHALL** contain exactly one [1..1] `id` (CONF:17233).
      - 1. This `id` **SHALL** contain exactly one [1..1] `@nullFlavor="NA"` (CONF:17234).



**Figure 1: RecordTarget Example**

```

<recordTarget>
  <patientRole>
    <id nullFlavor="NA"/>
  </patientRole>
</recordTarget>

```

### 1.1.2 author

The CDA standard requires an author with an identifier to represent a person or device that have created document content. For a given document, there may be multiple authoring individuals and/or devices. Authors may also be described in other header elements, depending on roles.

12. **SHALL** contain at least one [1..\*] **author** (CONF:18156) such that it

The author/time value represents the time when the document was last edited. When there are multiple authors, the first author time usually correlates with the effectiveTime of the document, which is when the document was generated.

- a. **SHALL** contain exactly one [1..1] **time** (CONF:18158).
- b. **SHALL** contain exactly one [1..1] **assignedAuthor** (CONF:18157).
  - i. This assignedAuthor **SHALL** contain exactly one [1..1] **id** (CONF:711240).
  - ii. This assignedAuthor **MAY** contain zero or one [0..1] **assignedPerson** (CONF:18368).
  - iii. This assignedAuthor **MAY** contain zero or one [0..1] **assignedAuthoringDevice** (CONF:18162).
    1. The assignedAuthoringDevice, if present, **SHALL** contain exactly one [1..1] **softwareName** (CONF:18262).
  - iv. This assignedAuthor **SHALL** contain exactly one [1..1] **representedOrganization** (CONF:18163).
    1. This representedOrganization **SHALL** contain at least one [1..\*] **name** (CONF:18265).
- c. There **SHALL** be exactly one assignedAuthor/assignedPerson or exactly one assignedAuthor/assignedAuthoringDevice (CONF:19667).

**Figure 2: Device Author Example**

```

<author>
  <time value="20150311061231-0500"/>
  <assignedAuthor>
    <id root="3d0a32f3-5164-4a6f-8922-de3badf83ddd"/>
    <assignedAuthoringDevice>
      <softwareName>SOME Data Aggregator Transform Tool
        AS00016dev</softwareName>
    </assignedAuthoringDevice>
    <representedOrganization>
      <id root="2.16.840.1.113883.19.5" extension="223344"/>
      <name>Good Health Clinic</name>
    </representedOrganization>
  </assignedAuthor>
</author>

```

**Figure 3: Person Author Example**

```

<author>
  <time value="20150312114411-0500"/>
  <assignedAuthor>
    <id root="2.16.840.1.113883.4.6" extension="11111112"
      assigningAuthorityName="NPI"/>
    <assignedPerson>
      <name>
        <given>Trevor</given>
        <family>Philips</family>
      </name>
    </assignedPerson>
    <representedOrganization>
      <id root="2.16.840.1.113883.19.5" extension="223344"/>
      <name>Good Health Clinic</name>
    </representedOrganization>
  </assignedAuthor>
</author>

```

### 1.1.3 custodian

The custodian element represents the organization that is in charge of maintaining and is entrusted with the care of the document.

13. **SHALL** contain exactly one [1..1] **custodian** (CONF:17213).

a. This custodian **SHALL** contain exactly one [1..1] **assignedCustodian** (CONF:17214).

i. This assignedCustodian **SHALL** contain exactly one [1..1] **representedCustodianOrganization** (CONF:17215).

1. This representedCustodianOrganization **SHALL** contain at least one [1..\*] **id** (CONF:18165).
  2. This representedCustodianOrganization **SHOULD** contain zero or one [0..1] **name** (CONF:18166).
- b. This assignedCustodian **SHALL** represent the organization that owns and reports the data (CONF:18246).

**Figure 4: Custodian Example**

```
<custodian>
  <assignedCustodian>
    <representedCustodianOrganization>
      <id root="2.16.840.1.113883.19.5" extension="223344"/>
      <name>Good Health Clinic</name>
    </representedCustodianOrganization>
  </assignedCustodian>
</custodian>
```

### 1.1.4 informationRecipient

The informationRecipient represents the CMS EP program the report is being submitted to.

14. **SHALL** contain exactly one [1..1] **informationRecipient** (CONF:711158).
- a. This informationRecipient **SHALL** contain exactly one [1..1] **intendedRecipient** (CONF:711159).
    - i. This intendedRecipient **SHALL** contain exactly one [1..1] **id** (CONF:711160).

The id/@root specifies that this identifier represents a CMS Program.

1. This id **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.3.249.7" CMS Program (CONF:711161).

The id/@extension contains the CMS Program the report is being submitted to.

2. This id **SHALL** contain exactly one [1..1] **@extension**, which **SHALL** be selected from ValueSet [CMS Program Name](#) 2.16.840.1.113883.3.249.14.101 **STATIC** (CONF:711162).
  - a. If ClinicalDocument/informationRecipient/intendedRecipient/id/@extension="CPC", then ClinicalDocument/participant/@typeCode="LOC" **SHALL** be present (CONF:711248).

**Figure 5: InformationRecipient Example**

```

<informationRecipient>
  <intendedRecipient>
    <id root="2.16.840.1.113883.3.249.7" extension="CPC"/>
  </intendedRecipient>
</informationRecipient>

```

### 1.1.5 legalAuthenticator

The legalAuthenticator element represents the individual legally responsible for ensuring the data they have aggregated in the report was aggregated correctly.

15. **SHALL** contain exactly one [1..1] **legalAuthenticator** (CONF:711133).

Note: If a Data Submission Vendor (DSV) is used, the DSV is the legalAuthenticator.

- a. This legalAuthenticator **SHALL** contain exactly one [1..1] **time** (CONF:711143).  
Note: This value is when the document was signed.
- b. This legalAuthenticator **SHALL** contain exactly one [1..1] **signatureCode** (CONF:18168).
  - i. This signatureCode **SHALL** contain exactly one [1..1] **@code="S"** Signed (CONF:18169).
- c. This legalAuthenticator **SHALL** contain exactly one [1..1] **assignedEntity** (CONF:19670).
  - i. This assignedEntity **MAY** contain zero or one [0..1] **representedOrganization** (CONF:19671).

When the legalAuthenticator is a DSV, the representedOrganization/id is the DSV TIN.

1. The representedOrganization, if present, **SHALL** contain at least one [1..\*] **id** (CONF:711144).
2. The representedOrganization, if present, **SHOULD** contain zero or one [0..1] **name** (CONF:19673).

**Figure 6: LegalAuthenticator Example**

```

<legalAuthenticator>
  <time value="20150312153222-0500"/>
  <signatureCode code="S"/>
  <assignedEntity>
    <id root="bc01a5d1-3a34-4286-82cc-43eb04c972a7"/>
    <representedOrganization>
      <id root="2.16.840.1.113883.19.5" extension="223344"/>
      <name>Good Health Clinic</name>
    </representedOrganization>
  </assignedEntity>
</legalAuthenticator>

```

### 1.1.6 participant is Device

The generic participant with a participationType of 'DEV' (device) and an associatedEntity classCode of 'RGPR' (regulated product) is used to represent the CMS EHR Certification ID.

16. **MAY** contain zero or more [0..\*] **participant** (CONF:18300) such that it

- a. **SHALL** contain exactly one [1..1] @typeCode="DEV" device (CodeSystem: HL7ParticipationType 2.16.840.1.113883.5.90 **STATIC**) (CONF:18301).
- b. **SHALL** contain exactly one [1..1] **associatedEntity** (CONF:18302).
  - i. This associatedEntity **SHALL** contain exactly one [1..1] @classCode="RGPR" Regulated Product (CodeSystem: RoleClass 2.16.840.1.113883.5.110 **STATIC**) (CONF:18303).
  - ii. This associatedEntity **MAY** contain zero or one [0..1] **id** (CONF:18304) such that it

The CMS EHR Certification ID was formerly known as the ONC Certification Number.

1. **SHALL** contain exactly one [1..1]
 

@root="2.16.840.1.113883.3.2074.1" CMS EHR Certification ID (CONF:18305).

Note: This value specifies that the id is the CMS EHR Certification ID.
- iii. This associatedEntity **SHALL** contain exactly one [1..1] **code** (CONF:18308).
  1. This code **SHALL** contain exactly one [1..1] @code="129465004" medical record, device (CodeSystem: SNOMED CT 2.16.840.1.113883.6.96 **STATIC**) (CONF:18309).

**Figure 7: Device Participant Example**

```

<participant typeCode="DEV">
  <associatedEntity classCode="RGPR">
    <id root="2.16.840.1.113883.3.2074.1" extension="1a2b3c"/>
    <code code="129465004" displayName="medical record, device"
      codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED-CT"/>
  </associatedEntity>
</participant>

```

### 1.1.7 participant is Location

For CPC reporting, the generic participant with a participationType of 'LOC' (location) and an associatedEntity classCode of 'SDLOC' (service delivery location) representing the CPC Practice Site is required.

If ClinicalDocument/informationRecipient/intendedRecipient/id/@extension="CPC", then this location participant must be present.

17. **MAY** contain zero or one [0..1] **participant** (CONF:711150) such that it

- a. **SHALL** contain exactly one [1..1] **@typeCode="LOC"** Location (CodeSystem: HL7ParticipationType 2.16.840.1.113883.5.90) (CONF:711151).
- b. **SHALL** contain exactly one [1..1] **associatedEntity** (CONF:711152).
  - i. This associatedEntity **SHALL** contain exactly one [1..1] **@classCode="SDLOC"** Service Delivery Location (CodeSystem: RoleClass 2.16.840.1.113883.5.110) (CONF:711153).
  - ii. This associatedEntity **SHALL** contain exactly one [1..1] **id** (CONF:711154).
    1. This id **SHALL** contain exactly one [1..1] **@root="2.16.840.1.113883.3.249.5.1"** CPC Practice Site (CONF:711155).  
Note: This OID contained in the @root (2.16.840.1.113883.3.249.5.1) designates that the @extension must hold a CPC Practice Site ID.
    2. This id **SHALL** contain exactly one [1..1] **@extension** (CONF:711156).  
Note: This is the CPC Practice Site ID assigned to the CPC Practice Site.
  - iii. This associatedEntity **SHALL** contain exactly one [1..1] **code** (CONF:711218).
    1. This code **SHALL** contain exactly one [1..1] **@code="394730007"** Healthcare Related Organization (CodeSystem: SNOMED CT 2.16.840.1.113883.6.96) (CONF:711219).
  - iv. This associatedEntity **SHALL** contain exactly one [1..1] **addr** (CONF:711157).

**Figure 8: Location Participant Example**

```

<participant typeCode="LOC">
  <associatedEntity classCode="SDLOC">
    <id root="2.16.840.1.113883.3.249.5.1" extension="OK666333"
      assigningAuthorityName="CMS-CMMI"/>
    <code code="394730007"
      displayName="healthcare related organization"
      codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED-CT"/>
    <addr>
      <streetAddressLine>123 Healthcare St</streetAddressLine>
      <city>Norman</city>
      <state>OK</state>
      <postalCode>73019</postalCode>
    </addr>
  </associatedEntity>
</participant>

```

### 1.1.8 documentationOf

The aggregated data contained in a QRDA Category III report was provided by one or more providers. The documentationOf service event can contain identifiers for all of the (one or more) providers involved, using the serviceEvent/performer elements. A serviceEvent/performer element must be present for each performer reporting data to a quality organization.

18. **SHALL** contain exactly one [1..1] **documentationOf** (CONF:711214).

- a. This documentationOf **SHALL** contain exactly one [1..1] **serviceEvent** (CONF:18171).
  - i. This serviceEvent **SHALL** contain exactly one [1..1] @**classCode**="PCPR" Care Provision (CodeSystem: HL7ActClass 2.16.840.1.113883.5.6 **STATIC**) (CONF:18172).
  - ii. This serviceEvent **SHALL** contain at least one [1..\*] **performer** (CONF:711220).
 

Note: All providers seeking credit for CMS program reporting are listed as performers. For CPC reporting, only CPC Practice Site providers are listed as performers.

    1. Such performers **SHALL** contain exactly one [1..1] @**typeCode**="PRF" Performer (CodeSystem: HL7ParticipationType 2.16.840.1.113883.5.90 **STATIC**) (CONF:18174).
    2. Such performers **MAY** contain zero or one [0..1] **time** (CONF:18175).
    3. Such performers **SHALL** contain exactly one [1..1] **assignedEntity** (CONF:18176).

The assignedEntity id/@root = '2.16.840.1.113883.4.6' coupled with the id/@extension represents the individual provider's National Provider Identification number (NPI).

NPI is required except for the Group Practice Reporting Option (GPRO). For GPRO, `id/@root='2.16.840.1.113883.4.6'` is coupled with `@nullFlavor="NA"`, and `@extension` shall be omitted.

- a. This assignedEntity **SHALL** contain exactly one [1..1] `id` (CONF:711167) such that it
  - i. **MAY** contain zero or one [0..1] `@nullFlavor="NA"` (CONF:711249).  
Note: `@nullFlavor` is only present for PQRS GPRO reporting.
  - ii. **SHALL** contain exactly one [1..1] `@root="2.16.840.1.113883.4.6"` National Provider ID (CONF:711169).  
Note: This value specifies that the `id` is the provider's National Provider Identifier (NPI).
  - iii. **SHALL** contain exactly one [1..1] `@extension` (CONF:711170).  
Note: This is the provider's NPI, it is only present when this is not PQRS GPRO reporting.
- b. This assignedEntity **MAY** contain zero or more [0..\*] `telecom` (CONF:18310).
- c. This assignedEntity **SHALL** contain exactly one [1..1] `representedOrganization` (CONF:18180).
  - i. This representedOrganization **SHALL** contain exactly one [1..1] `id` (CONF:711168) such that it
    1. **SHALL** contain exactly one [1..1] `@root="2.16.840.1.113883.4.2"` Tax ID Number (CONF:711171).  
Note: This value specifies that this `id` is the organization's Tax Identification Number (TIN).
    2. **SHALL** contain exactly one [1..1] `@extension` (CONF:711172).  
Note: This is the organization's TIN.
  - ii. This representedOrganization **SHOULD** contain zero or more [0..\*] `name` (CONF:19659).



**Figure 9: DocumentationOf Example**

```

<documentationOf>
  <serviceEvent classCode="PCPR">
    <!-- Care provision -->
    <effectiveTime>
      <low value="20140101"/>
      <high value="20141231"/>
    </effectiveTime>
    <!-- Multiple performers can be included, each with an NPI and TIN -->
    <performer typeCode="PRF">
      <time>
        <low value="20140101"/>
        <high value="20141231"/>
      </time>
      <assignedEntity>
        <!-- Provider NPI -->
        <id root="2.16.840.1.113883.4.6" extension="111111111"/>
        <representedOrganization>
          <!-- Organization TIN -->
          <id root="2.16.840.1.113883.4.2" extension="1234567"/>
          <name>Good Health Clinic</name>
        </representedOrganization>
      </assignedEntity>
    </performer>
  </serviceEvent>
</documentationOf>

```

### 1.1.9 authorization

If the data is submitted through an intermediary such as a data submission vendor, this authorization represents that the eligible professional has given permission to release the report.

PQRS, MU and CPC all allow aggregation and submission by a DSV. If a DSV is used, then information about the DSV (e.g. TIN) is captured as the Legal Authenticator.

19. **MAY** contain zero or one [0..1] **authorization** (CONF:18344).

- a. The authorization, if present, **SHALL** contain exactly one [1..1] **consent** (CONF:18360).
  - i. This consent **SHALL** contain exactly one [1..1] **id** (CONF:18361).  
Note: This is the identifier of the consent given by the EP.
  - ii. This consent **SHALL** contain exactly one [1..1] **code** (CodeSystem: SNOMED CT 2.16.840.1.113883.6.96 **STATIC**) (CONF:18363).
    1. This code **SHALL** contain exactly one [1..1] **@code="425691002"**  
Consent given for electronic record sharing (CodeSystem: SNOMED CT 2.16.840.1.113883.6.96) (CONF:19550).
  - iii. This consent **SHALL** contain exactly one [1..1] **statusCode** (CONF:18364).

1. This statusCode **SHALL** contain exactly one [1..1]  
@code="completed" Completed (CodeSystem: ActStatus  
2.16.840.1.113883.5.14) (CONF:19551).

**Figure 10: Authorization Example**

```
<authorization>
  <consent>
    <id root="84613250-e75e-11e1-aff1-0800200c9a66"/>
    <code code="425691002"
      displayName="consent given for electronic record sharing"
      codeSystem="2.16.840.1.113883.6.96"
      codeSystemName="SNOMED-CT"/>
    <statusCode code="completed"/>
  </consent>
</authorization>
```

### 1.1.10 component

A QRDA Category III document contains a Reporting Parameters Section and a Measure section.

20. **SHALL** contain exactly one [1..1] **component** (CONF:17217).

a. This component **SHALL** contain exactly one [1..1] **structuredBody** (CONF:17235).

i. This structuredBody **SHALL** contain exactly one [1..1] **component**  
(CONF:17281) such that it

1. **SHALL** contain exactly one [1..1] [QRDA Category III Reporting Parameters Section \(CMS EP\)](#)  
(templateId:2.16.840.1.113883.10.20.27.2.6)  
(CONF:711141).

ii. This structuredBody **SHALL** contain exactly one [1..1] **component**  
(CONF:17283) such that it

1. **SHALL** contain exactly one [1..1] [QRDA Category III Measure Section \(CMS EP\)](#)  
(templateId:2.16.840.1.113883.10.20.27.2.3)  
(CONF:711142).

**Table 2: CMS Program Name**

Value Set: CMS Program Name 2.16.840.1.113883.3.249.14.101 Specifies the CMS Program for QRDA-III report submissions.			
Code	Code System	Code System OID	Print Name
CPC	CMS Program	2.16.840.1.113883.3.249.7	CPC
PQRS_MU_INDIVIDUAL	CMS Program	2.16.840.1.113883.3.249.7	PQRS Meaningful Use Individual
PQRS_MU_GROUP	CMS Program	2.16.840.1.113883.3.249.7	PQRS Meaningful Use Group
MU_ONLY	CMS Program	2.16.840.1.113883.3.249.7	Meaningful Use Only

**Figure 11: StructuredBody Example**

```

<component>
  <structuredBody>
    <component>
      <!-- QRDA Category III Reporting Parameters Section (CMS EP) -->
      <section>
        ...
        <title>Reporting Parameters</title>
        ...
      </section>
    </component>
    <component>
      <!-- QRDA Category III Measure Section (CMS EP) -->
      <section>
        ...
        <title>Measure Section</title>
        ...
      </section>
    </component>
  </structuredBody>
</component>

```

## 2. Section-Level Templates

### 2.1 QRDA Category III Measure Section (CMS EP)

[section: templateId 2.16.840.1.113883.10.20.27.2.3 (open)]

**Table 3: QRDA Category III Measure Section (CMS EP) Contexts**

Contained By	Contains
<a href="#">QRDA Category III Report - CMS EP</a> (required)	<a href="#">Measure Reference and Results (CMS EP)</a>

This section references the measure(s) being reported. For each reported measure, this section includes entries for reporting various aggregate counts (e.g. number of patients in the measure's denominator). For continuous variable measures, this section includes entries for reporting the continuous variables. This section can also include entries not only for aggregate counts, but stratified aggregate counts (e.g. not just total number of patients in the denominator, but also the number of males in the denominator). Note that the QRDA-III standard allows for more than one measure within this section, but does not allow multiple occurrences of the same measure in a single QRDA-III instance.

For CPC reporting, this section must contain a Measure Reference and Results template for each measure that is being reported on by the CPC practice site.

1. Conforms to QRDA Category III Measure Section template (2.16.840.1.113883.10.20.27.2.1).
2. **SHALL** contain exactly one [1..1] `templateId` (CONF:711276) such that it
  - a. **SHALL** contain exactly one [1..1] `@root="2.16.840.1.113883.10.20.27.2.3"` (CONF:711277).
3. **SHALL** contain exactly one [1..1] `code` (CONF:12798).
  - a. This code **SHALL** contain exactly one [1..1] `@code="55186-1"` Measure Section (CodeSystem: LOINC 2.16.840.1.113883.6.1) (CONF:19230).
4. **SHALL** contain exactly one [1..1] `title="Measure Section"` (CONF:12799).
5. **SHALL** contain exactly one [1..1] `text` (CONF:12800).
6. **SHALL** contain at least one [1..\*] `entry` (CONF:17906) such that it
  - a. **SHALL** contain exactly one [1..1] [Measure Reference and Results \(CMS EP\)](#) (templateId:2.16.840.1.113883.10.20.27.3.17) (CONF:17907).

**Figure 12: QRDA-III Measure Section (CMS EP) Example**

```

<section>
  <!-- Measure Section template ID -->
  <templateId root="2.16.840.1.113883.10.20.24.2.2" />
  <!-- QRDA Category III Measure Section template ID -->
  <templateId root="2.16.840.1.113883.10.20.27.2.1" />
  <!-- QRDA Category III Measure Section (CMS EP) template ID -->
  <templateId root="2.16.840.1.113883.10.20.24.2.3" />
  <code code="55186-1" codeSystem="2.16.840.1.113883.6.1"/>
  <title>Measure Section</title>
  <text>
    <table border="1" width="100%">
      <thead>
        <tr>
          <th>eMeasure Title</th>
          <th>Version neutral identifier</th>
          <th>Version specific identifier</th>
        </tr>
      </thead>
      <tbody>
        <tr>
          <td>Controlling High Blood Pressure</td>
          <td>abdc37cc-bac6-4156-9b91-d1be2c8b7268</td>
          <td>40280381-3d61-56a7-013e-66bc02da4dee</td>
        </tr>
      </tbody>
      <list>
        ...
      </list>
    </table>
  </text>
  <entry>
    <!-- Measure Reference and Results (CMS EP) -->
    <organizer classCode="CLUSTER" moodCode="EVN">
      ...
    </organizer>
  </entry>
</section>

```

## 2.2 QRDA Category III Reporting Parameters Section (CMS EP)

[section: templateId 2.16.840.1.113883.10.20.27.2.6 (open)]

**Table 4: QRDA Category III Reporting Parameters Section (CMS EP) Contexts**

Contained By	Contains
<a href="#">QRDA Category III Report - CMS EP</a> (required)	<a href="#">Reporting Parameters Act (CMS EP)</a>

The QRDA Category III Reporting Parameters Section provides information about the reporting time interval, and may contain other information that provides context for the data being reported. This template adds an optional Service Encounter template.

The QRDA Category III report contains data covering a single time period represented by the reporting parameters act.

1. Conforms to QRDA Category III Reporting Parameters Section template (2.16.840.1.113883.10.20.27.2.2).
2. **SHALL** contain exactly one [1..1] `templateId` (CONF:711278) such that it
  - a. **SHALL** contain exactly one [1..1] `@root="2.16.840.1.113883.10.20.27.2.6"` (CONF:711279).
3. **SHALL** contain exactly one [1..1] `code` (CONF:18191).
  - a. This code **SHALL** contain exactly one [1..1] `@code="55187-9"` Reporting Parameters (CodeSystem: LOINC 2.16.840.1.113883.6.1) (CONF:19229).
4. **SHALL** contain exactly one [1..1] `title="Reporting Parameters"` (CONF:4142).
5. **SHALL** contain exactly one [1..1] `text` (CONF:4143).
6. **SHALL** contain exactly one [1..1] `entry` (CONF:18325) such that it
  - a. **SHALL** contain exactly one [1..1] `@typeCode="DRIV"` Is derived from (CodeSystem: HL7ActRelationshipType 2.16.840.1.113883.5.1002 **STATIC**) (CONF:18427).
  - b. **SHALL** contain exactly one [1..1] Reporting Parameters Act (CMS EP) (templateId:2.16.840.1.113883.10.20.27.3.23) (CONF:711175).

**Figure 13: QRDA-III Reporting Parameters Section (CMS EP) Example**

```
<section>
  <!--Reporting Parameters Section template ID -->
  <templateId root="2.16.840.1.113883.10.20.17.2.1" />
  <!--QRDA Category III Reporting Parameters Section template ID -->
  <templateId root="2.16.840.1.113883.10.20.27.2.2" />
  <!--QRDA Category III Reporting Parameters (CMS EP) template ID -->
  <templateId root="2.16.840.1.113883.10.20.27.2.6" />
  <code code="55187-9" codeSystem="2.16.840.1.113883.6.1" />
  <title>Reporting Parameters</title>
  <text>
    <list>
      <item>Reporting period: 01 Jan 2014 - 31 Dec 2014</item>
    </list>
  </text>
  <entry typeCode="DRIV">
    <!-- Reporting Parameters Act (CMS EP) -->
    <act classCode="ACT" moodCode="EVN">
      ...
    </act>
  </entry>
</section>
```

## 3. Entry-Level Templates

### 3.1 Aggregate Count (CMS EP)

[observation: templateId 2.16.840.1.113883.10.20.27.3.24 (open)]

**Table 5: Aggregate Count (CMS EP) Contexts**

Contained By	Contains
<a href="#">Measure Data (CMS EP)</a> (required) <a href="#">Reporting Stratum (CMS EP)</a> (required) <a href="#">Race Supplemental Data Element (CMS EP)</a> (required) <a href="#">Ethnicity Supplemental Data Element (CMS EP)</a> (required) <a href="#">Sex Supplemental Data Element (CMS EP)</a> (required) <a href="#">Payer Supplemental Data Element (CMS EP)</a> (required)	

The Aggregate Count captures the number of items aggregated. This template is contained in a parent template that describes the item. For CMS EP program reporting, the count must be sent even if the number is zero.



Table 6: Aggregate Count (CMS EP) Constraints Overview

XPath	Card.	Verb	Data Type	CONF#	Fixed Value
observation[templateId/@root = '2.16.840.1.113883.10.20.27.3.24']					
@classCode	1..1	SHALL		<a href="#">17563</a>	2.16.840.1.113883.5.6 (HL7ActClass) = OBS
@moodCode	1..1	SHALL		<a href="#">17564</a>	2.16.840.1.113883.5.1001 (ActMood) = EVN
templateId	1..1	SHALL		<a href="#">711262</a>	
@root	1..1	SHALL		<a href="#">711263</a>	2.16.840.1.113883.10.20.27.3.24
code	1..1	SHALL		<a href="#">17566</a>	
@code	1..1	SHALL		<a href="#">19508</a>	2.16.840.1.113883.5.4 (ActCode) = MSRAGG
statusCode	1..1	SHALL		<a href="#">711244</a>	
@code	1..1	SHALL		<a href="#">711245</a>	2.16.840.1.113883.5.14 (ActStatus) = completed
value	1..1	SHALL	INT	<a href="#">17567</a>	
@value	1..1	SHALL		<a href="#">17568</a>	
methodCode	1..1	SHALL		<a href="#">19509</a>	
@code	1..1	SHALL		<a href="#">19510</a>	2.16.840.1.113883.5.84 (ObservationMethod) = COUNT

1. Conforms to Aggregate Count template (2.16.840.1.113883.10.20.27.3.3).
2. **SHALL** contain exactly one [1..1] @classCode="OBS" (CodeSystem: HL7ActClass 2.16.840.1.113883.5.6 **STATIC**) (CONF:17563).
3. **SHALL** contain exactly one [1..1] @moodCode="EVN" (CodeSystem: ActMood 2.16.840.1.113883.5.1001 **STATIC**) (CONF:17564).
4. **SHALL** contain exactly one [1..1] templateId (CONF:711262) such that it
  - a. **SHALL** contain exactly one [1..1] @root="2.16.840.1.113883.10.20.27.3.24" (CONF:711263).
5. **SHALL** contain exactly one [1..1] code (CONF:17566).

- a. This code **SHALL** contain exactly one [1..1] @code="MSRAGG" rate aggregation (CodeSystem: ActCode 2.16.840.1.113883.5.4) (CONF:19508).
6. **SHALL** contain exactly one [1..1] statusCode (CONF:711244).
  - a. This statusCode **SHALL** contain exactly one [1..1] @code="completed" Completed (CodeSystem: ActStatus 2.16.840.1.113883.5.14) (CONF:711245).
7. **SHALL** contain exactly one [1..1] value with @xsi:type="INT" (CONF:17567).
  - a. This value **SHALL** contain exactly one [1..1] @value (CONF:17568).
8. **SHALL** contain exactly one [1..1] methodCode (CONF:19509).
  - a. This methodCode **SHALL** contain exactly one [1..1] @code="COUNT" Count (CodeSystem: ObservationMethod 2.16.840.1.113883.5.84) (CONF:19510).

**Figure 14: Aggregate Count (CMS EP) Example**

```
<observation classCode="OBS" moodCode="EVN">
  <!-- Aggregate Count template ID -->
  <templateId root="2.16.840.1.113883.10.20.27.3.3"/>
  <!-- Aggregate Count (CMS EP) template ID -->
  <templateId root="2.16.840.1.113883.10.20.27.3.24"/>
  <code code="MSRAGG" displayName="rate aggregation"
    codeSystem="2.16.840.1.113883.5.4" codeSystemName="ActCode"/>
  <statusCode code="completed"/>
  <value xsi:type="INT" value="1000"/>
  <methodCode code="COUNT" displayName="Count"
    codeSystem="2.16.840.1.113883.5.84"
    codeSystemName="ObservationMethod"/>
</observation>
```

## 3.2 Continuous Variable Measure Value (CMS EP)

[observation: templateId 2.16.840.1.113883.10.20.27.3.26 (open)]

**Table 7: Continuous Variable Measure Value (CMS EP) Contexts**

Contained By	Contains
<a href="#">Measure Data (CMS EP)</a> (optional) <a href="#">Reporting Stratum (CMS EP)</a> (optional)	

This observation represents the continuous variables found in quality measures that measure performance criteria by time spans, magnitude changes, etc. A continuous variable for a given patient might be the time spent waiting for a procedure. A continuous variable for a population might be the

mean wait time. The type of aggregation (e.g. mean, median) is represented in the observation/methodCode.

**Table 8: Continuous Variable Measure Value (CMS EP) Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Fixed Value
observation[templateId/@root = '2.16.840.1.113883.10.20.27.3.26']					
@classCode	1..1	SHALL		<a href="#">17569</a>	2.16.840.1.113883.5.6 (HL7ActClass) = OBS
@moodCode	1..1	SHALL		<a href="#">17570</a>	2.16.840.1.113883.5.1001 (ActMood) = EVN
templateId	1..1	SHALL		<a href="#">711264</a>	
@root	1..1	SHALL		<a href="#">711265</a>	2.16.840.1.113883.10.20.27.3.26
code	1..1	SHALL		<a href="#">17571</a>	
statusCode	1..1	SHALL		<a href="#">711241</a>	
@code	1..1	SHALL		<a href="#">711242</a>	2.16.840.1.113883.5.14 (ActStatus) = completed
value	1..1	SHALL		<a href="#">17572</a>	
methodCode	1..1	SHALL		<a href="#">18242</a>	2.16.840.1.113883.1.11.20450 (ObservationMethodAggregate)
reference	1..1	SHALL		<a href="#">18243</a>	
externalObservation	1..1	SHALL		<a href="#">18244</a>	
id	1..1	SHALL		<a href="#">711205</a>	

1. Conforms to Continuous Variable Measure Value template (2.16.840.1.113883.10.20.27.3.2).
2. **SHALL** contain exactly one [1..1] @classCode="OBS" (CodeSystem: HL7ActClass 2.16.840.1.113883.5.6 **STATIC**) (CONF:17569).
3. **SHALL** contain exactly one [1..1] @moodCode="EVN" (CodeSystem: ActMood 2.16.840.1.113883.5.1001 **STATIC**) (CONF:17570).
4. **SHALL** contain exactly one [1..1] templateId (CONF:711264) such that it
  - a. **SHALL** contain exactly one [1..1] @root="2.16.840.1.113883.10.20.27.3.26" (CONF:711265).

5. **SHALL** contain exactly one [1..1] **code** (CONF:17571).
  - a. This code element **SHALL** equal the code element in that eMeasure's measure observation definition (CONF:711243).
6. **SHALL** contain exactly one [1..1] **statusCode** (CONF:711241).
  - a. This statusCode **SHALL** contain exactly one [1..1] **@code="completed"** Completed (CodeSystem: ActStatus 2.16.840.1.113883.5.14) (CONF:711242).
7. **SHALL** contain exactly one [1..1] **value** (CONF:17572).
8. **SHALL** contain exactly one [1..1] **methodCode**, which **SHALL** be selected from ValueSet [ObservationMethodAggregate](#) 2.16.840.1.113883.1.11.20450 **STATIC** (CONF:18242).
9. **SHALL** contain exactly one [1..1] **reference** (CONF:18243).
  - a. This reference **SHALL** contain exactly one [1..1] **externalObservation** (CONF:18244).
    - i. This externalObservation **SHALL** contain exactly one [1..1] **id** (CONF:711205).  
Note: This is the id in the eMeasure's measure observation definition.

**Table 9: ObservationMethodAggregate**

Value Set: ObservationMethodAggregate 2.16.840.1.113883.1.11.20450			
Code	Code System	Code System OID	Print Name
AVERAGE	ObservationMethod	2.16.840.1.113883.5.84	Average
COUNT	ObservationMethod	2.16.840.1.113883.5.84	Count
MAX	ObservationMethod	2.16.840.1.113883.5.84	Maxima
MEDIAN	ObservationMethod	2.16.840.1.113883.5.84	Median
MIN	ObservationMethod	2.16.840.1.113883.5.84	Minima
MODE	ObservationMethod	2.16.840.1.113883.5.84	Mode
STDEV.P	ObservationMethod	2.16.840.1.113883.5.84	Population Standard Deviation
STDEV.S	ObservationMethod	2.16.840.1.113883.5.84	Sample Standard Deviation
SUM	ObservationMethod	2.16.840.1.113883.5.84	Sum
VARIANCE.P	ObservationMethod	2.16.840.1.113883.5.84	Population Variance
...			

**Figure 15: Continuous Variable Measure Value (CMS EP) Example**

```

<observation classCode="OBS" moodCode="EVN">
  <!-- Continuous Variable Measure Value template ID -->
  <templateId root="2.16.840.1.113883.10.20.27.3.2"/>
  <!-- Continuous Variable Measure Value (CMS EP) template ID -->
  <templateId root="2.16.840.1.113883.10.20.27.3.26"/>
  <code nullFlavor="OTH">
    <originalText>Time Difference</originalText>
  </code>
  <statusCode code="completed"/>
  <value xsi:type="PQ" value="55" unit="min"/>
  <methodCode code="MEDIAN" displayName="Median"
    codeSystem="2.16.840.1.113883.5.84"
    codeSystemName="ObservationMethod"/>
  <!-- reference to the relevant measure observation in the eMeasure -->
  <reference typeCode="REFR">
    <externalObservation classCode="OBS" moodCode="EVN">
      <id root="bcefe756-fb9f-4e46-aadc-d19de340b6b5"/>
    </externalObservation>
  </reference>
</observation>

```

### 3.3 Ethnicity Supplemental Data Element (CMS EP)

[observation: templateId 2.16.840.1.113883.10.20.27.3.22 (open)]

**Table 10: Ethnicity Supplemental Data Element (CMS EP) Contexts**

Contained By	Contains
<a href="#">Measure Data (CMS EP)</a> (required)	<a href="#">Aggregate Count (CMS EP)</a>

This observation represents whether the patient is Hispanic or not Hispanic and provides the number of patients in the population that report that ethnicity. For CMS EP programs, all codes present in the value set must be reported, even if the count is zero. If the eMeasure is episode-based, the count will reflect the patient count rather than the episode count.

Table 11: Ethnicity Supplemental Data Element (CMS EP) Constraints Overview

XPath	Card.	Verb	Data Type	CONF#	Fixed Value
observation[templateId/@root = '2.16.840.1.113883.10.20.27.3.22']					
@classCode	1..1	SHALL		<a href="#">18216</a>	2.16.840.1.113883.5.6 (HL7ActClass) = OBS
@moodCode	1..1	SHALL		<a href="#">18217</a>	2.16.840.1.113883.5.1001 (ActMood) = EVN
templateId	1..1	SHALL		<a href="#">711253</a>	
@root	1..1	SHALL		<a href="#">711254</a>	2.16.840.1.113883.10.20.27.3.22
code	1..1	SHALL		<a href="#">18220</a>	
@code	1..1	SHALL		<a href="#">18221</a>	2.16.840.1.113883.6.96 (SNOMED CT) = 364699009
statusCode	1..1	SHALL		<a href="#">18118</a>	
@code	1..1	SHALL		<a href="#">18119</a>	2.16.840.1.113883.5.14 (ActStatus) = completed
value	1..1	SHALL	CD	<a href="#">18222</a>	2.16.840.1.114222.4.11.837 (EthnicityGroup)
entryRelationship	1..1	SHALL		<a href="#">18120</a>	
@typeCode	1..1	SHALL		<a href="#">18121</a>	2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = SUBJ
@inversionInd	1..1	SHALL		<a href="#">18122</a>	true
observation	1..1	SHALL		<a href="#">711201</a>	

1. **SHALL** contain exactly one [1..1] @classCode="OBS" (CodeSystem: HL7ActClass 2.16.840.1.113883.5.6 **STATIC**) (CONF:18216).
2. **SHALL** contain exactly one [1..1] @moodCode="EVN" (CodeSystem: ActMood 2.16.840.1.113883.5.1001 **STATIC**) (CONF:18217).
3. **SHALL** contain exactly one [1..1] templateId (CONF:711253) such that it
  - a. **SHALL** contain exactly one [1..1] @root="2.16.840.1.113883.10.20.27.3.22" (CONF:711254).
4. **SHALL** contain exactly one [1..1] code (CONF:18220).

- a. This code **SHALL** contain exactly one [1..1] @code="364699009" Ethnic Group (CodeSystem: SNOMED CT 2.16.840.1.113883.6.96) (CONF:18221).
5. **SHALL** contain exactly one [1..1] statusCode (CONF:18118).
  - a. This statusCode **SHALL** contain exactly one [1..1] @code="completed" Completed (CodeSystem: ActStatus 2.16.840.1.113883.5.14 **STATIC**) (CONF:18119).
6. **SHALL** contain exactly one [1..1] value with @xsi:type="CD", where the code **SHALL** be selected from ValueSet [EthnicityGroup](#) 2.16.840.1.114222.4.11.837 **DYNAMIC** (CONF:18222).
7. **SHALL** contain exactly one [1..1] entryRelationship (CONF:18120) such that it
  - a. **SHALL** contain exactly one [1..1] @typeCode="SUBJ" Has Subject (CodeSystem: HL7ActRelationshipType 2.16.840.1.113883.5.1002 **STATIC**) (CONF:18121).
  - b. **SHALL** contain exactly one [1..1] @inversionInd="true" (CONF:18122).
  - c. **SHALL** contain exactly one [1..1] [Aggregate Count \(CMS EP\)](#) (templateId:2.16.840.1.113883.10.20.27.3.24) (CONF:711201).

Table 12: EthnicityGroup

Value Set: EthnicityGroup 2.16.840.1.114222.4.11.837			
Code System: Race & Ethnicity - CDC 2.16.840.1.113883.6.238			
Value Set Source: <a href="http://phinivads.cdc.gov/vads/ViewValueSet.action?id=35D34BBC-617F-DD11-B38D-00188B398520">http://phinivads.cdc.gov/vads/ViewValueSet.action?id=35D34BBC-617F-DD11-B38D-00188B398520</a>			
Code	Code System	Code System OID	Print Name
2135-2	Race & Ethnicity - CDC	2.16.840.1.113883.6.238	Hispanic or Latino
2186-5	Race & Ethnicity - CDC	2.16.840.1.113883.6.238	Not Hispanic or Latino



**Figure 16: Ethnicity Supplemental Data Element (CMS EP) Example**

```

<observation classCode="OBS" moodCode="EVN">
  <!-- Ethnicity Supplemental Data Element template ID -->
  <templateId root="2.16.840.1.113883.10.20.27.3.7"/>
  <!-- Ethnicity Supplemental Data Element (CMS EP) template ID -->
  <templateId root="2.16.840.1.113883.10.20.27.3.22"/>
  <code code="364699009" displayName="Ethnic Group"
    codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED-CT"/>
  <statusCode code="completed"/>
  <value xsi:type="CD"
    code="2186-5" displayName="Not Hispanic or Latino"
    codeSystem="2.16.840.1.113883.6.238" codeSystemName="Race &
    Ethnicity - CDC"/>
  <!-- Aggregate Count (CMS EP) -->
  <entryRelationship typeCode="SUBJ" inversionInd="true">
    <observation classCode="OBS" moodCode="EVN">
      ...
    </observation>
  </entryRelationship>
</observation>

```

### 3.4 Measure Data (CMS EP)

[observation: templateId 2.16.840.1.113883.10.20.27.3.16 (open)]

**Table 13: Measure Data (CMS EP) Contexts**

Contained By	Contains
<a href="#">Measure Reference and Results (CMS EP)</a> (required)	<a href="#">Aggregate Count (CMS EP)</a> <a href="#">Continuous Variable Measure Value (CMS EP)</a> <a href="#">Ethnicity Supplemental Data Element (CMS EP)</a> <a href="#">Payer Supplemental Data Element (CMS EP)</a> <a href="#">Race Supplemental Data Element (CMS EP)</a> <a href="#">Reporting Stratum (CMS EP)</a> <a href="#">Sex Supplemental Data Element (CMS EP)</a>

This observation asserts a population into which a subject falls and provides the number of patients in the population. It may also contain reporting stratum, supplemental data element counts, and continuous variables that are relevant to the population. The measure data entry must reference a unique measure population ID.

Populations that are used in eMeasures can be complicated. The simple case has one each of initial patient population (IPP), numerator, and denominator, along with denominator exclusions and denominator exceptions. It is also possible to have eMeasures with multiple population groups (a population group is a set of IPP, numerator, denominator, etc.), and eMeasures with multiple

denominators and numerators (for example, an eMeasure with 3 denominators and 2 numerators will require a QRDA Category III report with 6 sets of data). QRDA Category III reports were designed to allow the representation of data sets that map to all of these types of multiple populations.

**Table 14: Measure Data (CMS EP) Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Fixed Value
observation[templateId/@root = '2.16.840.1.113883.10.20.27.3.16']					
@classCode	1..1	SHALL		<a href="#">17615</a>	2.16.840.1.113883.5.6 (HL7ActClass) = OBS
@moodCode	1..1	SHALL		<a href="#">17616</a>	2.16.840.1.113883.5.1001 (ActMood) = EVN
templateId	1..1	SHALL		<a href="#">711266</a>	
@root	1..1	SHALL		<a href="#">711267</a>	2.16.840.1.113883.10.20.27.3.16
code	1..1	SHALL		<a href="#">17617</a>	
@code	1..1	SHALL		<a href="#">18198</a>	2.16.840.1.113883.5.4 (ActCode) = ASSERTION
statusCode	1..1	SHALL		<a href="#">18199</a>	2.16.840.1.113883.5.14 (ActStatus)
@code	1..1	SHALL		<a href="#">19555</a>	2.16.840.1.113883.5.14 (ActStatus) = completed
value	1..1	SHALL	CD	<a href="#">17618</a>	2.16.840.1.113883.1.11.20369 (ObservationPopulationInclusion)
entryRelationship	1..1	SHALL		<a href="#">17619</a>	
@typeCode	1..1	SHALL		<a href="#">17910</a>	SUBJ
@inversionInd	1..1	SHALL		<a href="#">17911</a>	true
observation	1..1	SHALL		<a href="#">711198</a>	
entryRelationship	0..*	MAY		<a href="#">17918</a>	
@typeCode	1..1	SHALL		<a href="#">17919</a>	COMP
observation	1..1	SHALL		<a href="#">711180</a>	
entryRelationship	1..*	SHALL		<a href="#">711190</a>	
@typeCode	1..1	SHALL		<a href="#">18137</a>	2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = COMP
observation	1..1	SHALL		<a href="#">711181</a>	

XPath	Card.	Verb	Data Type	CONF#	Fixed Value
entryRelationship	1..*	SHALL		<a href="#">711191</a>	
@typeCode	1..1	SHALL		<a href="#">18144</a>	2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = COMP
observation	1..1	SHALL		<a href="#">711182</a>	
entryRelationship	1..*	SHALL		<a href="#">711192</a>	
@typeCode	1..1	SHALL		<a href="#">18145</a>	2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = COMP
observation	1..1	SHALL		<a href="#">711183</a>	
entryRelationship	1..*	SHALL		<a href="#">711193</a>	
@typeCode	1..1	SHALL		<a href="#">18146</a>	2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = COMP
observation	1..1	SHALL		<a href="#">711184</a>	
entryRelationship	0..*	MAY		<a href="#">18143</a>	
@typeCode	1..1	SHALL		<a href="#">18148</a>	2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = COMP
observation	1..1	SHALL		<a href="#">711212</a>	
reference	1..1	SHALL		<a href="#">18239</a>	
externalObservation	1..1	SHALL		<a href="#">18240</a>	
id	1..1	SHALL		<a href="#">711233</a>	

1. Conforms to Measure Data template (2.16.840.1.113883.10.20.27.3.5).
2. **SHALL** contain exactly one [1..1] @classCode="OBS" (CodeSystem: HL7ActClass 2.16.840.1.113883.5.6 **STATIC**) (CONF:17615).
3. **SHALL** contain exactly one [1..1] @moodCode="EVN" (CodeSystem: ActMood 2.16.840.1.113883.5.1001 **STATIC**) (CONF:17616).
4. **SHALL** contain exactly one [1..1] templateId (CONF:711266) such that it
  - a. **SHALL** contain exactly one [1..1] @root="2.16.840.1.113883.10.20.27.3.16" (CONF:711267).

5. **SHALL** contain exactly one [1..1] **code** (CONF:17617).
  - a. This code **SHALL** contain exactly one [1..1] **@code="ASSERTION"** Assertion (CodeSystem: ActCode 2.16.840.1.113883.5.4 **STATIC**) (CONF:18198).
6. **SHALL** contain exactly one [1..1] **statusCode** (CodeSystem: ActStatus 2.16.840.1.113883.5.14 **STATIC**) (CONF:18199).
  - a. This statusCode **SHALL** contain exactly one [1..1] **@code="completed"** Completed (CodeSystem: ActStatus 2.16.840.1.113883.5.14) (CONF:19555).
7. **SHALL** contain exactly one [1..1] **value** with **@xsi:type="CD"**, where the code **SHOULD** be selected from ValueSet [ObservationPopulationInclusion](#) 2.16.840.1.113883.1.11.20369 **DYNAMIC** (CONF:17618).
8. **SHALL** contain exactly one [1..1] **entryRelationship** (CONF:17619) such that it
  - a. **SHALL** contain exactly one [1..1] **@typeCode="SUBJ"** (CONF:17910).
  - b. **SHALL** contain exactly one [1..1] **@inversionInd="true"** (CONF:17911).
  - c. **SHALL** contain exactly one [1..1] [Aggregate Count \(CMS EP\)](#) (templateId:2.16.840.1.113883.10.20.27.3.24) (CONF:711198).
9. **MAY** contain zero or more [0..\*] **entryRelationship** (CONF:17918) such that it
  - a. **SHALL** contain exactly one [1..1] **@typeCode="COMP"** (CONF:17919).
  - b. **SHALL** contain exactly one [1..1] [Reporting Stratum \(CMS EP\)](#) (templateId:2.16.840.1.113883.10.20.27.3.20) (CONF:711180).
10. **SHALL** contain at least one [1..\*] **entryRelationship** (CONF:711190) such that it
  - a. **SHALL** contain exactly one [1..1] **@typeCode="COMP"** (CodeSystem: HL7ActRelationshipType 2.16.840.1.113883.5.1002 **STATIC**) (CONF:18137).
  - b. **SHALL** contain exactly one [1..1] [Sex Supplemental Data Element \(CMS EP\)](#) (templateId:2.16.840.1.113883.10.20.27.3.21) (CONF:711181).
11. **SHALL** contain at least one [1..\*] **entryRelationship** (CONF:711191) such that it
  - a. **SHALL** contain exactly one [1..1] **@typeCode="COMP"** (CodeSystem: HL7ActRelationshipType 2.16.840.1.113883.5.1002 **STATIC**) (CONF:18144).
  - b. **SHALL** contain exactly one [1..1] [Ethnicity Supplemental Data Element \(CMS EP\)](#) (templateId:2.16.840.1.113883.10.20.27.3.22) (CONF:711182).
12. **SHALL** contain at least one [1..\*] **entryRelationship** (CONF:711192) such that it

- a. **SHALL** contain exactly one [1..1] @typeCode="COMP" (CodeSystem: HL7ActRelationshipType 2.16.840.1.113883.5.1002 **STATIC**) (CONF:18145).
  - b. **SHALL** contain exactly one [1..1] [Race Supplemental Data Element \(CMS EP\)](#) (templateId:2.16.840.1.113883.10.20.27.3.19) (CONF:711183).
13. **SHALL** contain at least one [1..\*] entryRelationship (CONF:711193) such that it
- a. **SHALL** contain exactly one [1..1] @typeCode="COMP" (CodeSystem: HL7ActRelationshipType 2.16.840.1.113883.5.1002 **STATIC**) (CONF:18146).
  - b. **SHALL** contain exactly one [1..1] [Payer Supplemental Data Element \(CMS EP\)](#) (templateId:2.16.840.1.113883.10.20.27.3.18) (CONF:711184).

If observation/value/@code="MSRPOPL" then the following entryRelationship SHALL be present.

14. **MAY** contain zero or more [0..\*] entryRelationship (CONF:18143) such that it
- a. **SHALL** contain exactly one [1..1] @typeCode="COMP" (CodeSystem: HL7ActRelationshipType 2.16.840.1.113883.5.1002 **STATIC**) (CONF:18148).
  - b. **SHALL** contain exactly one [1..1] [Continuous Variable Measure Value \(CMS EP\)](#) (templateId:2.16.840.1.113883.10.20.27.3.26) (CONF:711212).
15. **SHALL** contain exactly one [1..1] reference (CONF:18239) such that it
- a. **SHALL** contain exactly one [1..1] externalObservation (CONF:18240).
    - i. This externalObservation **SHALL** contain exactly one [1..1] id (CONF:711233).  
Note: This is the id defined in the corresponding eMeasure population criteria section.

**Table 15: ObservationPopulationInclusion**

Value Set: ObservationPopulationInclusion 2.16.840.1.113883.1.11.20369			
Code	Code System	Code System OID	Print Name
DENEX	ObservationValue	2.16.840.1.113883.5.1063	Denominator Exclusions
DENOM	ObservationValue	2.16.840.1.113883.5.1063	Denominator
DENEXCEP	ObservationValue	2.16.840.1.113883.5.1063	Denominator Exceptions
IPP	ObservationValue	2.16.840.1.113883.5.1063	Initial Patient Population
MSRPOPL	ObservationValue	2.16.840.1.113883.5.1063	Measure Population
NUMER	ObservationValue	2.16.840.1.113883.5.1063	Numerator
NUMEX	ObservationValue	2.16.840.1.113883.5.1063	Numerator Exclusions

**Figure 17: Measure Data (CMS EP) Example**

```

<observation classCode="OBS" moodCode="EVN">
  <!-- Measure Data template ID -->
  <templateId root="2.16.840.1.113883.10.20.27.3.5"/>
  <!-- Measure Data (CMS EP) template ID -->
  <templateId root="2.16.840.1.113883.10.20.27.3.16"/>
  <code code="ASSERTION" codeSystem="2.16.840.1.113883.5.4"
    displayName="Assertion" codeSystemName="ActCode"/>
  <statusCode code="completed"/>
  <value xsi:type="CD" code="IPP" codeSystem="2.16.840.1.113883.5.1063"
    displayName="initial patient population"
    codeSystemName="ObservationValue"/>
  <!-- Aggregate Count (CMS EP) -->
  <entryRelationship typeCode="SUBJ" inversionInd="true">
    <observation classCode="OBS" moodCode="EVN">
      ...
    </observation>
  </entryRelationship>
  <!-- Sex Supplemental Data Element (CMS EP) -->
  <entryRelationship typeCode="COMP">
    <observation classCode="OBS" moodCode="EVN">
      ...
    </observation>
  </entryRelationship>
  <!-- Ethnicity Supplemental Data Element (CMS EP) -->
  <entryRelationship typeCode="COMP">
    <observation classCode="OBS" moodCode="EVN">
      ...
    </observation>
  </entryRelationship>
  <!-- Race Supplemental Data Element (CMS EP) -->
  <entryRelationship typeCode="COMP">
    <observation classCode="OBS" moodCode="EVN">
      ...
    </observation>
  </entryRelationship>
  <!-- Payer Supplemental Data Element (CMS EP) -->
  <entryRelationship typeCode="COMP">
    <observation classCode="OBS" moodCode="EVN">
      ...
    </observation>
  </entryRelationship>
  <!-- reference to the relevant population in the eMeasure -->
  <reference typeCode="REFR">
    <externalObservation classCode="OBS" moodCode="EVN">
      <id root="670DFFA3-F2EE-4CF7-9083-743F2C1D7D50"/>
      <!-- This is the population ID in the eMeasure.
        In this case, the IPP -->
    </externalObservation>
  </reference>
</observation>

```

### 3.5 Measure Reference and Results (CMS EP)

[organizer: templateId 2.16.840.1.113883.10.20.27.3.17 (open)]

**Table 16: Measure Reference and Results (CMS EP) Contexts**

Contained By	Contains
<a href="#">QRDA Category III Measure Section (CMS EP)</a> (required)	<a href="#">Measure Data (CMS EP)</a> <a href="#">Performance Rate for Proportion Measure (CMS EP)</a>

This template defines the way that a measure should be referenced. Measures are referenced through externalAct reference to an externalDocument. The externalDocument/ids and version numbers are used to reference the measure. Component entries can be used to report various rates, aggregate counts (e.g., number of patients in the measure's denominator); stratified aggregate counts (e.g., number of male patients in the measure's denominator); or continuous variables from continuous variable measures.

**Table 17: Measure Reference and Results (CMS EP) Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Fixed Value
organizer[templateId/@root = '2.16.840.1.113883.10.20.27.3.17']					
@classCode	1..1	SHALL		<a href="#">17887</a>	2.16.840.1.113883.5.6 (HL7ActClass) = CLUSTER
@moodCode	1..1	SHALL		<a href="#">17888</a>	2.16.840.1.113883.5.1001 (ActMood) = EVN
templateId	1..1	SHALL		<a href="#">711268</a>	
@root	1..1	SHALL		<a href="#">711269</a>	2.16.840.1.113883.10.20.27.3.17
statusCode	1..1	SHALL		<a href="#">17889</a>	
@code	1..1	SHALL		<a href="#">19552</a>	2.16.840.1.113883.5.14 (ActStatus) = completed
reference	1..1	SHALL		<a href="#">17890</a>	
@typeCode	1..1	SHALL		<a href="#">17891</a>	REFR
externalDocument	1..1	SHALL		<a href="#">17892</a>	2.16.840.1.113883.5.6 (HL7ActClass)
@classCode	1..1	SHALL		<a href="#">19548</a>	2.16.840.1.113883.5.6 (HL7ActClass)
id	1..1	SHALL		<a href="#">18192</a>	



XPath	Card.	Verb	Data Type	CONF#	Fixed Value
@root	1..1	SHALL		<a href="#">18193</a>	
code	0..1	SHOULD		<a href="#">17896</a>	2.16.840.1.113883.6.1 (LOINC)
@code	1..1	SHALL		<a href="#">19553</a>	2.16.840.1.113883.6.1 (LOINC) = 57024-2
text	0..1	SHOULD		<a href="#">17897</a>	
component	0..*	MAY		<a href="#">17903</a>	
observation	1..1	SHALL		<a href="#">711213</a>	
component	1..*	SHALL		<a href="#">18425</a>	
observation	1..1	SHALL		<a href="#">18428</a>	

1. Conforms to Measure Reference and Results template (2.16.840.1.113883.10.20.27.3.1).
2. **SHALL** contain exactly one [1..1] @classCode="CLUSTER" (CodeSystem: HL7ActClass 2.16.840.1.113883.5.6 **STATIC**) (CONF:17887).
3. **SHALL** contain exactly one [1..1] @moodCode="EVN" (CodeSystem: ActMood 2.16.840.1.113883.5.1001 **STATIC**) (CONF:17888).
4. **SHALL** contain exactly one [1..1] templateId (CONF:711268) such that it
  - a. **SHALL** contain exactly one [1..1] @root="2.16.840.1.113883.10.20.27.3.17" (CONF:711269).
5. **SHALL** contain exactly one [1..1] statusCode (CONF:17889).
  - a. This statusCode **SHALL** contain exactly one [1..1] @code="completed" Completed (CodeSystem: ActStatus 2.16.840.1.113883.5.14) (CONF:19552).
6. **SHALL** contain exactly one [1..1] reference (CONF:17890) such that it
  - a. **SHALL** contain exactly one [1..1] @typeCode="REFR" (CONF:17891).
  - b. **SHALL** contain exactly one [1..1] externalDocument (CodeSystem: HL7ActClass 2.16.840.1.113883.5.6 **STATIC**) (CONF:17892).
    - i. This externalDocument **SHALL** contain exactly one [1..1] @classCode (CodeSystem: HL7ActClass 2.16.840.1.113883.5.6) (CONF:19548).

- ii. This externalDocument **SHALL** contain exactly one [1..1] `id` (CONF:18192) such that it
  - 1. **SHALL** contain exactly one [1..1] `@root` (CONF:18193).  
Note: This `id/@root` SHALL equal the version specific identifier for eMeasure (i.e., QualityMeasureDocument/id).
- iii. This externalDocument **SHOULD** contain zero or one [0..1] `code` (CodeSystem: LOINC 2.16.840.1.113883.6.1 **STATIC**) (CONF:17896).
  - 1. The code, if present, **SHALL** contain exactly one [1..1] `@code="57024-2"` Health Quality Measure Document (CodeSystem: LOINC 2.16.840.1.113883.6.1) (CONF:19553).

This text is the title and optionally a brief description of the Quality Measure.

- iv. This externalDocument **SHOULD** contain zero or one [0..1] `text` (CONF:17897).
- 7. **MAY** contain zero or more [0..\*] `component` (CONF:17903) such that it
    - a. **SHALL** contain exactly one [1..1] Performance Rate for Proportion Measure (CMS EP) (templateId:2.16.840.1.113883.10.20.27.3.25) (CONF:711213).
  - 8. **SHALL** contain at least one [1..\*] `component` (CONF:18425) such that it
    - a. **SHALL** contain exactly one [1..1] Measure Data (CMS EP) (templateId:2.16.840.1.113883.10.20.27.3.16) (CONF:18428).

**Figure 18: Measure Reference and Results (CMS EP) Example**

```

<organizer classCode="CLUSTER" moodCode="EVN">
  <!-- Measure Reference template ID -->
  <templateId root="2.16.840.1.113883.10.20.24.3.98" />
  <!-- Measure Reference and Results template ID -->
  <templateId root="2.16.840.1.113883.10.20.27.3.1" />
  <!-- Measure Reference and Results (CMS EP) template ID -->
  <templateId root="2.16.840.1.113883.10.20.27.3.17" />
  <statusCode code="completed" />
  <reference typeCode="REFR">
    <externalDocument classCode="DOC" moodCode="EVN">
      <!-- This is the version-specific identifier for eMeasure -->
      <id root="40280381-3d61-56a7-013e-66a5a5834990" />
      <code code="57024-2" displayName="Health Quality Measure
        Document"
        codeSystemName="LOINC" codeSystem="2.16.840.1.113883.6.1" />
      <!-- This is the title of the eMeasure -->
      <text>Breast Cancer Screening</text>
    </externalDocument>
  </reference>
  <component>
    <!-- Performance Rate for Proportion Measure (CMS EP) -->
    <observation classCode="OBS" moodCode="EVN">
      ...
    </observation>
  </component>
</organizer>

```

### 3.6 Payer Supplemental Data Element (CMS EP)

[observation: templateId 2.16.840.1.113883.10.20.27.3.18 (open)]

**Table 18: Payer Supplemental Data Element (CMS EP) Contexts**

Contained By	Contains
<a href="#">Measure Data (CMS EP)</a> (required)	<a href="#">Aggregate Count (CMS EP)</a>

This observation represents the policy or program providing the coverage for the patients being reported on and provides the number of patients in the population that are covered by that policy or program. When a patient has multiple payers, only count the primary payer (usually this is the first payer listed). For CMS EP programs, all codes present in the value set must be reported, even if the count is zero. If an eMeasure is episode-based, the count will reflect the patient count rather than the episode count.

Individual payer codes from the Public Health Data Standards Consortium Source of Payment Typology (2.16.840.1.113883.3.221.5) have been grouped for QRDA-III aggregate reports.

Table 19: Payer Supplemental Data Element (CMS EP) Constraints Overview

XPath	Card.	Verb	Data Type	CONF#	Fixed Value
observation[templateId/@root = '2.16.840.1.113883.10.20.27.3.18']					
@classCode	1..1	SHALL		<a href="#">21155</a>	2.16.840.1.113883.5.6 (HL7ActClass) = OBS
@moodCode	1..1	SHALL		<a href="#">21156</a>	2.16.840.1.113883.5.1001 (ActMood) = EVN
templateId	1..1	SHALL		<a href="#">711270</a>	
@root	1..1	SHALL		<a href="#">711271</a>	2.16.840.1.113883.10.20.27.3.18
id	1..*	SHALL		<a href="#">711226</a>	
code	1..1	SHALL		<a href="#">711227</a>	
@code	1..1	SHALL		<a href="#">711228</a>	2.16.840.1.113883.6.1 (LOINC) = 48768-6
statusCode	1..1	SHALL		<a href="#">18106</a>	
@code	1..1	SHALL		<a href="#">18107</a>	2.16.840.1.113883.5.14 (ActStatus) = completed
value	1..1	SHALL	CD	<a href="#">711196</a>	
translation	1..1	SHALL		<a href="#">711230</a>	
@code	1..1	SHALL		<a href="#">711231</a>	2.16.840.1.113883.3.249.14.102 (CMS Payer Groupings)
@nullFlavor	1..1	SHALL		<a href="#">711229</a>	OTH
entryRelationship	1..1	SHALL		<a href="#">18108</a>	
@typeCode	1..1	SHALL		<a href="#">18109</a>	2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = SUBJ
@inversionInd	1..1	SHALL		<a href="#">18110</a>	true
observation	1..1	SHALL		<a href="#">711199</a>	

1. Conforms to Payer Supplemental Data Element template (2.16.840.1.113883.10.20.27.3.9).
2. **SHALL** contain exactly one [1..1] @classCode="OBS" (CodeSystem: HL7ActClass 2.16.840.1.113883.5.6 **STATIC**) (CONF:21155).

3. **SHALL** contain exactly one [1..1] @moodCode="EVN" (CodeSystem: ActMood 2.16.840.1.113883.5.1001 **STATIC**) (CONF:21156).
4. **SHALL** contain exactly one [1..1] templateId (CONF:711270) such that it
  - a. **SHALL** contain exactly one [1..1] @root="2.16.840.1.113883.10.20.27.3.18" (CONF:711271).
5. **SHALL** contain at least one [1..\*] id (CONF:711226).
6. **SHALL** contain exactly one [1..1] code (CONF:711227).
  - a. This code **SHALL** contain exactly one [1..1] @code="48768-6" Payment Source (CodeSystem: LOINC 2.16.840.1.113883.6.1) (CONF:711228).
7. **SHALL** contain exactly one [1..1] statusCode (CONF:18106).
  - a. This statusCode **SHALL** contain exactly one [1..1] @code="completed" Completed (CodeSystem: ActStatus 2.16.840.1.113883.5.14 **STATIC**) (CONF:18107).
8. **SHALL** contain exactly one [1..1] value with @xsi:type="CD" (CONF:711196).
  - a. This value **SHALL** contain exactly one [1..1] translation (CONF:711230).
    - i. This translation **SHALL** contain exactly one [1..1] @code, which **SHALL** be selected from ValueSet [CMS Payer Groupings](#) 2.16.840.1.113883.3.249.14.102 (CONF:711231).
  - b. This value **SHALL** contain exactly one [1..1] @nullFlavor="OTH" (CONF:711229).
9. **SHALL** contain exactly one [1..1] entryRelationship (CONF:18108) such that it
  - a. **SHALL** contain exactly one [1..1] @typeCode="SUBJ" Has Subject (CodeSystem: HL7ActRelationshipType 2.16.840.1.113883.5.1002 **STATIC**) (CONF:18109).
  - b. **SHALL** contain exactly one [1..1] @inversionInd="true" (CONF:18110).
  - c. **SHALL** contain exactly one [1..1] [Aggregate Count \(CMS EP\)](#) (templateId:2.16.840.1.113883.10.20.27.3.24) (CONF:711199).

**Table 20: CMS Payer Groupings**

Value Set: CMS Payer Groupings 2.16.840.1.113883.3.249.14.102 Values specifying the primary payer for CMS QRDA-III report submissions that groups codes from the Public Health Data Standards Consortium Source of Payment Typology (2.16.840.1.113883.3.221.5). Codes are grouped as follows:  Payer Grouping A: Medicare (1) Payer Grouping B: Medicaid (2) Payer Grouping C: Private Health Insurance (5), Blue Cross/Blue Shield (6) Payer Grouping D: Other Government (3), Department of Corrections (4), Managed Care Unspecified (7), No Payment Listed (8), Miscellaneous/Other (9)			
Code	Code System	Code System OID	Print Name
A	CMS Clinical Codes	2.16.840.1.113883.3.249.12	Medicare
B	CMS Clinical Codes	2.16.840.1.113883.3.249.12	Medicaid
C	CMS Clinical Codes	2.16.840.1.113883.3.249.12	Private Health Insurance
D	CMS Clinical Codes	2.16.840.1.113883.3.249.12	Other

**Figure 19: Payer Supplemental Data Element (CMS EP) Example**

```

<observation classCode="OBS" moodCode="EVN">
  <!-- Payer Characteristic Payer template ID -->
  <templateId root="2.16.840.1.113883.10.20.24.3.55"/>
  <!-- Payer Supplemental Data Element template ID -->
  <templateId root="2.16.840.1.113883.10.20.27.3.9"/>
  <!-- Payer Supplemental Data Element (CMS EP) template ID -->
  <templateId root="2.16.840.1.113883.10.20.27.3.18"/>
  <id nullFlavor="NA"/>
  <code code="48768-6" displayName="Payment source"
    codeSystem="2.16.840.1.113883.6.1" codeSystemName="SNOMED-CT"/>
  <statusCode code="completed"/>
  <!-- Parent template requires "SHALL be drawn from Value Set: PHDSC
    Source of Payment Typology 2.16.840.1.114222.4.11.3591 DYNAMIC-->
  <!-- CMS Prefers to group the insurances more broadly than the
    Source of Payment Typology allows. Therefore, nullFlavor of OTH will
    be used and CMS local codes used to identify groupings-->
  <value xsi:type="CD" nullFlavor="OTH">
    <translation code="A" displayName="Medicare"
      codeSystem="2.16.840.1.113883.3.249.12"
      codeSystemName="CMS Clinical Codes"/>
  </value>
  <entryRelationship typeCode="SUBJ" inversionInd="true">
    <!-- Aggregate Count (CMS EP) -->
    <observation classCode="OBS" moodCode="EVN">
      ...
    </observation>
  </entryRelationship>
</observation>

```

### 3.7 Performance Rate for Proportion Measure (CMS EP)

[observation: templateId 2.16.840.1.113883.10.20.27.3.25 (open)]

**Table 21: Performance Rate for Proportion Measure (CMS EP) Contexts**

Contained By	Contains
<a href="#">Measure Reference and Results (CMS EP)</a> (optional)	

This template is only used with proportion measures. The performance rate is a ratio of patients that meet the numerator criteria divided by patients in the denominator (after accounting for exclusions and exceptions). Performance Rate is calculated using this formula: Performance Rate = (NUMER) / (DENOM – DENOM EXCL – DENOM EXCEP).

**Table 22: Performance Rate for Proportion Measure (CMS EP) Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Fixed Value
observation[templateId/@root = '2.16.840.1.113883.10.20.27.3.25']					
@classCode	1..1	SHALL		<a href="#">18395</a>	2.16.840.1.113883.5.6 (HL7ActClass) = OBS
@moodCode	1..1	SHALL		<a href="#">18396</a>	2.16.840.1.113883.5.1001 (ActMood) = EVN
templateId	1..1	SHALL		<a href="#">711255</a>	
@root	1..1	SHALL		<a href="#">711256</a>	2.16.840.1.113883.10.20.27.3.25
code	1..1	SHALL		<a href="#">18397</a>	
@code	1..1	SHALL		<a href="#">18398</a>	2.16.840.1.113883.6.1 (LOINC) = 72510-1
statusCode	1..1	SHALL		<a href="#">18421</a>	
@code	1..1	SHALL		<a href="#">18422</a>	2.16.840.1.113883.5.14 (ActStatus) = completed
value	1..1	SHALL	REAL	<a href="#">18399</a>	
reference	1..1	SHALL		<a href="#">711203</a>	
@typeCode	1..1	SHALL		<a href="#">19652</a>	2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR
externalObservation	1..1	SHALL		<a href="#">19653</a>	
@classCode	1..1	SHALL		<a href="#">19654</a>	2.16.840.1.113883.5.6 (HL7ActClass)
id	1..1	SHALL		<a href="#">711204</a>	
@root	1..1	SHALL		<a href="#">19656</a>	
code	1..1	SHALL		<a href="#">19657</a>	
@code	1..1	SHALL		<a href="#">19658</a>	2.16.840.1.113883.5.1063 (ObservationValue) = NUMER

1. Conforms to Performance Rate for Proportion Measure template (2.16.840.1.113883.10.20.27.3.14).



2. **SHALL** contain exactly one [1..1] `@classCode="OBS" Observation (CodeSystem: HL7ActClass 2.16.840.1.113883.5.6 STATIC) (CONF:18395).`
3. **SHALL** contain exactly one [1..1] `@moodCode="EVN" Event (CodeSystem: ActMood 2.16.840.1.113883.5.1001 STATIC) (CONF:18396).`
4. **SHALL** contain exactly one [1..1] `templateId (CONF:711255)` such that it
  - a. **SHALL** contain exactly one [1..1] `@root="2.16.840.1.113883.10.20.27.3.25" (CONF:711256).`
5. **SHALL** contain exactly one [1..1] `code (CONF:18397).`
  - a. This code **SHALL** contain exactly one [1..1] `@code="72510-1" Performance Rate (CodeSystem: LOINC 2.16.840.1.113883.6.1 STATIC) (CONF:18398).`
6. **SHALL** contain exactly one [1..1] `statusCode (CONF:18421).`
  - a. This statusCode **SHALL** contain exactly one [1..1] `@code="completed" completed (CodeSystem: ActStatus 2.16.840.1.113883.5.14 STATIC) (CONF:18422).`
7. **SHALL** contain exactly one [1..1] `value` with `@xsi:type="REAL" (CONF:18399).`

This is a reference to the specific Numerator included in the calculation.

8. **SHALL** contain exactly one [1..1] `reference (CONF:711203).`
  - a. This reference **SHALL** contain exactly one [1..1] `@typeCode="REFR" refers to (CodeSystem: HL7ActRelationshipType 2.16.840.1.113883.5.1002) (CONF:19652).`
  - b. This reference **SHALL** contain exactly one [1..1] `externalObservation (CONF:19653).`
    - i. This externalObservation **SHALL** contain exactly one [1..1] `@classCode (CodeSystem: HL7ActClass 2.16.840.1.113883.5.6) (CONF:19654).`
    - ii. This externalObservation **SHALL** contain exactly one [1..1] `id (CONF:711204).`
      1. This id **SHALL** contain exactly one [1..1] `@root (CONF:19656).`  
Note: This is the ID of the numerator in the referenced eMeasure.
    - iii. This externalObservation **SHALL** contain exactly one [1..1] `code (CONF:19657).`
      1. This code **SHALL** contain exactly one [1..1] `@code="NUMER" Numerator (CodeSystem: ObservationValue 2.16.840.1.113883.5.1063) (CONF:19658).`

**Figure 20: Performance Rate for Proportion Measure (CMS EP) Example**

```

<observation classCode="OBS" moodCode="EVN">
  <!-- Performance Rate for Proportion Measure template ID -->
  <templateId root="2.16.840.1.113883.10.20.27.3.14"/>
  <!-- Performance Rate for Proportion Measure (CMS EP) template ID -->
  <templateId root="2.16.840.1.113883.10.20.27.3.25"/>
  <code code="72510-1" codeSystem="2.16.840.1.113883.6.1"
    displayName="Performance Rate"
    codeSystemName="2.16.840.1.113883.6.1"/>
  <statusCode code="completed"/>
  <value xsi:type="REAL" value="0.833"/>
  <!-- This is the reference to the Numerator in the eMeasure -->
  <reference typeCode="REFR">
    <externalObservation classCode="OBS" moodCode="EVN">
      <!-- The externalObservationID contains the ID of the
        numerator in the referenced eMeasure. -->
      <id root="17D7EEFE-C12C-4020-BA68-545A3FFC3598"/>
      <code code="NUMER" displayName="Numerator"
        codeSystem="2.16.840.1.113883.5.1063"
        codeSystemName="ObservationValue"/>
    </externalObservation>
  </reference>
</observation>

```

### 3.8 Race Supplemental Data Element (CMS EP)

[observation: templateId 2.16.840.1.113883.10.20.27.3.19 (open)]

**Table 23: Race Supplemental Data Element (CMS EP) Contexts**

Contained By	Contains
<a href="#">Measure Data (CMS EP)</a> (required)	<a href="#">Aggregate Count (CMS EP)</a>

This observation represents the race category reported by patients and provides the number of patients in the population that report that race category. For CMS EP programs, all codes present in the value set must be reported, even if the count is zero. If there are multiple race values reported for a patient, count as 'Other Race' value. For episode-based eMeasures, the count will reflect the patient count rather than the episode count.

Table 24: Race Supplemental Data Element (CMS EP) Constraints Overview

XPath	Card.	Verb	Data Type	CONF#	Fixed Value
observation[templateId/@root = '2.16.840.1.113883.10.20.27.3.19']					
@classCode	1..1	SHALL		<a href="#">18223</a>	2.16.840.1.113883.5.6 (HL7ActClass) = OBS
@moodCode	1..1	SHALL		<a href="#">18224</a>	2.16.840.1.113883.5.1001 (ActMood) = EVN
templateId	1..1	SHALL		<a href="#">711257</a>	
@root	1..1	SHALL		<a href="#">711258</a>	2.16.840.1.113883.10.20.27.3.19
code	1..1	SHALL		<a href="#">18227</a>	
@code	1..1	SHALL		<a href="#">18228</a>	2.16.840.1.113883.6.96 (SNOMED CT) = 103579009
statusCode	1..1	SHALL		<a href="#">18112</a>	
@code	1..1	SHALL		<a href="#">18113</a>	2.16.840.1.113883.5.14 (ActStatus) = completed
value	1..1	SHALL	CD	<a href="#">18229</a>	2.16.840.1.114222.4.11.836 (RaceCategory)
entryRelationship	1..1	SHALL		<a href="#">18114</a>	
@typeCode	1..1	SHALL		<a href="#">18115</a>	2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = SUBJ
@inversionInd	1..1	SHALL		<a href="#">18116</a>	true
observation	1..1	SHALL		<a href="#">711200</a>	

1. Conforms to Race Supplemental Data Element template (2.16.840.1.113883.10.20.27.3.8).
2. **SHALL** contain exactly one [1..1] @classCode="OBS" (CodeSystem: HL7ActClass 2.16.840.1.113883.5.6 **STATIC**) (CONF:18223).
3. **SHALL** contain exactly one [1..1] @moodCode="EVN" (CodeSystem: ActMood 2.16.840.1.113883.5.1001 **STATIC**) (CONF:18224).
4. **SHALL** contain exactly one [1..1] templateId (CONF:711257) such that it

- a. **SHALL** contain exactly one [1..1]  
@root="2.16.840.1.113883.10.20.27.3.19" (CONF:711258).
- 5. **SHALL** contain exactly one [1..1] **code** (CONF:18227).
  - a. This **code** **SHALL** contain exactly one [1..1] @code="103579009" **Race**  
(CodeSystem: SNOMED CT 2.16.840.1.113883.6.96) (CONF:18228).
- 6. **SHALL** contain exactly one [1..1] **statusCode** (CONF:18112).
  - a. This **statusCode** **SHALL** contain exactly one [1..1] @code="completed" **Completed**  
(CodeSystem: ActStatus 2.16.840.1.113883.5.14 **STATIC**) (CONF:18113).
- 7. **SHALL** contain exactly one [1..1] **value** with @xsi:type="CD", where the code **SHALL** be  
selected from ValueSet [RaceCategory](#) 2.16.840.1.114222.4.11.836 **DYNAMIC**  
(CONF:18229).
- 8. **SHALL** contain exactly one [1..1] **entryRelationship** (CONF:18114) such that it
  - a. **SHALL** contain exactly one [1..1] @typeCode="SUBJ" **Has Subject** (CodeSystem:  
HL7ActRelationshipType 2.16.840.1.113883.5.1002 **STATIC**)  
(CONF:18115).
  - b. **SHALL** contain exactly one [1..1] @inversionInd="true" (CONF:18116).
  - c. **SHALL** contain exactly one [1..1] [Aggregate Count \(CMS EP\)](#)  
(templateId:2.16.840.1.113883.10.20.27.3.24) (CONF:711200).

**Table 25: RaceCategory**

Value Set: RaceCategory 2.16.840.1.114222.4.11.836			
Code System: Race & Ethnicity - CDC 2.16.840.1.113883.6.238			
Value Set Source: <a href="https://phinvads.cdc.gov/vads/ViewValueSet.action?id=67D34BBC-617F-DD11-B38D-00188B398520">https://phinvads.cdc.gov/vads/ViewValueSet.action?id=67D34BBC-617F-DD11-B38D-00188B398520</a>			
Code	Code System	Code System OID	Print Name
1002-5	Race & Ethnicity - CDC	2.16.840.1.113883.6.238	American Indian or Alaska Native
2028-9	Race & Ethnicity - CDC	2.16.840.1.113883.6.238	Asian
2054-5	Race & Ethnicity - CDC	2.16.840.1.113883.6.238	Black or African American
2076-8	Race & Ethnicity - CDC	2.16.840.1.113883.6.238	Native Hawaiian or Other Pacific Islander
2106-3	Race & Ethnicity - CDC	2.16.840.1.113883.6.238	White
2131-1	Race & Ethnicity - CDC	2.16.840.1.113883.6.238	Other Race

**Figure 21: Race Supplemental Data Element (CMS EP) Example**

```

<observation classCode="OBS" moodCode="EVN">
  <!-- Race Supplemental Data Element template ID -->
  <templateId root="2.16.840.1.113883.10.20.27.3.8"/>
  <!-- Race Supplemental Data Element (CMS EP) template ID -->
  <templateId root="2.16.840.1.113883.10.20.27.3.19"/>
  <code code="103579009"
    displayName="Race"
    codeSystem="2.16.840.1.113883.6.96"
    codeSystemName="SNOMED-CT"/>
  <statusCode code="completed"/>
  <value xsi:type="CD"
    code="2054-5"
    displayName="Black or African American"
    codeSystem="2.16.840.1.113883.6.238"
    codeSystemName="Race & Ethnicity - CDC"/>
  <entryRelationship typeCode="SUBJ" inversionInd="true">
    <!-- Aggregate Count (CMS EP) -->
    <observation classCode="OBS" moodCode="EVN">
      ...
    </observation>
  </entryRelationship>
</observation>

```

### 3.9 Reporting Parameters Act (CMS EP)

[act: templateId 2.16.840.1.113883.10.20.27.3.23 (open)]

**Table 26: Reporting Parameters Act (CMS EP) Contexts**

Contained By	Contains
<a href="#">QRDA Category III Reporting Parameters Section (CMS EP)</a> (required)	

This template provides information about the reporting time interval, and provides context for the patient data being reported to the CMS EP program.

For CPC and PQRS reporting programs, the data reporting period (when data is collected) is Jan 1, 2014 – Dec 31, 2014.

For EHR Incentive Program (Meaningful Use) CQM reporting, the data reporting period (when data is collected) is one full year (Jan 1, 2014 – Dec 31, 2014) or a calendar quarter between Jan 1, 2014 – Dec 31, 2014. EPs who are in their first year of participation in the EHR Incentive Program can also use any 90-day period within the calendar year 2014 as the data reporting period.

**Table 27: Reporting Parameters Act (CMS EP) Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Fixed Value
act[templateId/@root = '2.16.840.1.113883.10.20.27.3.23']					
@classCode	1..1	SHALL		<a href="#">3269</a>	2.16.840.1.113883.5.6 (HL7ActClass) = ACT
@moodCode	1..1	SHALL		<a href="#">3270</a>	2.16.840.1.113883.5.1001 (ActMood) = EVN
templateId	1..1	SHALL		<a href="#">711272</a>	
@root	1..1	SHALL		<a href="#">711273</a>	2.16.840.1.113883.10.20.27.3.23
code	1..1	SHALL		<a href="#">3272</a>	2.16.840.1.113883.6.96 (SNOMED CT) = 252116004
effectiveTime	1..1	SHALL		<a href="#">3273</a>	
low	1..1	SHALL		<a href="#">3274</a>	
high	1..1	SHALL		<a href="#">3275</a>	

1. Conforms to Reporting Parameters Act template (2.16.840.1.113883.10.20.17.3.8).
2. **SHALL** contain exactly one [1..1] `@classCode="ACT"` (CodeSystem: HL7ActClass 2.16.840.1.113883.5.6 **STATIC**) (CONF:3269).
3. **SHALL** contain exactly one [1..1] `@moodCode="EVN"` Event (CodeSystem: ActMood 2.16.840.1.113883.5.1001 **STATIC**) (CONF:3270).
4. **SHALL** contain exactly one [1..1] `templateId` (CONF:711272) such that it
  - a. **SHALL** contain exactly one [1..1] `@root="2.16.840.1.113883.10.20.27.3.23"` (CONF:711273).
5. **SHALL** contain exactly one [1..1] `code="252116004"` Observation Parameters (CodeSystem: SNOMED CT 2.16.840.1.113883.6.96 **STATIC**) (CONF:3272).
6. **SHALL** contain exactly one [1..1] `effectiveTime` (CONF:3273).
  - a. This `effectiveTime` **SHALL** contain exactly one [1..1] `low` (CONF:3274).
  - b. This `effectiveTime` **SHALL** contain exactly one [1..1] `high` (CONF:3275).

**Figure 22: Reporting Parameters Act (CMS EP) Example**

```
<act classCode="ACT" moodCode="EVN">
  <!-- Reporting Parameters Act template ID -->
  <templateId root="2.16.840.1.113883.10.20.17.3.8"/>
  <!-- Reporting Parameters Act (CMS EP) template ID -->
  <templateId root="2.16.840.1.113883.10.20.27.3.23"/>
  <id root="55a43e20-6463-46eb-81c3-9a3a1ad41225"/>
  <code code="252116004" codeSystem="2.16.840.1.113883.6.96"
  displayName="Observation Parameters" />
  <effectiveTime>
    <low value="20140101"/>
    <!-- The low value is the start date of the reporting period -->
    <high value="20141231"/>
    <!-- The high value is the end date of the reporting period -->
  </effectiveTime>
</act>
```

### 3.10 Reporting Stratum (CMS EP)

[observation: templateId 2.16.840.1.113883.10.20.27.3.20 (open)]

**Table 28: Reporting Stratum (CMS EP) Contexts**

Contained By	Contains
<a href="#">Measure Data (CMS EP)</a> (optional)	<a href="#">Aggregate Count (CMS EP)</a> <a href="#">Continuous Variable Measure Value (CMS EP)</a>

Stratifications are used to classify populations by one or more characteristics, variables, or other categories. As subsets of the overall population, they are used in risk adjustment, analysis and interpretation. Examples of stratification include age, discharge status for an inpatient stay, facility location within a hospital (e.g., ICU, Emergency Department), surgical procedures, and specific conditions.

This observation uses the reference/externalObservation element to reference the stratification used in the quality measure. The definition of the stratification is in the corresponding eMeasure. The Reporting Stratum also provides the number of patients in the referenced stratification. Note that all strata must be present for CMS EP program reporting, even if the count is zero. Each stratum identified in the referenced eMeasure(s), must be reported for each population.

**Table 29: Reporting Stratum (CMS EP) Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Fixed Value
observation[templateId/@root = '2.16.840.1.113883.10.20.27.3.20']					
@classCode	1..1	SHALL		<a href="#">17575</a>	2.16.840.1.113883.5.6 (HL7ActClass) = OBS
@moodCode	1..1	SHALL		<a href="#">17576</a>	2.16.840.1.113883.5.1001 (ActMood) = EVN
templateId	1..1	SHALL		<a href="#">711274</a>	
@root	1..1	SHALL		<a href="#">711275</a>	2.16.840.1.113883.10.20.27.3.20
code	1..1	SHALL		<a href="#">17577</a>	
@code	1..1	SHALL		<a href="#">17578</a>	2.16.840.1.113883.5.4 (ActCode) = ASSERTION
statusCode	1..1	SHALL		<a href="#">17579</a>	
@code	1..1	SHALL		<a href="#">18201</a>	2.16.840.1.113883.5.14 (ActStatus) = completed



XPath	Card.	Verb	Data Type	CONF#	Fixed Value
value	0..1	SHOULD		<a href="#">17580</a>	
entryRelationship	1..1	SHALL		<a href="#">17581</a>	
@typeCode	1..1	SHALL		<a href="#">17582</a>	SUBJ
@inversionInd	1..1	SHALL		<a href="#">17583</a>	true
observation	1..1	SHALL		<a href="#">711197</a>	
entryRelationship	0..*	MAY		<a href="#">19511</a>	
observation	1..1	SHALL		<a href="#">711211</a>	
reference	1..1	SHALL		<a href="#">18204</a>	
@typeCode	1..1	SHALL		<a href="#">18205</a>	2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR
externalObservation	1..1	SHALL		<a href="#">18206</a>	
id	1..1	SHALL		<a href="#">711210</a>	

1. Conforms to Reporting Stratum template (2.16.840.1.113883.10.20.27.3.4).
2. **SHALL** contain exactly one [1..1] @classCode="OBS" (CodeSystem: HL7ActClass 2.16.840.1.113883.5.6 **STATIC**) (CONF:17575).
3. **SHALL** contain exactly one [1..1] @moodCode="EVN" (CodeSystem: ActMood 2.16.840.1.113883.5.1001 **STATIC**) (CONF:17576).
4. **SHALL** contain exactly one [1..1] templateId (CONF:711274) such that it
  - a. **SHALL** contain exactly one [1..1] @root="2.16.840.1.113883.10.20.27.3.20" (CONF:711275).
5. **SHALL** contain exactly one [1..1] code (CONF:17577).
  - a. This code **SHALL** contain exactly one [1..1] @code="ASSERTION" Assertion (CodeSystem: ActCode 2.16.840.1.113883.5.4 **STATIC**) (CONF:17578).
6. **SHALL** contain exactly one [1..1] statusCode (CONF:17579).
  - a. This statusCode **SHALL** contain exactly one [1..1] @code="completed" Completed (CodeSystem: ActStatus 2.16.840.1.113883.5.14 **STATIC**) (CONF:18201).

7. **SHOULD** contain zero or one [0..1] **value** (CONF:17580).
  - a. This value **SHALL** be the same as the contents of the observation/code element in the referenced eMeasure (e.g., 21112-8 'Birth date') (CONF:711232).
8. **SHALL** contain exactly one [1..1] **entryRelationship** (CONF:17581) such that it
  - a. **SHALL** contain exactly one [1..1] **@typeCode="SUBJ"** (CONF:17582).
  - b. **SHALL** contain exactly one [1..1] **@inversionInd="true"** (CONF:17583).
  - c. **SHALL** contain exactly one [1..1] Aggregate Count (CMS EP) (templateId:2.16.840.1.113883.10.20.27.3.24) (CONF:711197).

The Continuous Variable template may also be nested inside the Reporting Stratum Template to represent continuous variables found in quality measures for the various strata.

9. **MAY** contain zero or more [0..\*] **entryRelationship** (CONF:19511) such that it
  - a. **SHALL** contain exactly one [1..1] Continuous Variable Measure Value (CMS EP) (templateId:2.16.840.1.113883.10.20.27.3.26) (CONF:711211).
10. **SHALL** contain exactly one [1..1] **reference** (CONF:18204).
  - a. This reference **SHALL** contain exactly one [1..1] **@typeCode="REFR"** (CodeSystem: HL7ActRelationshipType 2.16.840.1.113883.5.1002 **STATIC**) (CONF:18205).
  - b. This reference **SHALL** contain exactly one [1..1] **externalObservation** (CONF:18206).
    - i. This externalObservation **SHALL** contain exactly one [1..1] **id** (CONF:711210).  
Note: This is the ID of the stratum in the referenced eMeasure.

**Figure 23: Reporting Stratum (CMS EP) Example**

```

<observation classCode="OBS" moodCode="EVN">
  <!-- Reporting Stratum template ID -->
  <templateId root="2.16.840.1.113883.10.20.27.3.4"/>
  <!-- Reporting Stratum (CMS EP) template ID -->
  <templateId root="2.16.840.1.113883.10.20.27.3.20"/>
  <code code="ASSERTION"
        codeSystem="2.16.840.1.113883.5.4"
        displayName="Assertion"
        codeSystemName="ActCode"/>
  <statusCode code="completed"/>
  <value xsi:type="CD" nullFlavor="OTH">
    <originalText>Stratum</originalText>
  </value>
  <entryRelationship typeCode="SUBJ" inversionInd="true">
    <!-- Aggregate Count (CMS EP) -->
    <observation classCode="OBS" moodCode="EVN">
      ...
    </observation>
  </entryRelationship>
  <reference typeCode="REFR">
    <!-- Reference to the relevant strata in the eMeasure -->
    <externalObservation classCode="OBS" moodCode="EVN">
      <id root="9ACF2C09-8C0A-4BAD-97C1-DF6CB37E1AEB"/>
    </externalObservation>
  </reference>
</observation>

```

### 3.11 Sex Supplemental Data Element (CMS EP)

[observation: templateId 2.16.840.1.113883.10.20.27.3.21 (open)]

**Table 30: Sex Supplemental Data Element (CMS EP) Contexts**

Contained By	Contains
<a href="#">Measure Data (CMS EP)</a> (required)	<a href="#">Aggregate Count (CMS EP)</a>

This observation represents the sex of a person as used for administrative purposes (as opposed to clinical gender) and provides the number of patients in the population that are of that sex. For CMS EP programs, all codes present in the value set must be reported, even if the count is zero. If the eMeasure is episode-based, the count will reflect the patient count rather than the episode count.

Table 31: Sex Supplemental Data Element (CMS EP) Constraints Overview

XPath	Card.	Verb	Data Type	CONF#	Fixed Value
observation[templateId/@root = '2.16.840.1.113883.10.20.27.3.21']					
@classCode	1..1	SHALL		<a href="#">18230</a>	2.16.840.1.113883.5.6 (HL7ActClass) = OBS
@moodCode	1..1	SHALL		<a href="#">18231</a>	2.16.840.1.113883.5.1001 (ActMood) = EVN
templateId	1..1	SHALL		<a href="#">711259</a>	
@root	1..1	SHALL		<a href="#">711260</a>	2.16.840.1.113883.10.20.27.3.21
code	1..1	SHALL		<a href="#">18234</a>	
@code	1..1	SHALL		<a href="#">18235</a>	2.16.840.1.113883.6.96 (SNOMED CT) = 184100006
statusCode	1..1	SHALL		<a href="#">18124</a>	
@code	1..1	SHALL		<a href="#">18125</a>	2.16.840.1.113883.5.14 (ActStatus) = completed
value	1..1	SHALL	CD	<a href="#">18236</a>	2.16.840.1.113883.1.11.1 (Administrative Gender (HL7 V3))
entryRelationship	1..1	SHALL		<a href="#">18126</a>	
@typeCode	1..1	SHALL		<a href="#">18127</a>	2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = SUBJ
@inversionInd	1..1	SHALL		<a href="#">18128</a>	true
observation	1..1	SHALL		<a href="#">711202</a>	

1. Conforms to Sex Supplemental Data Element template (2.16.840.1.113883.10.20.27.3.6).
2. **SHALL** contain exactly one [1..1] @classCode="OBS" (CodeSystem: HL7ActClass 2.16.840.1.113883.5.6 **STATIC**) (CONF:18230).
3. **SHALL** contain exactly one [1..1] @moodCode="EVN" (CodeSystem: ActMood 2.16.840.1.113883.5.1001 **STATIC**) (CONF:18231).
4. **SHALL** contain exactly one [1..1] templateId (CONF:711259) such that it

- a. **SHALL** contain exactly one [1..1]  
@root="2.16.840.1.113883.10.20.27.3.21" (CONF:711260).
- 5. **SHALL** contain exactly one [1..1] code (CONF:18234).
  - a. This code **SHALL** contain exactly one [1..1] @code="184100006" Patient sex  
(CodeSystem: SNOMED CT 2.16.840.1.113883.6.96 **STATIC**) (CONF:18235).
- 6. **SHALL** contain exactly one [1..1] statusCode (CONF:18124).
  - a. This statusCode **SHALL** contain exactly one [1..1] @code="completed" Completed  
(CodeSystem: ActStatus 2.16.840.1.113883.5.14 **STATIC**) (CONF:18125).
- 7. **SHALL** contain exactly one [1..1] value with @xsi:type="CD", where the code **SHALL** be  
selected from ValueSet [Administrative Gender \(HL7 V3\)](#)  
2.16.840.1.113883.1.11.1 **DYNAMIC** (CONF:18236).
  - a. Certification validators will allow use of Value Set - ONC Administrative Sex  
2.16.840.1.113762.1.4.1 or Value Set - Administrative Gender (HL7 V3)  
2.16.840.1.113883.1.11.1 (CONF:711261).
- 8. **SHALL** contain exactly one [1..1] entryRelationship (CONF:18126) such that it
  - a. **SHALL** contain exactly one [1..1] @typeCode="SUBJ" Has Subject (CodeSystem:  
HL7ActRelationshipType 2.16.840.1.113883.5.1002 **STATIC**)  
(CONF:18127).
  - b. **SHALL** contain exactly one [1..1] @inversionInd="true" (CONF:18128).
  - c. **SHALL** contain exactly one [1..1] [Aggregate Count \(CMS EP\)](#)  
(templateId:2.16.840.1.113883.10.20.27.3.24) (CONF:711202).

**Table 32: Administrative Gender (HL7 V3)**

Value Set: Administrative Gender (HL7 V3) 2.16.840.1.113883.1.11.1 Administrative Gender based upon HL7 V3 vocabulary. This value set contains only male, female and undifferentiated concepts.			
Code	Code System	Code System OID	Print Name
F	AdministrativeGender	2.16.840.1.113883.5.1	Female
M	AdministrativeGender	2.16.840.1.113883.5.1	Male
UN	AdministrativeGender	2.16.840.1.113883.5.1	Undifferentiated

**Table 33: ONC Administrative Sex**

Value Set: ONC Administrative Sex 2.16.840.1.113762.1.4.1 ONC Administrative gender.			
Code	Code System	Code System OID	Print Name
F	AdministrativeSex	2.16.840. 1.113883.18.2	Female
M	AdministrativeSex	2.16.840. 1.113883.18.2	Male
U	AdministrativeSex	2.16.840. 1.113883.18.2	Unknown

**Figure 24: Sex Supplemental Data Element (CMS EP) Example**

```

<observation classCode="OBS" moodCode="EVN">
  <!-- Sex Supplemental Data Element template ID -->
  <templateId root="2.16.840.1.113883.10.20.27.3.6"/>
  <!-- Sex Supplemental Data Element (CMS EP) template ID -->
  <templateId root="2.16.840.1.113883.10.20.27.3.21"/>
  <code code="184100006"
    displayName="patient sex"
    codeSystem="2.16.840.1.113883.6.96"
    codeSystemName="SNOMED-CT"/>
  <statusCode code="completed"/>
  <value xsi:type="CD"
    code="F"
    codeSystem="2.16.840.1.113883.5.1"
    codeSystemName="AdministrativeGender"/>
  <entryRelationship typeCode="SUBJ" inversionInd="true">
    <!-- Aggregate Count (CMS EP) -->
    <observation classCode="OBS" moodCode="EVN">
      ...
    </observation>
  </entryRelationship>
</observation>

```

## 4. Template Ids in This Guide

Table 34: Template List

Template Title	Template Type	templateId
<a href="#">QRDA Category III Report - CMS EP</a>	document	2.16.840.1.113883.10.20.27.1.2
<a href="#">QRDA Category III Measure Section (CMS EP)</a>	section	2.16.840.1.113883.10.20.27.2.3
<a href="#">QRDA Category III Reporting Parameters Section (CMS EP)</a>	section	2.16.840.1.113883.10.20.27.2.6
<a href="#">Aggregate Count (CMS EP)</a>	entry	2.16.840.1.113883.10.20.27.3.24
<a href="#">Continuous Variable Measure Value (CMS EP)</a>	entry	2.16.840.1.113883.10.20.27.3.26
<a href="#">Ethnicity Supplemental Data Element (CMS EP)</a>	entry	2.16.840.1.113883.10.20.27.3.22
<a href="#">Measure Data (CMS EP)</a>	entry	2.16.840.1.113883.10.20.27.3.16
<a href="#">Measure Reference and Results (CMS EP)</a>	entry	2.16.840.1.113883.10.20.27.3.17
<a href="#">Payer Supplemental Data Element (CMS EP)</a>	entry	2.16.840.1.113883.10.20.27.3.18
<a href="#">Performance Rate for Proportion Measure (CMS EP)</a>	entry	2.16.840.1.113883.10.20.27.3.25
<a href="#">Race Supplemental Data Element (CMS EP)</a>	entry	2.16.840.1.113883.10.20.27.3.19
<a href="#">Reporting Parameters Act (CMS EP)</a>	entry	2.16.840.1.113883.10.20.27.3.23
<a href="#">Reporting Stratum (CMS EP)</a>	entry	2.16.840.1.113883.10.20.27.3.20
<a href="#">Sex Supplemental Data Element (CMS EP)</a>	entry	2.16.840.1.113883.10.20.27.3.21

**Table 35: Template Containments**

Template Title	Template Type	templateId
<a href="#"><u>QRDA Category III Report - CMS EP</u></a>	document	2.16.840.1.113883.10.20.27.1.2
<a href="#"><u>QRDA Category III Measure Section (CMS EP)</u></a>	section	2.16.840.1.113883.10.20.27.2.3
<a href="#"><u>Measure Reference and Results (CMS EP)</u></a>	entry	2.16.840.1.113883.10.20.27.3.17
<a href="#"><u>Measure Data (CMS EP)</u></a>	entry	2.16.840.1.113883.10.20.27.3.16
<a href="#"><u>Aggregate Count (CMS EP)</u></a>	entry	2.16.840.1.113883.10.20.27.3.24
<a href="#"><u>Continuous Variable Measure Value (CMS EP)</u></a>	entry	2.16.840.1.113883.10.20.27.3.26
<a href="#"><u>Ethnicity Supplemental Data Element (CMS EP)</u></a>	entry	2.16.840.1.113883.10.20.27.3.22
<a href="#"><u>Aggregate Count (CMS EP)</u></a>	entry	2.16.840.1.113883.10.20.27.3.24
<a href="#"><u>Payer Supplemental Data Element (CMS EP)</u></a>	entry	2.16.840.1.113883.10.20.27.3.18
<a href="#"><u>Aggregate Count (CMS EP)</u></a>	entry	2.16.840.1.113883.10.20.27.3.24
<a href="#"><u>Race Supplemental Data Element (CMS EP)</u></a>	entry	2.16.840.1.113883.10.20.27.3.19
<a href="#"><u>Aggregate Count (CMS EP)</u></a>	entry	2.16.840.1.113883.10.20.27.3.24
<a href="#"><u>Reporting Stratum (CMS EP)</u></a>	entry	2.16.840.1.113883.10.20.27.3.20
<a href="#"><u>Aggregate Count (CMS EP)</u></a>	entry	2.16.840.1.113883.10.20.27.3.24
<a href="#"><u>Continuous Variable Measure Value (CMS EP)</u></a>	entry	2.16.840.1.113883.10.20.27.3.26
<a href="#"><u>Sex Supplemental Data Element (CMS EP)</u></a>	entry	2.16.840.1.113883.10.20.27.3.21
<a href="#"><u>Aggregate Count (CMS EP)</u></a>	entry	2.16.840.1.113883.10.20.27.3.24
<a href="#"><u>Performance Rate for Proportion Measure (CMS EP)</u></a>	entry	2.16.840.1.113883.10.20.27.3.25
<a href="#"><u>QRDA Category III Reporting Parameters Section (CMS EP)</u></a>	section	2.16.840.1.113883.10.20.27.2.6
<a href="#"><u>Reporting Parameters Act (CMS EP)</u></a>	entry	2.16.840.1.113883.10.20.27.3.23



## 5. Value Sets In This Guide

**Table 36: Value Sets**

Name	OID	URL
<a href="#">Administrative Gender (HL7 V3)</a>	2.16.840.1.113883.1.11.1	N/A
<a href="#">CMS Payer Groupings</a>	2.16.840.1.113883.3.249.14.102	N/A
<a href="#">CMS Program Name</a>	2.16.840.1.113883.3.249.14.101	N/A
<a href="#">EthnicityGroup</a>	2.16.840.1.114222.4.11.837	<a href="http://phinvads.cdc.gov/vads/ViewValueSet.action?id=35D34BBC-617F-DD11-B38D-00188B398520">http://phinvads.cdc.gov/vads/ViewValueSet.action?id=35D34BBC-617F-DD11-B38D-00188B398520</a>
<a href="#">ObservationMethodAggregate</a>	2.16.840.1.113883.1.11.20450	N/A
<a href="#">ObservationPopulationInclusion</a>	2.16.840.1.113883.1.11.20369	N/A
<a href="#">ONC Administrative Sex</a>	2.16.840.1.113762.1.4.1	N/A
<a href="#">RaceCategory</a>	2.16.840.1.114222.4.11.836	<a href="https://phinvads.cdc.gov/vads/ViewValueSet.action?id=67D34BBC-617F-DD11-B38D-00188B398520">https://phinvads.cdc.gov/vads/ViewValueSet.action?id=67D34BBC-617F-DD11-B38D-00188B398520</a>

## 6. Code Systems in This Guide

**Table 37: Code Systems**

Name	OID
ActCode	2.16.840.1.113883.5.4
ActMood	2.16.840.1.113883.5.1001
ActStatus	2.16.840.1.113883.5.14
AdministrativeGender	2.16.840.1.113883.5.1
AdministrativeSex	2.16.840.1.113883.18.2
CMS Clinical Codes	2.16.840.1.113883.3.249.12
CMS Program	2.16.840.1.113883.3.249.7
ConfidentialityCode	2.16.840.1.113883.5.25
HL7ActClass	2.16.840.1.113883.5.6
HL7ActRelationshipType	2.16.840.1.113883.5.1002
HL7ParticipationType	2.16.840.1.113883.5.90
Language	2.16.840.1.113883.6.121
LOINC	2.16.840.1.113883.6.1
ObservationMethod	2.16.840.1.113883.5.84
ObservationValue	2.16.840.1.113883.5.1063
Race & Ethnicity - CDC	2.16.840.1.113883.6.238
RoleClass	2.16.840.1.113883.5.110
SNOMED CT	2.16.840.1.113883.6.96
Source of Payment Typology (PHDSC)	2.16.840.1.113883.3.221.5