



RESOURCE AND PATIENT MANAGEMENT SYSTEM

# **Electronic Clinical Quality Measures Engine**

(ECQM)

## **Measure Guidance Manual**

Version 7.0  
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Office of Information Technology  
Division of Information Technology

## Table of Contents

|            |  |           |
|------------|--|-----------|
| <b>1.0</b> | <b>Introduction.....</b>   | <b>1</b>  |
| <b>2.0</b> | <b>EH/CAH eCQMs .....</b>  | <b>6</b>  |
| 2.1        | CMS9v11 Exclusive Breast Milk Feeding .....  | 6         |
| 2.1.1      | Details and Data Entry.....  | 6         |
| 2.2        | CMS71v13 Anticoagulation Therapy for Atrial Fibrillation/Flutter.....  | 7         |
| 2.2.1      | Details and Data Entry.....  | 7         |
| 2.3        | CMS72v12 Antithrombotic Therapy End of Hospital Day 2 .....  | 8         |
| 2.3.1      | Details and Data Entry.....  | 8         |
| 2.4        | CMS104v12 Discharged on Antithrombotic Therapy .....   | 10        |
| 2.4.1      | Details and Data Entry.....  | 10        |
| 2.5        | CMS108v12 Venous Thromboembolism Prophylaxis.....  | 11        |
| 2.5.1      | Details and Data Entry.....  | 11        |
| 2.6        | CMS190v12 Intensive Care Unit Venous Thromboembolism Prophylaxis<br>.....  | 13        |
| 2.6.1      | Detail and Data Entry .....  | 14        |
| 2.7        | CMS334v5 Cesarean Birth .....  | 15        |
| 2.7.1      | Detail and Data Entry .....  | 15        |
| 2.8        | CMS506v6 Safe Use of Opioids–Concurrent Prescribing.....   | 19        |
| 2.8.1      | Details and Data Entry.....  | 19        |
| 2.9        | CMS816v3: Hospital Harm - Severe Hypoglycemia .....  | 20        |
| 2.9.1      | Details and Data Entry.....  | 20        |
| 2.10       | CMS819v2 Opioid-Related Adverse Events .....   | 21        |
| 2.10.1     | Detail and Data Entry .....  | 21        |
| 2.11       | CMS826v2 Hospital Harm – Pressure Injury .....   | 22        |
| 2.11.1     | Detail and Data Entry .....  | 22        |
| 2.12       | CMS871v3 Hospital Harm–Severe Hyperglycemia .....  | 23        |
| 2.12.1     | Detail and Data Entry .....  | 23        |
| 2.13       | CMS986v2 Global Malnutrition Composite Score.....  | 25        |
| 2.13.1     | Details and Data Entry.....  | 25        |
| 2.14       | CMS1028v2 Severe Obstetric Complications .....   | 28        |
| 2.14.1     | Details and Data Entry.....  | 28        |
| <b>3.0</b> | <b>Eligible Hospital Hybrid Measures .....</b>   | <b>31</b> |
| 3.1        | CMS529v4 Core Clinical Data Elements for the Hybrid Hospital-Wide<br>Readmission (HWR) Measure with Claims and Electronic Health Record<br>Data .....  | 31        |
| 3.1.1      | Details and Data Entry.....  | 31        |
| 3.2        | CMS844v4 Core Clinical Data Elements for the Hybrid Hospital-Wide<br>(All-Condition, All-Procedure) Risk-Standardized Mortality Measure<br>(HWM) ..... | 32        |
| 3.2.1      | Details and Data Entry.....  | 32        |

|            |  |           |
|------------|--|-----------|
| <b>4.0</b> | <b>Eligible Clinician Measures (For 2024 Reporting Period)</b>   | <b>35</b> |
| 4.1        | CMS2v13 Preventive Care and Screening: Screening for Depression and Follow-Up Plan   | 35        |
| 4.1.1      | Details and Data Entry   | 35        |
| 4.2        | CMS22v12 Preventive Care and Screening: Screening for High Blood Pressure and Follow-Up Documented   | 36        |
| 4.2.1      | Details and Data Entry   | 36        |
| 4.3        | CMS50v12 Closing the Referral Loop: Receipt of Specialist Report   | 37        |
| 4.3.1      | Detail and Data Entry  | 37        |
| 4.4        | CMS69v12 Preventive Care and Screening: BMI Screening and Follow-Up Plan   | 38        |
| 4.4.1      | Detail and Data Entry  | 38        |
| 4.5        | CMS117v12 Childhood Immunization Status  | 39        |
| 4.5.1      | Detail and Data Entry  | 39        |
| 4.6        | CMS122v12 Diabetes: Hemoglobin A1c Poor Control (> 9%)   | 42        |
| 4.6.1      | Detail and Data Entry  | 42        |
| 4.7        | CMS124v12 Cervical Cancer Screening  | 43        |
| 4.7.1      | Detail and Data Entry  | 44        |
| 4.8        | CMS125v12 Breast Cancer Screening  | 44        |
| 4.8.1      | Detail and Data Entry  | 44        |
| 4.9        | CMS130v12 Colorectal Cancer Screening  | 46        |
| 4.9.1      | Detail and Data Entry  | 46        |
| 4.10       | CMS131v12 Diabetes: Eye Exam   | 47        |
| 4.10.1     | Detail and Data Entry  | 47        |
| 4.11       | CMS137v12 Initiation and Engagement of Alcohol and Other Drug Dependence Treatment   | 49        |
| 4.11.1     | Detail and Data Entry  | 49        |
| 4.12       | CMS138v12 Preventive Care and Screening: Tobacco Use: Screening and Cessation Intervention   | 50        |
| 4.12.1     | Detail and Data Entry  | 50        |
| 4.13       | CMS139v12 Falls: Screening for Future Fall Risk  | 51        |
| 4.13.1     | Detail and Data Entry  | 52        |
| 4.14       | CMS144v12 Heart Failure: Beta-Blocker Therapy for Left Ventricular Systolic Dysfunction (LVSD)   | 52        |
| 4.14.1     | Detail and Data Entry  | 52        |
| 4.15       | CMS145v12 Coronary Artery Disease (CAD): Beta-Blocker Therapy-Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF) less than or equal to 40% | 54        |
| 4.15.1     | Detail and Data Entry  | 54        |
| 4.16       | CMS154v12 Appropriate Treatment for Upper Respiratory Infection (URI)  | 55        |
| 4.16.1     | Detail and Data Entry  | 55        |
| 4.17       | CMS155v12 Weight Assessment and Counseling for Nutrition and Physical Activity for Children and Adolescents  | 56        |
| 4.17.1     | Detail and Data Entry  | 57        |

|                                  |  |           |
|----------------------------------|--|-----------|
| 4.18                             | CMS156v12 Use of High-Risk Medications in Older Adults.....  | 58        |
| 4.18.1                           | Detail and Data Entry .....  | 58        |
| 4.19                             | CMS159v12 Depression Remission at Twelve Months .....  | 59        |
| 4.19.1                           | Detail and Data Entry .....  | 59        |
| 4.20                             | CMS160v7 Depression Utilization of the PHQ-9 Tool (retired measure–<br>for trending purposes only) ..... | 61        |
| 4.20.1                           | Detail and Data Entry .....  | 61        |
| 4.21                             | CMS165v12 Controlling High Blood Pressure .....  | 62        |
| 4.21.1                           | Detail and Data Entry .....  | 62        |
| 4.22                             | CMS177v12 Child and Adolescent Major Depressive Disorder: Suicide<br>Risk Assessment .....               | 64        |
| 4.22.1                           | Detail and Data Entry .....  | 64        |
| 4.23                             | CMS347v7 Statin Therapy for the Prevention and Treatment of<br>Cardiovascular Disease .....              | 64        |
| 4.23.1                           | Detail and Data Entry .....  | 64        |
| 4.24                             | CMS349v6 HIV Screening .....   | 66        |
| 4.24.1                           | Details and Data Entry.....  | 66        |
| <b>Acronym List .....</b>        |  | <b>67</b> |
| <b>Contact Information .....</b> |  | <b>70</b> |

## Revision History

| Version | Date       | Author          | Section | Page Number | Summary of Change  |
|---------|------------|-----------------|---------|-------------|--|
| 2023    | 11/07/2023 | Kelly Samuelson | All     | All         | Updates to reflect the new CQM measures added with v6 for 2023 and updates to all existing measures to reflect 2023 accurately |
| 2023.1  | 06/06/2024 | Kelly Samuelson | 3.0     | 32 & 33     | Added v3 Hybrid measures section   |
| 2024    | 10/03/2024 | Kelly Samuelson | All     | All         | Updates to all existing measures for 2024 reporting  |

## 1.0 Introduction

Electronic Clinical Quality Measures (eCQM) are standardized metrics that measure and track the quality of health care services provided by eligible clinicians (EC), eligible hospitals (EH), and critical access hospitals (CAH).

The results of the measures are used to calculate a quality score. This process helps ensure that our healthcare system delivers effective, safe, efficient, patient-centered, equitable, and timely care. While the eCQMs are not practice guidelines, they are indicative through measuring positive or negative outcomes of good clinical practices.

eCQM performance rates are used by various governing bodies to evaluate programs, and in the case of Centers for Medicare & Medicaid Services (CMS), payments for Medicare services may be affected. eCQMs measure many aspects of patient care, including:

- Patient and family engagement
- Patient safety
- Care coordination
- Population/public health
- Efficient use of healthcare resources
- Clinical process/effectiveness

Indian Health Service Resource Patient Management System Certified Electronic Health Record (IHS RPMS-CEHR) generates patient-based files containing the data needed to create CQM reports in a standardized format. These are called Quality Reporting Data Architecture (QRDA) Category I (CAT-I) files. The ECQM Engine is a browser-enabled graphical user interface for the Indian Health Service (IHS) that extracts the data from multiple CAT-I files and generates QRDA Category III (CAT-III) aggregated report files, which may be submitted to CMS. The ECQM Engine also outputs human-readable reports that can be used in quality improvement activities at individual sites.

eCQMs are tools that help measure and track the quality of health care services that EP, EH, and CAH provide, as generated by a provider's electronic health record (EHR). Health care providers must electronically report eCQMs, which use data from EHRs or health information technology systems to measure health care quality.

eCQMs are a component of the ONC Certification Criteria for Health IT certification criteria necessary for participating in various CMS Programs. RPMS EHR has been updated to meet these expanded criteria.

Each year, CMS makes updates to the eQMs approved for CMS programs to reflect changes in:

- Evidence-based medicine
- Code sets
- Measure logic

Based on IHS Leadership/Stakeholders there are 13 EH/CAH eQMs, 2 EH/CAH Hybrids, and 24 EC eQMs are selected for inclusion in 2024.

### **Information for EH/CAHs:**

The 2024 reporting period for EHs and CAHs requires all four quarters (full year). IHS requested that one retired EH measure, CMS9v11 Exclusive Breast Milk Feeding, be included in the release calculated based on the 2023 measure logic; this allows sites to continue to track their performance for quality improvement.

Three EH measures included in this document are not reportable until CY2025, inclusion is for knowledge and data integrity for the 2025 reporting year. These include:

- CMS826v2 Hospital Harm–Pressure Injury
- CMS832v2 Hospital Harm – Acute Kidney injury
- CMS1074v2 Excessive Radiation Dose or Inadequate Image Quality for Diagnostic Computed Tomography (CT) in Adults (Facility IQR)

Selected EH/CAH eQM included in ONC Certification Criteria for Health IT (for the 2024 Reporting Period):

- CMS71v13 Anticoagulation Therapy for Atrial Fibrillation/Flutter
- CMS72v12 Antithrombotic Therapy By End of Hospital Day 2
- CMS104v12 Discharged on Anti-thrombotic Therapy
- CMS108v12 Venous Thromboembolism Prophylaxis
- CMS190v12 Intensive Care Unit Venous Thromboembolism Prophylaxis
- CMS334v5 Cesarean Birth
- CMS506v6 Safe Use of Opioids–Concurrent Prescribing
- CMS816v3 Hospital Harm–Severe Hypoglycemia
- CMS819v2 Hospital Harm–Opioid-Related Adverse Events
- CMS871v3 Hospital Harm–Severe Hyperglycemia
- CMS986v2 Global Malnutrition Composite Score
- CMS1028v2 Severe Obstetric Complications

Selected EH/CAH Hybrid eCQM included in ONC Certification Criteria for Health IT (for the July 1, XXXX–June 30, XXXX Reporting Period):

- CMS529v4 Core Clinical Data Elements for the Hybrid Hospital-Wide (All-Condition, All-Procedure) Risk-Standardized Mortality Measure (HWM)
- CMS844v4 Core Clinical Data Elements for the Hybrid Hospital-Wide Readmission (HWR) Measure with Claims and Electronic Health Record Data

Information for ECs (Merit-based Incentive Payment System or MIPS):

The 2024 eCQM reporting period for providers (EC) is any continuous 90-day period between January 1, 2024, and December 31, 2024. All participating ECs must report on any six eCQMs relevant to their scope of practice.

IHS requested that one retired EC measure remain in the software for sites to track for quality improvement:

- CMS160v7 Depression Utilization of the PHQ-9 Tool
  - This will be calculated based on the 2019 measure logic and has no updated measure versions.

Selected EC eCQMs (for the 2024 Reporting Period):

- CMS2v13 Preventive Care & Screening: Screening for Clinical Depression and Follow-up
- CMS22v12 Preventive Care and Screening: Screening for High Blood Pressure and Follow-Up Documented
- CMS50v12 Closing Referral Loop: Receipt of Specialist Report
- CMS69v12 Preventive Care & Screening: Body Mass Index (BMI) Screening and Follow-up
- CMS117v12 Childhood Immunization Status
- CMS122v12 Diabetes: Hemoglobin A1c (HbA1c) Poor Control (>9%)
- CMS124v12 Cervical Cancer Screening
- CMS125v12 Breast Cancer Screening
- CMS130v12 Colorectal Cancer Screening
- CMS131v12 Diabetes: Eye Exam
- CMS137v12 Initiation and Engagement of Alcohol and Other Drug Dependence Treatment
- CMS138v12 Preventive Care & Screening: Tobacco Use: Screening and Cessation Intervention
- CMS139v12 Falls: Screening for Future Fall Risk



- CMS144v12 Heart Failure: Beta-Blocker Therapy for Left Ventricular Systolic Dysfunction
- CMS145v12 Coronary Artery Disease (CAD): Beta-Blocker Therapy-Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF) less than or equal to 40%
- CMS154v12 Appropriate Treatment for Upper Respiratory Infection (URI)
- CMS155v12 Weight Assessment and Counseling for Nutrition and Physical Activity for Children and Adolescents
- CMS156v12 Use of High-Risk Medications in Older Adults
- CMS159v12 Depression Remission at Twelve Months
- CMS165v12 Controlling High Blood Pressure
- CMS177v12 Child and Adolescent Major Depressive Disorder: Suicide Risk Assessment
- CMS347v2 Statin Therapy for the Prevention and Treatment of Cardiovascular Disease
- CMS349v6 HIV Screening

While RPMS EHR offers multiple data entry options, eCQM included in this manual presents a limited subset of these options to efficiently capture the required data elements to achieve the highest possible score.

Each measure contains information from the ECQI website describing its description and logic, followed by a data entry process to achieve the best possible outcome. These data entry processes have been tested during development and certification. Each measure has a link to the ECQI website to get the full description, rationale, detailed logic, terminology, and data criteria (QDM Data Elements).

Value sets are found in each link to the ECQI website. Value sets are groups of codes including Systematized Nomenclature of Medicine-Clinical Terms (SNOMED-CT), International Classification of Diseases (ICD), RxNORM, Current Procedural Terminology (CPT), HCPCS (Healthcare Common Procedure Coding System), Logical Observation Identifiers Names and Codes (LOINC), etc. that CMS approves for each measure. A value set can contain from one to several hundred codes. Only these codes are counted for the measure. CMS updates these value sets periodically, removing some and adding others. IHS OIT updates the terminology used for eCQM based on these changes and distributes terminology updates. Installing these updates ensures that only active and approved codes are used. OIT “maps” to these new codes to simplify the workload for individual sites.

Since the contents of any given value set are fluid and change over time, it is not practical to list the currently available codes. Instead, it is better if the user logs into the Value Set Authority Center (VSAC) to create a free account and then searches for the current values within the set. Past value sets are also viewable for troubleshooting purposes.

## 2.0 EH/CAH eCQMs

### 2.1 CMS9v11 Exclusive Breast Milk Feeding

#### [Exclusive Breast Milk Feeding 11.1.000](#)

#### 2.1.1 Details and Data Entry

1. Initial population: Inpatient hospitalizations for single newborns who were born in the hospital where Inpatient Hospitalization ends during the measurement period and with either of the following conditions:
  - a. Newborn admitted to hospital
    - ADT Admission/discharge with ADMISSION TYPE-UB-04: NEWBORN
  - b. Diagnosis single live birth born in hospital
    - Integrated Problem List or ICD diagnosis in V POV of Single Live Newborn born in hospital with one of the following:
      - Gestational Age = > than 37 weeks w/o Birth Weight
        - Vitals component EGA measurement
      - Birth Weight  $\geq$  3000 gm w/o EGA
        - Vitals component weight must be entered on the same day as the newborn's date of birth
        - Birth measurement via personal health component
2. Denominator:
  - Initial population
3. Denominator Exclusions:
  - a. Admitted to NICU or ICU
    - ADT Admission/Discharge ward set as ICU or PEDS NICU
  - b. Diagnosis of Galactosemia
    - Integrated Problem List or ICD diagnosis in V POV
  - c. Prolonged length of stay (>120 days)
    - ADT Admission/Discharge LOS
  - d. Expired during hospitalization or transferred to an acute care facility
    - ADT Discharge UB-04 type Expired = 20
  - e. Total Parenteral Nutrition
    - ICD Procedure code 3E0G36Z in the Visit Services component in the EHR or PCC by coder

4. Numerator:
  - a. Exclusive Breast Feeding
    - Infant Feeding Component in EHR

Figure 2-1: Infant Feeding Choice

5. Numerator Exclusions: N/A
6. Denominator Exceptions: None

## 2.2 CMS71v13 Anticoagulation Therapy for Atrial Fibrillation/Flutter

<https://ecqi.healthit.gov/sites/default/files/ecqm/measures/CMS71v13.html>

### 2.2.1 Details and Data Entry

1. Initial population: Inpatient hospitalizations for patients age 18 and older, discharged from inpatient care (non-elective admissions) with a principal diagnosis of ischemic or hemorrhagic stroke and a length of stay less than or equal to 120 days that ends during the measurement period:
  - a. ADT non-elective type admission LOS <=120 days
  - b. IPL SNOMED or ICD Diagnosis in V POV of ischemic or hemorrhagic stroke
2. Denominator: Inpatient hospitalizations for patients with a principal diagnosis of ischemic stroke and a history of atrial ablation or current or history of atrial fibrillation/flutter:
  - a. IPL SNOMED or ICD Diagnosis in V POV of ischemic stroke and atrial ablation or atrial fibrillation/flutter.
3. Denominator exclusions: Inpatient hospitalizations for patients admitted for elective carotid intervention. This exclusion is implicitly modeled by only including non-elective hospitalizations:
  - ADT Admission type UB-4 type of Elective

- a. Inpatient hospitalizations for patients discharged to another hospital, left against medical advice, expired, home for hospice care, or to a health care facility for hospice care:
  - ADT Discharge UB-04 type
- b. Inpatient hospitalizations for patients with comfort measures documented:
  - IPL-Add Visit Instruction/ Care Plans/ Goal Activities component, then Treatment Regime/Therapy/Follow-up- Palliative Care.
4. Numerator: Inpatient hospitalizations for patients prescribed or continuing to take anticoagulation therapy at hospital discharge:
  - a. Prescribed/Orders Outpatient anticoagulant therapy medication marked as discharge medication
  - b. Outside Medication for anticoagulant therapy recorded/ordered and active before the date/time of discharge
5. Numerator Exclusions: N/A
6. Denominator Exceptions: Inpatient hospitalizations for patients with a documented reason for not prescribing anticoagulation therapy at discharge:
  - a. Personal Health component refusal for anticoagulation therapy medication:
    - Patient Refusal examples: Drug declined by patient, Refusal of treatment by patient
    - Medical Reason examples: Allergy to the drug, Contraindicated, Adverse reaction to the drug

## 2.3 CMS72v12 Antithrombotic Therapy End of Hospital Day 2

<https://ecqi.healthit.gov/sites/default/files/ecqm/measures/CMS72v12.html>

### 2.3.1 Details and Data Entry

1. Initial population: Inpatient hospitalization for patients age 18 and older discharged from inpatient care (non-elective admissions) with a principal diagnosis of ischemic or hemorrhagic stroke and a length of stay less than or equal to 120 days that ends during the measurement period:
  - a. ADT non-elective type admission LOS <=120 days
  - b. IPL SNOMED or ICD Diagnosis in V POV of ischemic or hemorrhagic stroke
2. Denominator: Inpatient hospitalizations for patients with a principal diagnosis of ischemic stroke:
  - a. IPL SNOMED or ICD Diagnosis in V POV of ischemic stroke
3. Denominator Exclusions:

- a. Inpatient hospitalizations for patients who have a duration of stay less than two days:
  - ADT admission/discharge less than 48 hours
- b. Inpatient hospitalizations for patients with comfort measures documented:
  - IPL-Add Visit Instruction/ Care Plans/ Goal Activities component then Treatment Regime/Therapy/Follow-up- Palliative Care

Figure 2-2: Palliative Care list

- c. Inpatient hospitalization for patients with intra-venous or intra-arterial Thrombolytic (t-PA) Therapy administered within 24 hours before arrival or anytime during hospitalization:
  - BCMA t-PA medication ordered, verified in the pharmacy, and then administered to the patient
4. Numerator: Inpatient hospitalization for patients who had antithrombotic therapy administered the day of or day after hospital arrival:
  - a. BCMA antithrombotic therapy medication ordered, verified in pharmacy, and then administered to the patient
  - b. Therapy Initiated Date/Time in the Stroke component (Required fields for entry Arrival Date/Time and Onset Date/Time)

Figure 2-3: Stroke Tool

5. Numerator Exclusions: N/A
6. Denominator Exceptions:

- a. Inpatient hospitalization for patients with a documented reason for not administering antithrombotic therapy the day of or day after hospital arrival:
  - Personal Health component refusal for anticoagulation therapy medication.
    - Patient Refusal examples: Drug declined by patient, Refusal of treatment by patient.
    - Medical reason examples: Allergy to the drug, contraindicated, adverse reaction to the drug.
- b. Inpatient hospitalization for patients who receive Prasugrel as an antithrombotic therapy the day of or day after hospital arrival:
  - Prasugrel medication was ordered, verified, and administered through BCMA.
- c. Inpatient hospitalization for patients with an INR greater than 3.5:
  - INR Lab resulted with a value > 3.5 during the admission found in V lab.

## 2.4 CMS104v12 Discharged on Antithrombotic Therapy

<https://ecqi.healthit.gov/sites/default/files/ecqm/measures/CMS104v12.html>

### 2.4.1 Details and Data Entry

1. Initial population: Inpatient hospitalizations for patients age 18 and older, discharged from inpatient care (non-elective admissions) with a principal diagnosis of ischemic or hemorrhagic stroke and a length of stay less than or equal to 120 days that ends during the measurement period:
  - a. ADT non-elective type admission LOS <=120 days
  - b. IPL SNOMED or ICD Diagnosis in V POV of ischemic or hemorrhagic stroke
2. Denominator: Inpatient hospitalizations for patients with a principal diagnosis of ischemic stroke:
  - a. IPL SNOMED or ICD diagnosis in V POV of ischemic stroke
3. Denominator Exclusions:
  - a. Inpatient hospitalizations for patients admitted for elective carotid intervention. This exclusion is implicitly modeled by only including non-elective hospitalizations
    - ADT Admission type UB-04 type of elective

- b. Inpatient hospitalizations for patients discharged to another hospital who left against medical advice, Inpatient hospitalizations for patients who expired, Inpatient hospitalizations for patients discharged to home for hospice care, and Inpatient hospitalizations for patients discharged to a health care facility for hospice care
  - ADT Discharge UB-04 type
- c. Inpatient hospitalizations for patients with documented comfort measures. It is essential to ensure patient comfort and well-being during their hospital stay.
  - IPL- Add Visit Instruction/ Care Plans/ Goal Activities component, then Treatment Regime/Therapy/Follow-up- Palliative Care
4. Numerator: Inpatient hospitalizations for patients prescribed or continuing to take antithrombotic therapy at hospital discharge
  - a. Requires an outpatient prescription for antithrombotic medication during hospitalization, marked as “discharge medication, or an existing medication active during and after the admission (outpatient or outside order)
5. Numerator Exclusions: Not applicable
6. Denominator Exceptions:
  - a. Inpatient hospitalization for patients with a documented reason for not administering antithrombotic therapy the day of or day after hospital arrival:
    - Personal Health component refusal for anticoagulation therapy medication
      - Patient refusal examples: Drug declined by patient, refusal of treatment by patient
      - Medical reason examples: Allergy to the drug, contraindicated, adverse reaction to the drug

## 2.5 CMS108v12 Venous Thromboembolism Prophylaxis

<https://ecqi.healthit.gov/sites/default/files/ecqm/measures/CMS108v12.html>

### 2.5.1 Details and Data Entry

1. Initial population: Inpatient hospitalizations for patients age 18 and older, discharged from hospital inpatient acute care without a diagnosis of venous thromboembolism (VTE) or obstetrics with a length of stay less than or equal to 120 days that ends during the measurement period:
  - a. ADT non-elective type admission LOS <=120 days
  - b. No diagnosis of VTE or obstetrics in IPL SNOMED or V POV ICD 10.
2. Denominator: Initial population.



3. Denominator Exclusions:
  - a. Inpatient hospitalizations for patients who have a length of stay of less than two days:
    - ADT admission discharge less than 48 hours
  - b. Inpatient hospitalizations for patients with comfort measures documented anytime between the day of arrival and the day after hospital admission:
    - Excludes patients with documented comfort measures (IPL/TREG)
  - c. Inpatient hospitalizations for patients with comfort measures documented by the day after surgery end date for surgeries that start the day of or the day after hospital admission:
    - Excludes patients with documented comfort measures (IPL/TREG)
  - d. Inpatient hospitalizations for direct patients admitted to the intensive care unit (ICU) or transferred to ICU the day of or the day after hospital admission with ICU length of stay greater than or equal to one day:
    - ADT admission and or transfer to ICU ward and LOS  $\leq$ 24 hours
  - e. Inpatient hospitalizations for patients with a principal diagnosis of mental disorders or stroke
    - IPL SNOMED or V POV ICD 10 diagnosis set as Primary
  - f. Inpatient hospitalizations for patients with a principal procedure of surgical care improvement project (SCIP) VTE selected surgeries
    - Visit services or PCC data entry of valid ICD 10 PCS marked a principal
4. Numerator: Inpatient hospitalizations for patients who received VTE prophylaxis:
  - a. Between the day of arrival and the day after hospital admission
  - b. The day of or the day after surgery end date for surgeries that end the day of or the day after hospital admission:
    - Medication administered while in hospital or ordered as discharge
    - Outpatient medication or outside medication order during or less than 24 hours after discharge
    - Application of VTE in IPL/TREG for Anticoag DVT prevention

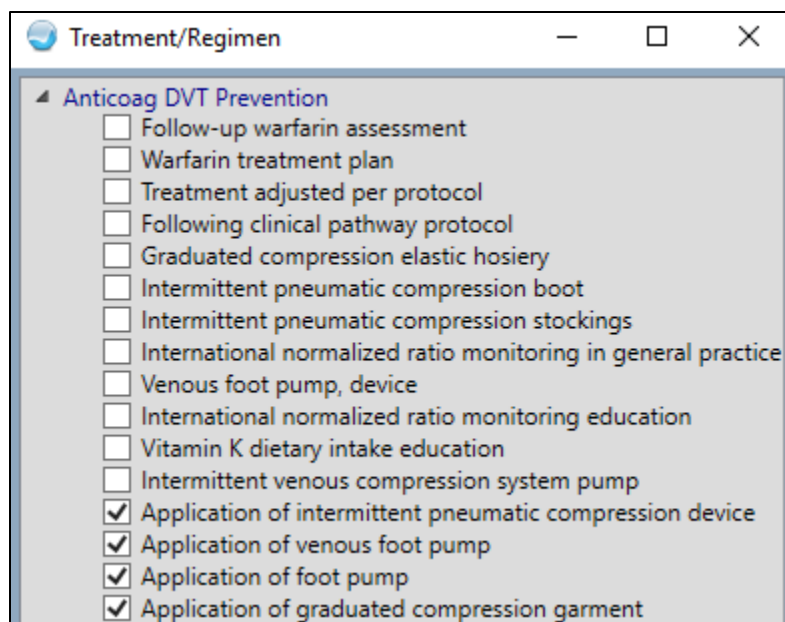


Figure 2-4: Treatment/Regimen Menu

- c. Inpatient hospitalizations for patients who have documentation of a reason why VTE prophylaxis was given:
- Between the day of arrival and the day after hospital admission
  - The day of or the day after surgery end date (for surgeries that end the day of or the day after hospital admission)
  - Personal Health component refusal for anticoagulation therapy medication:
    - Patient Refusal examples: Drug declined by patient, Refusal of treatment by patient
    - Medical reason examples: Allergy to the drug, contraindicated, adverse reaction to the drug
5. Numerator Exclusions: N/A
6. Denominator Exception: None

## 2.6 CMS190v12 Intensive Care Unit Venous Thromboembolism Prophylaxis

<https://ecqi.healthit.gov/sites/default/files/ecqm/measures/CMS190v12.html>

## 2.6.1 Detail and Data Entry

1. Initial population: Inpatient hospitalizations for patients age 18 and older, discharged from hospital inpatient acute care without a diagnosis of venous thromboembolism (VTE) or obstetrics with a length of stay less than or equal to 120 days that ends during the measurement period:
  - a. ADT non-elective type admission LOS  $\leq$ 120 days
  - b. No diagnosis of VTE or obstetrics in IPL SNOMED or V POV ICD 10
2. Denominator: Inpatient hospitalizations for patients directly admitted or transferred to ICU during the hospitalization:
  - a. ADT direct admission or transfer to a ward set up as ICU
3. Denominator Exclusions:
  - a. Inpatient hospitalizations for patients who have a hospital length of stay (LOS) of less than two days
    - ADT admission discharge less than 48 hours
  - b. Inpatient hospitalizations for patients with comfort measures documented anytime between the day of arrival and the day after ICU admission or transfer:
    - Excludes patients with documented comfort measures (IPL/TREG)
  - c. Inpatient hospitalizations for patients with comfort measures documented by the day after surgery end date for surgeries that end the day of or the day after hospital admission:
    - Excludes patients with documented comfort measures (IPL/TREG)
  - d. Inpatient hospitalizations for patients with a principal procedure of surgical care improvement Project (SCIP) VTE selected surgeries that end the day of or the day after ICU admission or transfer
    - Visit services or PCC data entry of valid ICD 10 PCS marked as principal
4. Numerator: Inpatient hospitalizations for patients who received VTE prophylaxis:
  - a. The day of or the day after ICU admission (or transfer)
  - b. The day of or the day after surgery end date for surgeries that end the day of or the day after ICU admission (or transfer):
    - Medication administered while in hospital or ordered as discharge
    - Outpatient medication or Outside medication order during or less than 24 hours after discharge
    - Application of VTE in IPL/TREG for Anticoag DVT Prevention

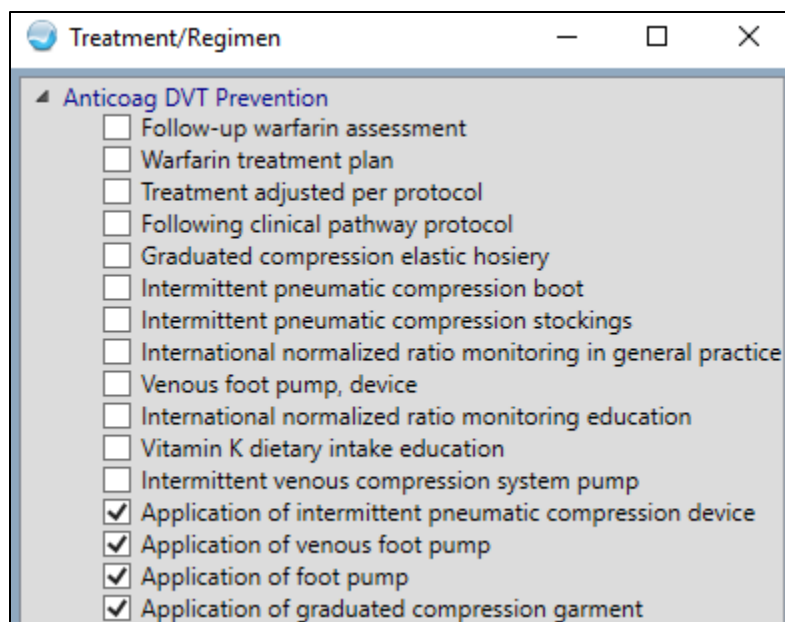


Figure 2-5: Treatment/Regimen Menu

- c. Inpatient hospitalizations for patients who have documentation of a reason why no VTE prophylaxis was given:
- Between the day of arrival and the day after ICU admission (for patients directly admitted as inpatients to the ICU)
  - The day of or the day after surgery end date (for surgeries that end the day of or the day after ICU admission (or transfer))
  - Personal health component refusal for anticoagulation therapy medication:
    - Patient Refusal examples: Drug declined by patient, Refusal of treatment by patient
    - Medical reason examples: Allergy to the drug, contraindicated, adverse reaction to the drug
5. Numerator Exclusions: N/A

## 2.7 CMS334v5 Cesarean Birth

<https://ecqi.healthit.gov/sites/default/files/ecqm/measures/CMS334v5.html>

### 2.7.1 Detail and Data Entry

1. Initial population: Inpatient hospitalizations for patients age  $\geq 8$  years and  $< 65$  admitted to the hospital for inpatient acute care who undergo a delivery procedure that ends during the measurement period:
  - a. ADT admission and discharge

- b. Delivery procedure in EHR visit services ICD10PCS or PCC coding data entry
- 2. Denominator: Inpatient hospitalizations for nulliparous patients delivered of a live term singleton newborn  $\geq 37$  weeks gestation

**Note:** The eCQM and chart-based measure slightly digress in the denominator logic.

- 3. eCQM: The measure description states, "Nulliparous women with a term, singleton baby in a vertex position delivered by cesarean birth." ACOG defines nulliparous as a woman with a parity of zero. The eCQM logic concludes that a patient is nulliparous when ONE of the following is true:
  - a. Parity equals zero
  - b. Gravidity equals one
  - c. Preterm and Term births both equal zero
- 4. Chart Based: The chart-based measure evaluates the "Previous Live Births" data element. If the answer is "yes," the patient will be excluded from the denominator. If a patient had a previous stillbirth or fetal demise, the abstractor is instructed to answer "no," and the patient will remain in the denominator:
  - a. IPL SNOMED diagnosis or ICD 10 in V POV of Single Live Birth

Figure 2-6: Integrated Problem Maintenance–Add Problem Menu Prompt

- b. EGA >=37 weeks entered into Vitals for V measurements or in PCC V Delivery EGA while adding newborn data

The screenshot shows a software interface with two tabs: 'Vital Entry' (active) and 'Vital Display'. Below the tabs is a table with columns for 'Default Units', 'Date/Time', 'Range', and 'Units'. The 'Estimated Gestational Age' row is selected with a blue circle. At the bottom of the table are three buttons: 'New Date/Time', 'Update', and 'Reset'.

| Default Units  | 18-Jan-2024 13:47 | Range | Units |
|--|-------------------|-------|-------|
| Vision Uncorrected   |                   |       |       |
| Head Circumference   |                   |       | in    |
| Abdominal Girth  |                   |       | cm    |
| <input checked="" type="radio"/> Estimated Gestational Age | 37 5/7            |       |       |
| Fundal Height  |                   |       | cm    |
| Fetal Heart Tones  |                   |       |       |
| Presentation   |                   |       |       |

Figure 2-7: Vital Entry Menu, Estimated Gestational Age Selected

The screenshot shows a text-based menu with options 'A Add a Newborn Entry' and 'N No Change'. Below the menu, it displays the selected action and the delivery date/time. A note explains that no EGA measurements are on file for the day before the delivery date. At the bottom, it lists patient information: EGA AT DELIVERY: 37 5/7, SEX AT BIRTH: F FEMALE, and LIVE/STILLBORN: L LIVE.

```

A      Add a Newborn Entry
N      No Change

which action: N// Add a Newborn Entry
Enter NEWBORN Delivery Date/Time: N (JAN 18, 2024@13:54:29)

Note: There are no EGA measurements on file between a day before
and the delivery date. You will need to manually enter the EGA.

EGA AT DELIVERY: 37 5/7
SEX AT BIRTH: F FEMALE
LIVE/STILLBORN: L LIVE
    
```

Figure 2-8: Add a Newborn Entry menu

- c. Reproductive factors:
  - Parity=Full Term and Premature births=0
  - Gravidity=Total # of Pregnancies=1

Figure 2-9: Update Reproductive Factors

5. Denominator Exclusions: Inpatient hospitalizations for patients with abnormal presentation or placenta previa during the encounter

**Note:** The chart-based measure excludes single stillbirths and patients with multiple gestations from the denominator. These concepts are mutually exclusive of the denominator requirement of live singleton newborns, and therefore, the logic does not address single stillbirth nor multiple gestation.

- a. Abnormal presentation in vitals for V measurements

| Default Units                                 | 18-Jan-2024 13:08 | Range | Units |
|---|-------------------|-------|-------|
| Head Circumference                            |                   |       | in    |
| Abdominal Girth                               |                   |       | cm    |
| Estimated Gestational Age                     |                   |       |       |
| Fundal Height                                 |                   |       | cm    |
| Fetal Heart Tones                             |                   |       |       |
| <input checked="" type="radio"/> Presentation |                   |       |       |
| Cervix Dilatation                             |                   |       | cm    |

Figure 2-10: Vital Entry menu prompt

6. Numerator: Inpatient hospitalizations for patients who deliver by cesarean section:
  - a. Delivery procedure in EHR visit services ICD10PCS or PCC coding data entry
7. Numerator Exclusions: None

## 2.8 CMS506v6 Safe Use of Opioids–Concurrent Prescribing

<https://ecqi.healthit.gov/sites/default/files/ecqm/measures/CMS506v6.html>

### 2.8.1 Details and Data Entry

1. Initial population: Inpatient hospitalizations (inpatient stay less than or equal to 120 days) that end during the measurement period, where the patient is 18 years of age and older at the start of the encounter and prescribed one or more new or continuing opioid or benzodiazepine at discharge:
  - a. ADT admission/discharge
  - b. Existing order or new prescription of one or more opioids or benzodiazepines still active at discharge:
    - Outpatient medications, Outside medication, and discharge medications all count
2. Denominator: initial population
3. Denominator Exclusions:
  - a. Inpatient hospitalizations where patients have cancer that begins before or during the encounter
  - b. IPL SNOMED or ICD 10 diagnosis in V POV of cancer



- c. Receiving palliative or hospice care (including comfort measures, terminal care, and dying care) during the encounter
    - IPL- Add Visit Instruction/ Care Plans/ Goal Activities component then Treatment Regime/Therapy/Follow-up- Palliative Care
    - Hospice care in Visit Services as a CPT/HCPC service code
  - d. Patients discharged to another inpatient care facility and patients who expire during the inpatient stay
    - Discharge UB-04 type
- OR
- IPL- Add Visit Instruction/ Care Plans/ Goal Activities component then Treatment Regime/Therapy/Follow-up- Disposition
4. Numerator: Inpatient hospitalizations where the patient is prescribed or continuing to take two or more opioids or an opioid and benzodiazepine at discharge active at discharge:
    - a. Existing order or new prescription of one or more opioids or benzodiazepines still active at discharge
      - Outpatient medications, outside medication, and discharge medications all count
  5. Numerator Exclusions: N/A

## 2.9 CMS816v3: Hospital Harm - Severe Hypoglycemia

<https://ecqi.healthit.gov/sites/default/files/ecqm/measures/CMS816v3.html>

### 2.9.1 Details and Data Entry

1. Initial population: Inpatient hospitalizations where the patient is 18 years of age or older at the start of the encounter, and at least one hypoglycemic medication was administered during the encounter
  - a. The measure includes instances of administration of hypoglycemic medications in the emergency department or in observation status at the start of an inpatient hospitalization when assessing the inclusion of encounters in the measure denominator
    - ADT admission discharge in hospital or Observation with admission to hospital within 59 minutes or Emergency Department admission in AMER then admission to hospital within 59 minutes
    - BCMA medication administration of hypoglycemic medication
2. Denominator: Equals initial population
3. Denominator Exclusions: None

4. Numerator: Inpatient hospitalizations where a severe hypoglycemic event occurred during the encounter, which is:
  - a. A blood glucose lab result less than 40 mg/dL in V Labs
    - Laboratory test performed and resulted in V lab based on glucose test LOINC
  - b. A hypoglycemic medication administered within 24 hours before the start of the severe hypoglycemic event (i.e., the glucose result is less than 40 mg/dL):
    - BCMA medication administration of hypoglycemic medication
  - c. No subsequent repeat test for blood glucose with a result greater than 80 mg/dL within five minutes of the start of the initial blood glucose test with a result less than 40mg/dL:
    - Laboratory test performed and resulted in V lab based on glucose test LOINC
5. Only the first qualifying severe hypoglycemic event is counted in the numerator, and only one severe hypoglycemic event is counted per encounter. The 24-hour and 5-minute timeframes are based on the time the blood glucose was drawn, as this reflects the time the patient was experiencing that specific blood glucose level
6. Numerator Exclusions: Not applicable
7. Denominator Exceptions: None

## 2.10 CMS819v2 Opioid-Related Adverse Events

<https://ecqi.healthit.gov/sites/default/files/ecqm/measures/CMS819v2.html>

### 2.10.1 Detail and Data Entry

1. Initial population: Inpatient hospitalizations for patients age 18 and older during which at least one opioid medication was administered outside of the operating room
  - a. ADT admit/discharge without a ward assigned in BCQM a NHSN location code of Operating Room/Suite 1096-7
  - b. Opioid administered via BCMA

|   |
|---|
| <b>Note:</b> See BCQM manual to assign NHSN codes to wards via RPMS |
|---|

2. Denominator: Equals initial population
3. Denominator Exclusions: None

4. Numerator: Inpatient hospitalizations where an opioid antagonist was administered outside of the operating room and within 12 hours following administration of an opioid medication. The route of administration of the opioid antagonist must be by intranasal spray, inhalation, intramuscular, subcutaneous, or intravenous injection. Only one numerator event is counted per encounter.
  - a. Medication administered via BCMA and medication route within the drug file must be linked to a SNOMED code via the MEDICATION ROUTES (51.2) file.
5. Numerator Exclusions: Not applicable
6. Denominator Exceptions: None

## 2.11 CMS826v2 Hospital Harm – Pressure Injury

<https://ecqi.healthit.gov/sites/default/files/ecqm/measures/CMS826v2-v2.html>

### 2.11.1 Detail and Data Entry

1. Initial population: Inpatient hospitalizations for patients aged 18 and older
  - a. ADT admission/discharge
2. Denominator: Equals initial population
3. Denominator Exclusions:
  - a. Inpatient hospitalizations for patients with a DTPI or stage 2, 3, 4 or unstageable pressure injury diagnosis present on admission, i.e., the diagnosis of pressure injury has a Present on Admission indicator = Y yes (Diagnosis was present at time of inpatient admission) or W (clinically undetermined).
    - PCC entry of PV (Purpose of Visit) ICD10 code with “Present on Admission?” = Y
  - b. Inpatient hospitalizations for patients with a DTPI found on exam 72 hours or less after the start of the encounter.
    - Pressure Injury Skin Exam documented in V Exams with a result of “Positive”
  - c. Inpatient hospitalizations for patients with a stage 2, 3, 4, or unstageable pressure injury found on exam 24 hours or less after the start of the encounter.
    - Pressure Injury Skin Exam documented in V Exams with a result of either: Low = 2, Moderate = 3, High = 4, or Abnormal = Unstageable
  - d. Inpatient hospitalizations for patients with diagnosis of a COVID-19 infection during the encounter.
    - PCC entry of PV (Purpose of Visit) ICD10 code in V POV

4. Numerator: Inpatient hospitalizations for patients with a new deep tissue pressure injury (DTPI) or stage 2, 3, 4, or unstageable pressure injury, as evidenced by any of the following:
  - a. A diagnosis of DTPI with the DTPI not present on admission, i.e., the diagnosis of DTPI has a Present on Admission indicator = N (Diagnosis was not present at time of inpatient admission) or U (documentation insufficient to determine if the condition was present at the time of inpatient admission).
    - PCC entry of PV (Purpose of Visit) ICD10 code with “Present on Admission?” = N or U
  - b. A diagnosis of stage 2, 3, 4 or unstageable pressure injury with the pressure injury diagnosis not present on admission, i.e., the diagnosis of pressure injury has a Present on Admission indicator = N (Diagnosis was not present at time of inpatient admission) or U (documentation insufficient to determine if the condition was present at the time of inpatient admission).
    - PCC entry of PV (Purpose of Visit) ICD10 code with “Present on Admission?” = N or U
  - c. A DTPI found on exam greater than 72 hours after the start of the encounter.
    - Pressure Injury Skin Exam documented in V Exams with a result of “Positive”
  - d. A stage 2, 3, 4 or unstageable pressure injury found on exam greater than 24 hours after the start of the encounter.
    - Pressure Injury Skin Exam documented in V Exams with a result of “Abnormal”
5. Numerator Exclusions: Not Applicable
6. Denominator Exceptions: None

## 2.12 CMS871v3 Hospital Harm–Severe Hyperglycemia

<https://ecqi.healthit.gov/sites/default/files/ecqm/measures/CMS871v3.html>

### 2.12.1 Detail and Data Entry

1. Initial population: Inpatient hospitalizations where the patient is 18 years or older at the start of the admission with a discharge during the measurement period, as well as either:
  - a. ADT admission discharge in hospital or Observation with admission to hospital within 59 minutes or Emergency Department admission in AMER then admission to hospital within 59 minutes and one of the following:
    - A diagnosis of diabetes that starts before or during the encounter or
      - IPL SNOMED or ICD10 in V POV diagnosis of diabetes

- Administration of at least one dose of insulin or any hypoglycemic medication during the encounter or
    - BCMA medication administration of hypoglycemic
  - Presence of at least one blood glucose value  $\geq 200$  mg/dL at any time during the encounter
    - Laboratory test performed and resulted in V lab based on glucose test LOINC
  - b. The measure includes inpatient hospitalizations that began in the emergency department or observation
2. Denominator: Equals initial population
3. Denominator Exclusions: Inpatient hospitalizations for patients with an initial blood glucose result of  $\geq 1000$  mg/dL anytime between 1 hour before the start of the encounter to 6 hours after the start of the encounter:
- Laboratory tests performed and resulted in V lab based on the glucose test LOINC
4. There are two Measure Observations:
- a. Measure Observation 1, associated with the denominator: The total number of eligible days of the inpatient hospitalization that match the initial population/denominator criteria
  - b. Measure Observation 2, associated with the numerator: The total number of hyperglycemic days during the inpatient hospitalization. Days with a hyperglycemic event are defined as:
    - All days with a blood glucose level  $>300$  mg/dL (except those occurring in the first 24-hour period after admission to the hospital (including the emergency department and observation))
      - Laboratory test performed and resulted in V lab based on glucose test LOINC
- OR
- All days where blood glucose was not measured, and it was preceded by two consecutive days where at least one glucose value during each of the two days was  $\geq 200$  mg/dL
    - Laboratory test performed and resulted in V lab based on glucose test LOINC
- c. The length of stay for all eligible inpatient hospitalizations is truncated to  $\leq$  ten days when the length exceeds ten days
  - d. Do not count the last day if it was less than 24 hours, as this is not considered a full day

5. Numerator: Inpatient hospitalizations with a hyperglycemic event within the first ten days of the encounter minus the first 24 hours and the last period before discharge if less than 24 hours:
  - a. A hyperglycemic event is defined as:
    - A day with at least one blood glucose value >300 mg/dL;
      - Laboratory test performed and resulted in V lab based on glucose test LOINC
    - OR
    - A day where a blood glucose test was not done, and it was preceded by two consecutive days where at least one glucose value during each of the two days was >=200 mg/dL
      - Laboratory test performed and resulted in V lab based on glucose test LOINC
6. Numerator Exclusions: Not applicable
7. Denominator Exceptions: None

## 2.13 CMS986v2 Global Malnutrition Composite Score

<https://ecqi.healthit.gov/sites/default/files/ecqm/measures/CMS986v2.html>

### 2.13.1 Details and Data Entry

1. Initial population: Valid Encounter: Inpatient hospitalizations during the measurement period with length of stay of 24 hours or more among individuals 65 years of age and older at the start of the inpatient encounter
  - a. ADT admission/discharge
2. Measure Population: Equals initial population
3. Measure Population Exclusions: None
4. There are six Measure Observations:

This measure is constructed of four clinically eligible components aggregated as an arithmetic average of eligible hospitalizations. A single measure population is used to calculate the "TotalMalnutritionComponentsScore" and "TotalMalnutritionCompositeScore as Percentage". The initial population are hospitalizations during the measurement period for patients aged 65 years and greater with a length of stay of 24 hours and greater.

- a. "Measure Observation 1" = "Encounters with Malnutrition Risk Screening and Identified Result"

- "Measure Observation 1" identifies hospital encounters where a "Malnutrition Risk Screening" was performed with a current identified "Malnutrition Screening Not At Risk Result" or current "Malnutrition Screening At Risk Result".
  - Malnutrition Risk Screening (MRS) in V Measurements with any result
    - If Yes = 1
    - If No= 0
- b. "Measure Observation 2" = "Encounter with Nutrition Assessment and Identified Status"
  - "Measure Observation 2" identifies hospital encounters where a "Nutrition Assessment" was performed with a current identified "Nutrition Assessment Status Not or Mildly Malnourished", "Nutrition Assessment Status Moderately Malnourished", or "Nutrition Assessment Status Severely Malnourished".
    - Nutritional Risk Assessment Status in V Health Factors with any result
      - If Yes = 1
      - If No= 0
- c. "Measure Observation 3" = "Encounters with Malnutrition Diagnosis"
  - "Measure Observation 3" identifies hospital encounters where a current "Malnutrition Diagnosis" was documented.
    - IPL SNOMED or ICD 10 in V POV diagnosis of Malnutrition
      - If Yes = 1
      - If No= 0
- d. "Measure Observation 4" = "Encounters with Nutrition Care Plan"
  - "Measure Observation 4" identifies hospital encounters where a current "Nutrition Care Plan" was performed.
    - Patient education any topic with -NUT for -Nutrition in V PATIENT ED during the admission
      - If Yes = 1
      - If No= 0
- e. "Population 5 Measure Observation TotalMalnutritionComponentsScore" = ("Measure Observation 1" + "Measure Observation 2" + "Measure Observation 3" + "Measure Observation 4")
  - "Population 5 Measure Observation "TotalMalnutritionComponentsScore" Calculations

- For each hospitalization, Population Criteria 5 represents the subtotal of Measure Observations performed for Population Criteria 1, 2, 3, and 4.
  - For the reporting facility, the Population Criteria 5 Aggregate Operator 'Count' counts the number of eligible hospitalizations during the measurement period.
- f. "Population 6 Measure Observation TotalMalnutritionCompositeScore as Percentage" =  $100 * (\text{"TotalMalnutritionComponentsScore"} \text{ divided by } \text{"TotalMalnutritionCompositeScore Eligible Denominators"})$ .
- Population 6 Measure Observation "TotalMalnutritionCompositeScore as Percentage" Calculations:
    - For each hospitalization, Population Criteria 6 represents the sum of performed Measure Observations 1, 2, 3, and 4 divided by the number of clinically eligible denominators.
    - For the reporting facility, the Population Criteria 6 Aggregate Operator 'Average' averages the performance of each "TotalMalnutritionCompositeScore as Percentage" across all eligible hospitalizations during the measurement period.
- g. "TotalMalnutritionCompositeScore Eligible Denominators" is always 4 except in the following two instances:
- If a "Malnutrition Risk Screening" was performed and a "Malnutrition Screening Not At Risk Result" was identified AND "Hospital Dietitian Referral" was not ordered, then the "TotalMalnutritionCompositeScore Eligible Denominators" is 1.
    - Malnutrition Risk Screening (MRS) in V Measurements with a result between 0-3
    - IPL problem entry of any of the following:
      - 306165000 Referral to hospital-based dietetics service (procedure)
      - 306354000 Referral to hospital-based dietitian (procedure)
  - If a "Nutrition Assessment" was performed and a "Nutrition Status Not or Mildly Malnourished" was identified, then the "TotalMalnutritionCompositeScore Eligible Denominators" are 2.
    - Nutritional Risk Assessment Status in V Health Factors with "Nutrition Risk-Not or Mildly Malnourished"
- h. The "TotalMalnutritionCompositeScore Eligible Denominators" equals 4:
- If a "Malnutrition Risk Screening" was performed AND a "Malnutrition Screening At Risk Result" was identified AND a "Nutrition Assessment" was not performed.



- Malnutrition Risk Screening (MRS) in V Measurements with a result between 4-7 and NO entry of Nutrition Risk Assessment Status in V health factors
- If a "Malnutrition Risk Screening" was not performed AND a "Nutrition Assessment" was not performed.
  - No entry of MRS in V measurements or Nutrition Risk Assessment Status in V health factors
- If a "Hospital Dietitian Referral" was ordered AND a "Nutrition Assessment" was not performed.
  - NO entry of Nutrition Risk Assessment Status in V health factors with an IPL problem entry of any of the following:
    - 306165000 Referral to hospital-based dietetics service (procedure)
    - 306354000 Referral to hospital-based dietitian (procedure)
- If a "Nutrition Assessment Status Moderately Malnourished" OR "Nutrition Assessment Status Severely Malnourished" was identified.
  - Nutritional Risk Assessment Status in V Health Factors with "Nutrition Risk-Severely Malnourished"

## 2.14 CMS1028v2 Severe Obstetric Complications

<https://ecqi.healthit.gov/sites/default/files/ecqm/measures/CMS1028v2.html>

### 2.14.1 Details and Data Entry

1. Initial population: Inpatient hospitalizations for patients age  $\geq 8$  years and  $< 65$  admitted to the hospital for inpatient acute care who undergo a delivery procedure with a discharge date that ends during the measurement period
  - a. ADT admission and discharge
  - b. Delivery procedure in EHR visit services ICD10PCS or PCC coding data entry
2. Denominator: Inpatient hospitalizations for patients delivering stillborn or live birth with  $\geq 20$  weeks, 0 days gestation completed
  - a. ADT admission
  - b. IPL SNOMED or ICD Diagnosis in V POV of stillborn or live birth
  - c. Estimated Gestational Age (EGA) in Measurements in V Measurements or V Delivery in PCC data entry  $\geq 20$

3. Denominator Exclusions: Inpatient hospitalizations for patients with a confirmed diagnosis of COVID with COVID-related respiratory condition or patients with a confirmed diagnosis of COVID with COVID-related respiratory procedure
  - a. IPL SNOMED or ICD Diagnosis in V POV
  - b. Respiratory procedure in EHR visit services ICD10PCS or PCC coding data entry No or Unable to Determine
4. Numerator: Inpatient hospitalizations for patients with severe obstetric complications (not present on admission that occur during the current delivery encounter), including the following:
  - a. Severe maternal morbidity diagnoses (see list below)
    - IPL SNOMED or ICD Diagnosis in V POV
    - ICD diagnosis with Present on Admission No, in PCC data entry
  - b. Severe maternal morbidity procedures (see list below)
    - Procedure in EHR visit services ICD10PCS or PCC coding data entry
  - c. Discharge disposition of expired
    - ADT discharge status type as Expired UB04 code 20
5. Severe Maternal Morbidity Diagnoses:
  - Cardiac (ICD10 PV)
    - Acute heart failure
    - Acute myocardial infarction
    - Aortic aneurysm
    - Cardiac arrest/ventricular fibrillation
    - Heart failure/arrest during procedure or surgery
  - Hemorrhage (ICD10 PV)
    - Disseminated intravascular coagulation
    - Shock
  - Renal (ICD10 PV)
    - Acute renal failure
  - Respiratory (ICD10 PV)
    - Adult respiratory distress syndrome
    - Pulmonary edema
  - Sepsis (ICD10 PV)
  - Other OB (ICD10 PV)
    - Air and thrombotic embolism
    - Amniotic fluid embolism

- Eclampsia
  - Severe anesthesia complications
  - Other Medical (ICD10 PV)
    - Puerperal cerebrovascular disorder
    - Sickle cell disease with crisis
6. Severe Maternal Morbidity Procedures: (ICD10 PCS)
- Blood transfusion
  - Conversion of cardiac rhythm
  - Temporary tracheostomy
  - Ventilation
7. Denominator Exceptions: None
8. Numerator Exclusions: Not applicable

## 3.0 Eligible Hospital Hybrid Measures

### 3.1 CMS529v4 Core Clinical Data Elements for the Hybrid Hospital-Wide Readmission (HWR) Measure with Claims and Electronic Health Record Data

<https://ecqi.healthit.gov/sites/default/files/ecqm/measures/CMS529v4.html>

#### 3.1.1 Details and Data Entry

1. Initial population: All Medicare fee-for-service patients aged 65 and older who are discharged during the measurement period (length of stay <365 days) at the start of an inpatient admission.
  - a. Medicare Insurance active in patient registration
  - b. ADT admission discharge (Must have an observation or ER/ED admission discharge prior to full admission)
  - c. Core clinical data elements listed below are from V measurements and V lab LOINC codes

**Note:** All Medicare fee-for-service encounters meeting the above criteria should be included, regardless if Medicare fee-for-service is the primary, secondary, or tertiary payer.

**Supplemental Data Elements:** For encounters in the initial population, report the FIRST value for vital signs resulting within the 24 hours prior to the inpatient admission. If no values resulted in the 24 hours before the admission (for example, for patients directly admitted to the hospital), report the first value resulting within 2 hours after the start of the inpatient admission.

For laboratory test results, report the first value that resulted within 24 hours before admission. If there are no values in the 24 hours prior to admission, report the first value resulting within 24 hours after the start of the inpatient admission.

First values for the core clinical data elements may result in the emergency department or other hospital outpatient locations within the hospital facility before a patient is subsequently admitted to the same hospital. First values for these data elements may also result in an inpatient location for directly admitted patients who do not receive care in the emergency department or other hospital outpatient locations before admission.

The core clinical data elements are as follows:

- Bicarbonate (or carbon dioxide, see Bicarbonate Lab Test value set)
- Creatinine

- Glucose
- Heart rate
- Hematocrit
- Oxygen saturation (by pulse oximetry)
- Potassium
- Respiratory rate
- Sodium
- Systolic blood pressure
- Temperature
- Weight
- White blood cell count

**Note:** Do not report ALL values on an encounter during their entire admission. Only report the FIRST resulted value for EACH core clinical data element collected in the appropriate timeframe, if available.

1. Denominator: N/A
2. Denominator Exclusions: N/A
3. Numerator: N/A
4. Numerator Exclusions: N/A
5. Denominator Exceptions: N/A

## 3.2 CMS844v4 Core Clinical Data Elements for the Hybrid Hospital-Wide (All-Condition, All-Procedure) Risk-Standardized Mortality Measure (HWM)

<https://ecqi.healthit.gov/sites/default/files/ecqm/measures/CMS844v4.html>

### 3.2.1 Details and Data Entry

1. Initial population: All Medicare fee-for-service encounters age 65 and older at the start of an inpatient admission, who are discharged during the measurement period (length of stay <365 days).
  - a. Medicare Insurance active in patient registration

- b. ADT admission discharge (Must have an Observation or ER/ED admission discharge prior to full admission)
- c. Core Clinical Data Elements listed below are from V Measurements and V lab LOINC codes

**Note:** All Medicare fee-for-service encounters meeting the above criteria should be included, regardless if Medicare fee-for-service is the primary, secondary, or tertiary payer.

Supplemental Data Elements: For encounters in the initial population, report the FIRST value for vital signs resulted within the 24 hours prior to the inpatient admission. If no values were resulted in the 24 hours prior to the admission (for example, for patients directly admitted to the hospital), report the first value resulted within 2 hours after the start of the inpatient admission.

For laboratory test results, report the first value resulted within the 24 hours prior to admission. If there are no values in the 24 hours prior to admission, report the first value resulted within 24 hours after the start of the inpatient admission.

First values for the core clinical data elements may be resulted in the emergency department or other hospital outpatient locations within the hospital facility before a patient is subsequently admitted to the same hospital. First values for these data elements may also be resulted in an inpatient location for directly admitted patients who do not receive care in the emergency department or other hospital outpatient locations before admission.

The HWM-core clinical data elements are as follows:

- Bicarbonate (or carbon dioxide, see Bicarbonate Lab Test value set)
- Creatinine
- Heart rate
- Hematocrit
- Oxygen saturation (by pulse oximetry)
- Platelet
- Sodium
- Systolic blood pressure
- Temperature
- White blood cell count

**Note:** Do not report ALL values on an encounter during their entire admission. Only report the FIRST resulted value for EACH core clinical data element collected in the appropriate timeframe, if available.

For every patient in the initial population, also identify payer, race, ethnicity and sex.

1. Denominator: N/A
2. Denominator Exclusions: N/A
3. Numerator: N/A
4. Numerator Exclusions: N/A
5. Denominator Exceptions: N/A

## 4.0 Eligible Clinician Measures (For 2024 Reporting Period)

### 4.1 CMS2v13 Preventive Care and Screening: Screening for Depression and Follow-Up Plan

<https://ecqi.healthit.gov/sites/default/files/ecqm/measures/CMS2v13.html>

#### 4.1.1 Details and Data Entry

1. Initial population: All patients aged 12 years and older at the beginning of the measurement period with at least one eligible encounter during the measurement period:
  - a. Patient of age with one qualifying encounter examples: Ambulatory, Telephone, Physical therapy, etc.
2. Denominator: Equals initial population
3. Denominator Exclusions: Patients who have been diagnosed with depression or with bipolar disorder
  - a. IPL SNOMED problem diagnosis or ICD 10 in V POV or depression or bipolar disorder
4. Numerator: Patients screened for depression on the date of the encounter or up to 14 days prior to the date of the encounter using an age-appropriate standardized tool AND if positive, a follow-up plan is documented on the date of the eligible encounter
  - a. Vitals for V Measurement scoring positive in either PHQ9, PHQ9, or PHQ-T depending on age
    - Follow up documented in TREG to IPL entry in the Treatment\Regime\Therapy- Follow-up
    - Depression medication order
    - Patient referral in RCIS
    - Consult order
  - b. Exam for Depression screening resulted positive:
    - Follow up documented in TREG to IPL entry in the Treatment\Regime-Follow-up
    - Depression medication order
    - Patient referral in RCIS



- Consult order

**Note:** Negative results in both Measurements and Exams will count in the numerator.

5. Numerator Exclusions: N/A

## 4.2 CMS22v12 Preventive Care and Screening: Screening for High Blood Pressure and Follow-Up Documented

<https://ecqi.healthit.gov/sites/default/files/ecqm/measures/CMS22v12.html>

### 4.2.1 Details and Data Entry

1. Initial population: All patient visits for patients aged 18 years and older at the beginning of the measurement period
  - a. Ambulatory service category and visit services with office visit CPT or preventative care CPT are some examples of qualifying encounters
2. Denominator: Equals initial population
3. Denominator Exclusions: The patient has an active diagnosis of hypertension
  - a. IPL SNOMED or ICD 10 in V POV active diagnosis for hypertension
4. Numerator: Patient visits where patients were screened for high blood pressure AND have a recommended follow-up plan documented, as indicated if the blood pressure is elevated or hypertensive
  - a. Vital measurement entry for blood pressure if high
    - Follow-up documented in TREG to IPL entry in the Treatment\Regime\Follow up- Follow-up
    - Prescribed diet education documented in TREG to IPL entry Treatment\Regimen\Follow up-Weight Management
    - Patient referral in RCIS to primary care or alternate provider
    - Patient referral in RCIS for alcohol counseling
    - Patient referral in RCIS to dietitian
    - Patient education for Lifestyle Adaptations
    - Medication order for Pharmacologic Therapy or Adverse Reaction/Allergy to Pharmacologic Therapy

5. Denominator Exceptions: Documentation of medical reason(s) for not screening for high blood pressure (e.g., patient is in an urgent or emergent medical situation where time is of the essence and to delay treatment would jeopardize the patient's health status)
  - a. EHR Personal Health Refusal for blood pressure measurement examples of reasons: Contraindicated, Not Indicated, Absent Response to Treatment
6. Documentation of patient reason(s) for not screening for blood pressure measurements or for not ordering an appropriate follow-up intervention if patient BP is elevated or hypertensive (e.g., patient refuses)
  - a. EHR Personal Health Refusal for blood pressure measurement examples of reasons: Patient Refused
7. Numerator Exclusions: N/A

## 4.3 CMS50v12 Closing the Referral Loop: Receipt of Specialist Report

<https://ecqi.healthit.gov/sites/default/files/ecqm/measures/CMS50v12.html>

### 4.3.1 Detail and Data Entry

1. Initial population: Number of patients, regardless of age, who had a visit during the measurement period and were referred by one provider to another provider
  - a. Ambulatory service category and visit services with office visit CPT or preventative care CPT are some examples of qualifying encounters
  - b. Patient referral in the RCIS package approved during the measurement period
2. Denominator: Equals initial population
3. Denominator Exclusions: None
4. Numerator: Number of patients with a referral, for which the referring provider received a report from the provider to whom the patient was referred
  - a. Patient referral closed-completed from RCIS package and provider received the consultation report back and acknowledged via the EHR Clinical Consultation button (referral needs to be highlighted before utilizing the button)

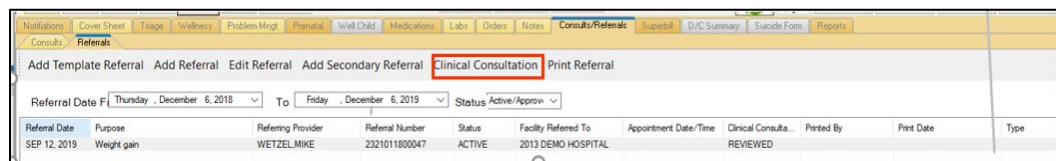


Figure 4-1: Clinical Consultation tab

5. Numerator Exclusions: N/A

## 4.4 CMS69v12 Preventive Care and Screening: BMI Screening and Follow-Up Plan

<https://ecqi.healthit.gov/sites/default/files/ecqm/measures/CMS69v12.html>

### 4.4.1 Detail and Data Entry

1. Initial population: All patients aged 18 and older on the date of the encounter with at least one eligible encounter during the measurement period
  - a. An ambulatory medical, dental, counseling encounter for a patient 18+ before the beginning of the measurement period
2. Denominator: Equals initial population
3. Denominator Exclusions: Patients who are pregnant or patients receiving palliative or hospice care
  - a. IPL SNOMED or ICD 10 in V POV diagnosis of pregnancy during the measurement period
  - b. TREG entry in Palliative Care
  - c. Visit services HCPC code for Hospice care
4. Numerator: Patients with a documented BMI during the encounter or during the previous twelve months, AND when the BMI is outside of normal parameters, a follow-up plan is documented during the encounter or during the previous twelve months of the current encounter
  - a. Vital measurement entry for both height and weight to calculate the BMI in V Measurements
  - b. TREG entry in Weight Management for prescribed diet or exercise therapy
  - c. Medication ordered for above or below average BMI (Outpatient prescribed or Outside documented)
  - d. Patient referral in RCIS examples: referral to mental health counselor, referral to psychiatrist, referral to physical activity program
  - e. Visit services CPT/HCPC code for nutrition education or exercise education
  - f. Surgical procedures CPT in visit services for Above normal BMI
5. Numerator Exclusions: N/A

6. Denominator Exceptions: Patients with a documented medical reason for not documenting BMI or for not documenting a follow-up plan for a BMI outside normal parameters (e.g., elderly patients 65 years of age or older for whom weight reduction/weight gain would complicate other underlying health conditions such as illness or physical disability, mental illness, dementia, confusion, or nutritional deficiency such as vitamin/mineral deficiency; patients in an urgent or emergent medical situation where time is of the essence and to delay treatment would jeopardize the patient's health status)
7. Patients who refuse measurement of height and/or weight
  - a. Personal health refusal for height and/or weight measurement

## 4.5 CMS117v12 Childhood Immunization Status

<https://ecqi.healthit.gov/sites/default/files/ecqm/measures/CMS117v12.html>

### 4.5.1 Detail and Data Entry

1. Initial population: Children who turn 2 years of age during the measurement period and who have a visit during the measurement period
2. Denominator: Equals initial population
3. Denominator Exclusions: Exclude children with any of the following on or before the child's second birthday:
  - Severe combined immunodeficiency
  - Immunodeficiency
  - HIV
  - Lymphoreticular cancer, multiple myeloma or leukemia
  - Intussusception
  - a. IPL SNOMED or ICD 10 in V POV diagnosis or condition listed aboveExclude patients who are in hospice care for any part of the measurement period
  - a. Visit service HCPC code for hospice services
  - b. TREG entry in the IPL for hospice care in Palliative Care category
4. Numerator: Children who have evidence showing they received recommended vaccines, had documented history of the illness, had a seropositive test result, or had an allergic reaction to the vaccine by their second birthday
  - a. Administered or documented historical immunization in the EHR meeting the following criteria below for each

- b. Immunization contraindicated with anaphylaxis reason for not administering immunization meeting the following criteria below for each
- c. IPL SNOMED or ICD 10 in V POV is the history of illness meeting the criteria below for each

### **Diphtheria, Tetanus, and Pertussis (DTaP) Vaccination**

Children with any of the following on or before the child's second birthday meet the criteria:

- At least four DTaP vaccinations, with different dates of service. Do not count a vaccination administered prior to 42 days after birth
- Anaphylaxis (immunization contraindication) due to diphtheria, tetanus, or pertussis vaccine
- Encephalitis due to diphtheria, tetanus, or pertussis vaccine

### **Poliovirus Vaccination (IPV)**

Children with either of the following meet criteria:

- At least three IPV vaccinations, with different dates of service on or before the child's second birthday. Do not count a vaccination administered prior to 42 days after birth.
- Anaphylaxis (immunization contraindication) due to poliovirus vaccine

### **Measles, Mumps, and Rubella Vaccination (MMR)**

Children with either of the following meet criteria:

- At least one MMR vaccination on or between the child's first and second birthdays
- All the following anytime on or before the child's second birthday (on the same or different date of service):
  - History of measles
  - History of mumps
  - History of rubella
- Anaphylaxis (immunization contraindication) due to MMR vaccine

### **Haemophilus Influenzae Type B Vaccination (HiB)**

Children with either of the following meet criteria on or before the child's second birthday:

- At least three HiB vaccinations, with different dates of service. Do not count a vaccination administered prior to 42 days after birth
- Anaphylaxis (immunization contraindication) due to the HiB vaccine

## Hepatitis B

Children with any of the following on or before the child's second birthday meet criteria:

- At least three hepatitis B vaccinations, with different dates of service
  - One of the three vaccinations can be a newborn hepatitis B vaccination during the eight-day period that begins on the date of birth and ends seven days after the date of birth. For example, if the member's date of birth is December 1, the newborn hepatitis B vaccination must be on or between December 1 and December 8
- Anaphylaxis (immunization contraindication) due to the hepatitis B vaccine
- History of hepatitis B illness

## Varicella Vaccination (VZV)

Children with either of the following meet criteria:

- At least one VZV vaccination, with a date of service on or between the child's first and second birthdays
- Anaphylaxis (immunization contraindication) due to the varicella vaccine
- History of varicella zoster (e.g., chicken pox) illness on or before the child's second birthday

## Pneumococcal Conjugate

Children with either of the following meet criteria:

- At least four pneumococcal conjugate vaccinations, with different dates of service on or before the child's second birthday. Do not count a vaccination administered prior to 42 days after birth.
- Anaphylaxis (immunization contraindication) due to the pneumococcal conjugate vaccine

## Hepatitis A

Children with either of the following meet criteria:

- At least one hepatitis A vaccination, with a date of service on or between the child's first and second birthdays
- Anaphylaxis (immunization contraindication) due to the hepatitis A vaccine
- History of hepatitis A illness on or before the child's second birthday

## Rotavirus

Children with any of the following meet criteria:

- At least two doses of the two-dose rotavirus vaccine on different dates of service on or before the child's second birthday. Do not count a vaccination administered prior to 42 days after birth

- At least three doses of the three-dose rotavirus vaccine on different dates of service on or before the child's second birthday. Do not count a vaccination administered prior to 42 days after birth
- At least one dose of the two-dose rotavirus vaccine and at least two doses of the three-dose rotavirus vaccine, all on different dates of service, on or before the child's second birthday. Do not count a vaccination administered prior to 42 days after birth
- Anaphylaxis (immunization contraindication) due to the rotavirus vaccine on or before the child's second birthday

### **Influenza**

Children with any of the following meet criteria:

- At least two influenza vaccinations, with different dates of service on or before the child's second birthday. Do not count a vaccination administered prior to 6 months (180 days) after birth
  - One of the two vaccinations can be an LAIV vaccination administered on the child's second birthday. Do not count an LAIV vaccination administered before the child's second birthday
- Anaphylaxis (immunization contraindication) due to the influenza vaccine

5. Numerator Exclusions: N/A

6. Denominator Exceptions: None

## **4.6 CMS122v12 Diabetes: Hemoglobin A1c Poor Control (> 9%)**

<https://ecqi.healthit.gov/sites/default/files/ecqm/measures/CMS122v12.html>

### **4.6.1 Detail and Data Entry**

1. Initial population: Patients 18-75 years of age with diabetes with a visit during the measurement period
  - Visit services with office visit CPT, preventative care CPT, Wellness, Telephone are some examples of qualifying encounters
  - IPL SNOMED or ICD 10 in V POV diagnosis of diabetes
2. Denominator: Equals initial population
3. Denominator Exclusions:
  - a. Exclude patients who are in hospice care for any part of the measurement period

- Hospice care service HCPC code in the Visit Services
  - Hospice Care TREG entry in the IPL Palliative care category
  - Inpatient hospitalization discharged to Hospice in ADT
- b. Exclude patients 66 and older by the end of the measurement period who are living long term in a nursing home any time on or before the end of the measurement period
- CPT for nursing home services in Visit Services
- c. Exclude patients 66 and older by the end of the measurement period with an indication of frailty for any part of the measurement period who also meet any of the following advanced illness criteria:
- Advanced illness with two outpatient encounters during the measurement period or the year prior
    - Frailty device issued in Visit Services with HCPC code AND IPL SNOMED or ICD 10 in V POV diagnosis of advanced illness
  - OR advanced illness with one inpatient encounter during the measurement period or the year prior
    - Frailty device issued in Visit Services with HCPC code AND IPL SNOMED or ICD 10 in V POV diagnosis of advanced illness AND an inpatient encounter
  - OR taking dementia medications during the measurement period or the year prior
    - Active medication order prescribed in Outpatient medications or documented in Outside medications
- d. Exclude patients receiving palliative care for any part of the measurement period
- TREG entry in the IPL in the Palliative care category
4. Numerator: Patients whose most recent HbA1c level (performed during the measurement period) is >9.0% or is missing, or was not performed during the measurement period
- a. Laboratory test resulted with LOINC in V lab for HbA1c >9.0% or NO laboratory test resulted for HbA1c
5. Numerator Exclusions: N/A
6. Denominator Exceptions: None

## 4.7 CMS124v12 Cervical Cancer Screening

<https://ecqi.healthit.gov/sites/default/files/ecqm/measures/CMS124v12.html>



### 4.7.1 Detail and Data Entry

1. Initial population: Women 23-64 years of age with a visit during the measurement period
  - a. Visit services with office visit CPT, preventative care CPT, Wellness, Telephone are some examples of qualifying encounters
2. Denominator: Equals initial population
3. Denominator Exclusions: Women who had a hysterectomy with no residual cervix or a congenital absence of cervix. Exclude patients who are in hospice care for any part of the measurement period. Exclude patients receiving palliative care for any part of the measurement period
  - a. CPT procedure code in Visit Services for hysterectomy
  - b. SNOMED entry in IPL for hysterectomy
  - c. Hospice care service HCPC code in the Visit Services
  - d. Hospice Care TREG entry in the IPL in the Palliative Care category
  - e. Inpatient hospitalization discharged to Hospice in ADT
  - f. TREG entry in the IPL in the palliative care category
4. Numerator: Women with one or more screenings for cervical cancer. Appropriate screenings are defined by any one of the following criteria:
  - a. Cervical cytology performed during the measurement period or the two years prior to the measurement period for women who are at least 21 years old at the time of the test
    - Laboratory test performed and resulted in V lab with LOINC
  - b. Cervical human papillomavirus (HPV) testing performed during the measurement period or the four years prior to the measurement period for women who are 30 years or older at the time of the test
    - Laboratory test performed and resulted in V lab with LOINC
5. Numerator Exclusions: N/A
6. Denominator Exceptions: None

## 4.8 CMS125v12 Breast Cancer Screening

<https://ecqi.healthit.gov/sites/default/files/ecqm/measures/CMS125v12.html>

### 4.8.1 Detail and Data Entry

1. Initial population: Women 52-74 years of age by the end of the measurement period with a visit during the measurement period

- a. Visit services with preventative care, office visit, wellness and telephone are some examples of qualifying encounters
2. Denominator: Equals initial population
3. Denominator Exclusions:
  - a. Women who had a bilateral mastectomy or who have a history of a bilateral mastectomy or for whom there is evidence of a right and a left unilateral mastectomy
    - Mastectomy procedure entered in Visit Services or historical procedures both go to V CPT laterality must be specified in the modifiers (Bilateral-50, Left-LT, or Right-RT)
  - b. Exclude patients who are in hospice care for any part of the measurement period
    - Hospice care service HCPC code in the Visit Services
    - Hospice Care TREG entry in the IPL Palliative care category
    - Inpatient hospitalization discharged to Hospice in ADT
  - c. Exclude patients 66 and older by the end of the measurement period who are living long term in a nursing home any time on or before the end of the measurement period
    - CPT for nursing home services in Visit Services
  - d. Exclude patients 66 and older by the end of the measurement period with an indication of frailty for any part of the measurement period who also meet any of the following advanced illness criteria:
    - Advanced illness with two outpatient encounters during the measurement period or the year prior
      - Frailty device issued in Visit Services with HCPC code AND IPL SNOMED or ICD 10 in V POV diagnosis of advanced illness
    - OR advanced illness with one inpatient encounter during the measurement period or the year prior
      - Frailty device issued in Visit Services with HCPC code AND IPL SNOMED or ICD 10 in V POV diagnosis of advanced illness AND an inpatient encounter
    - OR taking dementia medications during the measurement period or the year prior
      - Active medication order prescribed in Outpatient medications or documented in Outside medications
  - e. Exclude patients receiving palliative care for any part of the measurement period

- TREG entry in the IPL in the Palliative care category
4. Numerator: Women with one or more mammograms any time on or between October 1 two years prior to the measurement period and the end of the measurement period
    - a. Radiology procedure completed in V Radiology
    - b. mammography procedure code entered in visit services or historical CPT entered in Historical Procedure
  5. Numerator Exclusions: Not applicable
  6. Denominator Exceptions: None

## 4.9 CMS130v12 Colorectal Cancer Screening

<https://ecqi.healthit.gov/sites/default/files/ecqm/measures/CMS130v12.html>

### 4.9.1 Detail and Data Entry

1. Initial population: Patients 46-75 years of age by the end of the measurement period with a visit during the measurement period
  - a. Visit services with preventative care, office visits, wellness, and telephone are some examples of qualifying encounters
2. Denominator: Equals initial population
3. Denominator Exclusions :
  - a. Exclude patients who are in hospice care for any part of the measurement period
    - Hospice care service HCPC code in the Visit Services
    - Hospice Care TREG entry in the IPL Palliative care category
    - Inpatient hospitalization discharged to Hospice in ADT
  - b. Exclude patients with a diagnosis or past history of total colectomy or colorectal cancer.
    - Total colectomy procedure in Visit Services as a CPT or ICD10PCS or IPL SNOMED entry in the IPL
    - IPL SNOMED or ICD10 diagnosis of colon cancer in V POV
  - c. Exclude patients receiving palliative care for any part of the measurement period.
    - TREG entry in the IPL in the Palliative care category

4. Numerator: Patients with one or more screenings for colorectal cancer. Appropriate screenings are defined by any one of the following criteria:
  - a. Fecal occult blood test (FOBT) during the measurement period
    - Laboratory test performed and resulted to V LAB either POC in-house or outside reference lab
  - b. FIT-DNA during the measurement period or the two years prior to the measurement period
    - Laboratory test performed and resulted to V LAB either POC in-house or outside reference lab
  - c. Flexible sigmoidoscopy during the measurement period or the four years prior to the measurement period
    - Sigmoidoscopy procedure CPT/HCPC code in Visit Services
    - Sigmoidoscopy procedure in IPL SNOMED
  - d. CT Colonography during the measurement period or the four years prior to the measurement period
    - Radiology procedure ordered and completed in V Radiology
    - CT Colonography procedure code entered in visit services or historical CPT entered in Historical Procedure
  - e. Colonoscopy during the measurement period or the nine years prior to the measurement period
    - Colonoscopy procedure CPT/HCPC code in Visit Services
    - Colonoscopy procedure in IPL SNOMED
5. Numerator Exclusions: Not applicable
6. Denominator Exceptions: None

## 4.10 CMS131v12 Diabetes: Eye Exam

<https://ecqi.healthit.gov/sites/default/files/ecqm/measures/CMS131v12.html>

### 4.10.1 Detail and Data Entry

1. Patients 18-75 years of age by the end of the measurement period, with diabetes with a visit during the measurement period
  - a. Visit services with preventative care, office visit, wellness and telephone are some examples of qualifying encounters
2. Denominator: Equals initial population

3. Denominator Exclusions:
  - a. Exclude patients who are in hospice care for any part of the measurement period
    - Hospice care service HCPC code in the Visit Services
    - Hospice Care TREG entry in the IPL Palliative care category
    - Inpatient hospitalization discharged to Hospice in ADT
  - b. Exclude patients 66 and older by the end of the measurement period who are living long term in a nursing home any time on or before the end of the measurement period
    - CPT for nursing home services in Visit Services
  - c. Exclude patients 66 and older by the end of the measurement period with an indication of frailty for any part of the measurement period who also meet any of the following advanced illness criteria:
    - Advanced illness with two outpatient encounters during the measurement period or the year prior
      - Frailty device issued in Visit Services with HCPC code AND IPL SNOMED or ICD 10 in V POV diagnosis of advanced illness
    - OR advanced illness with one inpatient encounter during the measurement period or the year prior
      - Frailty device issued in Visit Services with HCPC code AND IPL SNOMED or ICD 10 in V POV diagnosis of advanced illness AND an inpatient encounter
    - OR taking dementia medications during the measurement period or the year prior
      - Active medication order prescribed in Outpatient medications or documented in Outside medications
  - d. Exclude patients receiving palliative care for any part of the measurement period
    - TREG entry in the IPL in the Palliative care category
4. Numerator: Patients with an eye screening for diabetic retinal disease. This includes diabetics who had one of the following:
  - a. Diabetic with a diagnosis of retinopathy in any part of the measurement period and a retinal or dilated eye exam by an eye care professional in the measurement period
    - IPL SNOMED or ICD 10 in V POV diagnosis of diabetes and retinopathy and Exam in EHR for Diabetic Eye Exam

- b. Diabetic with no diagnosis of retinopathy in any part of the measurement period and a retinal or dilated eye exam by an eye care professional in the measurement period or the year prior to the measurement period
  - IPL SNOMED or ICD 10 in V POV diagnosis of diabetes and Exam in EHR for Diabetic Eye Exam
5. Numerator Exclusions: Not applicable
6. Denominator Exceptions: None

## 4.11 CMS137v12 Initiation and Engagement of Alcohol and Other Drug Dependence Treatment

<https://ecqi.healthit.gov/sites/default/files/ecqm/measures/CMS138v12.html>

### 4.11.1 Detail and Data Entry

1. Initial population: Patients age 13 years of age and older as of the start of the measurement period who were diagnosed with a new SUD episode during a visit between January 1 and November 14 of the measurement period
  - a. Emergency department visit, inpatient or observation admission/discharge, office visit, telephone visit, and online assessment are examples of a qualifying encounter
2. Denominator: Equals initial population
  - Denominator Exclusions: Exclude patients who are in hospice care for any part of the measurement period Hospice care service HCPC code in the Visit Services
  - Hospice Care TREG entry in the IPL Palliative care category
  - Inpatient hospitalization discharged to Hospice in ADT
3. Numerator:
  - a. Numerator 1: Initiation of treatment includes either an intervention or medication for the treatment of SUD within 14 days of the new SUD episode
    - SUD services CPT/HCPC code in Visit Services
    - Substance abuse disorder performed in TREG entry in the IPL Substance abuse category
    - SUD medication order for treatment in Outpatient or Outside medications
  - b. Numerator 2: Engagement in ongoing SUD treatment within 34 days of initiation includes:

- A long-acting SUD medication on the day after the initiation through 34 days after the initiation of treatment

AND

- One of the following options on the day after the initiation of treatment through 34 days after the initiation of treatment:
  - Two engagement visits
  - Two engagement medication treatment events
  - One engagement visit and one engagement medication treatment event

4. Numerator Exclusions: Not applicable

5. Denominator Exceptions: None

## 4.12 CMS138v12 Preventive Care and Screening: Tobacco Use: Screening and Cessation Intervention

<https://ecqi.healthit.gov/sites/default/files/ecqm/asures/CMS138v12.html>

### 4.12.1 Detail and Data Entry

1. Initial population: All patients aged 18 years and older seen for at least two visits or at least one preventive visit during the measurement period
  - a. Two qualifying visit encounter examples are office visit, wellness, physical therapy, ophthalmology and telephone
  - b. Preventative visits are documented in the EHR within the Evaluation Management in the Preventative Medicine services, or individual or group preventative counseling CPT within the Visit Services
2. Denominator:
  - a. Population 1: Equals initial population
  - b. Population 2: Equals initial population who were screened for tobacco use during the measurement period and identified as a tobacco user
    - Tobacco use health factors (Smoke, Smokeless, or E-Cigarette) documented in the EHR with a user status
  - c. Population 3: Equals initial population
3. Denominator Exclusions: Exclude patients who are in hospice care for any part of the measurement period
  - Hospice care service HCPC code in the Visit Services
  - Hospice Care TREG entry in the IPL Palliative care category

- Inpatient hospitalization discharged to Hospice in ADT
4. Numerator:
    - a. Population 1: Patients who were screened for tobacco use at least once during the measurement period
      - Tobacco use health factor (Smoke, Smokeless, or E-Cigarette) documented
    - b. Population 2: Patients who received tobacco cessation intervention during the measurement period or in the six months prior to the measurement period
      - Tobacco cessation CPT in Visit Services
      - Tobacco cessation medication in Outpatient or Outside medications
      - Tobacco patient education topic “TO-XX”
      - Patient referral for Tobacco Cessation in EHR/RCIS
      - TREG entry in the IPL for “Referral to tobacco quit line” in the Tobacco category
  5. Population 3: Patients who were screened for tobacco use at least once during the measurement period AND who received tobacco cessation intervention during the measurement period or in the six months prior to the measurement period if identified as a tobacco user
    - Tobacco use health factor (Smoke, Smokeless, or E-Cigarette) documented
    - AND one of the following:
      - Tobacco cessation CPT in Visit Services
      - Tobacco cessation medication in Outpatient or Outside medications
      - Tobacco patient education topic “TO-XX”
      - Patient referral for Tobacco Cessation in EHR/RCIS
      - TREG entry in the IPL for “Referral to tobacco quit line” in the Tobacco category
  6. Numerator Exclusions: Not applicable
  7. Denominator Exceptions: None

#### 4.13 CMS139v12 Falls: Screening for Future Fall Risk

<https://ecqi.healthit.gov/sites/default/files/ecqm/measures/CMS139v12.html>



#### 4.13.1 Detail and Data Entry

1. Initial population: Patients aged 65 years and older at the start of the measurement period with a visit during the measurement period
  - a. Qualifying visit encounter examples are office visit, wellness, physical therapy, ophthalmology and telephone
2. Denominator: Equals initial population
  - Denominator Exclusions: Exclude patients who are in hospice care for any part of the measurement period
  - Hospice care service HCPC code in the Visit Services
  - Hospice Care TREG entry in the IPL Palliative care category
  - Inpatient hospitalization discharged to Hospice in ADT
3. Numerator: Patients who were screened for future fall risk at least once within the measurement period
  - Fall Risk Exam code 37 documented in the EHR or PCC
4. Numerator Exclusions: Not applicable
5. Denominator Exceptions: None

#### 4.14 CMS144v12 Heart Failure: Beta-Blocker Therapy for Left Ventricular Systolic Dysfunction (LVSD)

<https://ecqi.healthit.gov/sites/default/files/ecqm/asures/CMS144v12.html>

##### 4.14.1 Detail and Data Entry

1. Initial population: All patients aged 18 years and older with two qualifying encounters during the measurement period and a diagnosis of heart failure
  - a. Qualifying encounter examples are office visit, Ambulatory service category, home health care
  - b. IPL SNOMED or ICD10 in V POV diagnosis of heart failure
2. Denominator: Equals initial population with a current or prior LVEF  $\leq$  40%
  - a. IPL SNOMED or ICD10 in V POV diagnosis of both heart failure AND moderate or severe left ventricular failure
3. Denominator Exclusions: Patients with a history of heart transplant or with a Left Ventricular Assist Device (LVAD) prior to the end of the outpatient encounter with Moderate or Severe LVSD

- a. Has Heart Transplant
  - CPT code in Visit Services
- b. Has Heart Transplant Related Diagnosis
  - IPL SNOMED or ICD10 in V POV diagnosis
- c. Has Left Ventricular Assist Device Implanted
  - CPT code in Visit Services
- d. Has Left Ventricular Assist Device Related Diagnosis
  - IPL SNOMED or ICD10 in V POV diagnosis
4. Numerator: Patients who were prescribed or already taking beta-blocker therapy during the measurement period
  - a. Active beta-blocker therapy medication in Outpatient or Outside
5. Numerator Exclusions: Not applicable
6. Denominator Exceptions: Documentation of medical reason(s) for not prescribing beta-blocker therapy:
  - a. Arrhythmia
    - IPL SNOMED or ICD10 in V POV diagnosis
  - b. Asthma
    - IPL SNOMED or ICD10 in V POV diagnosis
  - c. Bradycardia
    - IPL SNOMED or ICD10 in V POV diagnosis
  - d. Hypotension
    - IPL SNOMED or ICD10 in V POV diagnosis
  - e. Patients with atrioventricular block without cardiac pacer
    - IPL SNOMED or ICD10 in V POV diagnosis and NO history of CPT/HCPC code for heart pacer
  - f. Observation of consecutive heart rates <50
    - Two most recent consecutive Pulses documented in V Measurements <50
  - g. Allergy, intolerance
    - Entry of Adverse Reactions/Allergy to medication or medication ingredient for beta-blocker
  - h. Documentation of patient reason(s) for not prescribing beta-blocker therapy (e.g., patient declined, other patient reasons)

- Personal Health Refusal documented with reason, examples: Refused, Drug declined by patient, not indicated

#### 4.15 CMS145v12 Coronary Artery Disease (CAD): Beta-Blocker Therapy-Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF) less than or equal to 40%

<https://ecqi.healthit.gov/sites/default/files/ecqm/measures/CMS145v12.html>

##### 4.15.1 Detail and Data Entry

1. Initial population: All patients aged 18 years and older with two qualifying encounters during the measurement period and a diagnosis of coronary artery disease (CAD)
  - a. Qualifying encounter examples are office visit, Ambulatory service category, home health care
  - b. IPL SNOMED or ICD10 in V POV diagnosis of CAD
2. Denominator: Equals initial population who also have prior (within the past 3 years) MI or a current or prior LVEF  $\leq 40\%$ 
  - a. IPL SNOMED or ICD10 in V POV diagnosis of both MI or moderate or severe left ventricular failure
3. Denominator Exclusions: Patients with a history of heart transplant or with a Left Ventricular Assist Device (LVAD) prior to the end of the outpatient encounter with Moderate or Severe LVSD
  - a. Has Heart Transplant
    - CPT code in Visit Services
  - b. Has Heart Transplant Related Diagnosis
    - IPL SNOMED or ICD10 in V POV diagnosis
  - c. Has Left Ventricular Assist Device Implanted
    - CPT code in Visit Services
  - d. Has Left Ventricular Assist Device Related Diagnosis
    - IPL SNOMED or ICD10 in V POV diagnosis
4. Numerator: Patients who were prescribed or already taking beta-blocker therapy during the measurement period
  - a. Active beta-blocker therapy medication in Outpatient or Outside

5. Numerator Exclusions: Not applicable
6. Denominator Exceptions: Documentation of medical reason(s) for not prescribing beta-blocker therapy:
  - a. Arrhythmia
    - IPL SNOMED or ICD10 in V POV diagnosis
  - b. Asthma
    - IPL SNOMED or ICD10 in V POV diagnosis
  - c. Bradycardia
    - IPL SNOMED or ICD10 in V POV diagnosis
  - d. Hypotension
    - IPL SNOMED or ICD10 in V POV diagnosis
  - e. Patients with atrioventricular block without cardiac pacer
    - IPL SNOMED or ICD10 in V POV diagnosis and NO history of CPT/HCPC code for heart pacer
  - f. Observation of consecutive heart rates <50
    - Two most recent consecutive Pulses documented in V Measurements <50
  - g. Allergy, intolerance
    - Entry of Adverse Reactions/Allergy to medication or medication ingredient for beta-blocker
  - h. Documentation of patient reason(s) for not prescribing beta-blocker therapy (e.g., patient declined, other patient reasons)
    - Personal Health Refusal documented with reason, examples: Refused, Drug declined by patient, not indicated

## 4.16 CMS154v12 Appropriate Treatment for Upper Respiratory Infection (URI)

<https://ecqi.healthit.gov/sites/default/files/ecqm/measures/CMS154v12.html>

### 4.16.1 Detail and Data Entry

1. Initial population: Outpatient visits, telephone visits, online assessments (i.e. e-visit or virtual check-in), observation stays or emergency department visits with a diagnosis of URI during the measurement period among patients 3 months of age and older
  - a. IPL SNOMED or ICD10 in V POV diagnosis of URI

2. Denominator: Equals initial population
3. Denominator Exclusions:
  - a. Exclude URI episodes when the patient had a comorbid condition during the 12 months prior to or on the episode date.
    - IPL SNOMED or ICD10 in the V POV diagnosis of a comorbid condition (Examples: Pneumonia, TB)
  - b. Exclude URI episodes when the patient had an active prescription of antibiotics in the 30 days prior to the episode date but is still active the same day of the encounter
    - Active medication order in Outpatient or Outside medications
  - c. Exclude URI episodes when the patient had competing diagnosis on or three days after the episode date
    - IPL SNOMED or ICD10 in the V POV diagnosis of a competing diagnosis (Examples: Otitis media, cholera, botulism, infection of skin, tenia, pneumonia)
  - d. Exclude URI episodes when the patient had hospice care for any part of the measurement period
    - Hospice care service HCPC code in the Visit Services
    - Hospice Care TREG entry in the IPL Palliative care category
    - Inpatient hospitalization discharged to Hospice in ADT
4. Numerator: URI episodes without a prescription for antibiotic medication on or 3 days after the outpatient visit, telephone visit, online assessment, observation stay or emergency department visit for an upper respiratory infection
  - a. IPL SNOMED or ICD10 in V POV of URI and NO active antibiotic medication in Outpatient or Outside medications issued on or 3 days after the encounter
5. Numerator Exclusions: Not applicable
6. Denominator Exceptions: None

#### 4.17 CMS155v12 Weight Assessment and Counseling for Nutrition and Physical Activity for Children and Adolescents

<https://ecqi.healthit.gov/sites/default/files/ecqm/measures/CMS155v11.html>

### 4.17.1 Detail and Data Entry

1. Initial population: Patients 3-17 years of age by the end of the measurement period, with at least one outpatient visit with a primary care physician (PCP) or an obstetrician/gynecologist (OB/GYN) during the measurement period
  - a. Qualifying encounter examples are office visit, home health care, preventative care, wellness
2. Denominator: Equals initial population
3. Denominator Exclusions:
  - a. Patients who have a diagnosis of pregnancy during the measurement period.
  - b. IPL SNOMED or ICD10 in V POV of pregnancy
  - c. Exclude patients who are in hospice care for any part of the measurement period
    - Hospice care service HCPC code in the Visit Services
    - Hospice Care TREG entry in the IPL Palliative care category
    - Inpatient hospitalization discharged to Hospice in ADT
4. Numerator:
  - a. Numerator 1: Patients who had a height, weight and body mass index (BMI) percentile recorded during the measurement period
    - Measurement of height and weight (BMI is calculated)
  - b. Numerator 2: Patients who had counseling for nutrition during the measurement period
    - Any patient education topic for Nutrition documented “XX-NUT”
    - Medical nutrition therapy CPT service codes in Visit Services
    - Patient referral with referral SNOMED “Referral to nutrition professional” (RCIS referral)
  - c. Numerator 3: Patients who had counseling for physical activity during the measurement period
    - Any patient education topic for Exercise documented “XX-EX”
    - Patient referral with referral SNOMED “Referral to physical activity program” (RCIS referral)
    - Prescribed activity/exercise education TREG entry in the IPL in Weight Management category
5. Numerator Exclusions: Not applicable

6. Denominator Exceptions: None

## 4.18 CMS156v12 Use of High-Risk Medications in Older Adults

<https://ecqi.healthit.gov/sites/default/files/ecqm/measures/CMS156v12.html>

### 4.18.1 Detail and Data Entry

1. Initial population: Patients 65 years and older at the end of the measurement period who had a visit during the measurement period
  - a. Qualifying encounter examples are office visit, home health care, preventative care, wellness
2. Denominator: Equals initial population
3. Denominator Exclusions:
  - a. Exclude patients who are in hospice care for any part of the measurement period
    - Hospice care service HCPC code in the Visit Services
    - Hospice Care TREG entry in the IPL Palliative care category
    - Inpatient hospitalization discharged to Hospice in ADT
  - b. Exclude patients receiving palliative care for any part of the measurement period.
    - Palliative care service HCPC code in the Visit Services
    - Palliative Care TREG entry in the IPL Palliative care category
4. Numerator:
  - a. Rate 1: Patients with at least two orders of high-risk medications from the same drug class on different days
    - At least two orders of high-risk medications from the same drug class
    - At least two orders of high-risk medications from the same drug class with summed days' supply greater than 90 days
    - At least two orders of high-risk medications from the same drug class each exceeding average daily dose criteria
      - Medication(s) ordered/documented in Outpatient and/or Outside medications
  - b. Rate 2: Patients with at least two orders of high-risk medications from the same drug class (i.e., antipsychotics and benzodiazepines) on different days

- Medication(s) ordered/documentated in Outpatient and/or Outside medications
  - c. Total rate (the sum of the two previous numerators, deduplicated)
5. Numerator Exclusions:
- a. Rate 2: For patients with two or more antipsychotic prescriptions ordered, exclude patients who have a diagnosis of schizophrenia, schizoaffective disorder, or bipolar disorder on or between January 1 of the year prior to the measurement period and the IPSD for antipsychotics
    - Medication(s) ordered/documentated in Outpatient and/or Outside medications
    - IPL SNOMED or ICD10 in V POV for conditions listed above
  - b. For patients with two or more benzodiazepine prescriptions ordered, exclude patients who have a diagnosis of seizure disorders, rapid eye movement sleep behavior disorder, benzodiazepine withdrawal, ethanol withdrawal, or severe generalized anxiety disorder on or between January 1 of the year prior to the measurement period and the IPSD for benzodiazepines
    - Medication(s) ordered/documentated in Outpatient and/or Outside medications
    - IPL SNOMED or ICD10 in V POV for conditions listed above
6. Denominator Exceptions: None

## 4.19 CMS159v12 Depression Remission at Twelve Months

<https://ecqi.healthit.gov/sites/default/files/ecqm/measures/CMS159v12.html>

### 4.19.1 Detail and Data Entry

1. Initial population: Adolescent patients 12 to 17 years of age and adult patients 18 years of age and older with a diagnosis of major depression or dysthymia and an initial PHQ-9 or PHQ-9M score greater than nine during the index event. Patients may be assessed using PHQ-9 or PHQ-9M on the same date or up to 7 days prior to the encounter (index event)
  - a. IPL SNOMED or ICD10 in V POV diagnosis of major depression or dysthymia
  - b. PHQ-9 or PHQ-9M (Modified for teens) in Measurements with a value greater than 9

**Note:** Index event occurs between 14 months before the measurement period and 2 months before the measurement period (to allow time for 12 months follow-up).



2. Denominator: Equals initial population
3. Denominator Exclusions:
  - a. Patients who died any time prior to the end of the measure assessment period
    - Patient registration “Date of Death” entered or ADT discharged as “Expired”
  - b. Patients who received hospice or palliative care services between the start of the denominator period and the end of the measurement assessment period
    - Hospice care service HCPC code in the Visit Services
    - Hospice Care TREG entry in the IPL in the Palliative Care category
    - Inpatient hospitalization discharged to Hospice in ADT
    - TREG entry in the IPL in the palliative care category for Hospice or Palliative Care
  - c. Patients who were permanent nursing home residents between the start of the denominator period and the end of the measurement assessment period
    - CPT for nursing home services in Visit Services
  - d. Patients with a diagnosis of bipolar disorder any time prior to the end of the measure assessment period
    - IPL SNOMED or ICD10 in V POV diagnosis of bipolar disorder
  - e. Patients with a diagnosis of personality disorder emotionally labile any time prior to the end of the measure assessment period
    - IPL SNOMED or ICD10 in V POV diagnosis of personality disorder
  - f. Patients with a diagnosis of schizophrenia or psychotic disorder any time prior to the end of the measure assessment period
    - IPL SNOMED or ICD10 in V POV diagnosis of schizophrenia or psychotic disorder
  - g. Patients with a diagnosis of pervasive developmental disorder any time prior to the end of the measure assessment period
    - IPL SNOMED or ICD10 in V POV diagnosis of pervasive developmental disorder
4. Numerator: Adolescent patients 12 to 17 years of age and adult patients 18 years of age and older who achieved remission at twelve months as demonstrated by the most recent twelve-month (+/- 60 days) PHQ-9 or PHQ-9M score of less than five
  - a. PHQ-9 or PHQ-9M (Modified for teens) in Measurements with a value less than 5
5. Numerator Exclusions: Not applicable

6. Denominator Exceptions: Denominator Exception: Patients who die on or before the measurement period
  - a. Patient registration “Date of Death” entered or ADT discharged as “Expired”

## 4.20 CMS160v7 Depression Utilization of the PHQ-9 Tool (retired measure—for trending purposes only)

No link is available to the ECQI website; the measure is not supported.

### 4.20.1 Detail and Data Entry

1. Initial population: Adolescent patients 12 to 17 years of age and adult patients 18 years of age and older with an office visit and the diagnosis of major depression or dysthymia during the four-month period
  - a. IPL SNOMED or ICD10 in V POV diagnosis of major depression or dysthymia
2. Denominator: Equals initial population
3. Denominator Exclusions:
  - a. Patients who died.
    - “Date of Death” inpatient registration OR ADT discharge as “expired”
  - b. Patients who received hospice or palliative care services
    - Hospice care service HCPC code in the Visit Services
    - Hospice Care TREG entry in the IPL in the Palliative Care category
    - Inpatient hospitalization discharged to Hospice in ADT
    - TREG entry in the IPL in the palliative care category for Hospice or Palliative Care
  - c. Patients who were permanent nursing home residents
    - Nursing home CPT services in Visit Services
  - d. Patients with a diagnosis of bipolar disorder
    - IPL SNOMED or ICD10 in V POV diagnosis
  - e. Patients with a diagnosis of personality disorder
    - IPL SNOMED or ICD10 in V POV diagnosis
  - f. Patients with a diagnosis of schizophrenia or psychotic disorder
    - IPL SNOMED or ICD10 in V POV diagnosis
  - g. Patients with a diagnosis of pervasive developmental disorder

- IPL SNOMED or ICD10 in V POV diagnosis
4. Numerator: Adolescent patients 12 to 17 years of age and adult patients 18 years of age and older who have a PHQ-9 or PHQ-9M tool administered at least once during the four-month period
    - a. PHQ-9 or PHQ-9M (Modified for teens) in
    - b. PHQ-9 or PHQ-9M (Modified for teens) in measurements
  5. Numerator Exclusions: Not applicable
  6. Denominator Exceptions: None

## 4.21 CMS165v12 Controlling High Blood Pressure

<https://ecqi.healthit.gov/sites/default/files/ecqm/measures/CMS165v12.html>

### 4.21.1 Detail and Data Entry

1. Initial population: Patients 18-85 years of age by the end of the measurement period who had a visit and diagnosis of essential hypertension starting before and continuing into, or starting during the first six months of the measurement period
  - a. Qualifying encounter examples are office visit, telephone, preventative, wellness
  - b. IPL SNOMED or ICD10 in V POV of essential hypertension
2. Denominator: Equals initial population
3. Denominator Exclusions:
  - a. Patients with evidence of end stage renal disease (ESRD), dialysis or renal transplant before or during the measurement period
    - IPL SNOMED or ICD10 in V POV of ESRD
    - Dialysis service CPT/HCPC in Visit Services
    - ESRD services CPT/HCPC in Visit Services
    - ESRD transplant CPT/HCPC/ICD10PCS codes in visit services
    - IPL SNOMED (History of renal transplant) or ICD10 (Z94.0-Kidney transplant status) in V POV of kidney transplant
  - b. Also exclude patients with a diagnosis of pregnancy during the measurement period
    - IPL SNOMED or ICD10 in V POV of pregnancy
  - c. Exclude patients who are in hospice care for any part of the measurement period

- Hospice care service HCPC code in the Visit Services
  - Hospice Care TREG entry in the IPL in the Palliative Care category
  - Inpatient hospitalization discharged to Hospice in ADT
  - TREG entry in the IPL in the palliative care category for Hospice Care
- d. Exclude patients 66 and older by the end of the measurement period who are living long term in a nursing home any time on or before the end of the measurement period
- CPT for nursing home services in Visit Services
- e. Exclude patients 66-80 by the end of the measurement period with an indication of frailty for any part of the measurement period who also meet any of the following advanced illness criteria:
- Advanced illness with two outpatient encounters during the measurement period or the year prior
    - Frailty device issued in Visit Service with HCPC code and IPL SNOMED or ICD 10 in V POV diagnosis of advanced illness
  - OR advanced illness with one inpatient encounter during the measurement period or the year prior
    - Frailty device issued in Visit Service with HCPC code and IPL SNOMED or ICD 10 in V POV diagnosis of advanced illness AND an inpatient hospitalization encounter
  - OR taking dementia medications during the measurement period or the year prior
    - Medication order prescribed in Outpatient medications or documented in Outside medications
- f. Exclude patients 81 and older by the end of the measurement period with an indication of frailty for any part of the measurement period
- Frailty device issued in Visit Service with HCPC code
  - IPL SNOMED or ICD 10 in V POV diagnosis of frailty or frailty symptom
- g. Exclude patients receiving palliative care for any part of the measurement period
- Palliative Care TREG entry in the IPL in the palliative care category
4. Numerator: Patients whose most recent blood pressure is adequately controlled (systolic blood pressure < 140 mmHg and diastolic blood pressure < 90 mmHg) during the measurement period
- a. Blood Pressure (BP) measurement in Vitals

5. Numerator Exclusions: Not applicable
6. Denominator Exceptions: None

## 4.22 CMS177v12 Child and Adolescent Major Depressive Disorder: Suicide Risk Assessment

<https://ecqi.healthit.gov/sites/default/files/ecqm/measures/CMS177v12.html>

### 4.22.1 Detail and Data Entry

1. Initial population: All patient visits for those patients aged 6 through 17 years with a diagnosis of major depressive disorder
  - a. Qualifying encounter examples are office visit, group therapy, Psych evaluation or therapy
  - b. IPL SNOMED or ICD10 in V POV of MDD
2. Denominator: Equals initial population
3. Denominator Exclusions: None
4. Numerator: Patient visits with an assessment for suicide risk
  - a. Suicide Risk Assessment (43) Exam document during the encounter
5. Numerator Exclusions: Not applicable
6. Denominator Exceptions: None

## 4.23 CMS347v7 Statin Therapy for the Prevention and Treatment of Cardiovascular Disease

<https://ecqi.healthit.gov/sites/default/files/ecqm/measures/CMS347v7.html>

### 4.23.1 Detail and Data Entry

1. Initial population:
  - a. Population 1: All patients who have an active diagnosis of clinical ASCVD or ever had an ASCVD procedure
    - Qualifying encounter examples are office visit, preventative, wellness
    - IPL SNOMED or ICD10 in V POV of ASCVD (Examples: Ischemic heart disease, myocardial infarction, stable and unstable angina)
    - CPT/HCPC/ICD10PCS codes for ASCD procedures (Examples: PCI, Carotid Intervention)

- b. Population 2: Patients aged 20 to 75 years at the beginning of the measurement period who have ever had a laboratory result of LDL-C  $\geq$ 190 mg/dL or were previously diagnosed with or currently have an active diagnosis of familial hypercholesterolemia
    - Qualifying encounter examples are office visit, preventative, wellness
    - IPL SNOMED or ICD10 in V POV of familial hypercholesterolemia
    - Laboratory test performed and resulted in V lab based on LDL-C LOINC
  - c. Population 3: Patients aged 40 to 75 years at the beginning of the measurement period with Type 1 or Type 2 diabetes.
    - Qualifying encounter examples are office visit, preventative, wellness
    - IPL SNOMED or ICD10 in V POV of diabetes Type 1 or 2
  - d. Population 4: Patients aged 40 to 75 at the beginning of the measurement period with a 10-year ASCVD risk score (i.e., 2013 ACC/AHA ASCVD Risk Estimator or the ACC Risk Estimator Plus) of  $\geq$  20 percent during the measurement period.
2. Denominator: Equals initial population
  3. Denominator Exclusions:
    - a. Patients who are breastfeeding at any time during the measurement period.
      - IPL SNOMED or ICD10 in V POV diagnosis of breastfeeding
    - b. Patients who have a diagnosis of rhabdomyolysis at any time during the measurement period
      - IPL SNOMED or ICD10 in V POV of rhabdomyolysis
  4. Numerator: Patients who are actively using or who receive an order (prescription) for statin therapy at any time during the measurement period
    - a. Medication order prescribed in Outpatient medications or documented in Outside medications
  5. Numerator Exclusions: Not applicable
  6. Denominator Exceptions:
    - a. Patients with statin-associated muscle symptoms or an allergy to statin medication.
      - Adverse Reaction/Allergy documented in the EHR for statin drug (Reason examples: Allergy to drug, contraindicated, drug resistance)
    - b. Patients who are receiving palliative or hospice care
      - Hospice care service HCPC code in the Visit Services

- Hospice Care TREG entry in the IPL in the Palliative Care category
  - Inpatient hospitalization discharged to Hospice in ADT
  - TREG entry in the IPL in the palliative care category for hospice Care or palliative care
- c. Patients with active liver disease or hepatic disease or insufficiency
- IPL SNOMED or ICD10 in V POV of liver disease or hepatitis A or B
- d. Patients with end-stage renal disease (ESRD)
- IPL SNOMED or ICD10 in V POV of ESRD
- e. Patients with documentation of a medical reason for not being prescribed statin therapy
- Refusal for statin medication in Personal Health (Example for reason: Refused, Drug declined by patient, not indicate)

## 4.24 CMS349v6 HIV Screening

<https://ecqi.healthit.gov/sites/default/files/ecqm/measures/CMS349v6.html>

### 4.24.1 Details and Data Entry

1. Initial population: Patients 15 to 65 years of age at the start of the measurement period AND who had at least one outpatient visit during the measurement period
  - a. Qualifying encounter examples: Ambulatory, Office Visit, Preventative Care, Mental health, etc. Defined by visit service category or CPT/HCPC code in EHR visit services
2. Denominator: Equals initial population
3. Denominator Exclusions: Patients diagnosed with HIV prior to the start of the measurement period
  - a. IPL SNOMED or ICD 10 in POV diagnosis of HIV
4. Numerator: Patients with documentation of an HIV test performed on or after their 15<sup>th</sup> birthday and before their 66th birthday
  - a. Laboratory test with valid result in V lab with appropriate LOINC assigned
5. Denominator Exception: Patients who die on or before the measurement period
  - a. Patient registration “Date of Death” entered or ADT discharged as “Expired”
6. Numerator Exclusions: N/A

## Acronym List

| Acronym  | Term Meaning  |
|----------|---|
| AACE/ACE | American Association of Clinical Endocrinologists/American College of Endocrinology |
| AAP      | American Academy of Pediatrics  |
| ACC      | American College of Cardiology  |
| ACCF     | American College of Cardiology Foundation   |
| ACE      | Angiotensin-Converting Enzyme   |
| ACIP     | Advisory Committee on Immunization Practices  |
| ACOG     | American College of Obstetricians and Gynecologists                                 |
| ADA      | American Diabetes Association   |
| ADE      | Adverse Drug Event  |
| AHA      | American Heart Association  |
| AHRQ     | Agency for Healthcare Research and Quality  |
| AIDS     | Acquired Immunodeficiency Syndrome  |
| AMA      | Against Medical Advice  |
| AMI      | Acute Myocardial Infarction   |
| AOD      | Alcohol or Other Drug abuse   |
| ARB      | Angiotensin Receptor Blocker  |
| ART      | Antiretroviral therapy  |
| ASCVD    | Atherosclerotic Cardiovascular Disease  |
| BDI      | Beck Depression Inventory   |
| BMI      | Body Mass Index   |
| CAH      | Critical Access Hospital  |
| CDC      | Centers for Disease Control and Prevention  |
| CEHR     | Certified Electronic Health Record  |
| CES-D    | Center for Epidemiologic Studies  |
| CMS      | Centers for Medicare and Medicaid Services  |
| CPT      | Current Procedural Terminology  |
| CVD      | Cardiovascular Disease  |
| CY       | Calendar Year   |
| DBT      | Digital Breast Tomosynthesis  |
| DTaP     | Diphtheria, Tetanus and Acellular Pertussis   |
| DVT      | Deep Vein Thrombosis  |
| ECG      | Electrocardiogram   |
| eCQI     | Electronic Clinical Quality Improvement   |



| <b>Acronym</b> | <b>Term Meaning</b>                                  |
|----------------|--|
| eCQM           | Electronic Clinical Quality Measures                 |
| EC             | Eligible Clinician                                   |
| ED             | Emergency Department                                 |
| EGA            | Estimated Gestational Age                            |
| EH             | Eligible Hospital                                    |
| EHR            | Electronic Health Record                             |
| EP             | Eligible Professional                                |
| ER             | Emergency Room                                       |
| ESRD           | End Stage Renal Disease                              |
| FDA            | Food and Drug Administration                         |
| FOBT           | Fecal Occult Blood Test                              |
| GCS            | Graduated Compression Stockings                      |
| GDMT           | Guideline-Directed Medical Therapy                   |
| GLAD-PC        | Guidelines for Adolescent Depression in Primary Care |
| HbA1c          | Hemoglobin A1c                                       |
| HBIG           | Hepatitis B Immune Globulin                          |
| HF             | Heart Failure  |
| HFrEF          | Heart Failure with reduced Ejection Fraction         |
| HHS            | Health and Human Services                            |
| HIV            | Human Immunodeficiency Virus                         |
| HPV            | Human Papillomavirus                                 |
| ICD            | International Classification of Diseases             |
| ICSI           | Institute for Clinical Systems Improvement           |
| ICU            | Intensive Care Unit                                  |
| IHS            | Indian Health Service                                |
| IIV            | Inactivated Influenza Vaccine                        |
| IPL            | Integrated Problem List                              |
| LDL-C          | Low-Density Lipoprotein Cholesterol                  |
| LOINC          | Logical Observation Identifiers Names and Codes      |
| LVEF           | Left Ventricular Ejection Fraction                   |
| MDD            | Major Depressive Disorder                            |
| MDE            | Major Depressive Episode                             |
| MMR            | Measles, Mumps, and Rubella                          |
| NHANES         | National Health and Nutrition Examination Survey     |
| NHLBI          | National Heart Lung and Blood Institute              |
| NQF            | National Quality Forum                               |

| <b>Acronym</b> | <b>Term Meaning</b>  |
|----------------|--|
| NVAF           | Nonvalvular Atrial Fibrillation                                      |
| OB/GYN         | Obstetrician/Gynecologist  |
| ONC            | Office of the National Coordinator for Health Information Technology |
| PCI            | Percutaneous Coronary Intervention                                   |
| PCP            | Primary Care Provider  |
| PE             | Pulmonary Embolism   |
| POV            | Purpose of Visit   |
| QRDA           | Quality Reporting Data Architecture                                  |
| RPMS           | Resource and Patient Management System                               |
| RV             | Rotavirus  |
| SCIP           | Surgical Care Improvement Project                                    |
| SNOMED-CT      | Systematized Nomenclature of Medicine–Clinical Terms                 |
| SSRI           | Selective Serotonin Reuptake Inhibitor                               |
| STEMI          | ST-Segment Myocardial Infarction                                     |
| TIA            | Transient Ischemic Attack  |
| TREG           | Treatment\Regime Therapy   |
| UACR           | Urinary Albumin-to-Creatinine Ratio                                  |
| USHIK          | United States Health Information Knowledgebase                       |
| USPSTF         | U.S. Preventive Services Task Force                                  |
| VSAC           | Value Set Authority Center   |
| VTE            | Venous Thromboembolism   |

## Contact Information

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