RESOURCE AND PATIENT MANAGEMENT SYSTEM

# IHS Clinical Reporting System
## (BGP)

## Meaningful Use Report – Stage 1
## Performance Measure List and Definitions
## Eligible Professional (EP) Measures

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# Table of Contents

   1.1    Eligible Professional Measures.......................................................5

   1.1.1   Core Measures ....................................................................... 5

      1.1.1.1   Hypertension: Blood Pressure Measurement NQF0013....................... 5
      1.1.1.2   Preventive Care and Screening Measure Pair NQF0028 ..................... 6
      1.1.1.3   Adult Weight Screening and Follow-Up NQF0421 ............................... 8

   1.1.2   Alternate Core Measures ....................................................... 10

      1.1.2.1   Influenza Immunization for Patients ≥ 50 Years Old NQF0041 .......... 10
      1.1.2.2   Weight Assessment Counseling for Children and Adolescents NQF 0024    11
      1.1.2.3   Childhood Immunization Status NQF 0038 ........................................ 13

   1.1.3   Menu Set Measures................................................................. 18

      1.1.3.1   Asthma Assessment (NQF 0001)............................................... 18
      1.1.3.2   Breast Cancer Screening NQF0031...................................... 20
      1.1.3.3   Colorectal Cancer Screening NQF0034.............................. 21
      1.1.3.4   Cervical Cancer Screening NQF0032 ....................................... 22
      1.1.3.5   Appropriate Testing for Children with Pharyngitis (NQF 0002)........... 23
      1.1.3.6   Initiation and Engagement of Alcohol and Other Drug Dependence Treatment:
               (a) Initiation, (b) Engagement (NQF 0004).......................................... 25
      1.1.3.7   Prenatal Care: Screening for HIV (NQF 0012).................................... 28
      1.1.3.8   Prenatal Care Anti-D Immune Globulin (NQF 0014)............................. 29
      1.1.3.9   Controlling High Blood Pressure (NQF 0018) ..................................... 30
      1.1.3.10  Smoking and Tobacco Use Cessation, Medical Assistance: (NQF 0027)    32
      1.1.3.11  Chlamydia Screening for Women (NQF 0033) ....................................... 33
      1.1.3.12  Use of Appropriate Medications for Asthma (NQF 0036) ................... 38
      1.1.3.13  Pneumonia Vaccination Status for Older Adults (65+) (NQF 0043) .... 42
      1.1.3.14  Asthma Pharmacologic Therapy (NQF 0047) .................................... 42
      1.1.3.15  Low Back Pain: Use of Imaging Studies (NQF 0052) .......................... 44
      1.1.3.16  Diabetes:  Eye Exam (NQF 0055)................................................ 45
      1.1.3.17  Diabetes:  Foot Exam (NQF 0056)........................................... 48
      1.1.3.18  Diabetes:  Hemoglobin A1c Poor Control (NQF 0059) ........................ 50
      1.1.3.19  Diabetes:  Blood Pressure Management (NQF 0061) ........................ 52
      1.1.3.20  Diabetes:  Urine Screening (NQF 0062) ............................................ 55
      1.1.3.21  Diabetes:  LDL Management and Control (NQF 0064)........................ 58
      1.1.3.22  Diabetes:  Hemoglobin A1c Control (NQF 0575) ................................. 60
      1.1.3.23  Coronary Artery Disease (CAD): Oral Antiplatelet Therapy (NQF 0067)62
      1.1.3.24  Ischemic Vascular Disease (IVD): Use of Aspirin or another Antithrombotic
               (NQF 0068)....64
      1.1.3.25  Coronary Artery Disease (CAD): Beta-Blocker Therapy (NQF 0070)..66
      1.1.3.26  Ischemic Vascular Disease (IVD): Blood Pressure Management (NQF 0073)
               ........................68
      1.1.3.27  Coronary Artery Disease (CAD): Drug Therapy for Lowering LDL Cholesterol
               (NQF 0074)....70
      1.1.3.28  Ischemic Vascular Disease (IVD): Complete Lipid Panel and LDL Control (NQF
               0075) .............72
      1.1.3.29  Heart Failure: ACE Inhibitor or ARB Therapy for LVSD (NQF 0081)...74
      1.1.3.30  Heart Failure: Beta-Blocker Therapy for LVSD (NQF 0083)................ 77
      1.1.3.31  Heart Failure: Warfarin Therapy Patients with Atrial Fibrillation (NQF 0084)  78

# 1.0 Performance Measure Topics and Definitions

The following sections define the performance measure topics and their definitions that are included in the CRS 20 version 11.0 Patch 2 Meaningful Use Report for Eligible Professionals, Stage 1.

## 1.1 Eligible Professional Measures

### 1.1.1 Core Measures

#### 1.1.1.1 Hypertension: Blood Pressure Measurement NQF0013

**Denominator**

Patients aged 18+ with a diagnosis/problem of hypertension on or before the beginning of the reporting period and with 2 or more outpatient or nursing facility encounters with the EP during the reporting period.

**Numerator**

Patients with both the systolic and diastolic blood pressure measurements recorded during both encounters with the EP during the reporting period.

**Definition**

Age is calculated as of the beginning of the reporting period.

MU searches VISIT for at least 2 outpatient or nursing facility encounters (either 2 outpatient, 2 nursing facility or a combination of both) with the EP during the reporting period represented by any of the following CPT codes:
--Outpatient: 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 99241, 99242, 99243, 99244, 99245, 99324, 99325, 99326, 99327, 99328, 99334, 99335, 99336, 99337, 99341, 99342, 99343, 99344, 99345, 99347, 99348, 99349, 99350
--Nursing Facility: 99304, 99305, 99306, 99307, 99308, 99309, 99310

MU searches V POV and PROBLEM for a diagnosis and/or active problem of hypertension documented on or before the beginning of the reporting period represented by the following ICD-9 codes:
: 401.0, 401.1, 401.9, 402.00, 402.01, 402.10, 402.11, 402.90, 402.91, 403.00, 403.01, 403.10, 403.11, 403.90, 403.91, 404.00, 404.01, 404.02, 404.03, 404.10, 404.11, 404.12, 404.13, 404.90, 404.91, 404.92, 404.93.

Numerator Logic:
MU searches V MEASUREMENT for both a Systolic and Diastolic blood pressure reading on the same dates as the 2 encounter dates within the reporting period.

**Patient List Description**

Hypertensive patients 18+ with at least 2 encounters with the EP during the reporting period, with 2 documented BPs during the encounters, if any.

## 1.1.1.2    Preventive Care and Screening Measure Pair NQF0028

### *1.1.1.2.1    Tobacco Use Assessment Query NQF0028a*

**Denominator**

Patients 18+ with at least:

--2 encounters of office visit, health and behavior assessment, occupational therapy or psychiatric and psychologic with the EP during the reporting period
OR
--1 encounter of preventive medicine, or individual or group counseling with the EP during the reporting period

**Numerator**

Patients who have been screened for tobacco use on or within the past 24 months of the latest encounter date during the reporting period.

**Definition**

Denominator Logic:
Age is calculated as of the beginning of the reporting period.

MU searches VISIT for encounters with the EP during the reporting period of:
--At least 2 of the following encounters:
  Office visit: 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215
  Health and Behavior Assessment: 96150, 96152
  Occupational Therapy: 97003, 97004
  Psychiatric and psychologic: 90802, 90804, 90805, 90806, 90807, 90808, 90809, 90810, 90811, 90812, 90813, 90814, 90815, 90845, 90862
OR
--At least 1 of the following encounters:
  Preventive Medicine Services 18 and older: 99385, 99386, 99387, 99395, 99396, 99397
  Preventive Medicine Individual Counseling: 99401, 99402, 99403, 99404
  Preventive Medicine Group Counseling: 99411, 99412
  Preventive Medicine Other Services: 99420, 99429

Numerator Logic:
MU searches V HEALTH FACTORS for an entry on or within the past 24 months of
the latest encounter date during the reporting period and classifies the patient as a:
--Tobacco User, if any of the following values exist:
  --Current every day smoker
  --Current some day smoker
  --Current smoker, status unknown
  --Current smokeless
--Non Tobacco User, if any of the following values exist:
  --Cessation smoker
  --Cessation smokeless
  --Previous (former) smoker
  --Previous (former) smokeless
  --Never smoked
  --Never used smokeless tobacco

**Patient List Description**

Patients 18+ with at least 1 or 2 encounters with the EP during the reporting period,
with documented tobacco screening within 24 months, if any.

### 1.1.1.2.2      Tobacco Users Who Received Cessation Intervention NQF0028b

**Denominator**

Patients 18+ with at least:
--2 encounters of office visit, health and behavior assessment, occupational therapy or
psychiatric and psychologic with the EP during the reporting period.
OR
--1 encounter of preventive medicine, or individual or group counseling with the EP
during the reporting period.

AND the patients have been documented as tobacco users on or within the past 24
months of the latest encounter date with the EP during the reporting period.

**Numerator**

Patients who received tobacco use cessation counseling or received a prescription for
a smoking cessation aid on or within the past 24 months of the latest encounter date
with the EP during the reporting period.

**Definition**

Denominator Logic:
Age is calculated as of the beginning of the reporting period.

MU searches VISIT for encounters with the EP during the reporting period of:
--At least 2 of the following encounters:
  Office visit: 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215
  Health and Behavior Assessment: 96150, 96152
  Occupational Therapy: 97003, 97004

Psychiatric and psychologic: 90802, 90804, 90805, 90806, 90807, 90808, 90809, 90810, 90811, 90812, 90813, 90814, 90815, 90845, 90862
OR
--At least 1 of the following encounters:
Preventive Medicine Services 18 and older: 99385, 99386, 99387, 99395, 99396, 99397
Preventive Medicine Individual Counseling: 99401, 99402, 99403, 99404
Preventive Medicine Group Counseling: 99411, 99412
Preventive Medicine Other Services: 99420, 99429

MU searches V HEALTH FACTORS for an entry on or within the past 24 months of the latest encounter date with the EP during the reporting period and classifies the patient as a Tobacco User if any of the following values exist:
--Current every day smoker
--Current some day smoker
--Current smoker, status unknown
--Current smokeless

Numerator Logic:
MU searches V MEDICATION and V CPT to determine if the patient has been prescribed a smoking cessation agent or been given tobacco use cessation counseling on or within the past 24 months of the latest encounter date.  The NDC codes for the cessation agents are defined in the BGPMU SMOKING CESSATION AGENTS taxonomy.  The CPT codes for cessation counseling are: 99406, 99407.

**Patient List Definition**

Patients 18+ with at least 1 or 2 encounters with the EP during the reporting period and who have been identified as tobacco users within the last 24 months, with documented cessation intervention, if any.

### 1.1.1.3    Adult Weight Screening and Follow-Up NQF0421

**Denominators**

1) Patients 65+ with 1 or more outpatient encounters with the EP during the reporting period.
2) Patients 18–64 with 1 or more outpatient encounters with the EP during the reporting period.

**Numerators**

1) (only paired with denominator 1):
Patients with BMI calculated on or within 6 months of the encounter date:
--BMI between => 22 and < 30:  Normal BMI; no follow-up needed
OR
--BMI < 22 OR => 30
  AND Patient has Care Goal: Follow-up BMI management
    OR

Communication provider to provider: Dietary consultation order

2) (only paired with denominator 2):
Patients with BMI calculated on or within 6 months of the encounter date:
--BMI between => 18.5 and < 25; Normal BMI; no follow-up needed
OR
--BMI < 18.5 OR => 25
  AND Patient has Care Goal: Follow-up BMI management
    OR
    Communication provider to provider: Dietary consultation order

**Exclusions**

Patients who have a terminal illness within 6 months of the encounter date, or are pregnant, or who did not have their height and/or weight taken for either patient, medical or system reasons**.**

**Definition**

Denominator Logic:
Age is calculated as of the beginning of the reporting period.

MU searches VISIT for at least 1 outpatient encounter with the EP during the reporting period represented by one of the following:
--CPT codes: 90802, 90804, 90805, 90806, 90807, 90808, 90809, 97001, 97003, 97802, 97803, 98960, 99201, 99202, 99203, 99204, 99205, 99211, 99212, 99213, 99214, 99215, 99324, 99325, 99326, 99327, 99328, 99334, 99335, 99336, 99337, 99341, 99342, 99343, 99344, 99345, 99347, 99348, 99349, 99350
--HCPCS codes: D7140, D7210, G0101, G0108, G0270

Numerator Logic:
MU searches V MEASUREMENT for patients with recent height and weight recorded within 6 months of the encounter and if found, the MU calculated the BMI. If the BMI does not fall within the normal/healthy range, MU searches V POV and V CPT for at least 1 of the following:
--Follow up plan for BMI management represented by any of the following documented on or within 6 months prior to the encounter date.
  --CPT codes: 43644, 43645, 43770, 43771, 43772, 43773, 43774, 43842, 43843, 43845, 43846, 43847, 43848, 97804, 98961, 98962, 99078
  --HCPCS codes: G8417, S9449, S9451, S9452, S9470
  --ICD-9 code: V65.3
OR
--A dietary consultation order represented by the CPT code: V65.3.

Exclusion Logic:

The patient is excluded if any of the following conditions exist:

1. MU searches V POV for any of the following:

   --A terminal illness documented on or within 6 months prior to the encounter date, (ICD-9 code V66.7)

   --A diagnosis of pregnancy documented during an outpatient encounter represented by one of the following ICD-9 codes: V22.0, V22.1, V22.2, V23.0, V23.1, V23.2, V23.3, V23.4, V23.41, V23.49, V23.5, V23.7, V23.8, V23.81, V23.82, V23.83, V23.84, V23.89, V23.9

2. MU searches the PATIENT REFUSLAS FOR SERVICE/NMI for a REF (refusal), NMI (not medically indicated), or UAS (unable to screen) of height and/or weight measurement documented during the reporting period>

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**Patient List Definition**

Patients 18+ with at least 1 encounter with the EP during the reporting period, with documented BMI and follow-up, if any.

# 1.1.2    Alternate Core Measures

## 1.1.2.1    Influenza Immunization for Patients ≥ 50 Years Old NQF0041

**Denominators**

Patients 50+ with at least 2 outpatient encounters or 1 preventive medicine encounter/nursing facility.

**Numerators**

Patients who received the influenza vaccine during the flu season.

**Exclusions**

Patients who meet any of the following conditions:

--Contraindications/allergies/adverse effects/intolerance to the Influenza vaccine

--Allergic to eggs

--Declined the vaccine

--Were not given the vaccine for patient/medical/system reasons

**Definition**

Denominator Logic:

Age is calculated as of the beginning of the reporting period.

The patient must meet both of the following conditions:

1. MU searches VISIT for the following CPT encounter codes with the EP during the reporting period:

   At least 2 outpatient encounters: 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 99241, 99242, 99243, 99244, 99245, 99324, 99325, 99326,

99327, 99328, 99334, 99335, 99336, 99337, 99341, 99342, 99343, 99344, 99345, 99347, 99348, 99349, 99350
OR
At least 1 of the following encounters:
--Preventive medicine services 40 and older: 99386, 99387, 99396, 99397
--Preventive medicine group counseling: 99411, 99412
--Preventive medicine individual counseling: 99401, 99402, 99403, 99404
--Preventive medicine other services: 99420, 99429
--Nursing Discharge: 99315, 99316
--Nursing Facility: 99304, 99305, 99306, 99307, 99308, 99309, 99310

2. Influenza Encounter: MU searches VISIT for any of the encounter codes with the EP shown above documented during the flu season of September 1 through February 28. For example if the 90-day reporting period is January 1 through March 31, 2011, then MU searches for the encounter during September 1, 2010 through February 28, 2011. If the report is being run for a 1-year period of January 1 through December 31, 201,1 then MU searches for the encounter during September 1, 2010 through February 28, 2011.

Numerator Logic:
MU searches IMMUNIZATIONS and V CPT to determine if the influenza vaccine was administered during the most recent September 1 through February 28 flu season (as described above) using CPT codes 90656, 90658, 90660, 90661, 90662, 90663, 90664, 90666, 90667, 90668 or the CVX codes of 15, 16, 111, 125, 126, 127, 128 or 135.

Exclusion Logic:
The patient is excluded if any of the following conditions are documented on or before the date of influenza encounter described above in item number 2 of the denominator logic.
--MU searches IMMUNIZATION for a contraindication, adverse effect from, or allergy to the influenza vaccine
--MU searches V IMMUNIZAATION for an egg allergy
--MU searches V POV for an egg allergy documented by ICD-9 code V15.03
--MU searches PATIENT REFUSALS FOR SERVICE/NMI for a REF (refused) or NMI (not medically indicated) of the influenza vaccine

**Patient List Definition**

Patients 50+ with at least 1 or 2 encounters with the EP, with documented influenza immunization, if any.

## 1.1.2.2    Weight Assessment Counseling for Children and Adolescents NQF 0024
**Denominators**

1) Patients 2-16 with at least 1 encounter with the EP during the reporting period and who were not pregnant during the reporting period.

2) Patients 2-10 with at least 1 encounter with the EP during the reporting period and who were not pregnant during the reporting period.
3) Patients 11-16 with at least 1 encounter with the EP during the reporting period and who were not pregnant during the reporting period.

**Numerators**

1) Patient has BMI percentile documented during the reporting period.
2) Patient has had Nutrition Counseling during the reporting period.
3) Patient has had Physical Activity Counseling during the reporting period.

**Definition**

Denominator Logic:
Age is calculated as of the beginning of the reporting period.

MU searches VISIT for at least 1 outpatient encounter or OB/GYN encounter with the EP during the reporting period represented by one of the following:

Outpatient Encounters:
--CPT codes: 99201, 99202, 99203, 99204, 99205, 99211, 99212, 99213, 99214, 99215, 99217, 99218, 99219, 99220, 99241, 99242, 99243, 99244, 99245, 99341, 99342, 99343, 99344, 99345, 99347-99350, 99384, 99385, 99386, 99387, 99394, 99395, 99396, 99397, 99401, 99402, 99403, 99404, 99411, 99412, 99420, 99429, 99455, 99456
--ICD-9 codes: V70.0, V70.3, V70.5, V70.6, V70.8, V70.9,

OB/GYN Encounters:
--ICD-9 codes: V24, V25, V26, V27, V28, V45.5, V61.5, V61.6, V61.7, V69.2, V72.3, V72.4

To determine if the patient was pregnant during the reporting period MU performs two functions. If either or both conditions exist, the patient is not counted in the denominator:
--MU searches V POV for a diagnosis of pregnancy documented at the time of the encounter represented by any ICD-9 code in the BGPMU PREGNANCY ALL ICD taxonomy.
--MU searches V POV for a pregnancy encounter during the reporting period represented by one of the following ICD-9 codes: V24, V24.0, V24.2, V25, V25.01, V25.02, V25.03, V25.09, V26.81, V28, V28.3, V28.81, V28.82, V72.4, V72.40, V72.41, V72.42

Numerator Logic:
1) MU searches V POV for a BMI percentile entry during the reporting period represented by one of the following ICD-9 codes: V85.5, V85.51, V85.52, V85.53, V85.54.
2) MU searches V POV and V CPT for a counseling for nutrition entry during the reporting period represented by one of the following:
   --ICD-9 code: V65.3
   --CPT codes: 97802, 97803, 97804
   --HCPCS codes: G0270, G0271, S9449, S9452, S9470
3) MU searches V POV and V CPT for counseling for physical activity during the reporting period represented by one of the following:
   --ICD-9 code: V65.41
   --HCPCS code: S9451

**Patient List Definition**

Patients 2-16 who had at least 1 outpatient encounter with the EP during the reporting period, with documented BMI and counseling, if any.

## 1.1.2.3   Childhood Immunization Status NQF 0038

**Denominators**

Patients who have reached 2 years and who have at least 1 encounter with the EP, both during the reporting period.

**Numerators**

MU searches for each dose of a vaccine administered between the date of birth and the day before the 2nd birthday of the patient.

When multiple doses of a vaccine are required, MU checks to ensure there is at least 10 days between the administration of each dose to count the patient in the numerator.

1) Patients with at least 4 doses of DTaP: 1) 4 DTaP/DTP/Tdap; 2) 1 DTaP/DTP/Tdap and 3 DT/Td; 3) 1 DTaP/DTP/Tdap and 3 each of Diphtheria and Tetanus; 4) 4 DT and 4 Acellular Pertussis; 5) 4 Td and 4 Acellular Pertussis; or 6) 4 each of Diphtheria, Tetanus, and Acellular Pertussis administered before their 2nd birthday.

2) Patients with at least 3 IPV vaccine administered before their 2nd birthday.

3) Patients with the following vaccinations administered before their 2nd birthday
   --At least 1 MMR vaccination.
   OR
   --At least 1 M/R and 1 Mumps Rubella vaccine OR evidence of disease.
   OR
   --At least 1 R/M and 1 Measles vaccine OR evidence of disease.
   OR
   --At least 1 each of Measles, Mumps and Rubella vaccines OR evidence of disease.

4)  Patients with at least 3 HiB vaccines administered before their 2nd birthday.

5)  Patients with at least 3 Hepatitis B vaccines administered before their 2nd birthday or evidence of disease.

6)  Patients with at least 1 VZV vaccine administered before their 2nd birthday or evidence of disease.

7)  Patients with at least 4 pneumococcal vaccines administered before their 2nd birthday.

8)  Patients with at least 2 Hepatitis A vaccines administered before their 2nd birthday or evidence of disease.

9)  Patients with at least 2 rotavirus vaccines administered before their 2nd birthday.

10) Patients with at least 2 influenza vaccines administered before their 2nd birthday.

11) All patients in numerators 1-6 (4 DTaP, 3 IPV, 1 MMR, 3 HiB, 3 Hepatitis B, and 1 VZV) or evidence of disease when applicable.

12) All patients in numerators 1-7 (4 DTaP, 3 IPV, 1 MMR, 3 HiB, 3 Hepatitis B, 1 VZV, and 4 Pneumococcal) or evidence of disease when applicable.

**Exclusions**

For each immunization, patients are excluded from the denominator when there is a contradiction or a refusal for that specific immunization.

**Definition**

Denominator Logic:
Age is calculated as of the beginning and as of the end of the reporting period to determine if the patient turned 2 years of age during this period.

MU searches VISIT for at least 1 outpatient encounter with the EP on or before the reporting period end date represented by one of the following:
--CPT codes: 99201, 99202, 99203, 99204, 99205, 99211, 99212, 99213, 99214, 99215, 99217, 99218, 99219, 99220, 99241, 99242, 99243, 99244, 99245, 99341, 99342, 99343, 99344, 99345, 99347-99350, 99384, 99385, 99386, 99387, 99394, 99395, 99396, 99397, 99401, 99402, 99403, 99404, 99411, 99412, 99420, 99429, 99455, 99456
--ICD-9 codes: V24, V25, V26, V27, V28, V45.5, V61.5, V61.6, V61.7, V69.2, V72.3, V72.4

Numerator Logic:
1)  **DTaP**:

--DTaP IZ definitions:
1) Immunization (CVX) codes: 20, 50, 106, 107, 110, 120, 130
2) POV V06.1;
3) CPT: 90696, 90698, 90700, 90721, 90723.

--DTP IZ definitions:
  1) Immunization (CVX) codes: 1, 22, 102
  2) POV: V06.1, V06.2, V06.3
  3) CPT: 90701, 90711 (old code), 90720
  4) Procedure 99.39.

--Tdap IZ definition:
  1) Immunization (CVX) code:  115
  2) CPT 90715.

--DT IZ definitions:
  1) Immunization (CVX) code 28
  2) POV V06.5
  3) CPT 90702.

--Td IZ definitions:
  1) Immunization (CVX) code 9, 113
  2) POV V06.5
  3) CPT 90714, 90718.

--Diphtheria IZ definitions:
  1) POV V03.5
  2) CPT 90719
  3) Procedure 99.36.

--Tetanus definitions:
  1) Immunization (CVX) codes: 35, 112
  2) POV V03.7
  3) CPT 90703
  4) Procedure 99.38.

--Acellular Pertussis definitions:
  1) Immunization (CVX) code 11
  2) POV V03.6
  3) Procedure 99.37 (old code).

**2) IPV:**

--IPV definitions:
  1) Immunization (CVX) codes: 10, 89, 110, 120, 130
  2) POV V04.0, V06.3
  3) CPT: 90696, 90698, 90711 (old code), 90713, 90723
  4) Procedure 99.41.

--IPV evidence of disease definitions:
  1) POV or PCC Problem List (active or inactive): 730.70-730.79

### 3) MMR:

--MMR definitions:
  1) Immunization (CVX) codes: 3, 94
  2) POV V06.4
  3) CPT: 90707, 90710
  4) Procedure 99.48.

--M/R definitions:
  1) Immunization (CVX) code 4;
  2) CPT 90708.

--R/M definitions:
  1) Immunization (CVX) code 38
  2) CPT 90709 (old code)

--Measles definitions:
  1) Immunization (CVX) code 5
  2) POV V04.2
  3) CPT 90705
  4) Procedure 99.45.  Measles evidence of disease definition: POV or PCC Problem List (active or inactive) 055*.

--Mumps definitions:
  1) Immunization (CVX) code 7
  2) POV V04.6
  3) CPT 90704
  4) Procedure 99.46.  Mumps evidence of disease definition: POV or PCC Problem List (active or inactive) 072*.

--Rubella definitions:
  1) Immunization (CVX) code 6
  2) POV V04.3
  3)CPT 90706
  4) Procedure 99.47.  Rubella evidence of disease definitions: POV or PCC Problem List (active or inactive) 056*, 771.0.

### 4) HiB:

--HiB definitions:
  1) Immunization (CVX) codes: 17, 22, 46-49, 50, 51, 102, 120
  2) POV V03.81
  3) CPT: 90645-90648, 90698, 90720-90721, 90737 (old code), 90748.

**5) Hepatitis B:**

--Hepatitis B definitions:
  1) Immunization (CVX) codes: 8, 42-45, 51, 102, 104, 110
  2) CPT: 90636, 90723, 90731 (old code), 90740, 90743-90748, G0010, Q3021 (old code), Q3023 (old code).

--Hepatitis B evidence of disease definitions:
  1) POV or PCC Problem List (active or inactive): V02.61, 070.2, 070.3.

**6) VZV:**

--VZV definitions:
  1) Immunization (CVX) codes: 21, 94
  2) POV V05.4
  3) CPT: 90710, 90716.

--VZV evidence of disease definitions:
  1) POV or PCC Problem List (active or inactive) 052*, 053*.

**7) Pneumococcal:**

--Pneumococcal definitions:
  1) Immunization (CVX) codes: 33 Pneumo Polysaccaride; 100 Pneumo Conjugate; 109 Pneumo NOS
  2) POV: V06.6; V03.82
  3) CPT: 90669, 90732, G0009, G8115.

**8) Hepatitis A:**

--Hepatitis A definitions:
  1) Immunization (CVX) codes: 83
  2) CPT: 90633.

**9) Rotavirus:**

--Rotavirus definitions:
  1) Immunization (CVX) codes: 116; 119
  2) CPT: 90680; 90681.

**10) Influenza:**

--Influenza definitions:
  1) Immunization (CVX) codes: 15 Inf Virus Vac SV; 135
  2) CPT: 90655, 90657, 90661, 90662.

**11) (Numerators 1-6 4:3:1:3:3:1):**
MU uses the logic for numerators 1 through 6.

**12)** **(Numerators 1-7 4:3:1:3:3:1:4):**
    MU uses the logic for numerators 1 through 7.

Exclusion Logic:
For each immunization, patients are excluded from the denominator when there is a contradiction or a refusal for that specific immunization recorded anytime between the date of birth and the end of the reporting period.

-Contraindication Definitions:

--Immunization Package contraindication of "Anaphylaxis" applies to all immunizations.
--IPV Contraindication definition: Immunization Package contraindication of "Neomycin Allergy".
--MMR and VZV contraindication definitions: POV: 279, V08, 042, 200-202, 203.0, 203.1, 203.8, 204-208; or Immunization Package contraindication of "Immune Deficiency," "Immune Deficient," or "Neomycin Allergy."
--Influenza Contraindication documented at any time before the end of the reporting period, defined as: A) Contraindication in the Immunization Package of Egg Allergy or B) PCC NMI Refusal

-Refusal Definitions: Parent/Patient Refusal in Immunization package or PCC Refusal type REF or NMI for IZ codes: DTaP: 20, 50, 106, 107, 110, 120, 130; DTP: 1, 22, 102; IPV: 10, 89, 110, 120; MMR: 3, 94: M/R: 4; R/M: 38; Measles: 5; Mumps: 7; Rubella: 6; HiB: 17, 22, 46-49; 50, 51, 102, 120; Hepatitis B: 8, 42-45, 51, 102, 104, 110; Pneumococcal: 33, 100, 109; Hepatitis A: 83; Rotavirus: 116, 119; Influenza: 15, 135.

**Patient List Description**

Patients who reached 2 years of age and who had at least 1 encounter with the EP, both during the reporting period.


## 1.1.3    Menu Set Measures

### 1.1.3.1    Asthma Assessment (NQF 0001)

**Denominator**

Patients who reach 5–40 years of age during the reporting period with a diagnosis of asthma who had at least 2 office or outpatient consultation encounters with the EP during the reporting period.

**Numerator**

Patients who were assessed for or had active asthma daytime and nighttime symptoms before or simultaneously to the latest encounter with the EP occurring during the reporting period.

**Definition**

Denominator Logic:
Age is calculated as of the beginning and end of the reporting period to determine if a patient is 5–40 years old during the reporting period.

MU searches V POV and PROBLEM for a diagnosis and/or active problem of asthma during the reporting period and VISIT for at least 2 office or outpatient consultation encounters with the EP during the reporting period. These are determined by:
--Asthma ICD-9 codes: 493.00, 493.01, 493.02, 493.10, 493.11, 493.12, 493.20, 493.21, 493.22, 493.81, 493.82, 493.90, 493.91, 493.92
--Encounter office and outpatient consultation CPT codes: 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 99241, 99242, 99243, 99244, 99245

Numerator Logic:
To be included in the numerator, the patient must meet one of the conditions shown below.

MU searches V CPT for patients who had their assessed asthma daytime and nighttime symptoms evaluated before or simultaneously to the latest encounter with the EP occurring during the reporting period. This is determined by:
  --Asthma daytime symptoms quantified CPT code: 1005F
  --Asthma nighttime symptoms quantified CPT code: 1005F

OR

--MU searches V CPT for patients who had active asthma daytime and nighttime symptoms before or simultaneously to the latest encounter with the EP occurring during the reporting period. This is determined by:
  --Asthma daytime symptoms CPT code: 1005F
  --Asthma nighttime symptoms CPT code: 1005F

OR

--MU searches V CPT for patients who had a risk category/assessment using the asthma symptom assessment tool before or simultaneously to the latest encounter with the EP occurring during the reporting period. This is determined by:
  --Asthma symptom assessment tool CPT code: 1005F

**Patient List Description**

Patients aged 5-40 years with a diagnosis of asthma who had at least 2 office visits with the EP during the reporting period and who were evaluated during at least 1 office visit during the reporting period for the frequency (numeric) of daytime and nocturnal asthma symptoms, if any.

### 1.1.3.2    Breast Cancer Screening NQF0031

**Denominators**

Female patients 41-68 with at least 1 outpatient encounter with the EP within 2 years of the reporting period end date and who have never had a mastectomy on both breasts.

**Numerators**

Patients who received breast cancer screening within 2 years of the reporting period end date.

**Definitions**

Denominator Logic:
Age is calculated at the beginning of the reporting period.

To identify female patients, MU searches PATIENT for SEX = F.

MU searches VISIT for at least 1 outpatient Encounter with the EP within 2 years of the reporting period end date represented by one of the following:
CPT codes: 99201, 99202, 99203, 99204, 99205, 99211, 99212, 99213, 99214, 99215, 99217, 99218, 99219, 99220, 99241, 99242, 99243, 99244, 99245, 99341, 99342, 99343, 99344, 99345, 99347-99350, 99384, 99385, 99386, 99387, 99394, 99395, 99396, 99397, 99401, 99402, 99403, 99404, 99411, 99412, 99420, 99429, 99455, 99456
ICD-9 codes: V70.0, V70.3, V70.5, V70.6, V70.8, V70.9

MU searches V CPT and V PROCEDURE to determine if the patient has ever had a bilateral mastectomy or 2 unilateral mastectomies on or before the end of the reporting period and if so, the patient is not counted in the denominator.  This is determined by:
--Bilateral Mastectomy ICD-9 codes: 85.42, 85.44, 85.46, 85.48
OR
--Unilateral mastectomy CPT Codes: 19180, 19200, 19220, 19240, 19303, 19304, 19305, 19306, 19307
  AND
  --Bilateral mastectomy modifier: 09950, .50
   OR
  --At least 2 unilateral mastectomies
     CPT Codes: 19180, 19200, 19220, 19240, 19303, 19304, 19305, 19306, 19307
     ICD-9 Codes: 85.41, 85.43, 85.45, 85.47

Numerator Logic:
MU searches V CPT, V RADIOLOGY, V PROCEDURE or V POV to see if the patient has had a breast cancer screening within 2 years of the reporting period end date.  The applicable codes for breast screening are:
--CPT codes: 76090, 76091, 76092, 77055, 77056, 77057
--HCPCS codes: G0202, G0204, G0206

--ICD-9 codes: 87.36, 87.37, V76.11, V76.12

**Patient List Definition**

Female patients 41–68 with at least 1 encounter with the EP within 2 years of the reporting period end date and who have never had a bilateral mastectomy or 2 unilateral mastectomies, with documented mammogram, if any.

### 1.1.3.3    Colorectal Cancer Screening NQF0034

**Denominators**

Patients aged 50-74 who have had at least 1 outpatient encounter with the EP within 2 years of the reporting period end date and who have never had a total colectomy.

**Numerators**

Patients who have had a colonoscopy within 10 years, flexible sigmoidoscopy within 5 years, or fecal occult blood testing (FOBT) during the reporting period.

**Exclusions**

Patients who have an active, inactive or resolved diagnosis of colorectal cancer on or before the reporting period end date are not counted in the denominator.

**Definitions**

Denominator Logic:
Age is calculated at the beginning of the reporting period.

MU searches VISIT for at least 1 outpatient encounter with the EP within 2 years of the reporting period end date represented by the following:
--CPT codes: 99201, 99202, 99203, 99204, 99205, 99211, 99212, 99213, 99214, 99215, 99217, 99218, 99219, 99220, 99241, 99242, 99243, 99244, 99245, 99341, 99342, 99343, 99344, 99345, 99347-99350, 99384, 99385, 99386, 99387, 99394, 99395, 99396, 99397, 99401, 99402, 99403, 99404, 99411, 99412, 99420, 99429, 99455, 99456.
--ICD-9 codes:  V70.0, V70.3, V70.5, V70.6, V70.8, V70.9

MU searches V CPT and V PROCEDURE to determine if the patient had a total colectomy on or before the reporting period end date and if so, the patient is not counted in the denominator.  The applicable codes for a total colectomy are:
--CPT codes: 44150, 44151, 44152, 44153, 44155, 44156, 44157, 44158, 44210, 44211, 44212
--ICD-9 codes: 45.8, 45.81, 45.82, 45.83

Numerator Logic:
MU searches V CPT, V PROCEDURE and V LAB to determine if the patient had at least 1 of the following:

1. Colonoscopy within 10 years of the reporting period end date represented by the following:

--CPT codes: 44388, 44389, 44390, 44391, 44392, 44393, 44394, 44397, 45355, 45378, 45379, 45380, 45381, 45382, 45383, 45384, 45385, 45386, 45387, 45391, 45392
  --HCPCS codes: G0105, G0121
  --ICD-9 codes: 45.22, 45.23, 45.25, 45.42, 45.43

2. Flexible sigmoidoscopy within 5 years of the reporting period end date represented by the following:
  --CPT codes: 45330, 45331, 45332, 45333, 45334, 45335, 45337, 45338, 45339, 45340, 45341, 45342, 45345
  --HCPCS code: G0104
  --ICD-9 code: 45.24

3. Fecal occult blood test (FOBT) during the reporting period represented by the following:
  --CPT codes: 82270, 82274
  --HCPCS codes: G0328, G0394
  --ICD-9 code: V76.51
  --LOINC codes: 12503-9, 12504-7, 14563-1, 14564-9, 14565-6, 2335-8, 27396-1, 27401-9, 27925-7, 27926-5, 29771-3

Exclusion Logic:
MU searches V CPT, V POV and PROBLEM (inactive or active) for diagnosis of colorectal cancer documented on or before the end of the reporting period and if found, the patient is counted as an exclusion.  The applicable codes for colorectal cancer are:
--HCPCS codes: G0213, G0214, G0215, G0231
--ICD-9 codes: 153, 153.0, 153.1, 153.2, 153.3, 153.4, 153.5, 153.6, 153.7, 153.8, 153.9, 154.0, 154.1, 197.5, V10.05

**Patient List Definition**

Patients 50-74 with at least 1 encounter with the EP within the last 2 years who have never had a total colectomy, with documented colorectal cancer screening, if any.

## 1.1.3.4   Cervical Cancer Screening NQF0032

**Denominators**

Female patients 23-63 who have at least 1 visit with the EP within 2 years of the reporting period end date and who have never had a hysterectomy.

**Numerators**

Patients who have had a pap test within 3 years of the reporting period end date.

**Definitions**

Denominator Logic:
Age is calculated at the beginning of the reporting period.

To identify female patients, MU searches PATIENT for SEX = F.

MU searches VISIT for at least 1 OB/GYN or outpatient encounter with the EP within 2 years of the reporting period end date. The applicable encounter codes are:
--OB/GYN ICD-9 codes are V24, V25, V26, V27, V28, V45.5, V61.5, V61.6, V61.7, V69.2, V72.3, V72.4
--Outpatient
  --CPT codes: 99201, 99202, 99203, 99204, 99205, 99211, 99212, 99213, 99214, 99215, 99217, 99218, 99219, 99220, 99241, 99242, 99243, 99244, 99245, 99341, 99342, 99343, 99344, 99345, 99347-99350, 99384, 99385, 99386, 99387, 99394, 99395, 99396, 99397, 99401, 99402, 99403, 99404, 99411, 99412, 99420, 99429, 99455, 99456
  --ICD-9 codes: V70.0, V70.3, V70.5, V70.6, V70.8, V70.9.

MU searches V CPT, V PROCEDURE, VPOV and PROBLEM (active & inactive) to determine if the patient has ever had a hysterectomy on or before the reporting period end date and if so, the patient is not counted in the denominator. The applicable codes for a hysterectomy are:
--CPT codes: 51925, 56308, 58150, 58152, 58200, 58210, 58240, 58260, 58262, 58263, 58267, 58270, 58275, 58280, 58285, 58290, 58291, 58292, 58293, 58294, 58550, 58552, 58553, 58554, 58570, 58571, 58572, 58573, 58951, 58953, 58954, 58956, 59135
--ICD-9 codes: 618.5, 68.4, 68.41, 68.49, 68.5, 68.51, 68.59, 68.6, 68.61, 68.69, 68.7, 68.71, 68.79, 68.8, V67.01, V76.47, V88.01, V88.03

Numerator Logic:
MU searches V CPT, V PROCEDURE and V LAB to determine if the patient has had a pap test within 3 years of the reporting period end date. The applicable codes for pap test are:
--CPT codes: 88141, 88142, 88143, 88147, 88148, 88150, 88152, 88153, 88154, 88155, 88164, 88165, 88166, 88167, 88174, 88175
--HCPCS codes: G0123, G0124, G0141, G0143, G0144, G0145, G0147, G0148, P3000, P3001, Q0091
--ICD-9 codes: 91.46, V72.32
--LOINC codes: 10524-7, 18500-9, 19762-4, 19764-0, 19765-7, 19766-5, 19774-9, 33717-0, 47527-7, 47528-5

## 1.1.3.5   Appropriate Testing for Children with Pharyngitis (NQF 0002)

**Denominator**

Patients 2–18 years of age with at least 1 ED or outpatient encounter with the EP during the reporting period who were diagnosed with pharyngitis during this encounter and who were prescribed an antibiotic by the EP during or within 3 days after the encounter..

**Numerator**

Patients who had a group A streptococcus (strep) laboratory test performed <= 3 days before or <= 3 days after the pharyngitis antibiotics were prescribed or dispensed. These antibiotics are aminopenicillins; beta-lactamase inhibitors; first, second, and third generation cephalosporins; folate antagonists; lincomycin derivatives; macrolides; miscellaneous antibiotics; natural penicillins; penicillinase-resistant penicillins; quinolones; sulfonamides and tetracycline.

**Definition**

Denominator Logic:
Age is calculated as of the end of the reporting period to determine if the patient reached an age of between 2-18 years old during the reporting period.

MU searches VISIT for at least 1 ED or outpatient encounter with the EP during the reporting period and V POV for a diagnosis of pharyngitis during this encounter represented by the following:
--ED Encounter CPT codes: 99281, 99282, 99283, 99284, 99285
--Outpatient Encounter CPT codes: 99201, 99202, 99203, 99204, 99205, 99211, 99212, 99213, 99214, 99215, 99217, 99218, 99219, 99220, 99241, 99242, 99243, 99244, 99245, 99341, 99342, 99343, 99344, 99345, 99347, 99348, 99349, 99350, 99384, 99385, 99386, 99387, 99394, 99395, 99396, 99397, 99401, 99402, 99403, 99404, 99411, 99412, 99420, 99429, 99455, 99456
--Outpatient Encounter ICD-9 codes: V70.0, V70.3, V70.5, V70.6, V70.8, V70.9
--Pharyngitis Diagnosis ICD-9 codes: 034.0, 462, 463

MU searches PRESCRIPTION for active or expired pharyngitis antibiotics prescribed by the EP <= 3 days after the ED or outpatient encounter with the EP during reporting period. These medications are defined in the BGPMU PHARYNGITIS MEDS NDCS taxonomy. MU uses the ISSUE DATE for the time calculation.

Additionally, the patient is NOT included in the denominator if the patient meets the following condition:
--MU searches PRESCRIPTION for active or expired pharyngitis antibiotics prescribed by the EP <= 30 days before the ED or outpatient encounter with the EP during the reporting period. The NDC codes for these medications are defined in the BGPMU PHARYNGITIS MEDS NDCS taxonomy. MU uses the RELEASED DATE/TIME, and if this field is NULL, then MU uses the ISSUE DATE for the time calculation.

Numerator Logic:
MU searches V LAB (using RESULTS DATE AND TIME) and V MICROBIOLOGY (using COMPLETE DATE) for a group A streptococcus test <= 3 days before OR <= 3 days after the pharyngitis antibiotics were prescribed by the EP (MU uses the ISSUE DATE from the PRESCRIPTION file for this time calculation) represented by the following LOINC codes: 626-2, 5036-9, 6556-5, 6558-1, 6559-9, 11268-0, 17656-0, 18481-2, 31971-5, 49610-9. If a lab test is not found, then MU

searches V CPT for the following CPT codes: 87070, 87071, 87081, 87430, 87650, 87651, 87652, 87880.

**Patient List Description**

Patients 2-18 with at least 1 ED or outpatient encounter with the EP during the reporting period AND who were diagnosed with pharyngitis AND who were prescribed an antibiotic <= 3 days after the encounter AND who received a group A streptococcus (strep) test <= 3 days before or after the antibiotic was prescribed by the EP, if any.

### 1.1.3.6    Initiation and Engagement of Alcohol and Other Drug Dependence Treatment: (a) Initiation, (b) Engagement (NQF 0004)

**Denominators**

Denominator 1:
Patients 13-17 years old who have at least 1 of the following with the EP from 1 year before to 45 days before the reporting period end date which will be defined as the FIRST diagnosis of alcohol or drug dependence for use in Numerator 1:

1. A FIRST diagnosis of alcohol or drug dependence during an emergency department (ED) encounter, an acute or non-acute inpatient encounter, an outpatient behavioral health (BH) or an outpatient BH req point of service (POS) encounter with a POS modifier.

2. A FIRST acute or non-acute inpatient encounter with an alcohol, drug rehab and detoxification intervention.

3. A FIRST detoxification intervention.

Additionally, patients must not have had a diagnosis of alcohol or drug dependence <= 60 days BEFORE the FIRST episode described in conditions 1, 2 and 3 above.

Denominator 2:
Patients 18+ who meet the conditions listed in denominator 1.

Denominator 3:
Patients 13+ who meet the conditions listed in denominator 1..

**Numerators**

Numerator 1:
Patients who meet at least 1 of the following conditions which will be defined as the FIRST TREATMENT for use in Numerator 2:

1. A FIRST acute or non-acute inpatient encounter with an alcohol, drug rehab and detoxification intervention with the EP from 1 year before to 45 days before the reporting period end date.  Please note: this is the same as denominator condition 2 above.

2. An acute or non-acute inpatient encounter, an outpatient BH encounter or an outpatient BH req encounter with a POS modifier <= 14 days and a diagnosis of alcohol or drug dependence after the FIRST diagnosis of alcohol or drug dependence as defined in the denominator.

Numerator 2:
Patients who had at least 2 counts of any of the following <= 30 days after the FIRST TREATMENT as defined in numerator 1:
1. --Acute or non-acute inpatient encounters with a diagnosis of alcohol or drug dependence
2. --Outpatient BH encounters
3. --Outpatient BH req POS encounters with a POS modifier and a diagnosis of alcohol or drug dependence.

**Definition**

Denominator Logic:
Age is calculated as of the end of the reporting period to determine if the patient reached an age of 13 years or older during the reporting period.

Additionally, the patient must have at least 1 of the following episodes with the EP from 365 days before the reporting period end date to 45 days before the reporting period end date.  If more than 1 episode exists, MU takes the earliest episode.  The episode is considered the FIRST diagnosis of alcohol or drug dependence for the patient for use in Numerator 1.

1. MU searches VISIT and V POV for the FIRST of any of the following types of encounters with a diagnosis of alcohol or drug dependence: an ED encounter, an outpatient BH encounter, or an outpatient BH req POS encounter with a POS modifier, or an acute or non-acute inpatient encounter.  The codes to represent the visit and the diagnosis are among the following:
--ED CPT codes: 99281, 99282, 99283, 99284, 99285
--Outpatient BH CPT codes: 90804, 90805, 90806, 90807, 90808, 90809, 90810, 90811, 90812, 90813, 90814, 90815, 98960, 98961, 98962, 99078, 99201, 99202, 99203, 99204, 99205, 99211, 99212, 99213, 99214, 99215, 99217, 99218, 99219, 99220, 99241, 99242, 99243, 99244, 99245, 99341, 99342, 99343, 99344, 99345, 99347, 99348, 99349, 99350, 99384, 99385, 99386, 99387, 99394, 99395, 99396, 99397, 99401, 99402, 99403, 99404, 99408, 99409, 99411, 99412, 99510
--Outpatient BH req POS CPT codes: 90801, 90802, 90816, 90817, 90818, 90819, 90821, 90822, 90823, 90824, 90826, 90827, 90828, 90829, 90845, 90847, 90849, 90853, 90857, 90862, 90875, 90876, 99221, 99222, 99223, 99231, 99232, 99233, 99238, 99239, 99251, 99252, 99253, 99254, 99255

--POS modifier CPT codes: 03, 05, 07, 09, 11, 12, 13, 14, 15, 20, 22, 33, 49, 50, 52, 53, 57, 71, 72
--Acute inpatient CPT codes: 99221, 99222, 99223, 99231, 99232, 99233, 99238, 99239, 99251, 99252, 99253, 99254, 99255, 99291
--Non-acute inpatient CPT codes: 99304, 99305, 99306, 99307, 99308, 99309, 99310, 99315, 99316, 99318, 99324, 99325, 99326, 99327, 99328, 99334, 99335, 99336, 99337
--Alcohol or drug dependence diagnosis ICD-9 codes: These codes are defined in the BGPMU ALCOHOL DRUG DEP DX taxonomy.

2. MU searches VISIT and V PROCEDURE for the FIRST acute or non-acute inpatient encounter with an alcohol, drug rehab and detox intervention represented by the following:
--Acute inpatient CPT codes: see above for codes
--Non-acute inpatient CPT codes: see above for codes
--Alcohol, drug rehab and detox intervention ICD-9 codes: 94.61, 94.63, 94.64, 94.66, 94.67, 94.69.

3. MU searches V PROCEDURE for a detoxification intervention during the period defined above represented by one of the following ICD-9 codes: 94.62, 94.65, 94.68.

Numerator Logic 1:
To be included in numerator 1, the patient must meet at least 1 of the following conditions which will be defined as the FIRST TREATMENT for a patient for use in Numerator 2.  If both conditions are met, MU takes the earliest episode.

1. MU searches VISIT and V PROCEDURE for the FIRST acute or non-acute inpatient encounter with a alcohol, drug rehab and detox intervention with the EP from 365 days before the reporting period end date to 45 days before the reporting period end date.  See above for the applicable CPT and ICD-9 codes.  This is the same as denominator condition 2 above.

2. MU searches VISIT and V POV for the FIRST of any of the following encounters with a diagnosis of alcohol or drug dependence with the EP within 14 days after the FIRST diagnosis of alcohol or drug dependence (as defined in the denominator): an outpatient BH encounter, or an outpatient BH req POS with a POS modifier encounter, or an acute or non-acute inpatient encounter.  See above for the applicable CPT and ICD-9 codes.

Numerator Logic 2:

MU searches VISIT and V POV for at least 2 of any of the following encounters with the EP within 30 days after the FIRST TREATMENT as defined in Numerator 1:
1. Acute or non-acute inpatient encounter with a diagnosis of alcohol or drug dependence

2. Outpatient BH encounter

3. Outpatient BH req POS with POS modifier encounter with a diagnosis of alcohol
or drug dependence.  See above for the applicable CPT and ICD-9 codes.

**Patient List Description**

Patients 13+ with a new episode of alcohol and other drug (AOD) dependence who
initiate treatment through an inpatient AOD admission, outpatient visit, intensive
outpatient encounter, or partial hospitalization within 14 days of the diagnosis and
who initiated treatment and who had two or more additional services with an AOD
diagnosis within 30 days of the initiation visit, if any.

## 1.1.3.7    Prenatal Care: Screening for HIV (NQF 0012)

**Denominator**

Patients who had live birth delivery with at least 1 prenatal encounter during the
reporting period.

**Numerator**

Patients whose estimated date of conception was less than or equal to 10 months from
live birth delivery who received HIV screening within 30 days of first or second
prenatal encounter during the reporting period..

**Exclusion**

Patients who had an active or inactive diagnosis of HIV on or before the prenatal
encounter or who did not have an HIV screening laboratory test for either patient or
medical reasons within 30 days of the first or second prenatal encounter.

**Definition**

Denominator Logic:
MU searches V CPT and V POV for a delivery live birth procedure during the
reporting period represented by the following
--CPT codes: 59400, 59409, 59410, 59425, 59426, 59510, 59514, 59515, 59610,
59612, 59614, 59618, 59620, 59622
--ICD-9 Codes: the codes are defined in the BGPMU DELIVERY LIVE BIRTH DX
taxonomy.

MU searches VISIT and V POV for at least 1 prenatal encounter with the EP within
300 days before the delivery date (VISIT DATE) represented by the following ICD-9
codes: V22.0, V22.1, V22.2.

Numerator Logic:
MU searches V LAB for patients who received HIV screening within 30 days of first
or second prenatal encounter that were =< 300 days prior to the delivery date (VISIT
DATE).  This is determined by the following:
--HIV screening LOINC codes: 5017-9, 5018-7, 5220-9, 5221-7, 5222-5, 5223-3,
5224-1, 5225-8, 7917-8, 7918-6, 7919-4, 9660-2, 9661-0, 9662-8, 9663-6, 9664-4,
9665-1, 9666-9, 9667-7, 9668-5, 9669-3, 9821-0, 9836-8, 9837-6, 35437-3, 35438-1,
35439-9, 35440-7, 35441-5, 35442-3, 35443-1, 35444-9, 35445-6, 35446-4, 35447-2,
35448-0, 35449-8, 35450-6, 35452-2, 35564-4, 35565-1, 38998-1, 40437-6, 40438-4,

40439-2, 40732-0, 40733-8, 41143-9, 41144-7, 41145-4, 41290-8, 41497-9, 41498-7, 41513-3, 41514-1, 41515-8, 41516-6, 42339-2, 42600-7, 42627-0, 42768-2, 42917-5, 43008-2, 43009-0, 43010-8, 43011-6, 43012-4, 43013-2
--HIV screening CPT codes: 87390, 87391, 87534, 87535, 87536, 87537, 87538, 87539
--Prenatal encounter ICD-9 codes: See denominator logic for codes

Exclusion Logic:
The patient is excluded if the patient meets either of the following conditions:
--MU searches the V POV and PROBLEM files for patients who had a diagnosis/problem (active or inactive) of HIV on or before the prenatal encounter represented by ICD-9 codes: 042, V08.
--MU searches MU searches the PATIENT REFUSALS FOR SERVICE/NMI for REF or NMI refusals for patients with a documented reason for not having an HIV screening laboratory test within 30 days of first or second prenatal encounter that were =< 300 days prior to the delivery date (VISIT DATE).  See the numerator logic for the HIV screening LOINC codes.

**Patient List Description**

Patients, regardless of age, who gave birth during the reporting period who were screened for HIV infection during the first or second prenatal encounter, if any.

## 1.1.3.8    Prenatal Care Anti-D Immune Globulin (NQF 0014)

**Denominator**

D (Rh) negative, unsensitized patients who gave birth during the reporting period and had at least 1 prenatal encounter with the EP after the estimated date of conception. For IHS purposes, the estimated date of conception is calculated as the delivery date minus 300 days.

**Numerator**

Patients  who were given anti-D immune globulin at or between 26-30 weeks gestation.

**Exclusion**

Patients at or between 26-30 weeks gestation who declined or were not given anti-d immune globulin for medical, patient, or system reasons.

**Definition**

Denominator Logic:
MU searches V CPT for a delivery live birth procedure during the reporting period represented by the following CPT codes: 59400, 59409, 59410, 59425, 59426, 59510, 59514, 59515, 59610, 59612, 59614, 59618, 59620, 59622.

MU searches VISIT for at least 1 prenatal encounter with the EP within 300 days before the delivery date (VISIT DATE for the live birth procedure) represented by the following ICD-9 codes: V22.0, V22.1, V22.2.

MU searches to determine if the patient is D (Rh) negative and is unsensitized using the following 2 step process:

1. MU searches V LAB for an D (Rh) negative result on or before the live birth delivery date defined as a N, NEG or NEGATIVE in the RESULTS field for a lab test with any of the following LOINC codes: 1314-4, 10331-7, 14906-2, 14907-0, 14908-8, 17531-5, 34961-3.

2. If in step 1 the patient is determined to be D (Rh) negative, then MU searches V LAB to determine if the patient is unsensitized.  This is defined as an Indirect Coombs (Antibody Screen) test after the estimate date of conception and before the live birth date with a value in the RESULTS field of N, NEG or NEGATIVE with the laboratory test represented by the LOINC code 1008-2 or CPT code 86885.

Numerator Logic:
MU searches PHARMACY PATIENT for patients who were given anti-D immune globulin at or between 182-210 days after the date of conception.  The NDCs for these medications are defined in the BGPMU ANTI-D IMMUNE GLOBUL NDC taxonomy.

Exclusion Logic:
MU searches PATIENT REFUSALS FOR SERVICE/NMI for a REF (refused) or NMI (not medically indicated) of RHO (D) IMMUNE GLOBULIN after the estimated date of conception.

**Patient List Description**

Percentage of D (Rh) negative, unsensitized patients, regardless of age, who gave birth during the reporting period who received anti-D immune globulin at 26-30 weeks gestation.

## 1.1.3.9   Controlling High Blood Pressure (NQF 0018)

**Denominator**

Patients 18-85 years of age who during the reporting period had an active diagnosis of hypertension and at least 1 outpatient encounter with the EP and none of the following:
--Active diagnosis of pregnancy
--Active diagnosis of End Stage Renal Disease (ESRD)
--Procedures indicative of ESRD

**Numerator**

Patients whose lowest systolic BP reading was < 140 mmHg and lowest diastolic BP reading was < 90 mmHg during their most recent outpatient encounter with the EP during the reporting period.

**Definition**

Denominator Logic:

Age is calculated as of the end of the reporting period to determine if the patient reached an age between 18-85 years old during the reporting period.

MU searches VISIT for at least 1 outpatient encounter with the EP during the reporting period represented by one of the following:

--CPT codes: 99201, 99202, 99203, 99204, 99205, 99211, 99212, 99213, 99214, 99215, 99217, 99218, 99219, 99220, 99241, 99242, 99243, 99244, 99245, 99341, 99342, 99343, 99344, 99345, 99347, 99348, 99349, 99350, 99384, 99385, 99386, 99387, 99394, 99395, 99396, 99397, 99401, 99402, 99403, 99404, 99411, 99412, 99420, 99429, 99455, 99456

--ICD-9 codes: V70.0, V70.3, V70.5, V70.6, V70.8, V70.9

MU searches V POV and PROBLEM for a diagnosis and/or active problem of hypertension during the reporting period represented by the following ICD-9 codes: 401, 401.0, 401.1, 401.9.

MU searches various files to determine that NONE of the following conditions exist for the patient:

1. MU searches V POV for a diagnosis of pregnancy during the reporting period represented by the ICD-9 codes defined in the BGPMU PREGNANCY ALL ICD taxonomy.

2. MU searches V POV and PROBLEM for a diagnosis and/or active problem of ESRD during the reporting period represented by the following ICD-9 codes: 585.5, 585.6, V42.0, V45.1, V45.11, V45.12, V56, V56.0, V56.1, V56.2, V56.3, V56.31, V56.32, V56.8.

3. MU searches V CPT and V PROCEDURE for a procedure indicative of ESRD during the reporting period represented by the following:

   --CPT codes: 36145, 36147, 36148, 36800, 36810, 36815, 36818, 36819, 36820, 36821, 36831, 36832, 36833, 50300, 50320, 50340, 50360, 50365, 50370, 50380, 90920, 90921, 90924, 90925, 90935, 90937, 90940, 90945, 90947, 90957, 90958, 90959, 90960, 90961, 90962, 90965, 90966, 90969, 90970, 90989, 90993, 90997, 90999, 99512

   --HCPCS codes: G0257, G0308, G0309, G0310, G0311, G0312, G0313, G0314, G0315, G0316, G0317, G0318, G0319, G0322, G0323, G0326, G0327, G0392, G0393, S9339

   --ICD-9 codes: 38.95, 39.27, 39.42, 39.43, 39.53, 39.93, 39.94, 39.95, 54.98, 55.6, 55.61, 55.69

Numerator Logic:

MU searches VISIT for the most recent outpatient encounter with the EP during the reporting period and V MEASUREMENT for a lowest systolic BP reading of < 140 mmHg and a lowest diastolic BP reading of < 90 mmHg during this encounter. See denominator logic for the applicable encounter codes.

**Patient List Definition**

Hypertensive patients 18-85 years of age with at least 1 encounter with the EP during the reporting period and whose lowest systolic BP reading was < 140 mmHg and lowest diastolic BP reading was < 90 mmHg during the most recent encounter with the EP during the reporting period, if any.

## 1.1.3.10  Smoking and Tobacco Use Cessation, Medical Assistance: (NQF 0027)

**Denominator**

Patients turning 18 years and older having 1 or more outpatient encounters with the EP within 2 years of the reporting period end date.

**Numerators**

Numerator 1:
Patients using tobacco 1 year before or within the reporting period.

Numerator 2:
Patients using tobacco as in Numerator 1 who, within 1 year of the reporting period end date, (a) received communication on cessation counseling, or (b) had an encounter with the EP where the EP recommended or discussed smoking or tobacco use cessation medications, methods, or strategies.

**Definition**

Denominator Logic:
Age is calculated as of the end of the reporting period to determine if the patient reached an age of 18 years or older during the reporting period.

MU searches VISIT for at least 1 outpatient encounter with the EP within 730 days of the reporting period end date represented by one of the following:
--CPT codes: 99201, 99202, 99203, 99204, 99205, 99211, 99212, 99213, 99214, 99215, 99217, 99218, 99219, 99220, 99241, 99242, 99243, 99244, 99245, 99341, 99342, 99343, 99344, 99345, 99347, 99348, 99349, 99350, 99384, 99385, 99386, 99387, 99394, 99395, 99396, 99397, 99401, 99402, 99403, 99404, 99411, 99412, 99420, 99429, 99455, 99456
--ICD-9 codes: V70.0, V70.3, V70.5, V70.6, V70.8, V70.9

Numerator Logic:
Numerator 1 Logic:

MU searches V HEALTH FACTORS for any of the following values that classifies the patient as a Tobacco User within 365 days of the reporting period end date:

--Current every day smoker
--Current some day smoker
--Current smoker, status unknown
--Current smokeless

Numerator 2 Logic:

MU searches V HEALTH FACTORS for any of the following values that classifies
the patient as a Tobacco User within 365 days of the reporting period end date:
--Current every day smoker
--Current some day smoker
--Current smoker, status unknown
--Current smokeless

MU searches VISIT and V PATIENT ED to determine if the patient had either an
encounter or received communication on tobacco use cessation within 365 days of the
reporting period end date represented by the following:
--Encounter cessation counseling CPT codes: 99406, 99407
--Communication to patient cessation counseling-Patient Education Topic: any code
beginning or ending with TO-xx, xx-TO, xx-SHS

**Patient List Definition**

Patients 18 years of age and older with at least 1 encounter with the EP within 2 years
of the reporting period end date, who have been identified as tobacco users within 1
year before or during the reporting period and who received advice to quit smoking or
tobacco use or whose EP recommended or discussed smoking or tobacco use
cessation medications, methods or strategies within 1 year of the reporting period end
date, if any.

### 1.1.3.11  Chlamydia Screening for Women (NQF 0033)
**Denominators**

Denominator 1:
Patients 15-24 who had at least 1 outpatient encounter with the EP on or before the
reporting period end date  AND at least one of the following:
--During the reporting period:
  1. Procedure indicative of sexually active women
  2. Laboratory test (either performed or with a result ) for pregnancy
  3. Pregnancy encounter
OR
--On or before the reporting period end date:
  4. Lab tests indicative of a sexually active woman
  5. Diagnosis of a sexually active woman
  6. Prescription for contraceptives
  7. Use of an IUD device
  8. Allergy to an IUD device

9. Contraceptive use education

Denominator 2:
Patients 15-19 years old who had at least 1 outpatient encounter with the EP during the reporting period AND at least one of the conditions numbered 1 through 9 listed in denominator 1.

Denominator 3:
Patients 20-24 years old who had at least 1 outpatient encounter with the EP during the reporting period AND at least one of the conditions numbered 1 through 9 listed in denominator 1.

**Numerator**

Patients with a laboratory test performed for chlamydia screening during the reporting period.

**Exclusions**

Patients are excluded if they have a laboratory test performed for pregnancy during the reporting period AND one of the following <= 7 days after the date the laboratory test was performed or <= 7 days after the laboratory test results date:
--Prescription for retinoid
--X-ray study

**Definition**

Denominator Logic:
Age is calculated as of the end of the reporting period to determine if the patient reached an age of between 15 and 24 years or age during the reporting period.

MU searches VISIT for at least 1 outpatient encounter with the EP during the reporting period represented by one of the following:
--CPT codes: 99201, 99202, 99203, 99204, 99205, 99211, 99212, 99213, 99214, 99215, 99217, 99218, 99219, 99220, 99241, 99242, 99243, 99244, 99245, 99341, 99342, 99343, 99344, 99345, 99347, 99348, 99349, 99350, 99384, 99385, 99386, 99387, 99394, 99395, 99396, 99397, 99401, 99402, 99403, 99404, 99411, 99412, 99420, 99429, 99455, 99456
--ICD-9 codes: V70.0, V70.3, V70.5, V70.6, V70.8, V70.9

Additionally, the patient must have a least one of the following conditions:

1. MU searches V CPT, V PROCEDURE and V POV for a procedure indicative of a sexually active woman during the reporting period represented by the following codes:
--CPT codes : 11975, 11976, 11977, 57022, 57170, 58300, 58301, 58600, 58605, 58611, 58615, 58970, 58974, 58976, 59000, 59001, 59012, 59015, 59020, 59025, 59030, 59050, 59051, 59070, 59072, 59074, 59076, 59100, 59120, 59121, 59130, 59135, 59136, 59140, 59150, 59151, 59160, 59200, 59300, 59320, 59325, 59350, 59400, 59409, 59410, 59412, 59414, 59425, 59426, 59430, 59510, 59514, 59515,

59525, 59610, 59612, 59614, 59618, 59620, 59622, 59812, 59820, 59821, 59830, 59840, 59841, 59850, 59851, 59852, 59855, 59856, 59857, 59866, 59870, 59871, 59897, 59898, 59899, 76801, 76805, 76811, 76813, 76815, 76816, 76817, 76818, 76819, 76820, 76821, 76825, 76826, 76827, 76828, 76941, 76945, 76946, 80055, 81025, 82105, 82106, 82143, 82731, 83632, 83661, 83662, 83663, 83664, 84163, 84702, 84703, 84704, 86592, 86593, 86631, 86632, 87110, 87164, 87166, 87270, 87320, 87490, 87491, 87492, 87590, 87591, 87592, 87620, 87621, 87622, 87660, 87800, 87801, 87808, 87810, 87850, 88141, 88142, 88143, 88147, 88148, 88150, 88152, 88153, 88154, 88155, 88164, 88165, 88166, 88167, 88174, 88175, 88235, 88267, 88269
--HCPCS codes: G0101, G0123, G0124, G0141, G0143, G0144, G0145, G0147, G0148, H1000, H1001, H1003, H1004, H1005, P3000, P3001, Q0091, S0180, S0199, S4981, S8055
--ICD-9 procedure codes: 69.01, 69.02, 69.51, 69.52, 69.7, 72, 73, 74, 75, 88.78, 97.24, 97.71, 97.73
--ICD-9 diagnosis codes: V15.7, V76.2

2. MU searches V LAB for a laboratory test for pregnancy during the reporting period represented by the following codes:
--LOINC codes: 2106-3, 2107-1, 2110-5, 2111-3, 2112-1, 2113-9, 2114-7, 2115-4, 2118-8, 2119-6, 19080-1, 19180-9, 20415-6, 20994-0, 21198-7, 25372-4, 25373-2, 34670-0
--CPT codes: 81025, 84702, 84703

3. MU searches V POV for a pregnancy encounter during the reporting period represented by the following ICD-9 codes: V26.81, V28, V28.3, V28.81, V28.82, V72.4, V72.40, V72.41, V72.42.

4. MU searches V LAB for a laboratory test indicative of a sexually active woman on or before the reporting period end date represented by the following:
--LOINC codes: 660-1, 688-2, 690-8, 691-6, 692-4, 693-2, 698-1, 1832-5, 1834-1, 5393-4, 5394-2, 557-9, 560-3, 5291-0, 5292-8, 6487-3, 6488-1, 6489-9, 6510-2, 6511-0, 6514-4, 6516-9, 6561-5, 6562-3, 7975-6, 8041-6, 10705-2, 11083-3, 11084-1, 11481-9, 11597-2, 12222-6, 12223-4, 14499-8, 14500-3, 14502-9, 14503-7, 14504-5, 14506-0, 15019-3, 16280-0, 17398-9, 17399-7, 17400-3, 17401-1, 17402-9, 17403-7, 17404-5, 17405-2, 17406-0, 17407-8, 17408-6, 17409-4, 17410-2, 17411-0, 17412-8, 17723-8, 17724-6, 17725-3, 17726-1, 17727-9, 17728-7, 17729-5, 19080-1, 19171-8, 19176-7, 19177-5, 20403-2, 20404-0, 20415-6, 20507-0, 20508-8, 21414-8, 21415-5, 21416-3, 21440-3, 21441-1, 22461-8, 22462-6, 22587-0, 22590-4, 22592-0, 22594-6, 24110-9, 24111-7, 24312-1, 26009-1, 29311-8, 30167-1, 31147-2, 31905-3, 31906-1, 31993-9, 32198-4, 32199-2, 32705-6, 34147-9, 34382-2, 34493-7, 34656-9, 34718-7, 35457-1, 36902-5, 36903-3, 38372-9, 40679-3, 40680-1, 41273-4, 41274-2, 42316-0, 42481-2, 42931-6, 43304-5, 43305-2, 43403-5, 43404-3, 43406-8, 43798-8, 44543-7, 44544-5, 44546-0, 44547-8, 44549-4, 44550-2, 44806-8, 44807-6, 45067-6, 45068-4, 45069-2, 45070-0, 45074-2, 45076-7, 45078-3, 45080-9, 45084-1, 45091-6,

45095-7, 45098-1, 45100-5, 45327-4, 45331-6, 45332-4, 46731-6, 46989-0, 47211-8, 47212-6, 47236-5, 47237-3, 47238-1, 47387-6, 48030-1, 48039-2, 48560-7, 48781-9, 49096-1, 49246-2, 49318-9, 49891-5, 49896-4, 5028-6, 50388-8, 50690-7, 51838-1, 51839-9, 53605-2, 53762-1, 53879-3, 5392-6, 53927-0, 55299-2
--CPT codes: 86592, 86593, 87164, 87166, 87590, 87591, 87592, 87620, 87621, 87622, 87660, 87800, 87801, 87808, 87850

5. MU searches V POV  for a diagnosis of a sexually active woman on or before the reporting period end date represented by one of the following ICD-9 codes: 054.10, 054.11, 054.12, 054.19, 078.11, 078.88, 079.4, 079.51, 079.52, 079.53, 079.88, 079.98, 091, 091.0, 091.1, 091.2, 091.3, 091.4, 091.5, 091.50, 091.51, 091.52, 091.6, 091.61, 091.62, 091.69, 091.7, 091.8, 091.81, 091.82, 091.89, 091.9, 092, 092.0, 092.9, 093, 093.0, 093.1, 093.2, 093.20, 093.21, 093.22, 093.23, 093.24, 093.8, 093.81, 093.82, 093.89, 093.9, 094, 094.0, 094.1, 094.2, 094.3, 094.8, 094.81, 094.82, 094.83, 094.84, 094.85, 094.86, 094.87, 094.89, 094.9, 095, 095.0, 095.1, 095.2, 095.3, 095.4, 095.5, 095.6, 095.7, 095.8, 095.9, 096, 097, 097.0, 097.1, 097.9, 098.0, 098.10, 098.11, 098.15, 098.16, 098.17, 098.19, 098.2, 098.30, 098.31, 098.35, 098.36, 098.37, 098.39, 098.4, 098.40, 098.41, 098.42, 098.43, 098.49, 098.5, 098.50, 098.51, 098.52, 098.53, 098.59, 098.6, 098.7, 098.8, 098.81, 098.82, 098.83, 098.84, 098.85, 098.86, 098.89, 099, 099.0, 099.1, 099.2, 099.3, 099.4, 099.40, 099.41, 099.49, 099.5, 099.50, 099.51, 099.52, 099.53, 099.54, 099.55, 099.56, 099.59, 099.8, 099.9, 131, 131.0, 131.00, 131.01, 131.02, 131.03, 131.09, 131.8, 131.9, 339.82, 614, 614.0, 614.1, 614.2, 614.3, 614.4, 614.5, 614.6, 614.7, 614.8, 614.9, 615, 615.0, 615.1, 615.9, 616, 616.0, 616.1, 616.10, 616.11, 616.2, 616.3, 616.4, 616.5, 616.50, 616.51, 616.8, 616.81, 616.89, 616.9, 622.3, 623.4, 626.7, 628, 628.0, 628.1, 628.2, 628.3, 628.4, 628.8, 628.9.

6. MU searches PRESCRIPTION for an active or expired prescription for contraceptives on or before the reporting period end date represented by the NDC codes in the BGPMU CONTRACEPTIVES NDCS taxonomy.

7. MU searches V POV, V PROCEDURE, V CPT and REPRODUCTIVE FACTORS for IUD device use  defined by the following:
ICD-9 encounter codes: V25.1, V25.11, V25.12, V25.13, V25.42
ICD-9 procedure codes: 69.7, 97.91
CPT codes: 58400, 58301
CONTRACEPTIVE METHOD=IUD

8. MU searches PATIENT ALLERGIES for an allergy to an IUD device on or before the reporting period end date represented by the following:
(SNOMED codes )

9. MU searches V PATIENT EDUCATION to determine if the patient received communication on contraceptive use on or before the reporting period end date

represented by the following patient education topics: any code  beginning or ending with FP-xx, xx-FP, xx-xxx.

Numerator Logic:
MU searches V LAB for a chlamydia screening test during the reporting period represented by the following:
--LOINC codes: 14463-4, 14464-2, 14467-5, 14470-9, 14471-7, 14474-1, 14509-4, 14510-2, 14513-6, 16600-9, 16601-7, 21189-6, 21190-4, 21191-2, 21192-0, 21613-5, 23838-6, 31771-9, 31772-7, 31775-0, 31777-6, 4993-2, 50387-0, 53925-4, 53926-2
--CPT codes: 86631, 86632, 87110, 87270, 87320, 87490, 87491, 87492, 87810

Exclusion Logic:
Patients are excluded if they meet both of the following conditions:

1. MU searches V LAB for a laboratory test for pregnancy during the reporting period represented by the following codes:
--LOINC codes: 2106-3, 2107-1, 2110-5, 2111-3, 2112-1, 2113-9, 2114-7, 2115-4, 2118-8, 2119-6, 19080-1, 19180-9, 20415-6, 20994-0, 21198-7, 25372-4, 25373-2, 34670-0
--CPT codes: 81025, 84702, 84703

2. The patient has one of the following <= 7 days after the date the laboratory test for pregnancy was performed or <= 7 days after the lab test results date :
  --MU searches PRESCRIPTION for an active or expired prescription for retinoid which is defined by the NDC codes in the BGPMU RETINOID NDCS taxonomy.
  --MU searches RAD/NUC MED PATIENT and V RADIOLOGY for an X-ray study represented by one of the following CPT codes: 70010, 70015, 70030, 70100, 70110, 70120, 70130, 70134, 70140, 70150, 70160, 70170, 70190, 70200, 70210, 70220, 70240, 70250, 70260, 70300, 70310, 70320, 70328, 70330, 70332, 70336, 70350, 70355, 70360, 70370, 70371, 70373, 70380, 70390, 70450, 70460, 70470, 70480, 70481, 70482, 70486, 70487, 70488, 70490, 70491, 70492, 70496, 70498, 70540, 70542, 70543, 70544, 70545, 70546, 70547, 70548, 70549, 70551, 70552, 70553, 70554, 70555, 70557, 70558, 70559, 71010, 71015, 71020, 71021, 71022, 71023, 71030, 71034, 71035, 71040, 71060, 71090, 71100, 71101, 71110, 71111, 71120, 71130, 71250, 71260, 71270, 71275, 71550, 71551, 71552, 71555, 72010, 72020, 72040, 72050, 72052, 72069, 72070, 72072, 72074, 72080, 72090, 72100, 72110, 72114, 72120, 72125, 72126, 72127, 72128, 72129, 72130, 72131, 72132, 72133, 72141, 72142, 72146, 72147, 72148, 72149, 72156, 72157, 72158, 72159, 72170, 72190, 72191, 72192, 72193, 72194, 72195, 72196, 72197, 72198, 72200, 72202, 72220, 72240, 72255, 72265, 72270, 72275, 72285, 72291, 72292, 72295, 73000, 73010, 73020, 73030, 73040, 73050, 73060, 73070, 73080, 73085, 73090, 73092, 73100, 73110, 73115, 73120, 73130, 73140, 73200, 73201, 73202, 73206, 73218, 73219, 73220, 73221, 73222, 73223, 73225, 73500, 73510, 73520, 73525, 73530, 73540, 73542, 73550, 73560, 73562, 73564, 73565, 73580, 73590, 73592, 73600, 73610, 73615, 73620, 73630, 73650, 73660, 73700, 73701, 73702, 73706,

73718, 73719, 73720, 73721, 73722, 73723, 73725, 74000, 74010, 74020, 74022, 74150, 74160, 74170, 74175, 74181, 74182, 74183, 74185, 74190, 74210, 74220, 74230, 74235, 74240, 74241, 74245, 74246, 74247, 74249, 74250, 74251, 74260, 74270, 74280, 74283, 74290, 74291, 74300, 74301, 74305, 74320, 74327, 74328, 74329, 74330, 74340, 74350, 74355, 74360, 74363, 74400, 74410, 74415, 74420, 74425, 74430, 74440, 74445, 74450, 74455, 74470, 74475, 74480, 74485, 74710, 74740, 74742, 74775, 75557, 75558, 75559, 75560, 75561, 75562, 75563, 75564, 75600, 75605, 75625, 75630, 75635, 75650, 75658, 75660, 75662, 75665, 75671, 75676, 75680, 75685, 75705, 75710, 75716, 75722, 75724, 75726, 75731, 75733, 75736, 75741, 75743, 75746, 75756, 75774, 75790, 75801, 75803, 75805, 75807, 75809, 75810, 75820, 75822, 75825, 75827, 75831, 75833, 75840, 75842, 75860, 75870, 75872, 75880, 75885, 75887, 75889, 75891, 75893, 75894, 75896, 75898, 75900, 75901, 75902, 75940, 75945, 75946, 75952, 75953, 75954, 75956, 75957, 75958, 75959, 75960, 75961, 75962, 75964, 75966, 75968, 75970, 75978, 75980, 75982, 75984, 75989, 75992, 75993, 75994, 75995, 75996, 76000, 76001, 76010, 76080, 76098, 76100, 76101, 76102, 76120, 76125, 76140, 76150, 76376, 76377, 76380, 76390, 76496, 76497, 76498, 76499.

**Patient List Definition**

Patients 15-24 years of age with at least 1 encounter with the EP during the reporting period, who have been identified as sexually active or pregnant on or before the reporting period AND who had had Chlamydia screening during the reporting period, if any.

### 1.1.3.12   Use of Appropriate Medications for Asthma (NQF 0036)

**Denominators**

Denominator 1:
Patients 5-11 years old who meet at least 1 of the following conditions:

1. At least 1 emergency department (ED) or acute inpatient encounter with the EP during the reporting period or within 1 year before the beginning of the reporting period AND an active diagnosis of asthma during this timeframe.

2. At least 4 outpatient encounters with the EP during the reporting period or within 1 year before the beginning of the reporting period AND an active diagnosis of asthma during this timeframe AND 2 counts of asthma medication prescribed during this timeframe.  These asthma medications are defined as antiasthmatic combinations, antibody inhibitors, inhaled corticosteroids, inhaled steroid combinations, leukotriene inhibitors, long- and short-acting inhaled beta 2 agonists, mast cell stabilizers and methylxanthines.

3. At least 4 counts of asthma medication prescribed by the EP during the reporting period or within 1 year before the beginning of the reporting period.  These asthma medications are defined as antiasthmatic combinations, antibody inhibitors, inhaled corticosteroids, inhaled steroid combinations, long- and short-acting inhaled beta 2 agonists, mast cell stabilizers and methylxanthines.

4. At least 4 counts of leukotriene inhibitor medication prescribed by the EP during the reporting period or within 1 year before the beginning of the reporting period AND an active diagnosis of asthma during this timeframe.

Denominator 2:
Patients 12-50 years old who meet at least one of the conditions numbered 1 through 4 listed in denominator 1.

Denominator 3:
Patients 5-50 years old who meet at least one of the conditions numbered 1 through 4 listed in denominator 1.

**Numerator**

Patients who were prescribed at least 1 count of asthma medication during the reporting period.  These asthma medications are defined as antiasthmatic medication combinations, antibody inhibitor, inhaled corticosteroids, inhaled steroid combinations, leukotriene inhibitors, mast cell stabilizers, and methylxanthines.

**Exclusions**

Patients are excluded if they have an active diagnosis of COPD, cystic fibrosis, emphysema, or acute respiratory failure on or before the reporting period end date

**Definitions**

Denominator Logic:
Age is calculated as of the end of the reporting period to determine if the patient reached an age during the reporting period of:
--Between 5 and 11 years old for denominator 1
--Between 12 and 50 years old for denominator 2
--Between 5 and 50 years old for denominator 3

Additionally, the patient must meet at least one of the following:

1. MU searches VISIT for at least 1 ED or acute inpatient encounter with the EP during the reporting period or within 1 year before the beginning of the reporting period AND V POV and PROBLEM for a diagnosis and/or active problem of asthma during this timeframe represented by the following:
--ED encounter CPT codes: 99281, 99282, 99283, 99284, 99285
--Acute inpatient encounter CPT codes: 99221, 99222, 99223, 99231, 99232, 99233, 99238, 99239, 99251, 99252, 99253, 99254, 99255, 99291
–-Asthma ICD-9 codes: 493, 493.0, 493.00, 493.01, 493.02, 493.1, 493.10, 493.11, 493.12, 493.2, 493.20, 493.21, 493.22, 493.8, 493.81, 493.82, 493.9, 493.90, 493.91, 493.92

2. The patient must meet both of the following conditions:

--MU searches VISIT for at least 4 outpatient encounters with the EP during the reporting period or within 1 year before the beginning of the reporting period AND V POV and PROBLEM for a diagnosis and/or active problem of asthma during this timeframe represented by the following:

  --Outpatient encounter CPT codes: 99201, 99202, 99203, 99204, 99205, 99211, 99212, 99213, 99214, 99215, 99217, 99218, 99219, 99220, 99241, 99242, 99243, 99244, 99245, 99341, 99342, 99343, 99344, 99345, 99347-99350, 99384, 99385, 99386, 99387, 99394, 99395, 99396, 99397, 99401, 99402, 99403, 99404, 99411, 99412, 99420, 99429, 99455, 99456
  --Outpatient encounter ICD-9 codes: V70.0, V70.3, V70.5, V70.6, V70.8, V70.9
  --Asthma ICD-9 codes:  See number 1 above.

--MU searches V MEDICATION for 2 counts of any of the following asthma medications prescribed by the EP during the reporting period or within 1 year before the beginning of the reporting period:

  --Antiasthmatic combinations, antibody inhibitors and methylxanthines.  The NDC codes for these medications are defined in the BGPMU ASTHMA GENERAL NDCS taxonomy.
  --Inhaled corticosteroids, inhaled steroid combinations and mast cell stabilizers.  The NDC codes for these medications are defined in the BGPMU ASTHMA INHALED NDCS taxonomy.
  --Leukotriene inhibitors.  The NDC codes for these medications are defined in the BGPMU ASTHMA LEUK NDCS taxonomy.
  --Short- and long-acting inhaled beta 2 agonists.  The NDC codes for these medications are defined in the BGPMU ASTHMA BETA NDCS taxonomy.

3. MU searches V MEDICATION for 4 counts of any of the following asthma medications prescribed by the EP during the reporting period or within 1 year before the beginning of the reporting period:
--Antiasthmatic combinations, antibody inhibitors and methylxanthines (see BGPMU ASTHMA GENERAL NDCS taxonomy)
--Inhaled corticosteroids, inhaled steroid combinations and mast cell stabilizers (see BGPMU ASTHMA INHALED NDCS taxonomy)
--Short- and long-acting inhaled beta 2 agonists (see BGPMU ASTHMA BETA NDCS taxonomy)

4. The patient must meet both of the following conditions:

--MU searches V MEDICATION for 4 counts of leukotriene inhibitor medications prescribed by the EP during the reporting period or within 1 year before the beginning of the reporting period represented by the NDC codes in the BGPMU ASTHMA LEUK NDCS taxonomy.

--MU searches V POV and PROBLEM for a diagnosis and/or active problem of asthma during the reporting period or within 1 year before the beginning of the reporting period.  See number 1 above for the asthma diagnosis codes.

For purposes of conditions 2, 3 and 4 above, a count of medication is defined as 1 prescription of any amount lasting 30 days or less.  For prescriptions longer than 30 days, MU divides the day's supply by 30 and rounds down to convert to a whole number.  For example, a 100-day prescription is equal to 3 counts (100/30 = 3.33, rounded down to 3).  Also, 2 different prescriptions dispensed on the same day are considered as 2 different counts.  Inhalers are considered as 1 count.  If the medication was started and then discontinued, MU will recalculate the number of DAYS PRESCRIBED by subtracting the prescription date (i.e., VISIT DATE) from the DATE DISCONTINUED.

Numerator Logic:
MU searches V MEDICATION for at least 1 count of any of the following asthma medications (either active or expired) prescribed by the EP during the reporting period:
--Antiasthmatic combinations, antibody inhibitors and methylxanthines (see BGPMU ASTHMA GENDERAL NDCS taxonomy)
--Inhaled corticosteroids, inhaled steroid combinations and mast cell stabilizers (see BGPMU ASTHMA INHALED NDCS taxonomy)
--Leukotriene inhibitors (see BGPMU ASTHMA LEUK NDCS taxonomy)

Exclusion Logic:
Patients are excluded if they meet the following condition:

MU searches V POV and PROBLEM for a diagnosis and/or active problem of COPD, cystic fibrosis, emphysema, or acute respiratory failure during the reporting period represented by the following ICD-9 codes:
--COPD: 491.2, 491.20, 491.21, 491.22, 492.0, 493.2, 493.20, 493.21, 493.22, 496, 506.4
--Cystic fibrosis: 277.0, 277.00, 277.01, 277.02, 277.03, 277.09
--Emphysema: 492, 492.0, 492.8, 518.1, 518.2
--Acute respiratory failure: 518.81

**Patient List Definition**

Patients 5–50 years of age with one of the following during the reporting period or within 1 year before the beginning of the reporting period: (a) at least 1 ED or acute inpatient encounter with the EP and a diagnosis of asthma, (b) at least 4 outpatient encounters with the EP AND a diagnosis of asthma AND at least 2 counts of asthma medication prescribed by the EP, (c) at least 4 counts of asthma medication prescribed by the EP, or (d) at least 4 counts of leukotriene inhibitors prescribed by the EP and a diagnosis of asthma, if any.

### 1.1.3.13  Pneumonia Vaccination Status for Older Adults (65+) (NQF 0043)

**Denominators**

> Patients who reach 65 years of age or older during the reporting period with at least 1 outpatient encounter with the EP within 1 year of the reporting period end date.

**Numerators**

> Patients who received a pneumococcal vaccine on or before the reporting period end date.

**Definitions**

> Denominator Logic:
> Age is calculated as of the end of the reporting period to determine if the patient reached an age of 65 years or older during the reporting period.
>
> MU searches VISIT for at least 1 outpatient encounter with the EP within 365 days of the reporting period end date represented by one of the following:
> --CPT codes: 99201, 99202, 99203, 99204, 99205, 99211, 99212, 99213, 99214, 99215, 99217, 99218, 99219, 99220, 99241, 99242, 99243, 99244, 99245, 99341, 99342, 99343, 99344, 99345, 99347, 99348, 99349, 99350, 99384, 99385, 99386, 99387, 99394, 99395, 99396, 99397, 99401, 99402, 99403, 99404, 99411, 99412, 99420, 99429, 99455, 99456
> --ICD-9 codes: V70.0, V70.3, V70.5, V70.6, V70.8, V70.9
>
> Numerator Logic:
> MU searches IMMUNIZATION and V CPT for patients who received a pneumococcal vaccine on or before the reporting period end date represented by one of the following:
> --CVX codes: 33, 100, 133
> --CPT codes: 90669, 90670, 90732

**Patient List Definition**

> Patients 65 years of age and older with at least 1 outpatient encounter with the EP within 1 year of the reporting period end date who received a pneumococcal vaccine during the reporting period, if any.

### 1.1.3.14  Asthma Pharmacologic Therapy (NQF 0047)

**Denominator**

> Patients 5–40 with an active diagnosis of mild, moderate, or severe persistent asthma on or before the reporting period end date and who had at least 2 office and outpatient consultation encounters with the EP during the reporting period.

**Numerators**

> Patients who were prescribed an inhaled corticosteroid or alternative asthma medication including short- and long-acting-inhaled beta2 agonists, leukotriene modifiers, and theophylline classes during the reporting period.

**Exclusions**

Patients who meet any of the following conditions:
--Allergy or intolerance to, or adverse event from, inhaled corticosteroid or alternative asthma medication
--Were not given inhaled corticosteroid or alternative asthma medication for patient reasons

**Definitions**

Denominator Logic:
Age is calculated as of the end the reporting period to determine if the patient reached an age of between 5–40 years old during the reporting period.

MU searches VISIT for at least 2 office and outpatient consultation encounters with the EP during reporting period represented by the following CPT codes: 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 99241, 99242, 99243, 99244, 99245.

MU searches PROBLEM for an active problem of asthma with a CLASSIFICATION of MILD PERSISTENT, MODERATE PERSISTENT or SEVERE PERSISTENT with a DATE OF ONSET or DATE ENTERED (if the DATE OF ONSET is NULL) before the reporting period end date. A problem of asthma is represented by the following ICD-9 codes: 493.00, 493.01, 493.02, 493.10, 493.11, 493.12, 493.20, 493.21, 493.22, 493.81, 493.82, 493.90, 493.91, 493.92.

Numerator Logic:
MU searches PRESCRIPTION for an active or expired prescription for an inhaled corticosteroid or alternative asthma medication during the reporting period. The NDC codes for these medications are defined in the BGPMU ASTHMA MEDS NDCS taxonomy.

Exclusion Logic:
Patients are excluded if either of the following is found on or before the office and outpatient encounter dates:
--MU searches PATIENT ALLERGIES for an allergy or intolerance to, or adverse effects from, an inhaled corticosteroid or alternative asthma medications represented by the drug classes NT200, RE100, RE101, RE102, RE103, RE104, RE105, RE 108 and RE109
--MU searches PATIENT REFUSALS FOR SERVICE/NMI for a REF (refused) of an inhaled corticosteroid or alternative asthma medication. The NDC codes for these medications are defined in the BGPMU ASTHMA MEDS NDCS taxonomy.

**Patient List Definition**

Patients aged 5-40 years with a diagnosis of mild, moderate, or severe persistent asthma who had at least 2 office visits with the EP during the reporting period and

were prescribed either an inhaled corticosteroid or an alternative asthma medication during the reporting period, if any.

### 1.1.3.15  Low Back Pain: Use of Imaging Studies (NQF 0052)

**Denominator**

Patients 18-49 who had an active diagnosis of low back pain occurring during an emergency department, outpatient, orthopedic, or chiropractic encounter with the EP during the reporting period and who DID NOT HAVE any of the following:
--Previous diagnosis of low back pain within 180 days BEFORE the FIRST diagnosis of low back pain during the reporting period
--Diagnosis of cancer, trauma, IV drug abuse, or neurologic impairment within 2 years of the reporting period end date

**Numerator**

Patients who did not have any spinal imaging done within 28 days after the first diagnosis of low back pain during the reporting period.

**Definitions**

Denominator Logic:
Age is calculated as of the end of the reporting period to determine if the patient reached an age between 18-49 years during the reporting period.

MU searches VISIT for an emergency department, outpatient, orthopedic, or chiropractic encounter with the EP during the reporting period and V POV for the FIRST diagnosis of low back pain during this encounter (if there are multiple visits during the reporting period with a purpose of visit of low back pain, MU takes the first of these visits) represented by the following:
--Emergency Department Encounter CPT codes: 99281, 99282, 99283, 99284, 99285
--Outpatient Encounter CPT codes: 99201, 99202, 99203, 99204, 99205, 99211, 99212, 99213, 99214, 99215, 99217, 99218, 99219, 99220, 99241, 99242, 99243, 99244, 99245, 99341, 99342, 99343, 99344, 99345, 99347, 99348, 99349, 99350, 99384, 99385, 99386, 99387, 99394, 99395, 99396, 99397, 99401, 99402, 99403, 99404, 99411, 99412, 99420, 99429, 99455, 99456
--Outpatient Encounter ICD-9 codes: V70.0, V70.3, V70.5, V70.6, V70.8, V70.9
--Orthopedics and Chiropractic Encounter CPT codes: 98925, 98926, 98927, 98928, 98929, 98940, 98941, 98942
--Low Back Pain Diagnosis ICD-9 codes: 724.6, 721.3, 722.10, 722.32, 722.52, 722.93, 724, 724.02, 724.2, 724.3, 724.5, 724.7, 724.70, 724.71, 724.79, 738.5, 739.3, 739.4, 846.0, 846.1, 846.2, 846.3, 846.8, 846.9.

The patient is not included in the denominator if the patient meets any of the following conditions:

1. MU searches V POV and PROBLEM for a diagnosis and/or active problem of low back pain within 180 days BEFORE the FIRST diagnosis of low back pain occurring during the reporting period.  See above for the applicable ICD-9 codes.

2. MU searches V POV and PROBLEM for a diagnosis and/or active problem of cancer within 2 years of the reporting period end date represented by the ICD-9 codes defined in the BGPMU CANCER DX taxonomy.

3. MU searches V POV and PROBLEM for a diagnosis and/or active problem of trauma within 2 years of the reporting period end date represented by the ICD-9 codes defined in the BGPMU TRAUMA DX taxonomy.

4. MU searches V POV and PROBLEM for a diagnosis and/or active problem of IV drug abuse within 2 years of the reporting period end date represented by one of the following ICD-9 codes: 304.0, 304.00, 304.01, 304.02, 304.03, 304.1, 304.10, 304.11, 304.12, 304.13, 304.2, 304.20, 304.21, 304.22, 304.23, 304.4, 304.40, 304.41, 304.42, 304.43, 305.4, 305.40, 305.41, 305.42, 305.43, 305.5, 305.50, 305.51, 305.52, 305.53, 305.6, 305.60, 305.61, 305.62, 305.63, 305.7, 305.70, 305.71, 305.72, 305.73.

5. MU searches V POV and PROBLEM for a diagnosis and/or active problem of neurologic impairment within 2 years of the reporting period end date represented by one of the following ICD-9 codes: 344.60, 729.2.

Numerator Logic:
The patient is NOT included in the numerator if the patient meets the following condition:

MU searches RAD/NUC MED PATIENT and V RADIOLOGY for a spinal imaging study performed within 28 days from the FIRST low back pain diagnosis date during the reporting period represented by the following CPT codes: 72010, 72020, 72052, 72100, 72110, 72114, 72120, 72131, 72132, 72133, 72141, 72142, 72146, 72147, 72148, 72149, 72156, 72158, 72200, 72202, 72220.

**Patient List Definition**

Patients 18-49 with a primary diagnosis of low back pain and who had an emergency department, outpatient, orthopedic, or chiropractic encounter with the EP during the reporting period and who DID NOT HAVE an imaging study within 28 days of the FIRST diagnosis of low back pain during the reporting period, if any.

## 1.1.3.16  Diabetes:  Eye Exam (NQF 0055)
**Denominator**

Patients who reach 18–75 years of age during the reporting period with at least 1 of the following within 2 years of the reporting period end date:
--Dispensed, ordered or active medications indicative of diabetes prescribed by the EP
--An active diagnosis of diabetes with at least 1 of the following with the EP during the reporting period:
  --1 acute inpatient or ED encounter

--2 non-acute inpatient, outpatient, or ophthalmology encounters on different dates

**Numerators**

Patients who had an eye exam during the reporting period OR had both an eye exam and no active diagnosis of diabetic retinopathy during the year prior to the reporting period.

**Exclusions**

Patients are excluded when, within 2 years of the reporting period end date, there is NO encounter with a purpose of visit of type 1 or type 2 diabetes AND the patient has one of the following conditions:
--An active diagnosis of polycystic ovaries
--An active diagnosis of either gestational diabetes or steroid-induced diabetes AND an active or expired prescription(s) for medication(s) indicative of diabetes

**Definition**

Denominator Logic:
Age is calculated as of the end of the reporting period to determine if the patient reached an age between 18-75 years old during the reporting period.

MU searches to determine if either of the following conditions exists:
--MU searches PRESCRIPTION for active or expired medications indicative of diabetes prescribed by the EP within 730 days of the reporting period end date.  The NDC codes for these medications are defined in the BGPMU DIAB NDCS INDICATIVE ALL taxonomy.
--MU searches V POV and PROBLEM for a diagnosis and/or active problem of diabetes within 730 days of the reporting period end date and VISIT for at least 1 inpatient or ED encounter, OR at least 2 encounters of non-acute inpatient, outpatient, or ophthalmology occurring on different dates, with the EP during the reporting period.  These are determined by:
  --Diabetes ICD-9 codes: 250, 250.0, 250.00, 250.01, 250.02, 250.03, 250.10, 250.11, 250.12, 250.13, 250.20, 250.21, 250.22, 250.23, 250.30, 250.31, 250.32, 250.33, 250.4, 250.40, 250.41, 250.42, 250.43, 250.50, 250.51, 250.52, 250.53, 250.60, 250.61, 250.62, 250.63, 250.7, 250.70, 250.71, 250.72, 250.73, 250.8, 250.80, 250.81, 250.82, 250.83, 250.9, 250.90, 250.91, 250.92, 250.93, 357.2, 362.0, 362.01, 362.02, 362.03, 362.04, 362.05, 362.06, 362.07, 366.41, 648.0, 648.00, 648.01, 648.02, 648.03, 648.04
  --Encounter acute inpatient CPT codes: 99221, 99222, 99223, 99231, 99232, 99233, 99238, 99239, 99251, 99252, 99253, 99254, 99255, 99291
  --Encounter ED CPT codes: 99281, 99282, 99283, 99284, 99285
  --Encounter non-acute inpatient CPT codes: 99304, 99305, 99306, 99307, 99308, 99309, 99310, 99315, 99316, 99318, 99324, 99325, 99326, 99327, 99328, 99334, 99335, 99336, 99337

--Encounter outpatient CPT codes: 99201, 99202, 99203, 99204, 99205, 99211, 99212, 99213, 99214, 99215, 99217, 99218, 99219, 99220, 99241, 99242, 99243, 99244, 99245, 99341, 99342, 99343, 99344, 99345, 99347, 99348, 99349, 99350, 99384, 99385, 99386, 99387, 99394, 99395, 99396, 99397, 99401, 99402, 99403, 99404, 99411, 99412, 99420, 99429, 99455, 99456
  --Encounter outpatient ICD-9 Codes: V70.0, V70.3, V70.5, V70.6, V70.8, V70.9
  --Encounter ophthalmology CPT codes: 92002, 92003, 92004, 92005, 92006, 92007, 92008, 92009, 92010, 92011, 92012, 92013, 92014

Numerator Logic:
MU searches to determine if either of the following conditions exists:
--MU searches V CPT for patients who had an eye exam during the reporting period.
--MU searches V CPT, V POV and PROBLEM for patients who had an eye exam AND who did not have a diagnosis/active problem of diabetic retinopathy during the year prior to the reporting period.

These are determined by:
--Eye exam CPT codes: 67028, 67030, 67031, 67036, 67038, 67039, 67040, 67041, 67042, 67043, 67101, 67105, 67107, 67108, 67110, 67112, 67113, 67121, 67141, 67145, 67208, 67210, 67218, 67220, 67221, 67227, 67228, 92002, 92004, 92012, 92014, 92018, 92019, 92225, 92226, 92230, 92235, 92240, 92250, 92260
--Eye exam HCPCS codes: S0620, S0621, S0625, S3000
--Eye exam ICD-9 codes: 14.1, 14.2, 14.3, 14.4, 14.5, 14.9, 95.02, 95.03, 95.04, 95.11, 95.12, 95.16, V72.0
--Diabetic retinopathy ICD-9 codes: 362.01, 362.02, 362.03, 362.04, 362.05, 362.06

Exclusion Logic:
MU searches V POV, PROBLEM and PRESCRIPTION and excludes the patient if within 730 days of the reporting period end date there is:
--No encounter with a purpose of visit of type 1 or type 2 diabetes AND one of the following:
  --A diagnosis/active problem of polycystic ovaries
  --A diagnosis/active problem of gestational diabetes or steroid-induced diabetes
AND active or expired prescription(s) for medication(s) indicative of diabetes

These are determined by:
--Polycystic ovaries ICD-9 code: 256.4
--Gestational diabetes ICD-9 codes: 648.8, 648.80, 648.81, 648.82, 648.83, 648.84
--Steroid-induced diabetes ICD-9 codes: 249, 249.0, 249.00, 249.01, 249.1, 249.10, 249.11, 249.2, 249.20, 249.21, 249.3, 249.30, 249.31, 249.4, 249.40, 249.41, 249.5, 249.50, 249.51, 249.6, 249.60, 249.61, 249.7, 249.70, 249.71, 249.8, 249.80, 249.81, 249.9, 249.90, 249.91, 251.8, 962.0
--Diabetes ICD-9 codes: See denominator logic for codes
--Medications indicative of diabetes:

the NDC codes for these medications are defined in the BGPMU DIABETES MEDS NDCS taxonomy.

**Patient List Description**

Diabetic patients 18–75 years of age with at least 1 or 2 encounters with the EP during the reporting period, who had a retinal or dilated eye exam during the reporting period or a negative retinal exam (no evidence of retinopathy) during the year prior to the reporting period, if any.

## 1.1.3.17  Diabetes:  Foot Exam (NQF 0056)

**Denominator**

Patients who reach 18–75 years of age during the reporting period with at least 1 of the following within 2 years of the reporting period end date:
--Dispensed, ordered or active medications indicative of diabetes prescribed by the EP
--An active diagnosis of diabetes with at least one of the following with the EP during the reporting period:
  --1 acute inpatient or ED encounter
  --2 non-acute inpatient, outpatient, or ophthalmology encounters on different dates

**Numerators**

Patients who had a foot exam during the reporting period.

**Exclusions**

Patients are excluded when, within 2 years of the reporting period end date, there is NO encounter with a purpose of visit of type 1 or type 2 diabetes AND the patient has one of the following conditions:
--An active diagnosis of polycystic ovaries
--An active diagnosis of either gestational diabetes or steroid-induced diabetes AND an active or expired prescription(s) for medication(s) indicative of diabetes

**Definition**

Denominator Logic:
Age is calculated as of the end of the reporting period to determine if the patient reached an age between 18-75 years old during the reporting period.

MU searches to determine if either of the following conditions exists:
--MU searches PRESCRIPTION for active or expired medications indicative of diabetes prescribed by the EP within 730 days of the reporting period end date.  The NDC codes for these medications are defined in the BGPMU DIAB NDCS INDICATIVE ALL taxonomy.
 .--MU searches V POV and PROBLEM for a diagnosis and/or active problem of diabetes within 730 days of the reporting period end date and VISIT for at least 1

inpatient or ED encounter, OR at least 2 encounters of non-acute inpatient, outpatient, or ophthalmology occurring on different dates, with the EP during the reporting period. These are determined by:
   --Diabetes ICD-9 codes: 250, 250.0, 250.00, 250.01, 250.02, 250.03, 250.10, 250.11, 250.12, 250.13, 250.20, 250.21, 250.22, 250.23, 250.30, 250.31, 250.32, 250.33, 250.4, 250.40, 250.41, 250.42, 250.43, 250.50, 250.51, 250.52, 250.53, 250.60, 250.61, 250.62, 250.63, 250.7, 250.70, 250.71, 250.72, 250.73, 250.8, 250.80, 250.81, 250.82, 250.83, 250.9, 250.90, 250.91, 250.92, 250.93, 357.2, 362.0, 362.01, 362.02, 362.03, 362.04, 362.05, 362.06, 362.07, 366.41, 648.0, 648.00, 648.01, 648.02, 648.03, 648.04
   --Encounter acute inpatient CPT codes: 99221, 99222, 99223, 99231, 99232, 99233, 99238, 99239, 99251, 99252, 99253, 99254, 99255, 99291
   --Encounter ED CPT codes: 99281, 99282, 99283, 99284, 99285
   --Encounter non-acute inpatient CPT codes: 99304, 99305, 99306, 99307, 99308, 99309, 99310, 99315, 99316, 99318, 99324, 99325, 99326, 99327, 99328, 99334, 99335, 99336, 99337
   --Encounter outpatient CPT codes: 99201, 99202, 99203, 99204, 99205, 99211, 99212, 99213, 99214, 99215, 99217, 99218, 99219, 99220, 99241, 99242, 99243, 99244, 99245, 99341, 99342, 99343, 99344, 99345, 99347, 99348, 99349, 99350, 99384, 99385, 99386, 99387, 99394, 99395, 99396, 99397, 99401, 99402, 99403, 99404, 99411, 99412, 99420, 99429, 99455, 99456
   --Encounter outpatient ICD-9 Codes: V70.0, V70.3, V70.5, V70.6, V70.8, V70.9
   --Encounter ophthalmology CPT codes: 92002, 92003, 92004, 92005, 92006, 92007, 92008, 92009, 92010, 92011, 92012, 92013, 92014

Numerator Logic:
MU searches V CPT for patients who had a foot exam during the reporting period represented by the CPT code 2028F.

Exclusion Logic:
MU searches V POV, PROBLEM and PRESCRIPTION and excludes the patient if within 730 days of the reporting period end date there is:
--No encounter with a purpose of visit of type 1 or type 2 diabetes AND one of the following:
   --A diagnosis/active problem of polycystic ovaries
   --A diagnosis/active problem of gestational diabetes or steroid-induced diabetes
AND active or expired prescription(s) for medication(s) indicative of diabetes

These are determined by:
--Polycystic ovaries ICD-9 code: 256.4
--Gestational diabetes ICD-9 codes: 648.8, 648.80, 648.81, 648.82, 648.83, 648.84
--Steroid-induced diabetes ICD-9 codes: 249, 249.0, 249.00, 249.01, 249.1, 249.10, 249.11, 249.2, 249.20, 249.21, 249.3, 249.30, 249.31, 249.4, 249.40, 249.41, 249.5, 249.50, 249.51, 249.6, 249.60, 249.61, 249.7, 249.70, 249.71, 249.8, 249.80, 249.81, 249.9, 249.90, 249.91, 251.8, 962.0

--Diabetes ICD-9 codes: See denominator logic for codes
--Medications indicative of diabetes: See denominator logic for taxonomy names

**Patient List Description**

Diabetic patients 18–75 years of age with at least 1 or 2 encounters with the EP during the reporting period, who had a foot exam (visual inspection, sensory exam with monofilament, or pulse exam), if any.

## 1.1.3.18   Diabetes:  Hemoglobin A1c Poor Control (NQF 0059)

**Denominator**

Patients who reach 18–75 years of age during the reporting period with at least 1 of the following within 2 years of the reporting period end date:
--Dispensed, ordered or active medications indicative of diabetes prescribed by the EP
--An active diagnosis of diabetes with at least 1 of the following with the EP during the reporting period:
  --1 acute inpatient or ED encounter
  --2 non-acute inpatient, outpatient, or ophthalmology encounters on different dates

**Numerators**

Patients who had an HbA1c test during the reporting period with the most recent result value being > 9.0%.

**Exclusions**

Patients are excluded when, within 2 years of the reporting period end date, there is NO encounter with a purpose of visit of type 1 or type 2 diabetes AND the patient has one of the following conditions:
--An active diagnosis of polycystic ovaries
--An active diagnosis of either gestational diabetes or steroid-induced diabetes AND an active or expired prescription(s) for medication(s) indicative of diabetes

**Definition**

Denominator Logic:
Age is calculated as of the end of the reporting period to determine if the patient reached an age between 18-75 years old during the reporting period.

MU searches to determine if either of the following conditions exists:
--MU searches PRESCRIPTION for active or expired medications indicative of diabetes prescribed by the EP within 730 days of the reporting period end date.  The NDC codes for these medications are defined in the BGPMU DIAB NDCS INDICATIVE ALL taxonomy.
--MU searches V POV and PROBLEM for a diagnosis and/or active problem of diabetes within 730 days of the reporting period end date and VISIT for at least 1

inpatient or ED encounter, OR at least 2 encounters of non-acute inpatient, outpatient, or ophthalmology occurring on different dates, with the EP during the reporting period.  These are determined by:

   --Diabetes ICD-9 codes: 250, 250.0, 250.00, 250.01, 250.02, 250.03, 250.10, 250.11, 250.12, 250.13, 250.20, 250.21, 250.22, 250.23, 250.30, 250.31, 250.32, 250.33, 250.4, 250.40, 250.41, 250.42, 250.43, 250.50, 250.51, 250.52, 250.53, 250.60, 250.61, 250.62, 250.63, 250.7, 250.70, 250.71, 250.72, 250.73, 250.8, 250.80, 250.81, 250.82, 250.83, 250.9, 250.90, 250.91, 250.92, 250.93, 357.2, 362.0, 362.01, 362.02, 362.03, 362.04, 362.05, 362.06, 362.07, 366.41, 648.0, 648.00, 648.01, 648.02, 648.03, 648.04

   --Encounter acute inpatient CPT codes: 99221, 99222, 99223, 99231, 99232, 99233, 99238, 99239, 99251, 99252, 99253, 99254, 99255, 99291

   --Encounter ED CPT codes: 99281, 99282, 99283, 99284, 99285

   --Encounter non-acute inpatient CPT codes: 99304, 99305, 99306, 99307, 99308, 99309, 99310, 99315, 99316, 99318, 99324, 99325, 99326, 99327, 99328, 99334, 99335, 99336, 99337

   --Encounter outpatient CPT codes: 99201, 99202, 99203, 99204, 99205, 99211, 99212, 99213, 99214, 99215, 99217, 99218, 99219, 99220, 99241, 99242, 99243, 99244, 99245, 99341, 99342, 99343, 99344, 99345, 99347, 99348, 99349, 99350, 99384, 99385, 99386, 99387, 99394, 99395, 99396, 99397, 99401, 99402, 99403, 99404, 99411, 99412, 99420, 99429, 99455, 99456

   --Encounter outpatient ICD-9 Codes: V70.0, V70.3, V70.5, V70.6, V70.8, V70.9

   --Encounter ophthalmology CPT codes: 92002, 92003, 92004, 92005, 92006, 92007, 92008, 92009, 92010, 92011, 92012, 92013, 92014

Numerator Logic:
MU searches V LAB for patients who had an HbA1c test during the reporting period with the most recent result value being > 9.0%.  The HbA1C test is represented by one of the following:
LOINC codes: 4548-4, 4549-2, 17856-6
CPT codes: 83036, 83037

Exclusion Logic:
MU searches V POV, PROBLEM and PRESCRIPTION and excludes the patient if within 730 days of the reporting period end date there is:
--No encounter with a purpose of visit of type 1 or type 2 diabetes AND one of the following:
  --A diagnosis/active problem of polycystic ovaries
  --A diagnosis/active problem of gestational diabetes or steroid-induced diabetes
AND active or expired prescription(s) for medication(s) indicative of diabetes

These are determined by:
--Polycystic ovaries ICD-9 code: 256.4
--Gestational diabetes ICD-9 codes: 648.8, 648.80, 648.81, 648.82, 648.83, 648.84

--Steroid-induced diabetes ICD-9 codes: 249, 249.0, 249.00, 249.01, 249.1, 249.10, 249.11, 249.2, 249.20, 249.21, 249.3, 249.30, 249.31, 249.4, 249.40, 249.41, 249.5, 249.50, 249.51, 249.6, 249.60, 249.61, 249.7, 249.70, 249.71, 249.8, 249.80, 249.81, 249.9, 249.90, 249.91, 251.8, 962.0
--Diabetes ICD-9 codes: See denominator logic for codes
--Medications indicative of diabetes: See denominator logic for taxonomy names

**Patient List Description**

Diabetic patients 18-75 years of age with at least 1 or 2 encounters with the EP during the reporting period, whose most recent HbA1c during the reporting period was > 9.0%, if any.

### 1.1.3.19  Diabetes:  Blood Pressure Management (NQF 0061)

**Meaningful Use, Stage 1**

**Denominator**

Patients who reach 18–75 years of age during the reporting period with at least 1 of the following within 2 years of the reporting period end date:
--Dispensed, ordered or active medications indicative of diabetes prescribed by the EP
--An active diagnosis of diabetes with at least 1 of the following with the EP during the reporting period:
  --1 acute inpatient or ED encounter
  --2 non-acute inpatient, outpatient, or ophthalmology encounters on different dates

**Numerators**

Patients whose lowest blood pressure reading during their most recent encounter with the EP during the reporting period was systolic < 140 mmHg and diastolic < 90 mmHg.

**Exclusions**

Patients are excluded when, within 2 years of the reporting period end date, there is NO encounter with a purpose of visit of type 1 or type 2 diabetes AND the patient has one of the following conditions:
--An active diagnosis of polycystic ovaries
--An active diagnosis of either gestational diabetes or steroid-induced diabetes AND an active or expired prescription(s) for medication(s) indicative of diabetes

**Definition**

Denominator Logic:
Age is calculated as of the end of the reporting period to determine if the patient reached an age between 18-75 years old during the reporting period.

MU searches to determine if either of the following conditions exists:

--MU searches PRESCRIPTION for active or expired medications indicative of diabetes prescribed by the EP within 730 days of the reporting period end date. The NDC codes for these medications are defined in the BGPMU DIAB NDCS INDICATIVE ALL taxonomy.

--MU searches V POV and PROBLEM for a diagnosis and/or active problem of diabetes within 730 days of the reporting period end date and VISIT for at least 1 inpatient or ED encounter, OR at least 2 encounters of non-acute inpatient, outpatient, or ophthalmology occurring on different dates, with the EP during the reporting period. These are determined by:

  --Diabetes ICD-9 codes: 250, 250.0, 250.00, 250.01, 250.02, 250.03, 250.10, 250.11, 250.12, 250.13, 250.20, 250.21, 250.22, 250.23, 250.30, 250.31, 250.32, 250.33, 250.4, 250.40, 250.41, 250.42, 250.43, 250.50, 250.51, 250.52, 250.53, 250.60, 250.61, 250.62, 250.63, 250.7, 250.70, 250.71, 250.72, 250.73, 250.8, 250.80, 250.81, 250.82, 250.83, 250.9, 250.90, 250.91, 250.92, 250.93, 357.2, 362.0, 362.01, 362.02, 362.03, 362.04, 362.05, 362.06, 362.07, 366.41, 648.0, 648.00, 648.01, 648.02, 648.03, 648.04

  --Encounter acute inpatient CPT codes: 99221, 99222, 99223, 99231, 99232, 99233, 99238, 99239, 99251, 99252, 99253, 99254, 99255, 99291

  --Encounter ED CPT codes: 99281, 99282, 99283, 99284, 99285

  --Encounter non-acute inpatient CPT codes: 99304, 99305, 99306, 99307, 99308, 99309, 99310, 99315, 99316, 99318, 99324, 99325, 99326, 99327, 99328, 99334, 99335, 99336, 99337

  --Encounter outpatient CPT codes: 99201, 99202, 99203, 99204, 99205, 99211, 99212, 99213, 99214, 99215, 99217, 99218, 99219, 99220, 99241, 99242, 99243, 99244, 99245, 99341, 99342, 99343, 99344, 99345, 99347, 99348, 99349, 99350, 99384, 99385, 99386, 99387, 99394, 99395, 99396, 99397, 99401, 99402, 99403, 99404, 99411, 99412, 99420, 99429, 99455, 99456

  --Encounter outpatient ICD-9 Codes: V70.0, V70.3, V70.5, V70.6, V70.8, V70.9

  --Encounter ophthalmology CPT codes: 92002, 92003, 92004, 92005, 92006, 92007, 92008, 92009, 92010, 92011, 92012, 92013, 92014

Numerator Logic:
MU searches VISIT for the most recent non-acute inpatient, outpatient, ophthalmology, acute inpatient, or ED encounter with the EP during the reporting period and V MEASUREMENT for a lowest systolic BP reading of < 140 mmHg and a lowest diastolic BP reading of < 90 mmHG during this encounter. See denominator logic for the applicable encounter codes.

Exclusion Logic:
MU searches V POV, PROBLEM and PRESCRIPTION and excludes the patient if within 730 days of the reporting period end date there is:
--No encounter with a purpose of visit of type 1 or type 2 diabetes AND one of the following:
  --A diagnosis/active problem of polycystic ovaries

--A diagnosis/active problem of gestational diabetes or steroid-induced diabetes AND active or expired prescription(s) for medication(s) indicative of diabetes

These are determined by:
--Polycystic ovaries ICD-9 code: 256.4
--Gestational diabetes ICD-9 codes: 648.8, 648.80, 648.81, 648.82, 648.83, 648.84
--Steroid-induced diabetes ICD-9 codes: 249, 249.0, 249.00, 249.01, 249.1, 249.10, 249.11, 249.2, 249.20, 249.21, 249.3, 249.30, 249.31, 249.4, 249.40, 249.41, 249.5, 249.50, 249.51, 249.6, 249.60, 249.61, 249.7, 249.70, 249.71, 249.8, 249.80, 249.81, 249.9, 249.90, 249.91, 251.8, 962.0
--Diabetes ICD-9 codes: See denominator logic for codes
--Medications indicative of diabetes: See denominator logic for taxonomy names

**Patient List Description**

Diabetic patients 18-75 years of age with at least 1 or 2 encounters with the EP during the reporting period, whose blood pressure reading during their most recent encounter was < 140/90 mmHg, if any.

### 1.1.3.20   Diabetes:  Urine Screening (NQF 0062)

**Meaningful Use, Stage 1**

**Denominator**

Patients who reach 18–75 years of age during the reporting period with at least 1 of the following within 2 years of the reporting period end date:

--Dispensed, ordered or active medications indicative of diabetes prescribed by the EP

--An active diagnosis of diabetes with at least one of the following with the EP during the reporting period:

  --1 acute inpatient or ED encounter

  --2 non-acute inpatient, outpatient, or ophthalmology encounters on different dates

**Numerators**

Patients who had a nephropathy screening test or evidence of nephropathy during the reporting period, or patients who were treated with ACE inhibitors/ARBs.

**Exclusions**

Patients are excluded when, within 2 years of the reporting period end date, there is NO encounter with a purpose of visit of type 1 or type 2 diabetes AND the patient has one of the following conditions:

--An active diagnosis of polycystic ovaries

--An active diagnosis of either gestational diabetes or steroid-induced diabetes AND an active or expired prescription for medication(s) indicative of diabetes

**Definition**

Denominator Logic:

Age is calculated as of the end of the reporting period to determine if the patient reached an age between 18-75 years old during the reporting period.

MU searches to determine if either of the following conditions exists:

--MU searches PRESCRIPTION for active or expired medications indicative of diabetes prescribed by the EP within 730 days of the reporting period end date.  The NDC codes for these medications are defined in the BGPMU DIAB NDCS INDICATIVE ALL taxonomy.

--MU searches V POV and PROBLEM for a diagnosis and/or active problem of diabetes within 730 days of the reporting period end date and VISIT for at least 1 inpatient or ED encounter, OR at least 2 encounters of non-acute inpatient, outpatient, or ophthalmology occurring on different dates, with the EP during the reporting period.  These are determined by:

  --Diabetes ICD-9 codes: 250, 250.0, 250.00, 250.01, 250.02, 250.03, 250.10, 250.11, 250.12, 250.13, 250.20, 250.21, 250.22, 250.23, 250.30, 250.31, 250.32, 250.33, 250.4, 250.40, 250.41, 250.42, 250.43, 250.50, 250.51, 250.52, 250.53,

250.60, 250.61, 250.62, 250.63, 250.7, 250.70, 250.71, 250.72, 250.73, 250.8, 250.80, 250.81, 250.82, 250.83, 250.9, 250.90, 250.91, 250.92, 250.93, 357.2, 362.0, 362.01, 362.02, 362.03, 362.04, 362.05, 362.06, 362.07, 366.41, 648.0, 648.00, 648.01, 648.02, 648.03, 648.04

--Encounter acute inpatient CPT codes: 99221, 99222, 99223, 99231, 99232, 99233, 99238, 99239, 99251, 99252, 99253, 99254, 99255, 99291

--Encounter ED CPT codes: 99281, 99282, 99283, 99284, 99285

--Encounter non-acute inpatient CPT codes: 99304, 99305, 99306, 99307, 99308, 99309, 99310, 99315, 99316, 99318, 99324, 99325, 99326, 99327, 99328, 99334, 99335, 99336, 99337

--Encounter outpatient CPT codes: 99201, 99202, 99203, 99204, 99205, 99211, 99212, 99213, 99214, 99215, 99217, 99218, 99219, 99220, 99241, 99242, 99243, 99244, 99245, 99341, 99342, 99343, 99344, 99345, 99347, 99348, 99349, 99350, 99384, 99385, 99386, 99387, 99394, 99395, 99396, 99397, 99401, 99402, 99403, 99404, 99411, 99412, 99420, 99429, 99455, 99456

--Encounter outpatient ICD-9 Codes: V70.0, V70.3, V70.5, V70.6, V70.8, V70.9

--Encounter ophthalmology CPT codes: 92002, 92003, 92004, 92005, 92006, 92007, 92008, 92009, 92010, 92011, 92012, 92013, 92014

Numerator Logic:
To be included in the numerator, the patient must meet at least 1 of the following conditions:

1. MU searches V POV and PROBLEM for a diagnosis and/or active problem of nephropathy during the reporting period represented by the applicable ICD-9 codes: 250.4, 250.40, 250.41, 250.42, 250.43, 403, 403.0, 403.00, 403.01, 403.1, 403.10, 403.11, 403.9, 403.90, 403.91, 404, 404.0, 404.00, 404.01, 404.02, 404.03, 404.1, 404.10, 404.11, 404.12, 404.13, 404.9, 404.90, 404.91, 404.92, 404.93, 405.01, 405.11, 405.91, 580, 580.0, 580.4, 580.8, 580.81, 580.89, 580.9, 581, 581.0, 581.1, 581.2, 581.3, 581.8, 581.81, 581.89, 581.9, 582, 582.0, 582.1, 582.2, 582.4, 582.8, 582.81, 582.89, 582.9, 583, 583.0, 583.1, 583.2, 583.4, 583.6, 583.7, 583.8, 583.81, 583.89, 583.9, 584, 584.5, 584.6, 584.7, 584.8, 584.9, 585, 585.1, 585.2, 585.3, 585.4, 585.5, 585.6, 585.9, 586, 587, 588, 588.0, 588.1, 588.8, 588.81, 588.89, 588.9, 753.0, 753.1, 753.10, 753.11, 753.12, 753.13, 753.14, 753.15, 753.16, 753.17, 753.19, 791.0, V42.0, V45.1, V45.11, V45.12, V56, V56.0, V56.1, V56.2, V56.3, V56.31, V56.32, V56.8.

2. MU searches V CPT and V PROCEDURE for a nephropathy-related procedure performed during the reporting period represented by one of the following:
--CPT codes: 36145, 36800, 36810, 36815, 36818, 36819, 36820, 36821, 36831, 36832, 36833, 50300, 50320, 50340, 50360, 50365, 50370, 50380, 90920, 90921, 90924, 90925, 90935, 90937, 90940, 90945, 90947, 90957, 90958, 90959, 90960, 90961, 90962, 90965, 90966, 90969, 90970, 90989, 90993, 90997, 90999, 99512
--HCPCS codes: G0257, G0314, G0315, G0316, G0317, G0318, G0319, G0322, G0323, G0326, G0327, G0392, G0393, S9339

--ICD-9 codes: 38.95, 39.27, 39.42, 39.43, 39.53, 39.93, 39.94, 39.95, 54.98, 55.4, 55.5, 55.6

3. MU searches V LAB for a urine microalbumin laboratory test performed during the reporting period represented by one of the following:
--LOINC codes: 5804-0, 20454-5, 50561-0, 53525-2
--CPT codes: 81000, 81002, 81003, 81005

4. MU searches V LAB for a nephropathy screening laboratory test performed during the reporting period represented by one of the following:
--LOINC codes: 1753-3, 1754-1, 1755-8, 1757-4, 2887-8, 2888-6, 2889-4, 2890-2, 9318-7, 11218-5, 12842-1, 13705-9, 13801-6, 14585-4, 14956-7, 14957-5, 14958-3, 14959-1, 18373-1, 20621-9, 21059-1, 21482-5, 26801-1, 27298-9, 30000-4, 30001-2, 30003-8, 32209-9, 32294-1, 32551-4, 34366-5, 35663-4, 40486-3, 40662-9, 40663-7, 43605-5, 43606-3, 43607-1, 44292-1, 47558-2, 49023-5, 50949-7, 53121-0, 53530-2, 53531-0, 53532-8
--CPT Codes: 82042, 82043, 82044, 84156

5. MU searches PRESCRIPTION for active or expired medications of ACE Inhibitors/ARBs during the reporting period defined by the NDC codes in the BGPMU DIABETES ACE ARBS NDCS taxonomy.

Exclusion Logic:
MU searches V POV, PROBLEM and PRESCRIPTION and excludes the patient if within 730 days of the reporting period end date there is:
--No encounter with a purpose of visit of type 1 or type 2 diabetes AND one of the following:
  --A diagnosis/active problem of polycystic ovaries
  --A diagnosis/active problem of gestational diabetes or steroid-induced diabetes
AND active or expired prescription(s) for medication(s) indicative of diabetes

These are determined by:
--Polycystic ovaries ICD-9 code: 256.4
--Gestational diabetes ICD-9 codes: 648.8, 648.80, 648.81, 648.82, 648.83, 648.84
--Steroid-induced diabetes ICD-9 codes: 249, 249.0, 249.00, 249.01, 249.1, 249.10, 249.11, 249.2, 249.20, 249.21, 249.3, 249.30, 249.31, 249.4, 249.40, 249.41, 249.5, 249.50, 249.51, 249.6, 249.60, 249.61, 249.7, 249.70, 249.71, 249.8, 249.80, 249.81, 249.9, 249.90, 249.91, 251.8, 962.0
--Diabetes ICD-9 codes: See denominator logic for codes
--Medications indicative of diabetes: See denominator logic for taxonomy names

**Patient List Description**

Diabetic patients 18–75 years of age with at least 1 or 2 encounters with the EP during the reporting period, who had a nephropathy screening test or evidence of nephropathy, or who were treated with ACE inhibitors/ARBs, if any.

### 1.1.3.21  Diabetes:  LDL Management and Control (NQF 0064)

**Denominator**

Patients who reach 18–75 years of age during the reporting period with at least 1 of the following within 2 years of the reporting period end date:

--Dispensed, ordered or active medications indicative of diabetes prescribed by the EP

--An active diagnosis of diabetes with at least 1 of the following with the EP during the reporting period:

  --1 acute inpatient or ED encounter

  --2 non-acute inpatient, outpatient, or ophthalmology encounters on different dates

**Numerators**

Numerator 1:

Patients who had an LDL-C test during the reporting period.

Numerator 2:

Patients who had LDL-C test during the reporting period with the most recent result value < 100mg/dL.

**Exclusions**

Patients are excluded when, within 2 years of the reporting period end date, there is NO encounter with a purpose of visit of type 1 or type 2 diabetes AND the patient has one of the following conditions:

--An active diagnosis of polycystic ovaries

--An active diagnosis of either gestational diabetes or steroid-induced diabetes AND an active or expired prescription(s) for medication(s) indicative of diabetes

**Definition**

Denominator Logic:

Age is calculated as of the end of the reporting period to determine if the patient reached an age between 18-75 years old during the reporting period.

MU searches to determine if either of the following conditions exists:

--MU searches PRESCRIPTION for active or expired medications indicative of diabetes prescribed by the EP within 730 days of the reporting period end date.  The NDC codes for these medications are defined in the BGPMU DIAB NDCS INDICATIVE ALL taxonomy.

--MU searches V POV and PROBLEM for a diagnosis and/or active problem of diabetes within 730 days of the reporting period end date and VISIT for at least 1 inpatient or ED encounter, OR at least 2 encounters of non-acute inpatient, outpatient, or ophthalmology occurring on different dates, with the EP during the reporting period.  These are determined by:

--Diabetes ICD-9 codes: 250, 250.0, 250.00, 250.01, 250.02, 250.03, 250.10, 250.11, 250.12, 250.13, 250.20, 250.21, 250.22, 250.23, 250.30, 250.31, 250.32, 250.33, 250.4, 250.40, 250.41, 250.42, 250.43, 250.50, 250.51, 250.52, 250.53, 250.60, 250.61, 250.62, 250.63, 250.7, 250.70, 250.71, 250.72, 250.73, 250.8, 250.80, 250.81, 250.82, 250.83, 250.9, 250.90, 250.91, 250.92, 250.93, 357.2, 362.0, 362.01, 362.02, 362.03, 362.04, 362.05, 362.06, 362.07, 366.41, 648.0, 648.00, 648.01, 648.02, 648.03, 648.04

--Encounter acute inpatient CPT codes: 99221, 99222, 99223, 99231, 99232, 99233, 99238, 99239, 99251, 99252, 99253, 99254, 99255, and 99291

--Encounter ED CPT codes: 99281, 99282, 99283, 99284, 99285

--Encounter non-acute inpatient CPT codes: 99304, 99305, 99306, 99307, 99308, 99309, 99310, 99315, 99316, 99318, 99324, 99325, 99326, 99327, 99328, 99334, 99335, 99336, 99337

--Encounter outpatient CPT codes: 99201, 99202, 99203, 99204, 99205, 99211, 99212, 99213, 99214, 99215, 99217, 99218, 99219, 99220, 99241, 99242, 99243, 99244, 99245, 99341, 99342, 99343, 99344, 99345, 99347, 99348, 99349, 99350, 99384, 99385, 99386, 99387, 99394, 99395, 99396, 99397, 99401, 99402, 99403, 99404, 99411, 99412, 99420, 99429, 99455, 99456

--Encounter outpatient ICD-9 Codes: V70.0, V70.3, V70.5, V70.6, V70.8, V70.9

--Encounter ophthalmology CPT codes: 92002, 92003, 92004, 92005, 92006, 92007, 92008, 92009, 92010, 92011, 92012, 92013, 92014

Numerator Logic 1:
MU searches V LAB for patients who had an LDL test during the reporting period represented by one of the following:
--LOINC Codes: 2089-1, 12773-8, 13457-7, 18261-8, 18262-6, 22748-8, 39469-2, 49132-4, 55440-2
--CPT Codes: 80061, 83700, 83701, 83704, 83721

Numerator Logic 2:
MU searches V LAB for patients who had an LDL test with a most recent result value of < 100 mg/dL.  See Numerator Logic 1 for the applicable LOINC and CPT codes.

Exclusion Logic:
MU searches V POV, PROBLEM and PRESCRIPTION and excludes the patient if within 730 days of the reporting period end date there is:
--No encounter with a purpose of visit of type 1 or type 2 diabetes AND one of the following:
  --A diagnosis/active problem of polycystic ovaries
  --A diagnosis/active problem of gestational diabetes or steroid-induced diabetes
AND active or expired prescription(s) for medication(s) indicative of diabetes

These are determined by:
--Polycystic ovaries ICD-9 code: 256.4
--Gestational diabetes ICD-9 codes: 648.8, 648.80, 648.81, 648.82, 648.83, 648.84

--Steroid-induced diabetes ICD-9 codes: 249, 249.0, 249.00, 249.01, 249.1, 249.10, 249.11, 249.2, 249.20, 249.21, 249.3, 249.30, 249.31, 249.4, 249.40, 249.41, 249.5, 249.50, 249.51, 249.6, 249.60, 249.61, 249.7, 249.70, 249.71, 249.8, 249.80, 249.81, 249.9, 249.90, 249.91, 251.8, 962.0
--Diabetes ICD-9 codes: See denominator logic for codes
--Medications indicative of diabetes: See denominator logic for taxonomy names

**Patient List Description**

Diabetes patients 18–75 years of age with at least 1 or 2 encounters with the EP during the reporting period, who had LDL-C < 100mg/dL, if any.

## 1.1.3.22  Diabetes:  Hemoglobin A1c Control (NQF 0575)

**Denominator**

Patients who reach 18–75 years of age during the reporting period with at least 1 of the following within 2 years of the reporting period end date:
--Dispensed, ordered or active medications indicative of diabetes prescribed by the EP
--An active diagnosis of diabetes with at least 1 of the following with the EP during the reporting period:
  --1 acute inpatient or ED encounter
  --2 non-acute inpatient, outpatient, or ophthalmology encounters on different dates

**Numerators**

Patients who had an HbA1c test during the reporting period with the most recent result value being < 8.0%.

**Exclusions**

Patients are excluded when, within 2 years of the reporting period end date, there is NO encounter with a purpose of visit of type 1 or type 2 diabetes AND the patient has one of the following conditions:
--An active diagnosis of polycystic ovaries

--An active diagnosis of either gestational diabetes or steroid-induced diabetes AND an active or expired prescription(s) for medication(s) indicative of diabetes

**Definition**

Denominator Logic:
Age is calculated as of the end of the reporting period to determine if the patient reached an age between 18-75 years old during the reporting period.

MU searches to determine if either of the following conditions exists:
--MU searches PRESCRIPTION for active or expired medications indicative of diabetes prescribed by the EP within 730 days of the reporting period end date.  The

NDC codes for these medications are defined in the BGPMU DIAB NDCS INDICATIVE ALL taxonomy.

--MU searches V POV and PROBLEM for a diagnosis and/or active problem of diabetes within 730 days of the reporting period end date and VISIT for at least 1 inpatient or ED encounter, OR at least 2 encounters of non-acute inpatient, outpatient, or ophthalmology occurring on different dates, with the EP during the reporting period. These are determined by:

  --Diabetes ICD-9 codes: 250, 250.0, 250.00, 250.01, 250.02, 250.03, 250.10, 250.11, 250.12, 250.13, 250.20, 250.21, 250.22, 250.23, 250.30, 250.31, 250.32, 250.33, 250.4, 250.40, 250.41, 250.42, 250.43, 250.50, 250.51, 250.52, 250.53, 250.60, 250.61, 250.62, 250.63, 250.7, 250.70, 250.71, 250.72, 250.73, 250.8, 250.80, 250.81, 250.82, 250.83, 250.9, 250.90, 250.91, 250.92, 250.93, 357.2, 362.0, 362.01, 362.02, 362.03, 362.04, 362.05, 362.06, 362.07, 366.41, 648.0, 648.00, 648.01, 648.02, 648.03, 648.04

  --Encounter acute inpatient CPT codes: 99221, 99222, 99223, 99231, 99232, 99233, 99238, 99239, 99251, 99252, 99253, 99254, 99255, 99291

  --Encounter ED CPT codes: 99281, 99282, 99283, 99284, 99285

  --Encounter non-acute inpatient CPT codes: 99304, 99305, 99306, 99307, 99308, 99309, 99310, 99315, 99316, 99318, 99324, 99325, 99326, 99327, 99328, 99334, 99335, 99336, 99337

  --Encounter outpatient CPT codes: 99201, 99202, 99203, 99204, 99205, 99211, 99212, 99213, 99214, 99215, 99217, 99218, 99219, 99220, 99241, 99242, 99243, 99244, 99245, 99341, 99342, 99343, 99344, 99345, 99347, 99348, 99349, 99350, 99384, 99385, 99386, 99387, 99394, 99395, 99396, 99397, 99401, 99402, 99403, 99404, 99411, 99412, 99420, 99429, 99455, 99456

  --Encounter outpatient ICD-9 Codes: V70.0, V70.3, V70.5, V70.6, V70.8, V70.9

  --Encounter ophthalmology CPT codes: 92002, 92003, 92004, 92005, 92006, 92007, 92008, 92009, 92010, 92011, 92012, 92013, 92014

Numerator Logic:

MU searches V LAB for patients who had an HbA1c test during the reporting period with the most recent result value being $< 8.0\%$. The HbA1C test is represented by one of the following:

LOINC codes: 4548-4, 4549-2, 17856-6

CPT codes: 83036, 83037

Exclusion Logic:

MU searches V POV, PROBLEM and PRESCRIPTION and excludes the patient if within 730 days of the reporting period end date there is:

--No encounter with a purpose of visit of type 1 or type 2 diabetes AND one of the following:

  --A diagnosis/active problem of polycystic ovaries

  --A diagnosis/active problem of gestational diabetes or steroid-induced diabetes

AND active or expired prescription(s) for medication(s) indicative of diabetes

These are determined by:
--Polycystic ovaries ICD-9 code: 256.4
--Gestational diabetes ICD-9 codes: 648.8, 648.80, 648.81, 648.82, 648.83, 648.84
--Steroid-induced diabetes ICD-9 codes: 249, 249.0, 249.00, 249.01, 249.1, 249.10, 249.11, 249.2, 249.20, 249.21, 249.3, 249.30, 249.31, 249.4, 249.40, 249.41, 249.5, 249.50, 249.51, 249.6, 249.60, 249.61, 249.7, 249.70, 249.71, 249.8, 249.80, 249.81, 249.9, 249.90, 249.91, 251.8, 962.0
--Diabetes ICD-9 codes: See denominator logic for codes
--Medications indicative of diabetes: See denominator logic for taxonomy names

**Patient List Description**

Diabetic patients 18–75 years of age with at least 1 or 2 encounters with the EP during the reporting period, whose most recent HbA1c result during the reporting period was $< 8.0\%$.

## 1.1.3.23   Coronary Artery Disease (CAD): Oral Antiplatelet Therapy (NQF 0067)

**Denominator**

Patients 18+ with at least 2 outpatient encounters or 2 nursing facility encounters or 1 inpatient encounter with the EP during the reporting period AND a diagnosis of CAD (includes myocardial infarction (MI)) or a cardiac surgery procedure on or before any of the encounter dates.

**Numerator**

Patients who were prescribed oral antiplatelet therapy during the reporting period.

**Exclusions**

Patients who meet any of the following conditions:
--Allergy or intolerance to, or adverse event from, antiplatelet therapy
--Bleeding coagulation disorders
--Were not given the antiplatelet therapy for patient, medical or system reasons

**Definitions**

Denominator Logic:
Age is calculated as of the end of the reporting period to determine if the patient reached an age of 18 years or older during the reporting period.

MU searches VISIT for at least 2 outpatient encounters or 2 nursing facility encounters or 1 inpatient encounter with the EP during the reporting period represented by the following:
--Outpatient CPT codes: 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 99241, 99242, 99243, 99244, 99245, 99324, 99325, 99326, 99327, 99328, 99334, 99335, 99336, 99337, 99341, 99342, 99343, 99344, 99345, 99347, 99348, 99349, 99350
--Nursing Facility CPT codes: 99304, 99305, 99306, 99307, 99308, 99309, 99310
--Inpatient CPT codes: 99238, 99239

The patient must also meet one of the following conditions on or before any of outpatient, nursing facility or inpatient encounter dates:

--MU searches V POV and PROBLEM for a diagnosis and/or active problem of CAD (includes MI) represented by one of the following ICD-9 codes: 410.00, 410.01, 410.02, 410.10, 410.11, 410.12, 410.20, 410.21, 410.22, 410.30, 410.31, 410.32, 410.40, 410.41, 410.42, 410.50, 410.51, 410.52, 410.60, 410.61, 410.62, 410.70, 410.71, 410.72, 410.80, 410.81, 410.82, 410.90, 410.91, 410.92, 411.0, 411.1, 411.81, 411.89, 412, 413.0, 413.1, 413.9, 414.00, 414.01, 414.02, 414.03, 414.04, 414.05, 414.06, 414.07, 414.8.

--MU searches V CPT for a cardiac surgery procedure represented by one of the following CPT codes: 33140, 33510, 33511, 33512, 33513, 33514, 33516, 33517, 33518, 33519, 33521, 33522, 33523, 33533, 33534, 33535, 33536, 92980, 92981, 92982, 92984, 92995, 92996.

Numerator Logic:

MU searches PRESCRIPTION for active or chronic oral antiplatelet therapy medications prescribed during the reporting period defined by the NDC codes in the BGPMU ANTIPLATELET NDCS taxonomy.

Exclusion Logic

Patients are excluded if any of the following are found on or before any of the outpatient, nursing facility or inpatient encounter dates:

1. MU searches PATIENT ALLERGIES and for an active allergy or intolerance to, or an adverse effect from, antiplatelet therapy represented by the drug class BL117.

2. MU searches V POV and PROBLEM for a diagnosis and/or active problem of bleeding coagulation disorder represented by one of the following ICD-9 codes: 286.0, 286.1, 286.2, 286.3, 286.4, 286.5, 286.6, 286.7, 286.9, 287.0, 287.1, 287.3, 287.31, 287.32, 287.33, 287.39, 287.4, 287.41, 287.49, 287.5, 287.8, 287.9, 289.81, 289.82, 289.84, 289.9.

3. MU searches PATIENT REFUSALS FOR SERVICE/NMI for a REF (refused) or NMI (not medically indicated) of the antiplatelet therapy defined by the NDC codes in the BGPMU ANTIPLATELET NDCS taxonomy.

**Patient List Definition**

Patients 18+ with a diagnosis of CAD (includes MI) or who had cardiac surgery, AND who had at least 2 outpatient or 2 nursing facility encounters or 1 inpatient encounter with the EP during the reporting period, AND who were prescribed oral antiplatelet therapy during the reporting period, if any.

### 1.1.3.24 Ischemic Vascular Disease (IVD): Use of Aspirin or another Antithrombotic (NQF 0068)

**Denominator**

Patients who reach 18 years of age and older during the reporting period with either of the following:

--At least 1 acute inpatient encounter with the EP 14-24 months prior to the reporting period end date and any of the following:

  --Percutaneous transluminal coronary angioplasty (PTCA) 14-24 months prior to the reporting period end date

  --Acute myocardial infarction (AMI) during this encounter

  --Coronary artery bypass graft (CABG) 14-24 months prior to the reporting period end date

--At least 1 acute inpatient or outpatient encounter with the EP with a diagnosis of ischemic vascular disease (IVD) within 2 years of the reporting period end date.

**Numerator**

Patients who were prescribed aspirin or another antithrombotic (oral antiplatelet therapy) during the reporting period.

**Definitions**

Denominator Logic:

Age is calculated as of the end of the reporting period to determine if the patient reached an age of 18 years or older during the reporting period.

Additionally, to be included in the denominator, the patient must meet at least one of the following conditions:

1. MU searches VISIT for at least 1 acute inpatient encounter with the EP 426 to 730 days before the reporting period end date and V CPT and V PROCEDURE for a PTCA procedure 426 to 730 days before the reporting period end date represented by the following:

  --Acute inpatient CPT codes: 99221, 99222, 99223, 99231, 99232, 99233, 99238, 99239, 99251, 99252, 99253, 99254, 99255, 99291

  --PTCA CPT codes: 33140, 92980, 92982, 92995

  --PTCA ICD-9 codes: 00.66, 36.06, 36.07, 36.09

2. MU searches VISIT for at least 1 acute inpatient encounter with the EP 426 to 730 days before the reporting period end date and V POV for a diagnosis of AMI during this encounter represented by the following:

  --Acute inpatient CPT codes: See above for the applicable encounter codes

  --AMI ICD-9 codes: 410.01, 410.11, 410.21, 410.31, 410.41, 410.51, 410.61, 410.71, 410.81, 410.91

3. MU searches VISIT for at least 1 acute inpatient encounter with the EP 426 to 730 days before the reporting period end date and V CPT and V PROCEDURE for a

CABG procedure 426 to 730 days before the reporting period end date represented by the following:
  --Acute inpatient encounter CPT codes: See above for the applicable encounter codes
  --CABG CPT codes: 33510, 33511, 33512, 33513, 33514, 33516, 33517, 33518, 33519, 33521, 33522, 33523, 33533, 33534, 33535, 33536
  --CABG HCPCS codes: S2205, S2206, S2207, S2208, S2209
  --CABG ICD-9 codes: 36.1, 36.10, 36.11, 36.12, 36.13, 36.14, 36.15, 36.16, 36.17, 36.19, 36.2

4. MU searches VISIT for at least 1 acute inpatient or outpatient encounter with the EP within 730 days of the reporting period end date and V POV for a diagnosis of IVD during this encounter represented by the following:
  --Acute inpatient CPT codes: See above for the applicable encounter codes
  --Outpatient CPT codes: 99201, 99202, 99203, 99204, 99205, 99211, 99212, 99213, 99214, 99215, 99217, 99218, 99219, 99220, 99241, 99242, 99243, 99244, 99245, 99341, 99342, 99343, 99344, 99345, 99347, 99348, 99349, 99350, 99384, 99385, 99386, 99387, 99394, 99395, 99396, 99397, 99401, 99402, 99403, 99404, 99411, 99412, 99420, 99429, 99455, 99456
  --Outpatient ICD-9 codes: V70.0, V70.3, V70.5, V70.6, V70.8, V70.9
  --IVD ICD-9 codes: 411.0, 411.1, 411.81, 411.89, 413.0, 413.1, 413.9, 414.00, 414.01, 414.02, 414.03, 414.04, 414.05, 414.06, 414.07, 414.2, 414.8, 414.9, 429.2, 433.0, 433.01, 433.10, 433.11, 433.20, 433.21, 433.30, 433.31, 433.80, 433.81, 433.90, 433.91, 434.00, 434.01, 434.10, 434.11, 434.90, 434.91, 440.1, 440.20, 440.21, 440.22, 440.23, 440.24, 440.29, 440.4, 444.0, 444.1, 444.21, 444.22, 444.81, 444.89, 444.9, 445.01, 445.02, 445.8, 445.81

Numerator Logic:
MU searches PRESCRIPTION for active or expired oral anti-platelet therapy medications prescribed or dispensed during the reporting period. The NDC codes are defined in the BGPMU IVD ANTIPLATELET NDCS taxonomy.

**Patient List Definition**

Patients 18+ and (a) who had at least 1 acute inpatient encounter with the EP 14-24 months prior to the reporting period end date AND who underwent percutaneous transluminal coronary angioplasty (PTCA), acute myocardial infarction (AMI), or coronary artery bypass graft (CABG); OR (b) who had at least 1 acute inpatient or outpatient encounter within 2 years of the reporting period end date with a diagnosis of ischemic vascular disease (IVD); AND (c) who had documentation of use of aspirin or another antithrombotic during the reporting period, if any.

### 1.1.3.25 Coronary Artery Disease (CAD): Beta-Blocker Therapy (NQF 0070)

**Denominator**

Patients who reach 18+ with at least 2 outpatient encounters or 2 nursing facility encounters or 1 inpatient encounter with the EP during the reporting period AND who had the following on or before any of these encounters:
--an active diagnosis of CAD or a cardiac surgery procedure, and
–-a prior diagnosis of MI.

**Numerator**

Patients who were prescribed beta-blocker therapy during the reporting period.

**Exclusions**

Patients who have any of the following:
--Allergy or intolerance to, or adverse event from, beta-blocker therapy
--Diagnosed with arrhythmia, hypotension, asthma, bradycardia, or atresia and stenosis of the aorta
--Diagnosed with atrioventricular block without a cardiac pacer
--Were on cardiac monitoring
--Were not given beta-blocker therapy for documented patient, medical or system reasons
--Had more than 1 consecutive heart rate reading of less than 50 beats per minute (bpm) in an encounter during the last two years.

**Definitions**

Denominator Logic:
Age is calculated as of the end of the reporting period to determine if the patient reached an age of 18 years or older during the reporting period.

MU searches VISIT for at least 2 outpatient encounters or 2 nursing facility encounters or 1 inpatient encounter with the EP during the reporting period represented by the following:
--Outpatient CPT codes: 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 99241, 99242, 99243, 99244, 99245, 99324, 99325, 99326, 99327, 99328, 99334, 99335, 99336, 99337, 99341, 99342, 99343, 99344, 99345, 99347, 99348, 99349, 99350
--Nursing Facility CPT codes: 99304, 99305, 99306, 99307, 99308, 99309, 99310
--Inpatient CPT codes: 99238, 99239

The patient must meet either of the following conditions on or before any of the outpatient, nursing facility or inpatient encounter dates:
--MU searches V POV and PROBLEM for a diagnosis and/or active problem of CAD and no MI represented by one of the following ICD-9 codes: 411.0, 411.1, 411.81, 411.89, 413.0, 413.1, 413.9, 414.00, 414.01, 414.02, 414.03, 414.04, 414.05, 414.06, 414.07, 414.8, 414.9, V45.81, V45.82.
--MU searches V CPT for a cardiac surgery procedure represented by one of the following CPT codes: 33140, 33510, 33511, 33512, 33513, 33514, 33516, 33517,

33518, 33519, 33521, 33522, 33523, 33533, 33534, 33535, 33536, 92980, 92981, 92982, 92984, 92995, 92996.

MU searches PROBLEM for an inactive problem of MI on or before any of the outpatient, nursing facility or inpatient encounter dates represented by one of the following ICD-9 codes: 410.00, 410.01, 410.02, 410.10, 410.11, 410.12, 410.20, 410.21, 410.22, 410.30, 410.31, 410.32, 410.40, 410.41, 410.42, 410.50, 410.51, 410.52, 410.60, 410.61, 410.62, 410.70, 410.71, 410.72, 410.80, 410.81, 410.82, 410.90, 410.91, 410.92, 412.

Numerator Logic:
MU searches PRESCRIPTION for active or chronic beta-blocker therapy medications prescribed during the reporting period defined by the NDC codes in the BGPMU BETABLOCKER NDCS taxonomy.

Exclusion Logic
Patients are excluded if any of the following are found on or before the outpatient, nursing facility or inpatient encounter dates:

1. MU searches PATIENT ALLERGIES for an active allergy or intolerance to, or adverse effect from, beta-blocker therapy represented by the drug class CV100.

2. MU searches V POV and PROBLEM for a diagnosis and/or active problem of arrhythmia, hypotension, asthma, bradycardia, or atresia and stenosis of the aorta represented by one of the following ICD-9 codes:
--Arrhythmia codes: 427.81, 427.89
--Hypotension codes: 458.0, 458.1, 458.21, 458.29, 458.8, 458.9
--Asthma codes: 493.00, 493.01, 493.02, 493.10, 493.11, 493.12, 493.20, 493.21, 493.22, 493.81, 493.82, 493.90, 493.91, 493.92
--Bradycardia codes: 337.09, 427.81, 427.89
--Artherosclerosis of the Aorta or Atresia and Stenosis of aorta codes: 440.0, 747.22

3. MU searches V POV and PROBLEM for a diagnosis and/or active problem of atrioventricular block, AND V POV, PROBLEM and V PROCEDURE for no evidence of a cardiac pacer, represented by the following ICD-9 codes:
--Atrioventricular block diagnosis codes: 426.0, 426.12, 426.13
--Cardiac pacer procedure code: 39.64, 89.45
--Cardiac pacer in situ diagnosis code: V45.01

4. MU searches V CPT and V PROCEDURE for evidence that the patient was being monitored for cardiac issues represented by the following:
--CPT codes: 93224, 93225, 93226, 93227, 93228, 93229, 93230, 93231, 93232, 93233, 93234, 93235, 93236, 93237, 93238, 93239, 93240, 93241, 93242, 93243, 93244, 93245, 93246, 93247, 93248, 93249, 93250, 93251, 93252, 93253, 93254, 93255, 93256, 93257, 93258, 93259, 93260, 93261, 93262, 93263, 93264, 93265,

93266, 93267, 93268, 93269, 93270, 93271, 93272, 93273, 93274, 93275, 93276, 93277, 93278
--ICD-9 codes: 89.5, 89.54, 89.56, 89.68

4. MU searches PATIENT REFUSALS FOR SERVICE/NMI for a REF (refused) or NMI (not medically indicated) of the beta-blocker therapy defined by the NDC codes in the BGPMU BETABLOCKER NDCS taxonomy.

Additionally, patients are excluded if the following is found: MU searches V MEASUREMENT for at least 2 consecutive pulse value readings of < 50 bpm during an outpatient, nursing facility or inpatient encounter with the EP that is within 730 days of the reporting period end date. See denominator logic for the encounter CPT codes.

**Patient List Definition**

Patients 18+ with a diagnosis of CAD or who had a cardiac surgery procedure, and inactive MI, AND at least 2 outpatient or 2 nursing facility encounters or 1 inpatient encounter with the EP during the reporting period, AND who were prescribed beta-blocker therapy during the reporting period, if any.

## 1.1.3.26   Ischemic Vascular Disease (IVD): Blood Pressure Management (NQF 0073)

**Denominator**

Patients 18+ with either of the following:
--At least 1 acute inpatient encounter with the EP 14-24 months prior to the reporting period end date and any of the following:
  --Percutaneous transluminal coronary angioplasty (PTCA) 14-24 months prior to the reporting period end date
  --Diagnosis of Acute myocardial infarction (AMI) during this encounter
  --Coronary artery bypass graft (CABG) 14-24 months prior to the reporting period end date
--At least 1 acute inpatient or outpatient encounter with the EP within 2 years of the reporting period end date with a diagnosis of ischemic vascular disease (IVD) during this encounter.

**Numerator**

Patients whose lowest systolic BP reading was < 140 mmHg and lowest diastolic BP reading was < 90 mmHg during their most recent acute inpatient or outpatient encounter with the EP before the end of the reporting period.

**Definitions**

Denominator Logic:
Age is calculated as of the end of the reporting period to determine if the patient reached an age of 18 years or older during the reporting period.

Additionally, to be included in the denominator, the patient must meet at least one of the following conditions:

1. MU searches VISIT for at least 1 acute inpatient encounter with the EP 426 to 730 days before the reporting period end date and V CPT and V PROCEDURE for a PTCA procedure 426 to 730 days before the reporting period end date represented by the following:
  --Acute inpatient CPT codes: 99221, 99222, 99223, 99231, 99232, 99233, 99238, 99239, 99251, 99252, 99253, 99254, 99255, 99291
  --PTCA CPT codes: 33140, 92980, 92982, 92995
  --PTCA ICD-9 codes: 00.66, 36.06, 36.07, 36.09

2. MU searches VISIT for at least 1 acute inpatient encounter with the EP 426 to 730 days before the reporting period end date and V POV for a diagnosis of AMI during this encounter represented by the following:
  --Acute inpatient CPT codes: See above for the applicable encounter codes
  --AMI ICD-9 codes: 410.01, 410.11, 410.21, 410.31, 410.41, 410.51, 410.61, 410.71, 410.81, 410.91

3. MU searches VISIT for at least 1 acute inpatient encounter with the EP 426 to 730 days before the reporting period end date and V CPT and V PROCEDURE for a CABG procedure 426 to 730 days before the reporting period end date represented by the following:
  --Acute inpatient encounter CPT codes: See above for the applicable encounter codes
  --CABG CPT codes: 33510, 33511, 33512, 33513, 33514, 33516, 33517, 33518, 33519, 33521, 33522, 33523, 33533, 33534, 33535, 33536
  --CABG HCPCS codes: S2205, S2206, S2207, S2208, S2209
  --CABG ICD-9 codes: 36.1, 36.10, 36.11, 36.12, 36.13, 36.14, 36.15, 36.16, 36.17, 36.19, 36.2

4. MU searches VISIT for at least 1 acute inpatient or outpatient encounter with the EP within 730 days of the reporting period end date and V POV for a diagnosis of IVD during this encounter represented by the following:
  --Acute inpatient CPT codes: See above for the applicable encounter codes
  --Outpatient CPT codes: 99201, 99202, 99203, 99204, 99205, 99211, 99212, 99213, 99214, 99215, 99217, 99218, 99219, 99220, 99241, 99242, 99243, 99244, 99245, 99341, 99342, 99343, 99344, 99345, 99347, 99348, 99349, 99350, 99384, 99385, 99386, 99387, 99394, 99395, 99396, 99397, 99401, 99402, 99403, 99404, 99411, 99412, 99420, 99429, 99455, 99456
  --Outpatient ICD-9 codes: V70.0, V70.3, V70.5, V70.6, V70.8, V70.9
  --IVD ICD-9 codes: 411.0, 411.1, 411.81, 411.89, 413.0, 413.1, 413.9, 414.00, 414.01, 414.02, 414.03, 414.04, 414.05, 414.06, 414.07, 414.2, 414.8, 414.9, 429.2, 433.0, 433.01, 433.10, 433.11, 433.20, 433.21, 433.30, 433.31, 433.80, 433.81, 433.90, 433.91, 434.00, 434.01, 434.10, 434.11, 434.90, 434.91, 440.1, 440.20, 440.21, 440.22, 440.23, 440.24, 440.29, 440.4, 444.0, 444.1, 444.21, 444.22, 444.81, 444.89, 444.9, 445.01, 445.02, 445.8, 445.81

Numerator Logic:
MU searches VISIT for the most recent acute inpatient or outpatient encounter with the EP during the reporting period and V MEASUREMENT for a lowest systolic BP reading of < 140 mmHg and a lowest diastolic BP reading of < 90 mmHg during this encounter.  See denominator logic for the applicable encounter codes.  If there is no encounter during the reporting period the patient will be counted as not meeting the numerator.

**Patient List Definition**

Patients 18+ and (a) who had at least 1 acute inpatient encounter with the EP 14-24 months prior to the reporting period end date AND who underwent percutaneous transluminal coronary angioplasty (PTCA), acute myocardial infarction (AMI), or coronary artery bypass graft (CABG); OR (b) who had at least 1 acute inpatient or outpatient encounter with the EP within 2 years of the reporting period end date with a diagnosis of ischemic vascular disease (IVD); AND (c) whose most recent blood pressure is under control (<140/90 mmHg), if any.

### 1.1.3.27   Coronary Artery Disease (CAD): Drug Therapy for Lowering LDL Cholesterol (NQF 0074)

**Denominator**

Patients 18+ with at least 2 outpatient or 2 nursing facility encounters with the EP during the reporting period AND a diagnosis of CAD (includes myocardial infarction (MI)) or a cardiac surgery procedure on or before any of the encounter dates.

**Numerators**

Patients who were prescribed lipid-lowering therapy during the reporting period.

**Exclusions**

Patients who meet any of the following conditions:
--A most recent LDL lab result of < 130 mg/dL within 1 year of the latest outpatient or nursing facility encounter during the reporting period
--Allergy or intolerance to, or adverse event from, lipid-lowering therapy
--Were not given the lipid-lowering therapy for documented patient, medical or system reasons

**Definitions**

Denominator Logic:
Age is calculated as of the end of the reporting period to determine if the patient reached and age of 18 years or older during the reporting period.

MU searches VISIT for at least 2 outpatient or 2 nursing facility encounters with the EP during the reporting period represented by the following:
--Outpatient CPT codes: 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 99241, 99242, 99243, 99244, 99245, 99324, 99325, 99326, 99327, 99328, 99334, 99335, 99336, 99337, 99341, 99342, 99343, 99344, 99345, 99347, 99348, 99349, 99350

--Nursing Facility CPT codes: 99304, 99305, 99306, 99307, 99308, 99309, 99310

The patient must also meet one of the following conditions on or before the outpatient or nursing facility encounter dates:
--MU searches V POV and PROBLEM for a diagnosis and/or active problem of CAD (includes MI) represented by one of the following ICD-9 codes: 410.00, 410.01, 410.02, 410.10, 410.11, 410.12, 410.20, 410.21, 410.22, 410.30, 410.31, 410.32, 410.40, 410.41, 410.42, 410.50, 410.51, 410.52, 410.60, 410.61, 410.62, 410.70, 410.71, 410.72, 410.80, 410.81, 410.82, 410.90, 410.91, 410.92, 411.0, 411.1, 411.81, 411.89, 412, 413.0, 413.1, 413.9, 414.00, 414.01, 414.02, 414.03, 414.04, 414.05, 414.06, 414.07, 414.8.
--MU searches V CPT for a cardiac surgery procedure represented by one of the following CPT codes: 33140, 33510, 33511, 33512, 33513, 33514, 33516, 33517, 33518, 33519, 33521, 33522, 33523, 33533, 33534, 33535, 33536, 92980, 92981, 92982, 92984, 92995, 92996.

Numerator Logic:
MU searches PRESCRIPTION for active or chronic lipid-lowering therapy medications prescribed during the reporting period defined by the NDC codes in the BGPMU LIPID LOWERING NDCS taxonomy.

Exclusion Logic
Patients are excluded if any of the following are found on or before any of the outpatient or nursing facility encounter dates:

1. MU searches PATIENT ALLERGIES for an active allergy or intolerance to, or adverse effect from, lipid-lowering therapy represented by the drug class CV350.

2. MU searches V LAB for patients who had an LDL test with the most recent result value of < 130 mg/dL within 365 days of the latest outpatient or nursing facility encounter during the reporting period represented by the following:
LDL Test LOINC codes: 2089-1, 2090-9, 2091-7, 2092-5, 2569-2, 3046-0, 3047-8, 12773-8, 13457-7, 13458-5, 14155-6, 16615-7, 16616-5, 18261-8, 18262-6, 22748-8, 24331-1, 25371-6, 35198-1, 35199-9, 39229-0, 39469-2.
Outpatient or Nursing Facility Encounter CPT codes: see denominator logic for codes.

3. MU searches PATIENT REFUSALS FOR SERVICE/NMI for a REF (refused) or NMI (not medically indicated) of the lipid-lowering therapy.  The NDC codes are defined in the BGPMU LIPID LOWERING NDCS taxonomy.

**Patient List Definition**

Patients 18+ with a diagnosis of CAD (includes MI) or who had cardiac surgery AND who had at least 2 outpatient or 2 nursing facility encounters with the EP during the

reporting period, AND who were prescribed lipid-lowering therapy during the reporting period, if any.

### 1.1.3.28  Ischemic Vascular Disease (IVD): Complete Lipid Panel and LDL Control (NQF 0075)

**Denominators**

Patients 18+ with either of the following:

--At least 1 acute inpatient encounter with the EP 14-24 months prior to the reporting period end date with any of the following:

   --Percutaneous transluminal coronary angioplasty (PTCA) 14-24 months prior to the reporting period end date

   --Acute myocardial infarction (AMI) during this encounter

   --Coronary artery bypass graft (CABG) 14-24 months prior to the reporting period end date

--At least 1 acute inpatient or outpatient encounter with the EP within 2 years of the reporting period end date with a diagnosis of ischemic vascular disease (IVD) during this encounter.

**Numerators**

Numerator 1:

Patients who had either an LDL test OR had all of the following during the reporting period:

--High density lipoprotein (HDL) test

--Total cholesterol test

--Triglycerides test

Numerator 2:

Patients who had an LDL test with the most recent result value < 100mg/dL OR had both of the following during the reporting period:

--Triglycerides test with the most recent value < 400 mg/dL

--(Most recent total cholesterol test value minus most recent HDL test value minus most recent triglycerides test value) divided by 5 < 100mg/dL.

**Definitions**

Denominator Logic:

Age is calculated as of the end of the reporting period to determine if the patient reached an age of 18 or older during the reporting period.

Additionally, to be included in the denominator, the patient must meet at least one of the following conditions:

1. MU searches VISIT for at least 1 acute inpatient encounter with the EP 426 to 730 days before the reporting period end date and V CPT and V PROCEDURE for a PTCA procedure 426 to 730 days before the reporting period end date represented by the following:

  --Acute inpatient CPT codes: 99221, 99222, 99223, 99231, 99232, 99233, 99238, 99239, 99251, 99252, 99253, 99254, 99255, 99291
   --PTCA CPT codes: 33140, 92980, 92982, 92995
   --PTCA ICD-9 codes: 00.66, 36.06, 36.07, 36.09

2. MU searches VISIT for at least 1 acute inpatient encounter with the EP 426 to 730 days before the reporting period end date and V POV for a diagnosis of AMI during this encounter represented by the following:
   --Acute inpatient CPT codes: See above for the applicable encounter codes
   --AMI ICD-9 codes: 410.01, 410.11, 410.21, 410.31, 410.41, 410.51, 410.61, 410.71, 410.81, 410.91

3. MU searches VISIT for at least 1 acute inpatient encounter with the EP 426 to 730 days before the reporting period end date and V CPT and V PROCEDURE for a CABG procedure 426 to 730 days before the reporting period end date represented by the following:
   --Acute inpatient encounter CPT codes: See above for the applicable encounter codes
   --CABG CPT codes: 33510, 33511, 33512, 33513, 33514, 33516, 33517, 33518, 33519, 33521, 33522, 33523, 33533, 33534, 33535, 33536
   --CABG HCPCS codes: S2205, S2206, S2207, S2208, S2209
   --CABG ICD-9 codes: 36.1, 36.10, 36.11, 36.12, 36.13, 36.14, 36.15, 36.16, 36.17, 36.19, 36.2

4. MU searches VISIT for at least 1 acute inpatient or outpatient encounter with the EP within 730 days of the reporting period end date and V POV for a diagnosis of IVD during this encounter represented by the following:
   --Acute inpatient CPT codes: See above for the applicable encounter codes
   --Outpatient CPT codes: 99201, 99202, 99203, 99204, 99205, 99211, 99212, 99213, 99214, 99215, 99217, 99218, 99219, 99220, 99241, 99242, 99243, 99244, 99245, 99341, 99342, 99343, 99344, 99345, 99347, 99348, 99349, 99350, 99384, 99385, 99386, 99387, 99394, 99395, 99396, 99397, 99401, 99402, 99403, 99404, 99411, 99412, 99420, 99429, 99455, 99456
   --Outpatient ICD-9 codes: V70.0, V70.3, V70.5, V70.6, V70.8, V70.9
   --IVD CPT codes: 411.0, 411.1, 411.81, 411.89, 413.0, 413.1, 413.9, 414.00, 414.01, 414.02, 414.03, 414.04, 414.05, 414.06, 414.07, 414.2, 414.8, 414.9, 429.2, 433.0, 433.01, 433.10, 433.11, 433.20, 433.21, 433.30, 433.31, 433.80, 433.81, 433.90, 433.91, 434.00, 434.01, 434.10, 434.11, 434.90, 434.91, 440.1, 440.20, 440.21, 440.22, 440.23, 440.24, 440.29, 440.4, 444.0, 444.1, 444.21, 444.22, 444.81, 444.89, 444.9, 445.01, 445.02, 445.8, 445.81

Numerator Logic:
Numerator 1 Logic:

MU searches V LAB for patients who had either an LDL test OR who had all of the following during the reporting period:
--High density lipoprotein (HDL) test
--Total cholesterol test
--Triglycerides test

These tests are represented by the following codes:
--LDL:
  --LOINC codes: 2089-1, 12773-8, 13457-7, 18261-8, 18262-6, 22748-8, 39469-2, 49132-4, 55440-2
  --CPT codes: 80061, 83700, 83701, 83704, 83721
--HDL:
  --LOINC codes: 2085-9, 14646-4, 18263-4
  --CPT code: 83701
--Total cholesterol:
  --LOINC codes: 2093-3, 14647-2
  --CPT code: 82465
--Triglycerides:
  --LOINC codes: 2571-8, 12951-0, 14927-8, 47210-0
  --CPT code: 84478

Numerator 2 Logic:

Patients who had an LDL test with the most recent result value during the reporting period < 100mg/dL OR had both of the following during the reporting period:
--Triglycerides with the most recent test value < 400 mg/dL
--(Most recent total cholesterol test value minus most recent HDL test value minus most recent triglycerides test value) divided by 5 < 100mg/dL

See numerator 1 logic for the applicable LOINC codes.

**Patient List Definition**

Patients 18+ and (a) who had at least 1 acute inpatient encounter with the EP 14-24 months prior to the reporting period end date AND who underwent percutaneous transluminal coronary angioplasty (PTCA), acute myocardial infarction (AMI), or coronary artery bypass graft (CABG); OR (b) who had least 1 acute inpatient or outpatient encounter with the EP within 2 years of the reporting period end date with a diagnosis of ischemic vascular disease (IVD); AND (c) who had a complete lipid profile performed during the measurement year; AND (d) whose LDL-C was <100 mg/dL, if any.

## 1.1.3.29   Heart Failure: ACE Inhibitor or ARB Therapy for LVSD (NQF 0081)

Denominators

Patients 18+ with at least 1 inpatient discharge encounter OR at least 2 outpatient encounters OR 2 nursing facility encounters with the EP during the reporting period

AND a diagnosis of heart failure during or before any of these encounters AND a LVEF of < 40% before the latest of these encounters.

**Numerators**

Patients who were prescribed ACE inhibitors or ARB medications by the EP during the reporting period.

**Exclusions**

Patients who meet any of the following conditions:
--Allergy or intolerance to, or adverse effects from, ACE inhibitors or ARBs
--Diagnosis of any of the following:
  --Pregnancy
  --Deficiencies of circulating enzymes
  --Disease of aortic and mitral valves
  --Non-rheumatic mitral (valve) disease
  --Chronic kidney disease with and without hypertension
  --Hypertensive renal disease with renal failure
  --Atherosclerosis of renal artery
  --Renal failure and ERSD
  --Acute renal failure
  --Atresia and stenosis of aorta
--Patients who declined or were not given ACE Inhibitors/ARBs for medical, patient, or system reasons.

**Definitions**

Denominator Logic:
Age is calculated as of the end of the reporting period to determine if the patient had reached 18 years or older during the reporting period.

MU searches VISIT for at least 1 inpatient discharge encounter OR at least 2 outpatient encounters OR 2 nursing facility encounters with the EP during the reporting period represented by the following CPT codes:
--Inpatient discharge: 99238, 99239
--Outpatient: 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 99241, 99242, 99243, 99244, 99245, 99324, 99325, 99326, 99327, 99328, 99334, 99335, 99336, 99337, 99341, 99342, 99343, 99344, 99345, 99347, 99348, 99349, 99350
--Nursing facility: 99304, 99305, 99306, 99307, 99308, 99309, 99310

MU searches V POV and PROBLEM for a diagnosis and/or active problem of heart failure on or before the latest inpatient discharge, outpatient, or nursing facility encounter with the EP during the reporting period represented by the following ICD-9 codes: 402.01, 402.11, 402.91, 404.01, 404.03, 404.11, 404.13, 404.91, 404.93, 428.0, 428.1, 428.20, 428.21, 428.22, 428.23, 428.30, 428.31, 428.32, 428.33, 428.40, 428.41, 428.42, 428.43, 428.9.

MU searches V MEASUREMENT for a TYPE of CEF (Cardiac Ejection Fraction) and a result VALUE of < 40% before any of the inpatient discharge, outpatient, or nursing facility encounters with the EP during the reporting period.

Numerator Logic:
MU searches PRESCRIPTION for active or expired medications of ACE Inhibitors or ARBs during the reporting period defined by the NDC codes in the BGPMU ACE ARBS NDCS taxonomy.

Exclusion Logic
The patient is excluded if any of the following conditions are found on or before the latest inpatient discharge, outpatient, or nursing facility encounter with the EP during the reporting period:

1. MU searches PATIENT ALLERGIES and excludes the patient if there is an allergy or intolerance to, or adverse effect from, ACE Inhibitors or ARBs represented by the drug classes CV800 and CV805.

2. MU searches V POV and PROBLEM for a diagnosis and/or active problem of any of the following represented by the applicable ICD-9 codes:
--Pregnancy: See BGPMU PREGNANCY ALL ICD taxonomy
--Deficiencies of circulating enzymes: 277.6
--Disease of aortic and mitral valves: 395.0, 395.2, 396.0, 396.2, 396.8
--Non-rheumatic mitral (valve) disease: 424.0
--Chronic kidney disease with and without hypertension: 403.01, 403.11, 403.91, 404.02, 404.03, 404.12, 404.13, 404.92, 404.93
--Hypertensive renal disease with renal failure: 403.01, 403.11, 403.91, 404.02, 404.03, 404.12, 404.13, 404.92, 404.93
--Atherosclerosis of renal artery: 440.1
--Renal failure and ERSD: 584.5, 584.6, 584.7, 584.8, 584.9, 585.5, 585.6, 586, 788.5
--Acute renal failure: 584.5, 584.6, 584.7, 584.8, 584.9
--Atresia and stenosis of aorta: 440.0, 747.22

3. MU searches PATIENT REFUSALS FOR SERVICE/NMI for a REF (refused) or NMI (not medically indicated) of ACE Inhibitors/ARBs defined by the NDC codes in the BGPMU ACE ARBS NDCS taxonomy.

**Patient List Definition**

Patients 18+ with at least 1 inpatient discharge encounter OR at least 2 outpatient OR 2 nursing facility encounters with the EP during the reporting period AND a diagnosis of heart failure during or before any of these encounters, AND a LVF assessment < 40% or an ejection fraction (LVEF) < 40% before the latest of the encounters during the reporting period if any.

## 1.1.3.30   Heart Failure: Beta-Blocker Therapy for LVSD (NQF 0083)

**Denominators**

Patients 18+ with at least 2 outpatient encounters or 2 nursing facility encounters with the EP during the reporting period AND a diagnosis of heart failure during or before any of these encounters, AND a LVF assessment study result of < 40% OR an ejection fraction result of < 40% before the latest of these encounters.

**Numerators**

Patients who were prescribed beta-blocker medication by the EP during the reporting period.

**Exclusions**

Patients who meet any of the following conditions:
--Allergy or intolerance to, or adverse effect from, beta-blocker therapy
--Diagnosis of any of the following:
  --Arrhythmia
  --Hypotension
  --Asthma
  --Atrioventricular block and no cardiac pacer
  --Bradycardia
--Patients who declined or were not given beta-blocker therapy for medical, patient, or system reasons.

**Definitions**

Denominator Logic:
Age is calculated as of the end of the reporting period to determine if the patient reached an age of 18 years or older during the reporting period.

MU searches VISIT for at least 2 outpatient or 2 nursing facility encounters, with the EP during the reporting period represented by the following CPT codes:
--Outpatient: 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 99241, 99242, 99243, 99244, 99245, 99324, 99325, 99326, 99327, 99328, 99334, 99335, 99336, 99337, 99341, 99342, 99343, 99344, 99345, 99347, 99348, 99349, 99350
--Nursing facility: 99304, 99305, 99306, 99307, 99308, 99309, 99310

MU searches V POV and PROBLEM for a diagnosis and/or active problem of heart failure on or before the latest outpatient or nursing facility encounter with the EP during the reporting period represented by the following ICD-9 codes: 402.01, 402.11, 402.91, 404.01, 404.03, 404.11, 404.13, 404.91, 404.93, 428.0, 428.1, 428.20, 428.21, 428.22, 428.23, 428.30, 428.31, 428.32, 428.33, 428.40, 428.41, 428.42, 428.43, 428.9.

MU searches V MEASUREMENT for a TYPE of CEF (Cardiac Ejection Fraction) and a result VALUE of < 40% before any of the inpatient discharge, outpatient, or nursing facility encounters with the EP during the reporting period.

Numerator Logic:
MU searches PRESCRIPTION for active or expired beta-blocker therapy medications during the reporting period defined by the NDC codes in the BGPMU BETABLOCKER NDCS taxonomy.

Exclusion Logic:
The patient is excluded if any of the following conditions are found on or before the latest outpatient or nursing facility encounter date:

1. MU searches PATIENT ALLERGIES and excludes the patient if there is an allergy or intolerance to, or adverse effect from, beta-blocker therapy represented by the drug classes CV100 and CV400.

2. MU searches V POV and PROBLEM for a diagnosis and/or active problem of any of the following represented by the applicable ICD-9 codes:
--Arrhythmia: 427.81, 427.89
--Hypotension: 458.0, 458.1, 458.21, 458.29, 458.8, 458.9
--Asthma: 493.00, 493.01, 493.02, 493.10, 493.11, 493.12, 493.20, 493.21, 493.22, 493.81, 493.82, 493.90, 493.91, 493.92
--Atrioventricular block and no cardiac pacer in situ diagnosis or no cardiac pacer device placement represented by the following:
  --Atrioventricular block: 426.0, 426.12, 426.13
  --Cardiac pacer in situ: V45.01
  --Cardiac pacer: 39.64, 89.45
--Bradycardia: 337.09, 427.81, 427.89

3. MU searches PATIENT REFUSALS for SERVICE/NMI for a REF (refused) or NMI (not medically indicated) of beta-blocker therapy defined by the NDC codes in the BGPMU BETABLOCKER NDCS taxonomy.

**Patient List Definition**

Patients 18+ with at least 2 outpatient encounters or 2 nursing facility encounters with the EP during the reporting period AND a diagnosis of heart failure AND a Left Ventricular Ejection Faction (LVEF) of < 40% before the any of these encounters during the reporting period AND who were prescribed beta-blocker therapy, if any.

## 1.1.3.31  Heart Failure: Warfarin Therapy Patients with Atrial Fibrillation (NQF 0084)

**Denominators**

Patients 18+ with at least 2 outpatient or nursing facility encounters with the EP during the reporting period AND a diagnosis of heart failure on or before the encounters AND a diagnosis of atrial fibrillation before or during the reporting period.

**Numerators**

Patients who were prescribed warfarin therapy during the reporting period.

**Exclusions**

Patients who meet any of the following conditions on or before the encounter dates:
--Allergy or intolerance to, or adverse effects from, warfarin therapy
--Diagnosis of any of the following:
  --Anemias and bleeding disorders
  --Esophageal and GI bleed
  --Intracranial hemorrhage
  --Leukemias/myeloproliferative disorders
  --Hematuria
  --Hemoptysis
  --Hemorrhage
  --Liver disorders
--Patients who declined or were not given warfarin therapy for patient, medical, or system reasons.

**Definitions**

Denominator Logic:
Age is calculated as of the end of the reporting period to determine if the patient reached an age of 18 years or older during the reporting period.

MU searches VISIT for at least 2 outpatient or nursing facility encounters with the EP during the reporting period represented by the following CPT codes:
--Outpatient: 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 99241, 99242, 99243, 99244, 99245, 99324, 99325, 99326, 99327, 99328, 99334, 99335, 99336, 99337, 99341, 99342, 99343, 99344, 99345, 99347, 99348, 99349, 99350
--Nursing facility: 99304, 99305, 99306, 99307, 99308, 99309, 99310

MU searches V POV and PROBLEM for a diagnosis and/or active problem of heart failure on or before the latest outpatient or nursing facility encounter with the EP during the reporting period represented by the following ICD-9 codes: 402.01, 402.11, 402.91, 404.01, 404.03, 404.11, 404.13, 404.91, 404.93, 428.0, 428.1, 428.20, 428.21, 428.22, 428.23, 428.30, 428.31, 428.32, 428.33, 428.40, 428.41, 428.42, 428.43, 428.9.

MU searches V POV and PROBLEM for a diagnosis and/or active problem of atrial fibrillation before or during the reporting period represented by the following ICD-9 code: 427.31.

Numerator Logic:

MU searches PRESCRIPTION for active or expired warfarin therapy medications during the reporting period defined by the NDC codes in the BGPMU WARFARIN NDCS taxonomy.

Exclusion Logic:
Patients are excluded if any of the following are found on or before the latest outpatient or nursing facility encounter date within the reporting period:

1. MU searches PATIENT ALLERGIES and excludes the patient if there is an allergy or intolerance to, or adverse effects from, warfarin therapy represented by the drug class BL110.

2. MU searches V POV and PROBLEM for a diagnosis and/or active problem of any of the following before any of the encounter dates represented by the applicable ICD-9 codes:
--Anemias and bleeding disorders: 280.0, 280.9, 285.1, 286.0, 286.1, 286.2, 286.3, 286.4, 286.5, 286.6, 286.7, 286.9, 287.30, 287.31, 287.32, 287.33, 287.39, 287.4, 287.41, 287.49, 287.5
--Esophageal and GI bleed: 530.7, 531.00, 531.01, 531.20, 531.21, 531.40, 531.41, 531.60, 531.61, 532.00, 532.01, 532.20, 532.21, 532.40, 532.41, 532.60, 532.61, 533.00, 533.01, 533.20, 533.21, 533.40, 533.41, 533.60, 533.61, 534.00, 534.01, 534.20, 534.21, 534.40, 534.41, 534.60, 534.61, 569.3, 578.0, 578.1, 578.9
--Intracranial hemorrhage: 430, 431, 432.0, 432.1, 432.9, 437.3
--Leukemias/myeloproliferative disorders: 203.00, 203.01, 203.10, 203.11, 203.80, 203.81, 204.00, 204.01, 204.10, 204.11, 204.20, 204.21, 204.80, 204.81, 204.90, 204.91, 205.00, 205.01, 205.10, 205.11, 205.20, 205.21, 205.30, 205.31, 205.80, 205.81, 205.90, 205.91, 206.00, 206.01, 206.10, 206.11, 206.20, 206.21, 206.80, 206.81, 206.90, 206.91, 207.00, 207.01, 207.10, 207.11, 207.20, 207.21, 207.80, 207.81, 208.00, 208.01, 208.10, 208.11, 208.20, 208.21, 208.80, 208.81, 208.90, 208.91
--Hematuria: 599.7
--Hemoptysis: 786.3, 786.30, 786.39
--Hemorrhage: 459.0
--Liver disorders: 570, 571.2, 571.5

4. MU searches PATIENT REFUSALS FOR SERVICE/NMI for a REF (refused) or NMI (not medically indicated) for warfarin therapy defined by the NDC codes in the BGPMU WARFARIN NDCS taxonomy.

**Patient List Definition**

Patients 18+ with at least 2 outpatient or nursing facility encounters with the EP during the reporting period AND who had diagnosis of heart failure on or before the encounters AND a diagnosis of atrial fibrillation before or during the reporting period AND who were prescribed warfarin therapy during the reporting period, if any.

### 1.1.3.32  Primary Open Angle Glaucoma (POAG): Optic Nerve Evaluation (NQF 0086)

**Denominators**

Patients 18+ with at least 2 of any of the following: domiciliary, nursing facility, office & outpatient consulting, or ophthalmological service encounters with the EP during the reporting period and a diagnosis of POAG on or before any of these encounters.

**Numerators**

Patients who had at least 1 optic nerve head evaluation procedure during a domiciliary, nursing facility, office & outpatient consulting, or ophthalmological service encounter with the EP during the reporting period.

**Exclusions**

Patients who did not have an optic nerve head evaluation procedure during the reporting period for medical reasons.

**Definitions**

Denominator Logic:
Age is calculated as of the end of the reporting period to determine if the patient reached an age of 18 years or older during the reporting period.

MU searches VISIT for at least 2 of any of the following: domiciliary, nursing facility, office & outpatient consulting, or ophthalmological service encounters with the EP during the reporting period represented by the following CPT codes:
--Domiciliary codes: 99324, 99325, 99326, 99327, 99328, 99334, 99335, 99336, 99337
--Nursing facility codes: 99304, 99305, 99306, 99307, 99308, 99309, 99310
--Office & outpatient consulting codes: 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 99241, 99242, 99243, 99244, 99245
--Ophthalmological services codes: 92002, 92004, 92012, 92014

MU searches V POV and PROBLEM for a diagnosis and/or active problem of POAG during or before any of the domiciliary, nursing facility, office & outpatient consulting, or ophthalmological service encounters with the EP during the reporting period represented by the following ICD-9 codes: 365.10, 365.11, 365.12, 365.15.

Numerator Logic:
MU searches V CPT and V PROCEDURE for at least 1 optic nerve head evaluation procedure during a domiciliary, nursing facility, office & outpatient consulting, or ophthalmological service encounter with the EP during the reporting period represented by: CLINIC code: 17 (OPHTHALMOLOGY) or 18 (OPTOMETRY) and 1 of the following:
CPT codes: 92081, 92082, 92083, 92135
ICD-9 Procedure code: 95.05

Exclusion Logic:
MU searches PATIENT REFUSALS FOR SERVICE/NMI for an NMI (not medically indicated) of an optic nerve head evaluation procedure during the reporting period represented by 1 of the following:
CPT codes: 92081, 92082, 92083, 92135
ICD-9 Procedure code: 95.05

**Patient List Definition**

Patients 18+ with a diagnosis of POAG and at least 2 domiciliary, nursing facility, office & outpatient consulting, or ophthalmological service encounters with the EP during the reporting period and who had an optic nerve head evaluation during one of these encounters, if any.

### 1.1.3.33  Diabetic Retinopathy: Macular Edema and Severity of Retinopathy (NQF 0088)

**Denominator**

Patients 18+ with 2 or more office & outpatient consult, ophthalmological services, nursing facility, or domiciliary encounters with the EP during the reporting period AND a diagnosis of diabetic retinopathy during or before any of these encounters.

**Numerator**

Patients who had a macular or fundus exam performed which included documentation of the level of severity of retinopathy and the presence or absence of macular edema during 1 or more encounters with the EP during the reporting period.

**Exclusions**

Patients who did not have a macular or fundus exam performed for either patient or medical reasons during the reporting period.

**Definitions**

Denominator Logic:
Age is calculated as of the end of the reporting period to determine if the patient reached an age of 18 years or older during the reporting period.

MU searches VISIT for at least 2 office & outpatient consultation, ophthalmological services, nursing facility, or domiciliary encounters with the EP during the reporting period represented by the following CPT codes:
--Office & outpatient consultation: 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 99241, 99242, 99243, 99244, 99245
--Ophthalmological services: 92002, 92004, 92012, 92014
--Nursing facility: 99304, 99305, 99306, 99307, 99308, 99309, 99310
--Domiciliary: 99324, 99325, 99326, 99327, 99328, 99334, 99335, 99336, 99337

MU searches V POV and PROBLEM for a diagnosis and/or active problem of diabetic retinopathy during or before any of the encounters during the reporting

period represented by the following ICD-9 codes: 362.01, 362.02, 362.03, 362.04, 362.05, 362.06.

Numerator Logic:
To be counted in the numerator the patient must meet all of the following conditions:

1. MU searches for at least 1 of the following which represent a macular or fundus exam during at least 1 of the office and outpatient consultation, ophthalmological services, nursing facility, or domiciliary encounters with the EP during the reporting period:
--MU searches V CPT for any of the following CPT codes: 2019F, 2021F, 92227, 92228, 92230, 92250
--MU searches V PROCEDURE for ICD-9 code 95.11
--MU searches VISIT for a CLINIC code of A2

2. MU searches V POV and PROBLEM for a diagnosis and/or active problem of macular edema on or within 14 days after the macular or fundus exam represented by ICD code 362.07.

3. MU searches V POV and PROBLEM for a diagnosis and/or active problem indicating the level of severity of retinopathy on or within 14 days after the macular or fundus exam represented by one of the following ICD codes: 362.02, 362.03, 362.04, 362.05, 362.06.

Exclusion Logic:
MU searches PATIENT REFUSALS OF SERVICE/NMI for REF or NMI for patients with a documented reason for not having a macular or fundus exam performed during the reporting period.  See the numerator logic for the macular or fundus exam CPT and ICD-9 codes.

**Patient List Definition**

Patients 18+ who had at least 2 office & outpatient consultation, ophthalmological services, nursing facility, or domiciliary encounters with the EP during the reporting period AND a diagnosis of diabetic retinopathy AND who had a macular or fundus exam performed which included documentation of the level of severity of retinopathy and the presence or absence of macular edema during 1 or more the encounters with the EP during the reporting period, if any.

### 1.1.3.34  Diabetic Retinopathy: Communication with EP Managing Ongoing Diabetes Care (NQF 0089)

**Denominators**

Patients 18+ with 2 or more office & outpatient consultation, ophthalmological services, nursing facility, or domiciliary encounters with the EP during the reporting period AND a diagnosis of diabetic retinopathy during or before the latest of these encounters AND a macular or fundus exam performed during at least of 1 of these encounters.

**Numerators**

Patients who had documented communication to the provider who manages the ongoing care of the diabetic patient regarding the findings of the macular or fundus exam at least once on or after the macular or fundus exam during the reporting period.

**Exclusion**

Patients who did not have documented communication to the provider who manages the ongoing care of the diabetic patient regarding the findings of the macular or fundus exam for either patient or medical reasons.

**Definitions**

Denominator Logic:
Age is calculated as of the end of the reporting period to determine if the patient reached an age of 18 years or older during the reporting period.

MU searches VISIT for at least 2 office & outpatient consultation, ophthalmological services, nursing facility, or domiciliary encounters with the EP during the reporting period represented by the following CPT codes:
--Office & outpatient consultation: 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 99241, 99242, 99243, 99244, 99245
--Ophthalmological services: 92002, 92004, 92012, 92014
--Nursing facility: 99304, 99305, 99306, 99307, 99308, 99309, 99310
--Domiciliary: 99324, 99325, 99326, 99327, 99328, 99334, 99335, 99336, 99337

MU searches V POV and PROBLEM for a diagnosis and/or active problem of diabetic retinopathy during or before any of the encounters during the reporting period represented by the following ICD-9 codes: 362.01, 362.02, 362.03, 362.04, 362.05, 362.06.

MU searches for at least 1 of the following which represent a macular or fundus exam during at least 1 of the office and outpatient consultation, ophthalmological services, nursing facility, or domiciliary encounters with the EP during the reporting period:
--MU searches V CPT for any of the following CPT codes: 2019F, 2021F, 92227, 92228, 99230, 99250
--MU searches V PROCEDURE for ICD-9 code 95.11
--MU searches VISIT for a CLINIC code of A2

Numerator Logic:
MU searches V CPT for a CPT code of 5010F on or within 14 days after the macular or fundus exam date. If not found, then MU searches VISIT for a CLINIC code of A2 for the encounter with the macular or fundus exam.

Exclusion Logic:
MU searches PATIENT REFUSALS FOR SERVICE/NMI for a REF or NMI of the 5010F communication CPT code.

**Patient List Definition**

Patients 18+ with 2 or more office & outpatient consultation, ophthalmological services, nursing facility or domiciliary encounters with the EP during the reporting period AND a diagnosis of diabetic retinopathy AND who had a macular or fundus exam performed with documented communication to the provider who manages the ongoing care of the diabetic patient regarding the findings of the macular or fundus exam at least once during the reporting period, if any.

## 1.1.3.35 Antidepressant Medication Management: (a) Effective Acute Phase Treatment, (b)Effective Continuation Phase Treatment (NQF 0105)

**Denominators**

Patients 18+ as of 245 days on or before the reporting period end date with an active/dispensed/ordered antidepressant medication <= 30 days before or <= 14 days after the FIRST diagnosis of major depression.

AND WITH one of the following:
--a FIRST primary diagnosis of major depression during at least 1 of the following encounters with the EP between <= 245 days before the reporting period start date and => 245 days before the reporting period end date: emergency department (ED), outpatient behavioral health (BH), or outpatient BH req point of service (POS) with a POS modifier.
--a FIRST secondary diagnosis of major depression during at least 2 of the following encounters with the EP between <= 245 days before the reporting period start date and => 245 days before the reporting period end date: ED, outpatient BH, or outpatient BH req POS with a POS modifier.
--a FIRST secondary diagnosis of major depression during at least 1 of the following encounters with the EP between <= 245 days before the reporting period start date and => 245 days before the reporting period end date: acute inpatient or non-acute inpatient.

AND WITHOUT an active diagnosis of major depression or depression <= 120 days on or before the FIRST active diagnosis of major depression identified above.

**Numerators**

Numerator 1:

Patients who had at least 1 active or expired prescription of antidepressant medication for a duration of => 84 days after the FIRST diagnosis of major depression as identified in the denominator.

Numerator 2:
Patients who had at least 1 active or expired prescription of antidepressant medication for a duration of => 180 days after the FIRST diagnosis of major depression as identified in the denominator.

**Definitions**

Denominator Logic:
Age is calculated as of 245 days from the end of the reporting period to determine if the patient reached an age of 18 years or older as of this date.

The patient must meet one of the following conditions:
1. MU searches V POV for a FIRST diagnosis of major depression between 245 days on or before the reporting period start date and 245 days on or before the reporting period end date AND searches VISIT to determine if the diagnosis occurred during at least 1 of any of the following encounters with the EP during this period: ED, outpatient BH, or outpatient BH requirements POS with a POS modifier.

2. MU searches V POV for a FIRST diagnosis of major depression between 245 days on or before the reporting period start date and 245 days on or before the reporting period end date AND searches VISIT to determine if the FIRST diagnosis and a subsequent diagnosis occurred during at least 2 of any of the following encounters with the EP during this period: ED, outpatient BH, or outpatient BH req POS.

3. MU searches V POV for a FIRST diagnosis of major depression between 245 days on or before the reporting period start date and 245 days on or before the reporting period end date AND searches VISIT to determine if the diagnosis occurred during at least 1 of any of the following encounters with the EP during this period: acute inpatient or non-acute inpatient.

The codes that represent the above conditions are as follows:
--Major depression ICD-9 codes: 296.20, 296.21, 296.22, 296.23, 296.24, 296.25, 296.30, 296.31, 296.32, 296.33, 296.34, 296.35, 298.0, 300.4, 309.1, 311
--Emergency department CPT codes: 99281, 99282, 99283, 99284, 99285
--Outpatient BH CPT codes: 90804, 90805, 90806, 90807, 90808, 90809, 90810, 90811, 90812, 90813, 90814, 90815, 98960, 98961, 98962, 99078, 99201, 99202, 99203, 99204, 99205, 99211, 99212, 99213, 99214, 99215, 99217, 99218, 99219, 99220, 99241, 99242, 99243, 99244, 99245, 99341, 99342, 99343, 99344, 99345, 99347, 99348, 99349, 99350, 99384, 99385, 99386, 99387, 99394, 99395, 99396, 99397, 99401, 99402, 99403, 99404, 99408, 99409, 99411, 99412, 99510
--Outpatient BH req POS CPT codes: 90801, 90802, 90816, 90817, 90818, 90819, 90821, 90822, 90823, 90824, 90826, 90827, 90828, 90829, 90845, 90847, 90849,

90853, 90857, 90862, 90875, 90876, 99221, 99222, 99223, 99231, 99232, 99233, 99238, 99239, 99251, 99252, 99253, 99254, 99255
--POS modifier codes: 03, 05, 07, 09, 11, 12, 13, 14, 15, 20, 22, 33, 49, 50, 52, 53, 57, 71, 72
--Non-acute inpatient CPT codes: 99304, 99305, 99306, 99307, 99308, 99309, 99310, 99315, 99316, 99318, 99324, 99325, 99326, 99327, 99328, 99334, 99335, 99336, 99337
--Acute inpatient CPT codes: 99221, 99222, 99223, 99231, 99232, 99233, 99238, 99239, 99251, 99252, 99253, 99254, 99255, 99291

Additionally, the patient must meet the following condition:
--MU searches PRESCRIPTION for active or expired antidepressant medications prescribed by the EP within 30 days BEFORE to within 14 days AFTER the FIRST diagnosis of major depression as identified above.  The NDC codes for these medications are defined in the BGPMU ANTIDEPRESSANT MEDS NDCS taxonomy.

Additionally, patients are NOT included in the denominator if they meet the following condition:

MU searches V POV and PROBLEM for a diagnosis and/or active problem of depression or major depression within 120 days before the FIRST diagnosis of major depression identified above represented by the following ICD-9 codes:
--Major depression: see above for codes
--Depression: 296.26, 296.36, 296.4, 296.40, 296.41, 296.42, 296.43, 296.44, 296.45, 296.46, 296.5, 296.50, 296.51, 296.52, 296.53, 296.54, 296.55, 296.56, 296.6, 296.60, 296.61, 296.62, 296.63, 296.64, 296.65, 296.66, 296.7, 296.8, 296.80, 296.81, 296.82, 296.89, 296.9, 296.90, 296.99, 309.0, 309.28

Numerator Logic:
Numerator 1 Logic:

MU searches PRESCRIPTION for an active or expired antidepressant medication => 84 days after the FIRST diagnosis of major depression identified in the denominator. The NDC codes for these medications are defined in the BGPMU ANTIDEPRESSANT MEDS NDCS taxonomy.

Numerator 2 Logic:

MU searches PRESCRIPTION for an active or expired antidepressant medication => 180 days after the FIRST diagnosis of major depression identified in the denominator. The NDC codes for these medications are defined in the BGPMU ANTIDEPRESSANT MEDS NDCS taxonomy.

**Patient List Definition**

Patients 18+ with a FIRST primary diagnosis of major depression during at least 1 ED, outpatient BH or outpatient BH req POS with a POS modifier encounter with the EP between <=245 days before the reporting period start date and => 245 days before the reporting period end date OR a secondary diagnosis of major depression during at least 2 ED, outpatient BH or outpatient BH req POS with a POS modifier encounters with the EP during this time period, OR a secondary diagnosis of major depression during an acute or non-acute inpatient encounter with the EP during this time period, AND who were prescribed antidepressant medication and who remained on antidepressant medication, if any.

### 1.1.3.36  Oncology Colon Cancer: Chemotherapy for Stage III Colon Cancer Patients (NQF 0385)

**Denominator**

Patients 18+ with at least 2 office visit encounters with the EP during the reporting period AND a diagnosis of colon cancer or an inactive colon cancer history during or before any of these encounters AND a colon cancer stage III procedure result during or before any of these encounters.

**Numerator**

Patients who have been prescribed or been administered adjuvant chemotherapy for colon cancer during or before any of the office visit encounters with the EP during the measurement period.

**Exclusions**

Patients who meet any of the following conditions on or before the encounter dates:
--Allergy or intolerance to, or adverse effects from, colon cancer chemotherapy
--Diagnosis of any of the following:
  --Metastatic sites common to colon cancer
  --Acute renal insufficiency
  --Neutropenia
  --Leukopenia
--Patient characteristic: ECOG performance status-poor
--Patients who were not given colon cancer chemotherapy for patient, medical, or system reasons

**Definitions**

Denominator Logic:
Age is calculated as of the end of the reporting period to determine if the patient had reached 18 years or older during the reporting period.

MU searches VISIT for at least 2 office visit encounters with the EP during the reporting period represented by the following CPT codes: 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215.

MU searches V POV and PROBLEM for a diagnosis and/or active problem of colon cancer OR a diagnosis and/or inactive problem of colon cancer history during or before any of the office visit encounters with the EP during the reporting period represented by the following ICD-9 codes:
--Colon cancer: 153.0, 153.1, 153.2, 153.3, 153.4, 153.5, 153.6, 153.7, 153.8, 153.9
--Colon cancer history: V10.05

MU searches V CPT for a procedure result of colon cancer stage III during or before any of the office visit encounters with the EP during the reporting period represented by the CPT code : 3388F.

Numerator Logic:
MU searches PRESCRIPTION  for active or expired colon cancer chemotherapy medications during the reporting measurement period defined by the NDC codes in the BGPMU COLON CANCER CHEMO NDCS taxonomy.

Exclusion Logic:
Patients are excluded if any of the following are found on or before any of the office visit encounters with the EP during the reporting period:

1. MU searches PATIENT ALLERGIES for an allergy or intolerance to, or adverse effect from, the following colon cancer chemotherapy medications: Aminoglutethimide, Anastrozole, Capecitabine, Exemestane, Fluorouracil and Leucovorin .

2. MU searches V POV and PROBLEM for a diagnosis and/or active problem of any of the following represented by the applicable ICD-9 codes:
--Metastatic sites common to colon cancer: 197.7
--Acute renal insufficiency: 593.9
--Neutropenia: 288.00, 288.02, 288.03, 288.04, 288.09, 289.53
--Leukopenia: 288.50, 288.59

3. MU searches V HEALTH FACTOR for ECOG performance status-poor represented by the following codes : ECOG 2 - UNABLE TO WORK, ECOG 3 - LIMITED SELF CARE, and ECOG 4 - COMPLETELY DISABLED.

4. MU searches PATIENT REFUSALS FOR SERVICE/NMI for a REF (refused) or NMI (not medically indicated) to colon cancer chemotherapy defined by the NDC codes in the BGPMU COLON CANCER CHEMO NDCS taxonomy.

**Patient List Definition**

Patients 18+ with Stage IIIA through IIIC colon cancer who had at least 2 office visit encounters with the EP during the reporting period, and who were referred for adjuvant chemotherapy, prescribed adjuvant chemotherapy, or have previously

received adjuvant chemotherapy during or before the latest office encounter with the EP during the reporting period, if any.

### 1.1.3.37  Oncology Breast Cancer: Hormonal Therapy (NQF 0387)

**Denominators**

Female patients 18+ with at least 2 office visit encounters with the EP during the reporting period AND a diagnosis of Stage IC–IIIC, ER or PR positive breast cancer during or before any of these encounters.

**Numerators**

Female patients who were prescribed tamoxifen or aromatase inhibitor therapy during the measurement period.

**Exclusion**

Patients who meet any of the following conditions on or before the encounter dates:
--Allergy or intolerance to, or adverse effects from, tamoxifen or aromatase inhibitor therapy
--Active medication: gonadotropin-releasing hormone analogue
--Had any of the following procedures:
  --Bilateral oophorectomy
  --Radiation therapy
  --Chemotherapy
--Diagnosis of metastatic sites common to breast cancer
--Patients who were not given tamoxifen or aromatase inhibitor therapy for patient, medical or system reasons

**Definitions**

Denominator Logic:
Age is calculated as of the end of the reporting period to determine if the patient reached an age of 18 years or older during the reporting period.

MU searches PATIENT for SEX = FEMALE.

MU searches VISIT for at least 2 office visit encounters with the EP during the reporting period represented by the following CPT codes: 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215.

MU searches V POV and PROBLEM for a diagnosis and/or active problem of breast cancer OR a diagnosis and/or inactive problem of breast cancer history during or before any of the office visit encounters with the EP during the reporting period represented by the following ICD-9 codes:
--Breast cancer: 174.0, 174.1, 174.2, 174.3, 174.4, 174.5, 174.6, 174.8, 174.9
--Breast cancer history: V10.3

MU searches V CPT for a procedure result of breast cancer stage IC-IIIC during or before any of the office visit encounters with the EP during the reporting period represented by the following CPT codes: 3372F, 3374F, 3376F, 3378F .

MU searches V POV for a procedure result of breast cancer ER or PR positive during or before any of the office encounters with the EP during the reporting period represented by the ICD-9 code V86.0 .

Numerator Logic:
MU searches PRESCRIPTION for active or expired tamoxifen or AI therapy medications during the reporting period defined by the NDC codes in the BGPMU TAMOXIFEN AROMATASE NDCS taxonomy.

Exclusion Logic:
Patients are excluded if any of the following are found on or before any of the office visit encounter dates with the EP during the reporting period:

1. MU searches PATIENT ALLERGIES for an allergy or intolerance to, or adverse effects from, tamoxifen or aromatase inhibitor therapy.

2. MU searches PRESCRIPTION for active or expired gonadotropin-releasing hormone analogue medications defined by the NDC codes in the BGPMU GONODOTROPIN NDCS taxonomy.

3. MU searches V CPT for any of the following procedures represented by the applicable CPT codes:
--Bilateral oophorectomy: 58720, 58940, 58943, 58950, 58951, 58952, 58953, 58954, 58956
--Radiation therapy: 77427, 77435, 77470
--Chemotherapy: 96401, 96402, 96405, 96406, 96409, 96411, 96413, 96415, 96416, 96417, 96420, 96422, 96423, 96425, 96440, 96445, 96450, 96521, 96522, 96523, 96542, 96549

4. MU searches V POV and PROBLEM for a diagnosis and/or active problem of metastatic sites common to breast cancer represented by ICD-9 codes: 197.0, 197.7, 198.3, 198.5.

5. MU searches PATIENT REFUSALS FOR SERVICE/NMI for a REF (refused) or NMI (not medically indicated) for tamoxifen or AI therapy defined by the NDC codes in the BGPMU TAMOXIFEN AROMATASE NDCS taxonomy.

**Patient List Definition**

Patients 18+ with at least 2 office encounters with the EP during the reporting period AND who had Stage IC–IIIC, ER or PR positive breast cancer during or before any of these encounters AND who were prescribed tamoxifen or aromatase inhibitor (AI) therapy during the reporting period, if any.

### 1.1.3.38   Prostate Cancer Low Risk: Avoidance of Bone Scan Overuse (NQF 0389)

**Denominator**

Patients with at least 1 office visit encounter with the EP during the reporting period with an active diagnosis of prostate cancer before or during the reporting period AND who had a prostate cancer treatment during the reporting period AND who had all of the following before or simultaneously to the prostate cancer treatment:
–-Procedure results of AJCC cancer stage low risk recurrence
--Prostate specific antigen test result of <=10 mg/dL
--Gleason score result <=6

**Numerator**

Patients who did not have a diagnostic bone scan study performed on or after the date of the prostate cancer diagnosis.

**Exclusions**

Patients who meet any of the following conditions after or simultaneous to the date of the prostate cancer diagnosis:
--Active diagnosis of pain related to prostate cancer
--Salvage therapy procedure
--Diagnostic bone scan study performed for other medical reason

**Definitions**

Denominator Logic:
MU searches VISIT for at least 1 office visit encounter with the EP during the reporting period represented by the following CPT codes: 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215.

MU searches V POV and PROBLEM for a diagnosis and/or active problem of prostate cancer during or before the reporting period represented by the ICD-9 code 185.

MU searches V CPT for a prostate cancer treatment procedure performed during the reporting period represented by the following CPT codes: 55810, 55812, 55815, 55840, 55842, 55845, 55866, 55873, 77427, 77776, 77777, 77778, 77787.

MU searches V CPT for a CPT code of 3271F representing AJCC cancer stage low-risk recurrence prostate cancer before or simultaneously to the prostate cancer treatment.

MU searches V LAB for a prostate-specific antigen test result <=10 mg/dL AND a Gleason Score test result <= 6 before or simultaneously to the prostate cancer treatment represented by the following:
--Prostate-specific antigen test CPT codes: 84152, 84153, 84154
--Prostate-specific antigen test LOINC codes: 2857-1, 10508-0, 10886-0, 12841-3, 14120-0, 15323-9, 15324-7, 15325-4, 19195-7, 19197-3, 19198-1, 19199-9, 19200-5, 19201-3, 19203-9, 19204-7, 19205-4, 19206-2, 33667-7, 34611-4, 35741-8

--Gleason score LOINC code: 35266-6

Numerator Logic:
Patients that meet the following are not counted in the numerator:

MU searches RAD/NUC MED PATIENT and V RADIOLOGY for a bone scan diagnostic study performed after the diagnosis of prostate cancer represented by the following CPT codes: 78300, 78305, 78306, 78315, 78320, 78350, 78351.

Exclusion Logic:
Patients are excluded if any of the following are found on or after the date of the prostate cancer diagnosis:

1. MU searches V POV and PROBLEM for a diagnosis and/or active problem of pain related to prostate cancer represented by ICD-9 codes: 338.3, 724.1, 724.5, 724.6, 724.79, 733.90, 786.50, 786.59, 789.00, V76.44, V84.03.

2. MU searches V CPT for salvage therapy performed after the diagnosis of prostate cancer represented by the following CPT codes: 55860, 55862, 55865, 55875, 55876.

3. MU searches V CPT for a tracking code of 3269F representing that a bone scan was performed for a reason other than prostate cancer.

**Patient List Definition**

Patients with an active diagnosis of prostate cancer before or during the reporting period who had a prostate cancer treatment during the reporting period AND who had all of the following before or simultaneously to the prostate cancer treatment:
–-Procedure results of AJCC cancer stage low-risk recurrence
--Prostate-specific antigen test result of <=10 mg/dL
--Gleason score test result of <=6
AND who did not have a diagnostic bone scan study performed on or after the date of the prostate cancer treatment, if any.

# 1.2      Hospital Measures

## 1.2.1      Emergency Department Measures

### 1.2.1.1      Median Elapsed Time from ED Arrival to ED Departure for Admitted ED Patients (ED-1) NQF0495

**Meaningful Use, Stage 1**

**Denominator**

Not Applicable.

**Numerator**

Median elapsed time from emergency department arrival to time of departure from the emergency room for patients admitted to the facility from the emergency department.  Numerators are stratified as follows:

A) All ED patients except patients with mental disorders or placed into observation status
B) ED patients placed into observation status
C) ED patients with a mental disorder

**Exclusions**

See each of the stratifications for exclusion criteria.

**Definition**

Numerator Logic:

Numerator A  – All ED Patients except Patients with Mental Disorder or Placed into Observation Status:

1.  MU searches for all hospitalization visits, defined with Service Category of "H" and finds matching ED patient records, defined with a clinic code of 30, in the Emergency Department (ER VISIT) file in which the elapsed time between ED Arrival Time (ER_VISIT.ADMISSION TIMESTAMP) and Inpatient Admission Time (VISIT.VISIT/ADMIT DATE&TIME) is less than 24 hours

2.  MU identifies valid and non-null ED Visit Time and ED Departure Time.  A record in which either value is null or not valid is excluded from the numerator.

3.  MU performs the calculation ED Departure Time minus the ED Visit Time and determines the value in minutes.  For each patient record, MU stores this value as the **Elapsed Time from ED Visit to ED Departure Time.**

4.  MU calculates the median value from the set of **Elapsed Time from ED Visit to ED Departure Time.**  If the set is empty, then MU reports a zero value.

Numerator B Logic – ED Patients Placed into Observation Status:

1. MU searches through the emergency department file (ER VISIT) during the report time period and then determines if a subsequent inpatient admission (PATIENT_MOVEMENT.DATE/TIME) occurred within 24 hours.MU identifies valid and non-null ED Visit Time and ED Departure Time.  A record in which either value is null or not valid is not considered.

2. MU identifies the set of patients who are placed into observation status.  Patients in observation status can be identified by checking the PATIENT MOVEMENT.WARD or WARD.SPECIALTY files for an observation specialty.

3. MU performs the calculation ED Departure Time minus the ED Visit Time and determines the value in minutes.  For each patient record, MU stores this value as the **Elapsed Time from ED Visit to ED Departure Time.**

4. MU calculates the median value from the set of **Elapsed Time from ED Visit to ED Departure Time.**  If the set is empty, then MU reports a zero value.

Numerator C Logic – ED Patients with a Mental Disorder:

1. MU searches through the emergency department file (ER VISIT) during the report time period and then determines if a subsequent inpatient admission (PATIENT_MOVEMENT.DATE/TIME) occurred within 24 hours.

2. MU identifies valid and non-null ED Visit Time and ED Departure Time.  A record in which either value is null or not valid is not considered.

3. MU identifies the set of patients who have a primary diagnosis code identifying them as having a mental disorder.  ICD-9 codes for mental disorders are identified with taxonomy "Mental Disorders".

4. MU performs the calculation Inpatient Admission Time minus the ED Visit Time and determines the value in minutes.  For each patient record, MU stores this value as the **Elapsed Time from ED Visit to ED Departure Time.**

5. MU calculates the median value from the set of **Elapsed Time from ED Visit to ED Departure Time.**  If the set is empty, then MU reports a zero value.

Exclusion Logic

Numerator A:

MU excludes patient records where the primary diagnosis contains a mental disorder ICD9 code or where the patient has been placed into observation status.   This is determined by:

--Mental Disorder ICD-9 primary diagnosis:  Taxonomy: "Mental Disorders"
OR
--Observation Status: Check the PATIENT MOVEMENT.WARD or
  WARD.SPECIALTY files for an observation specialty.  MU checks for the
  observation specialties:
  18 - Neurology Observation
  23 - Spinal Cord Injury Observation
  24 - Medical Observation
  36 - Blind Rehab Observation
  41 - Rehab Medicine Observation
  65 - Surgical Observation
  94 - Psychiatric Observation
  Numerator B:

**Patient List Description**

Elapsed times are stratified as follows: A) All ED patients excluding patients with
mental disorders or placed into observation status, B) ED patients placed into
observation status and C) ED patients with a mental disorder.

## 1.2.1.2    Median Time to ED Admission (ED-2) NQF00497
**Meaningful Use, Stage 1**
**Denominator**

Not Applicable

**Numerator**

Median elapsed time from emergency department admission decision time to time of
departure from the emergency room for patients admitted to the facility from the
emergency department.  Numerators are stratified as follows:

A) All ED patients except patients with mental disorders or placed into observation
   status
B) ED patients placed into observation status
C) ED patients with a mental disorder

**Exclusions**

See each of the stratifications for exclusion criteria.

**Definition**

Numerator Logic:

Numerator A – All ED Patients except Patients with Mental Disorder or Placed into
Observation Status:

1.  MU searches through the emergency department file (ER VISIT) during the report time period and then determines if a subsequent inpatient admission (PATIENT_MOVEMENT) occurred within 24 hours.

2.  MU identifies valid and non-null ED Admission Order Time (ORDER FILE – ORDER DIALOG FIELD) and ED Departure Time (ER VISIT: DEPARTURE TIME).  The order dialog (the 5th field) is checked to see if it contains the word ADMIT. If it is, this is the time used. A record in which either value is null or not valid is excluded from the numerator.

3.  MU performs the calculation ED Departure Time minus the ED Admission Order Time and determines the value in minutes.  For each patient record, MU stores this time as the **Elapsed Time from ED Admission Order Time to ED Departure Time.**

4.  MU calculates the median value from the set of **Elapsed Time from ED Admission Order Time to ED Departure Time.**  If the set is empty, then MU reports a zero value.

Numerator B Logic – ED Patients Placed into Observation Status:

1.  MU searches through the emergency department file (ER VISIT) during the report time period and then determines if a subsequent inpatient admission (PATIENT_MOVEMENT) occurred within 24 hours.

2.  MU identifies valid and non-null ED Admission Order Time (ORDER FILE – ORDER DIALOG FIELD) and ED Departure Time (ER VISIT: DEPARTURE TIME).  The order dialog (the 5th field) is checked to see if it contains the word ADMIT. If it is, this is the time used. A record in which either value is null or not valid is excluded from the numerator.

3.  MU identifies the set of patients who are placed into observation status.  Patients in observation status can be identified by checking the PATIENT MOVEMENT.WARD or WARD.SPECIALTY files for an observation specialty.

4.  MU performs the calculation ED Departure Time minus the ED Admission Decision Time and determine the value in minutes.  For each patient record, MU stores this time as the **Elapsed Time from ED Admission Order Time to ED Departure Time.**

5.  MU calculates the median value from the set of **Elapsed Time from ED Admission Order Time to ED Departure Time.**  If the set is empty, then MU reports a zero value.

Numerator C Logic – ED Patients with a Mental Disorder:

1.  MU searches through the emergency department file (ER VISIT) during the report time period and then determines if a subsequent inpatient admission (PATIENT_MOVEMENT) occurred within 24 hours.

2. MU identifies valid and non-null ED Admission Order Time (ORDER FILE – ORDER DIALOG FIELD) and ED Departure Time (ER VISIT: DEPARTURE TIME).  The order dialog (the 5th field) is checked to see if it contains the word ADMIT. If it is, this is the time used. A record in which either value is null or not valid is excluded from the numerator.

3.  MU identifies the set of patients who have a primary diagnosis code identifying them has having a mental disorder.  ICD9 codes for mental disorders are identified with taxonomy "Mental Disorders".

4.  MU performs the calculation ED Departure Time minus the ED Admission Order Time and determine the value in minutes.  For each patient record, MU stores this time as the **Elapsed Time from ED Admission Order Time to ED Departure Time.**

5.  MU calculates the median value from the set of **Elapsed Time from ED Admission Order Time to ED Departure Time.**  If the set is empty, then MU reports a zero value.

Exclusion Logic A:

MU excludes patient records where the primary diagnosis contains a mental disorder ICD9 code or where the patient has been placed into observation status.  This is determined by:
--Mental Disorder ICD-9 primary diagnosis:  Taxonomy: "Mental Disorders"
OR
--Observation Status:  Check the PATIENT MOVEMENT.WARD or WARD.SPECIALTY files for an observation specialty.  MU checks for the observation specialties:
18 - Neurology Observation
23 - Spinal Cord Injury Observation
24 - Medical Observation
36 - Blind Rehab Observation
41 - Rehab Medicine Observation
65 - Surgical Observation
94 - Psychiatric Observation

**Patient List Description**

Elapsed times are stratified as follows:

A) All ED patients excluding patients with mental disorders or placed into observation status,

B) ED patients placed into observation status, and

C) ED patients with a mental disorder.

## 1.2.2    Stroke Measures

### 1.2.2.1    Discharge on AntiThrombolytic Therapy (STK-2) NQF 0435

**Meaningful Use, Stage 1**

**Denominator**

Number of inpatient discharges for ischemic stroke patients.

**Numerator**

Number of inpatient discharges for ischemic stroke patients prescribed antithrombolytic therapy at hospital discharge.

**Exclusions**

The number of inpatient discharges for

- Patients under age 18
- Patients who had a Length of Stay greater than 120 Days
- Patients with Comfort Measures Only documented
- Patients enrolled in Clinical Trial
- Patients admitted for Elective Carotid Intervention.  NOTE: Elective Surgery is assumed to be the admit reason.
- Patients discharged/transferred to another hospital for inpatient care
- Patients who left against medical advice or discontinued care
- Patients who expired
- Patients discharged/transferred to a federal healthcare facility
- Patients discharged/transferred to hospice
- Patients with a documented Reason for Not Prescribing Antithrombolytic Therapy at Discharge

**Definition**

Denominator Logic:

Age is calculated as of the beginning of the reporting period.

MU searches for the inpatient (VISIT) file with a service category equal to "H" during the reporting period.

MU searches V POV for primary diagnosis of ischemic stroke with documented atrial fibrillation/flutter for the inpatient visit.  This is determined by meeting the criteria for ischemic stroke, primary diagnosis, V POV Modifier, AND any of the criteria for atrial fibrillation/flutter shown below.

--Ischemic Stroke ICD-9 codes: 433.0, 433.00, 433.01, 433.1, 433.10, 433.11, 433.2, 433.20, 433.21, 433.3, 433.30, 433.31, 433.8, 433.80, 433.81, 433.9, 433.90, 433.91, 434.0, 434.00, 434.01, 434.1, 434.10, 434.11, 434.9, 434.90, 434.91, 435.8, 435.9, 436,
AND
--Diagnosis is Primary,
AND
--V POV Modifier, if present, is not equal to: C (Consider), D (Doubtful), M (Maybe, Possible, Perhaps), O (Rule Out), P (Probable) or S (Suspect, Suspicious), AND
--Atrial Fibrillation/Flutter History and Finding Diagnosis ICD-9 codes: 427.31, 427.32,
OR
--Atrial Fibrillation/Flutter Procedure CPT codes: 93610, 33254, 33255, 33256, 33257, 33258, 33265, 33266, 33206, 33208, 33212, 33215,
OR
--Atrial Fibrillation/Flutter Procedure ICD-9 codes: 37.33, 37.34, 37.37, 37.72, 37.73, 37.76.

Numerator Logic:

MU searches V MEDICATION for patients who were prescribed stroke anticoagulation therapy at hospital discharge.  Please refer to the BGPMU ANTICOAG NDCS taxonomy for a list of the NDC codes.

Exclusion Logic:

MU searches the Inpatient (VISIT) file and excludes patient discharge records which have attributes which match any of the following criteria:

- Patients with age < 18, calculated as:  Admission Date minus Birthdate.

- Patients who have a Length of Stay > 120 days, calculated as:  Discharge Date/Time minus Admission Date/Time.

- Patients with Comfort Measures Only documented in the PROBLEM List (active problems only) or during the visit in the V POV and V CPT file.  This is determined by:
--Palliative Care Measures Only – ICD-9 code: V66.7, AND
--V POV Modifier, if present, is not equal to: C (Consider), D (Doubtful), M (Maybe, Possible, Perhaps), O (Rule Out), P (Probable) or S (Suspect, Suspicious), OR
--Palliative Care Measures Only – CPT code: 1152F

- Patients enrolled in a Clinical Trial documented in the PROBLEM List (active problems only) or during the visit in the V POV file.  This is determined by:
--ICD-9 code: V70.7, AND

--V POV Modifier, if present, is not equal to: C (Consider), D (Doubtful), M (Maybe, Possible, Perhaps), O (Rule Out), P (Probable) or S (Suspect, Suspicious)

- Patients admitted for Elective Carotid Intervention. MU searches for carotid intervention documented during the visit in the V PROCEDURE file with an elective admission.  This is determined by:
--Carotid Intervention Procedure ICD-9 codes: 00.61, 00.63, 38.02, 38.12, 38.22, 38.3, 38.42, 88.41, AND
--Admission Type-UB92 code: 3 (ELECTIVE ADMISSION).

- Patients discharged/transferred to another hospital for inpatient care, to a federal healthcare facility, to hospice, or who left against medical advice or discontinued care.  This is determined by:
--Discharge Status-UB92 codes: 02 Transferred Gen Hospital, 03 Transferred SNF, 04 Transferred ICF, 05 Transferred Other, 07 Left AMA, 43 Transferred Federal Hospital, 50 Discharged to Hospice-Home, or 51 Discharged to Hospice Facility.

- Patients who expired.  This is determined by any of the following:
--Discharge Status-UB92 codes: 20 Expired, 40 Expired at Home (Hospice Only), 41 Expired SNF, ICF, FS Hospice, or 42 Expired, Place Unknown.
--Date/Time of Death <= Discharge Date.

- Patients with a documented reason for not prescribing anticoagulation therapy at discharge.  This is determined by any of the following:
--Procedure CPT codes: 4012F, 4300F, 99363, 99364 documented on or within the past 180 days of the discharge date.
--Refusal: REF or NMI refusal of any stroke anticoagulation medication included in taxonomy BGPMU ANTICOAG NDCS documented during the visit.

**Patient List Definition**

Ischemic stroke patients with atrial fibrillation/flutter who are prescribed anticoagulation therapy at hospital discharge, if any

### 1.2.2.2    Anticoagulation Therapy (STK-3) NQF0436
**Meaningful Use, Stage 1**
**Denominators**

Number of inpatient discharges for ischemic stroke patients with documented atrial fibrillation/flutter.

**Numerators**

Number of inpatient discharges for ischemic stroke patients prescribed antithrombolytic therapy at hospital discharge.

**Exclusions**

Number of inpatient discharges for
--Patients with Age < 18
--Patients with Length of Stay > 120 Days

--Patients with Comfort Measures Only documented
--Patients enrolled in Clinical Trial
--Patients admitted for Elective Carotid Intervention.  NOTE: Elective Surgery is assumed to be the admit reason.
--Patients discharged/transferred to another hospital for inpatient care
--Patients who left against medical advice or discontinued care
--Patients who expired
--Patients discharged/transferred to a federal healthcare facility
--Patients discharged/transferred to hospice
--Patients with a documented Reason for Not Prescribing Anticoagulation Therapy**.**

**Definition**

Denominator Logic:

Age is calculated as of the beginning of the reporting period.

MU searches for at least one outpatient encounter with the EP during the reporting period represented by one of the following:
--CPT codes: 90802, 90804, 90805, 90806, 90807, 90808, 90809, 97001, 97003, 97802, 97803, 98960, 99201, 99202, 99203, 99204, 99205, 99211, 99212, 99213, 99214, 99215, 99324, 99325, 99326, 99327, 99328, 99334, 99335, 99336, 99337, 99341, 99342, 99343, 99344, 99345, 99347, 99348, 99349, 99350
--HCPCS codes: D7140, D7210, G0101, G0108, G0270

Numerator Logic:

MU searches V MEASUREMENT for patient with recent height and weight recorded within 6 months of the encounter and if found, the BMI is calculated.  If the BMI does not fall within the normal/healthy range, MU searches V POV and V CPT for a:
--Follow up plan for BMI management represented by any of the following documented on or within 6 months prior to the encounter date.
  --CPT codes: 43644, 43645, 43770, 43771, 43772, 43773, 43774, 43842, 43843, 43845, 43846, 43847, 43848, 97804, 98961, 98962, 99078
  --HCPCS codes: G8417, S9449, S9451, S9452, S9470
  --ICD-9 code: V65.3
OR
--A dietary consultation order represented by the CPT code: V65.3.

Exclusion Logic:

The patient is excluded from the denominator if patient meets any of the exclusion criteria:
  -MU searches the V POV file for any of the following:
   --A terminal illness documented on or within 6 months prior to the encounter date, (ICD-9 code V66.7)

--An active diagnosis of pregnancy documented during an outpatient encounter represented by the applicable ICD-9 codes: V22.0, V22.1, V22.2, V23.0, V23.1, V23.2, V23.3, V23.4, V23.41, V23.49, V23.5, V23.7, V23.8, V23.81, V23.82, V23.83, V23.84, V23.89, V23.9

-MU searches the PCC Refusal file for a refusal of height and weight in V MEASUREMENT documented on or within 6 months prior to the outpatient encounter, represented by the following codes: REF (refused), NMI (not medically indicated), or UAS (unable to screen).

**Patient List Definition**

Ischemic stroke patients 18+ with atrial fibrillation/flutter who are prescribed anticoagulation therapy at hospital discharge, if any.

## 1.2.2.3    Thrombolytic Therapy (STK-4) NQF 0437

**Meaningful Use, Stage 1**

**Denominators**

Number of inpatient discharges for acute ischemic stroke patients whose time of arrival is within 2 hours (< =120 minutes) of time last known well.

**Numerators**

Number of inpatient discharges for acute ischemic stroke patients for whom IV thrombolytic therapy was initiated at this hospital within 3 hours (<= 180 minutes) of time last known well.

**Exclusions**

Number of inpatient discharges for:
- Patients with Age < 18
- Patients with Length of Stay > 120 Days
- Patients enrolled in Clinical Trial
- Patients admitted for Elective Carotid Intervention. NOTE: Elective Surgery is assumed to be the admit reason.
- Time last known well to arrival in the emergency department greater than (>) 2 hours [120 minutes]
- Patients with a documented Reason for Not Initiating IV Thrombolytic

**Definition**

Denominator Logic:

MU searches for the inpatient (VISIT) FILE with a service category equal to "H" during the reporting period.

MU searches V POV for primary diagnosis of ischemic stroke.  This is determined by meeting the criteria for ischemic stroke, primary diagnosis, and V POV Modifier shown below.
--Ischemic Stroke ICD-9 codes:  433.0, 433.00, 433.01, 433.1, 433.10, 433.11, 433.2, 433.20, 433.21, 433.3, 433.30, 433.31, 433.8, 433.80, 433.81, 433.9, 433.90, 433.91,

434.0, 434.00, 434.01, 434.1, 434.10, 434.11, 434.9, 434.90, 434.91, 435.8, 435.9, 436,
AND
--Diagnosis is Primary, AND
--V POV Modifier, if present, is not equal to: C (Consider), D (Doubtful), M (Maybe, Possible, Perhaps), O (Rule Out), P (Probable) or S (Suspect, Suspicious).

Numerator Logic:

MU searches V MEASUREMENT for documentation of the patient's LAST KNOWN WELL and searches BCMA MEDICATION LOG for patients for whom IV thrombolytic therapy was initiated at this hospital within 3 hours (<=180 minutes) of time last known well, calculated as: Medication Administered Date/Time minus LAST KNOWN WELL result value.  This is determined by:
--Stroke Thrombolytic (t-PA) Medication NDC codes: 50242-0044-06, 50242-0044-13, 50242-0085-25, 50242-0085-27, AND
--IV Administration Route IV Flag: Yes, AND
--Medication Administered Date/Time minus Last Known Well is <=180 minutes.

Exclusion Logic:

MU searches the Inpatient (VISIT) file and excludes patient discharge records which have attributes which match any of the following criteria:
- Patients with age < 18, calculated as:  Admission Date minus Birthdate.

- Patients who have a Length of Stay > 120 days, calculated as:  Discharge Date/Time minus Admission Date/Time.

- Patients enrolled in a Clinical Trial documented in the PROBLEM List (active problems only) or during the visit in the V POV file.  This is determined by:
--ICD-9 code: V70.7, AND
--V POV Modifier, if present, is not equal to: C (Consider), D (Doubtful), M (Maybe, Possible, Perhaps), O (Rule Out), P (Probable) or S (Suspect, Suspicious)

- Patients admitted for Elective Carotid Intervention. MU searches for carotid intervention documented during the visit in the V PROCEDURE file with an elective admission.  This is determined by:
--Carotid Intervention Procedure ICD-9 codes: 00.61, 00.63, 38.02, 38.12, 38.22, 38.3, 38.42, 88.41, AND
--Admission Type-UB92 code: 3 (ELECTIVE ADMISSION).

- Time last known well of the patient to arrival in the emergency department is greater than 2 hours.  MU searches V MEASUREMENT for documentation of the patient's LAST KNOWN WELL and searches ER VISIT to determine if a patient's time last known well to arrival in the emergency department is greater than 2 hours.

This is determined by:
--Emergency Department Patient Class Clinic Code: 30, AND
--Admission Type-UB92 Code: 1 (EMERGENCY), AND
--ER Arrival Date/Time minus V Measurement LAST KNOWN WELL > 120 minutes.

- Patients with a documented Reason for Not Initiating IV Thrombolytic. This is determined by any of the following documented during the visit:
--Procedure CPT codes: 4012F, 4300F, 99363, 99364 documented on or within the past 180 days of the discharge date, OR
--Problem or Diagnosis ICD-9 code: v58.61 documented on or within the past 180 days of the discharge date, OR
--Stroke Thrombolytic (t-PA) Medication NDC codes: 50242-0044-06, 50242-0044-13, 50242-0085-25, 50242-0085-27, AND
--IV Administration Route IV Flag: Yes, AND
--Refusal: REF or NMI refusal of any stroke thrombolytic (t-PA) medication documented during the visit.

**Patient List Definition**

Acute ischemic stroke patients who arrive at this hospital within 2 hours of time last known well and for whom IV t-PA was initiated at this hospital within 3 hours of time last known well, if any.

## 1.2.2.4    Antithrombolytic Therapy by End of Hospital Day 2 (STK-5) NQF 0438

**Meaningful Use, Stage 1**

**Denominators**

Number of inpatient discharges for ischemic stroke patients

**Numerators**

Number of inpatient discharges for ischemic stroke patients who had antithrombolytic therapy administered by end of hospital day 2.

**Exclusions**

Number of inpatient discharges for
--Patients with Age < 18
--Patients with Length of Stay > 120 Days
--Patients Discharged by End of Hospital Day 2 (duration of stay)
--Patients with Comfort Measures Only documented on day of or day after arrival
--Patients enrolled in Clinical Trial
--Patients admitted for Elective Carotid Intervention. NOTE: Elective Surgery is assumed to be the admit reason.
--Patients with IV OR IA Thrombolytic (t-PA) Therapy Administered at This Hospital or Within 24 Hours Prior to Arrival
--Patients with a documented Reason For Not Administering Antithrombolytic Therapy By End Of Hospital Day 2

**Definition**

Denominator Logic:

Age is calculated as of the beginning of the reporting period.

MU searches for the inpatient (VISIT) file with a service category equal to "H" during the reporting period.

MU searches V POV for primary diagnosis of ischemic stroke for the inpatient visit. This is determined by meeting the criteria for ischemic stroke, primary diagnosis, and V POV Modifier shown below.
--Ischemic Stroke ICD-9 codes: 433.0, 433.00, 433.01, 433.1, 433.10, 433.11, 433.2, 433.20, 433.21, 433.3, 433.30, 433.31, 433.8, 433.80, 433.81, 433.9, 433.90, 433.91, 434.0, 434.00, 434.01, 434.1, 434.10, 434.11, 434.9, 434.90, 434.91, 435.8, 435.9, 436, AND
--Diagnosis is Primary, AND
--V POV Modifier, if present, is not equal to: C (Consider), D (Doubtful), M (Maybe, Possible, Perhaps), O (Rule Out), P (Probable) or S (Suspect, Suspicious)

Numerator Logic:

MU searches BCMA MEDICATION LOG file for patients who had stroke antithrombolytic therapy administered by end of hospital day 2, calculated as Medication Administered Date/Time minus Arrival Date/Time is <=2 days. Please refer to the BGPMU ANTITHROMBOLYTIC NDCS taxonomy for a list of the NDC codes.

Exclusion Logic
MU searches the Inpatient (VISIT) file and excludes patient discharge records which have attributes which match any of the following criteria:

- Patients with age < 18, calculated as:  Admission Date minus Birthdate.

- Patients who have a Length of Stay > 120 days, calculated as:  Discharge Date/Time minus Admission Date/Time.

- Patients discharged by end of hospital day 2 (duration of stay), calculated as: Discharge Date minus Arrival Date/Time is < 2 days.

- Patients with Comfort Measures Only documented in the PROBLEM List (active problems only) or on day of or day after arrival in the V POV and V CPT file.  This is determined by:
--Palliative Care Measures Only – ICD-9 code: V66.7, AND

--V POV Modifier, if present, is not equal to: C (Consider), D (Doubtful), M (Maybe, Possible, Perhaps), O (Rule Out), P (Probable) or S (Suspect, Suspicious), OR
--Palliative Care Measures Only – CPT code: 1152F

- Patients enrolled in a Clinical Trial documented in the PROBLEM List (active problems only) or during the visit in the V POV file.  This is determined by:
--ICD-9 code: V70.7, AND
--V POV Modifier, if present, is not equal to: C (Consider), D (Doubtful), M (Maybe, Possible, Perhaps), O (Rule Out), P (Probable) or S (Suspect, Suspicious)

- Patients admitted for Elective Carotid Intervention. MU searches for carotid intervention documented during the visit in the V PROCEDURE file with an elective admission.  This is determined by:
--Carotid Intervention Procedure ICD-9 codes: 00.61, 00.63, 38.02, 38.12, 38.22, 38.3, 38.42, 88.41, AND
--Admission Type-UB92 code: 3 (ELECTIVE ADMISSION).

- MU searches BCMA MEDICATION LOG file for patients with IV OR IA Thrombolytic (t-PA) Therapy Administered at this hospital or within 24 hours prior to arrival, calculated as: Medication Administered Date/Time minus Arrival Date/Time. This is determined by:
--Stroke Thrombolytic (t-PA) Medication NDC codes: 50242-0044-06, 50242-0044-13, 50242-0085-25, 50242-0085-27.
--IV Administration Route IV Flag: Yes.
--Medication Administered Date/Time: BCMA MEDICATION LOG.

- Patients with a documented Reason for Not Administering Antithrombolytic Therapy by End of Hospital Day 2, calculated as: Medication Administered Date/Time minus Arrival Date/Time.  This is determined by any of the following documented during the visit:
--Procedure CPT codes: 4012F, 4300F, 99363, 99364 documented on or within the past 180 days of the discharge date.
--Refusal: REF or NMI refusal of any stroke antithrombolytic medication included in taxonomy BGPMU ANTITHROMBOLYTIC NDCS documented <=48 hours of the arrival date/time.

**Patient List Definition**

Ischemic stroke patients administered antithrombolytic therapy by the end of hospital day 2, if any.

### 1.2.2.5    Discharge on Statin Medication (STK-6) NQF 0439

**Meaningful Use, Stage 1**

**Denominators**

Number of inpatient discharges for ischemic stroke patients with an LDL cholesterol >= 100, or LDL not measured, or who were on a lipid-lowering medication prior to hospital arrival.

**Numerators**

Number of inpatient discharges for patients prescribed statin medication at hospital discharge

**Exclusions**

Number of inpatient discharges for
--Patients with age < 18
--Patients with length of stay > 120 days
--Patients Comfort Measures Only documented
--Patients enrolled in Clinical Trial
--Patients admitted for Elective Carotid intervention. NOTE: Elective Surgery is assumed to be the admit reason.
--Patients without Evidence of Atherosclerosis
--Patients discharged/transferred to another hospital for inpatient care
--Patients who left against medical advice or discontinued care
--Patients who expired
--Patients discharged/transferred to a federal healthcare facility
--Patient discharged/transferred to a hospice
--Patients with a Reason for Not Prescribing Statin Medication at Discharge

**Definition**

Denominator Logic:

Age is calculated as of the beginning and as of the end of the reporting period to determine if the patient turned two years of age during this period.

To be included in the denominator, the patient must meet ALL conditions shown below.

1.  MU searches for the inpatient (VISIT) file with a service category equal to "H" during the reporting period.

2.  MU searches V POV for primary diagnosis of ischemic stroke for the inpatient visit.  This is determined by meeting the criteria for ischemic stroke, primary diagnosis, AND V POV Modifier shown below.
--Ischemic Stroke ICD-9 codes:  433.0, 433.00, 433.01, 433.1, 433.10, 433.11, 433.2, 433.20, 433.21, 433.3, 433.30, 433.31, 433.8, 433.80, 433.81, 433.9, 433.90, 433.91, 434.0, 434.00, 434.01, 434.1, 434.10, 434.11, 434.9, 434.90, 434.91, 435.8, 435.9, 436, AND
--Diagnosis is Primary, AND

--V POV Modifier, if present, is not equal to: C (Consider), D (Doubtful), M (Maybe, Possible, Perhaps), O (Rule Out), P (Probable) or S (Suspect, Suspicious)

3.  MU searches V LAB and V MEDICATION for any of the following:
--LDL cholesterol >= 100 within the first 48 hours of hospital arrival date/time or within 30 days prior to hospital arrival date/time, OR
--LDL not measured within the first 48 hours of hospital arrival date/time or within 30 days prior to hospital arrival date/time, OR
--Who were on a lipid-lowering medication prior to hospital arrival.

LDL Cholesterol and lipid-lowering medication are defined with:
--LDL Cholesterol Laboratory Test LOINC codes: 13457-7, 18261-8, 18262-6, 2089-1,
49132-4.
--Stroke Lipid Lowering Agent NDC: BGPMU LIPID LOWERING NDCS

Numerator Logic:

MU searches V MEDICATION for patients prescribed stroke statin medication at hospital discharge.  Please refer to the BGPMU STATIN NDCS taxonomy for a list of the NDC codes.

Exclusion Logic:

MU searches the Inpatient (VISIT) file and excludes patient discharge records which have attributes which match any of the following criteria:

- Patients with age < 18, calculated as:  Admission Date minus Birthdate.

- Patients who have a Length of Stay > 120 days, calculated as:  Discharge Date/Time minus Admission Date/Time.

- Patients with Comfort Measures Only documented in the PROBLEM List (active problems only) or during the visit in the V POV and V CPT file.  This is determined by:
--Palliative Care Measures Only – ICD-9 code: V66.7, AND
--V POV Modifier, if present, is not equal to: C (Consider), D (Doubtful), M (Maybe, Possible, Perhaps), O (Rule Out), P (Probable) or S (Suspect, Suspicious), OR
--Palliative Care Measures Only – CPT code: 1152F

- Patients enrolled in a Clinical Trial documented in the PROBLEM List (active problems only) or during the visit in the V POV file.  This is determined by:
--ICD-9 code:  V70.7, AND
--V POV Modifier, if present, is not equal to: C (Consider), D (Doubtful), M (Maybe, Possible, Perhaps), O (Rule Out), P (Probable) or S (Suspect, Suspicious)

- Patients admitted for Elective Carotid Intervention. MU searches for carotid intervention documented during the visit in the V PROCEDURE file with an elective admission.  This is determined by:
--Carotid Intervention Procedure ICD-9 codes: 00.61, 00.63, 38.02, 38.12, 38.22, 38.3, 38.42, 88.41, AND.
--Admission Type-UB92 code: 3 (ELECTIVE ADMISSION).

- Patients without evidence of Atherosclerosis.  MU searches V POV and PROBLEM List (active problems only) for any of the codes shown below documented prior to the discharge date. If none of the codes are found, the patient is treated as an exclusion and will not be included in the denominator.  If any of the codes are found, the patient is not excluded and will be included in the denominator.
--Evidence of Atherosclerosis ICD-9 codes: [250.70 & 443.81], [250.80 & 443.9], [250.81 & 443.89], [414.06 & 996.83], [434.91 & 784.51], [414.00 & 997.1], 342.80, 414.01, 414.05, 414.9, 416.0, 433.10, 437.0, 440.0, 440.1, 440.20, 440.29, 440.8, 440.9, 442.9, 444.21, 444.22, 447.5, 459.89, 746.85, AND
--V POV Modifier, if present, is not equal to: C (Consider), D (Doubtful), M (Maybe, Possible, Perhaps), O (Rule Out), P (Probable) or S (Suspect, Suspicious)

- Patients discharged/transferred to another hospital for inpatient care, to a federal healthcare facility, to hospice, or who left against medical advice or discontinued care.  This is determined by:
--Discharge Status-UB92 codes: 02 Transferred Gen Hospital, 03 Transferred SNF, 04 Transferred ICF, 05 Transferred Other, 07 Left AMA, 43 Transferred Federal Hospital, 50 Discharged to Hospice-Home, or 51 Discharged to Hospice Facility.

- Patients who expired.  This is determined by any of the following:
--Discharge Status-UB92 codes: 20 Expired, 40 Expired at Home (Hospice Only), 41 Expired SNF, ICF, FS Hospice, or 42 Expired, Place Unknown.
--Date/Time of Death <= Discharge Date.

- Patients with a documented reason for not prescribing statin medication at discharge.  This is determined by any of the following documented during the visit:
--Refusal: REF or NMI refusal of any stroke statin medication included in taxonomy BGPMU STATIN NDCS documented during the visit.

**Patient List Description**

Ischemic stroke patients with LDL >= 100 mg/dL, or LDL not measured, or, who were on a lipid-lowering medication prior to hospital arrival who are prescribed statin medication at hospital discharge, if any.

## 1.2.2.6    Stroke Education (STK-8) NQF0440

**Meaningful Use, Stage 1**

**Denominators**

> Number of inpatient discharges for ischemic stroke or
> hemorrhagic stroke patients discharged home.

**Numerators**

> Number of inpatient discharges for ischemic or hemorrhagic stroke patients with documentation that they or their caregivers were given educational material addressing all of the following:
> --Activation of emergency medical system
> --Need for follow-up after discharge
> --Medications prescribed at discharge
> --Risk factors for stroke
> --Warning signs for stroke.

**Exclusions**

> Number of inpatient discharges for
> --Patients with Age < 18
> --Patients with Length of Stay > 120 Days
> --Patients with Comfort Measures Only documented
> --Patients enrolled in Clinical Trial
> --Patients admitted for Elective Carotid Intervention. NOTE: Elective Surgery is assumed to be the admit reason

**Definitions**

> Denominator Logic:
>
> Age is calculated at the beginning of the reporting period.
>
> To be included in the denominator, the patient must meet ALL conditions shown below.
>
> 1. MU searches for the inpatient (VISIT) file with a service category equal to "H" during the reporting period.
> 2. MU searches V POV for primary diagnosis of ischemic or hemorrhagic stroke for the inpatient visit.  This is determined by meeting the criteria for ischemic or hemorrhagic stroke, primary diagnosis, AND V POV modifier shown below.
>    --Ischemic Stroke ICD-9 codes:  433.0, 433.00, 433.01, 433.1, 433.10, 433.11, 433.2, 433.20, 433.21, 433.3, 433.30, 433.31, 433.8, 433.80, 433.81, 433.9, 433.90, 433.91, 434.0, 434.00, 434.01, 434.1, 434.10, 434.11, 434.9, 434.90, 434.91, 435.8, 435.9, 436.
>    --Hemorrhagic Stroke ICD-9 codes: 430-432.99.
>    --Diagnosis is Primary
>    --V POV Modifier, if present, is not equal to: C (Consider), D (Doubtful), M (Maybe, Possible, Perhaps), O (Rule Out), P (Probable) or S (Suspect, Suspicious)

3.  MU searches PATIENT MOVEMENT for patients discharged to home care or self-care. This is determined by:
    --Discharge Status-UB92 codes: 01 DISCHARGED HOME, 06 UNDER CARE OF HOME HEALTH ORG.

Numerator Logic:

MU searches V CPT or V POV to see if the patient has had a breast cancer screening within 2 years of the reporting period end date.  The applicable codes for breast screening are:
--CPT codes: 76090, 76091, 76092, 77055, 77056, 77057
--HCPCS codes: G0202, G0204, G0206
--ICD-9 codes: 87.36, 87.37, V76.11, V76.12

Exclusion Logic
MU searches the Inpatient (VISIT) file and excludes patient discharge records which have attributes which match any of the following criteria:

- Patients with age < 18, calculated as:  Admission Date minus Birthdate.

- Patients who have a Length of Stay > 120 days, calculated as:  Discharge Date/Time minus Admission Date/Time.

- Patients with Comfort Measures Only documented in the PROBLEM List (active problems only) or during the visit in the V POV and V CPT file. This is determined by:
--Palliative Care Measures Only – ICD-9 code: V66.7, AND
--V POV Modifier, if present, is not equal to: C (Consider), D (Doubtful), M (Maybe, Possible, Perhaps), O (Rule Out), P (Probable) or S (Suspect, Suspicious), OR
--Palliative Care Measures Only – CPT code: 1152F

- Patients enrolled in a Clinical Trial documented in the PROBLEM List (active problems only) or during the visit in the V POV file. This is determined by:
--ICD-9 code:  V70.7, AND
--V POV Modifier, if present, is not equal to: C (Consider), D (Doubtful), M (Maybe, Possible, Perhaps), O (Rule Out), P (Probable) or S (Suspect, Suspicious)

- Patients admitted for Elective Carotid Intervention. MU searches for carotid intervention documented during the visit in the V PROCEDURE file with an elective admission. This is determined by:
--Carotid Intervention Procedure ICD-9 codes: 00.61, 00.63, 38.02, 38.12, 38.22, 38.3, 38.42, 88.41, AND
--Admission Type-UB92 code: 3 (ELECTIVE ADMISSION)

**Patient List Definition**

> Ischemic or hemorrhagic stroke patients or their caregivers who were given educational materials during the hospital stay addressing all of the following: activation of emergency medical system, need for follow-up after discharge, medications prescribed at discharge, risk factors for stroke, and warning signs and symptoms of stroke, if any.

## 1.2.2.7    Assessed for Rehabilitation (STK-10) NQF00441

**Meaningful Use, Stage 1**

**Denominators**

> Number of inpatient discharges for ischemic or hemorrhagic stroke patients.

**Numerators**

> Number of inpatient discharges for ischemic or hemorrhagic stroke patients assessed for or who received rehabilitation services.

**Exclusions**

> Number of inpatient discharges for
> --Patients with Age < 18
> --Patients with Length of Stay > 120 Days
> --Patients with Comfort Measures Only documented
> --Patients enrolled in Clinical Trial
> --Patients admitted for Elective Carotid Intervention. NOTE: Elective Surgery is assumed to be the admit reason.
> --Patients discharged/transferred to another hospital for inpatient care
> --Patients who left against medical advice or discontinued care
> --Patients who expired
> --Patients discharged/transferred to a federal healthcare facility
> --Patients discharged/transferred to hospice.

**Definitions**

> Denominator Logic:
>
> Age is calculated at the beginning of the reporting period.
>
> MU searches for the inpatient (VISIT) file with a service category equal to "H" during the reporting period.
>
> MU searches V POV for primary diagnosis of ischemic or hemorrhagic stroke for the inpatient visit.  This is determined by meeting the criteria for ischemic or hemorrhagic stroke, primary diagnosis, AND V POV modifier shown below.
> --Ischemic Stroke ICD-9 codes:  433.0, 433.00, 433.01, 433.1, 433.10, 433.11, 433.2, 433.20, 433.21, 433.3, 433.30, 433.31, 433.8, 433.80, 433.81, 433.9, 433.90, 433.91, 434.0, 434.00, 434.01, 434.1, 434.10, 434.11, 434.9, 434.90, 434.91, 435.8, 435.9, 436.
> --Hemorrhagic Stroke ICD-9 codes: 430-432.99.
> --Diagnosis is Primary

--V POV Modifier, if present, is not equal to: C (Consider), D (Doubtful), M (Maybe, Possible, Perhaps), O (Rule Out), P (Probable) or S (Suspect, Suspicious)

Numerator Logic:

```
MU searches V CPT for patients assessed for or who received
rehabilitation services during the reporting period. This is
determined by
--Assessed for Rehabilitation Services CPT code: 4079F.
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Exclusion Logic:

MU searches the Inpatient (VISIT) file and excludes patient records which have attributes which match any of the following criteria:

- Patients with age < 18, calculated as:  Admission Date minus Birthdate.

- Patients who have a Length of Stay > 120 days, calculated as:  Discharge Date/Time minus Admission Date/Time.

- Patients with Comfort Measures Only documented in the PROBLEM List (active problems only) or during the visit in the V POV and V CPT file.  This is determined by:
--Palliative Care Measures Only – ICD-9 code: V66.7, AND
--V POV Modifier, if present, is not equal to: C (Consider), D (Doubtful), M (Maybe, Possible, Perhaps), O (Rule Out), P (Probable) or S (Suspect, Suspicious), OR
--Palliative Care Measures Only – CPT code: 1152F

- Patients enrolled in a Clinical Trial documented in the PROBLEM List (active problems only) or during the visit in the POV file.  This is determined by:
--ICD-9 code:  V70.7, AND
--V POV Modifier, if present, is not equal to: C (Consider), D (Doubtful), M (Maybe, Possible, Perhaps), O (Rule Out), P (Probable) or S (Suspect, Suspicious)

- Patients admitted for Elective Carotid Intervention. MU searches for carotid intervention documented during the visit in the V PROCEDURE file with an elective admission.  This is determined by:
--Carotid Intervention Procedure ICD-9 codes: 00.61, 00.63, 38.02, 38.12, 38.22, 38.3, 38.42, 88.41, AND
--Admission Type-UB92 code: 3 (ELECTIVE ADMISSION).

- Patients discharged/transferred to another hospital for inpatient care, to a federal healthcare facility, to hospice, or who left against medical advice or discontinued care.  This is determined by:

--Discharge Status-UB92 codes: 02 Transferred Gen Hospital, 03 Transferred SNF, 04 Transferred ICF, 05 Transferred Other, 07 Left AMA, 43 Transferred Federal Hospital, 50 Discharged to Hospice-Home, or 51 Discharged to Hospice Facility.

- Patients who expired.  This is determined by any of the following:
--Discharge Status-UB92 codes: 20 Expired, 40 Expired at Home (Hospice Only), 41 Expired SNF, ICF, FS Hospice, or 42 Expired, Place Unknown.
--Date/Time of Death <= Discharge Date.

**Patient List Definition**

Ischemic or hemorrhagic stroke patients who were assessed for rehabilitation services, if any.

## 1.2.3    VTE Measures

### 1.2.3.1    VTE Prophylaxis (VTE-1) NQF0371
**Meaningful Use, Stage 1**
**Denominators**

Number of inpatient discharges for all patients.

**Numerators**

Number of inpatient discharges for patients who received VTE prophylaxis or have documentation why no VTE prophylaxis was given
--the day of or the day after hospital admission
--the day of or the day after surgery end date for surgeries that start the day of or the day after hospital admission

**Exclusions**

The number of inpatient discharges for
--Patients with Age < 18
--Patients who have a Length of Stay < 2 days
--Patients with Length of Stay > 120 Days
--Patients with Comfort Measures Only documented on day of or day after hospital arrival
--Patients enrolled in Clinical Trial
--Patients who are direct admits to intensive care unit (ICU), or transferred to ICU the day of or the day after hospital admission with ICU LOS ≥ one day
--Patients with Principal Diagnosis of Mental Disorders [Patients with Service Delivery of Behavioral Health]
--Patients with Principal Diagnosis of Hemorrhagic or Ischemic Stroke
--Patients with Principal Diagnosis of Obstetrics [Patients with Service Delivery of Obstetrics]
--Patients with Principal Diagnosis of VTE

**Definitions**

Denominator Logic:

Age is calculated at the beginning of the reporting period.

MU searches for the inpatient (VISIT) file with a service category equal to "H" during the reporting period.

Numerator Logic:

To be included in the numerator, the patient must meet at least one condition shown below.

1. MU searches BCMA MEDICATION LOG file for patients who received VTE prophylaxis medication included in taxonomy BGPMU VTE PROPHYLAXIS
   --the day of or the day after hospital admission, calculated as: VTE Prophylaxis Date/Time minus Admit Date/Time
   --the day of or the day after surgery end date for surgeries that start the day of or the day after hospital admission, calculated as: VTE Prophylaxis Date/Time minus Procedure Date/Time AND Procedure Date/Time minus Admit Date/Time.
2. MU searches PATIENT REFUSALS for refusal of VTE Prophylaxis. This is determined by:
   --VTE Prophylaxis - Application of Mechanical Device ICD-9 code: 93.59
   --VTE Prophylaxis - Application of Mechanical Device CPT code: E0676
   --Refusal: REF or NMI refusal of any VTE prophylaxis medication included in taxonomy BGPMU VTE PROPHYLAXIS.
3. MU searches V POV for a reason for not VTE Prophylaxis – Hospital Admission Surgery. This is determined by:
   --Reason for no VTE Prophylaxis – Mechanical ICD-9 codes: V49.89, V49.75, V49.76, V49.70, 897.7, 897.6, 959.7, 443.9, 459.9.
   --Reason for no VTE Prophylaxis – Pharmacologic ICD-9 codes: 995.27, 289.84, 286.9, 434.91, 431.2, 434.91, 593.9, 286.7, 790.99, 459.0.
   --V POV Modifier, if present, is not equal to: C (Consider), D (Doubtful), M (Maybe, Possible, Perhaps), O (Rule Out), P (Probable) or S (Suspect, Suspicious)

Exclusion Logic
MU searches the Inpatient (VISIT) file and excludes patient discharge records which have attributes which match any of the following criteria:
- Patients with age < 18, calculated as: Admission Date minus Birthdate.
- Patients who have a Length of Stay < 2 days, calculated as: Discharge Date/Time minus Admission Date/Time.
- Patients who have a Length of Stay > 120 days, calculated as: Discharge Date/Time minus Admission Date/Time.

- Patients with Comfort Measures Only documented in the PROBLEM List (active problems only) or day of or day after arrival in the V POV and/or V CPT file. This is determined by:
  --Palliative Care Measures Only – ICD-9 code: V66.7
  --Palliative Care Measures Only – CPT code: 1152F
  --V POV Modifier, if present, is not equal to: C (Consider), D (Doubtful), M (Maybe, Possible, Perhaps), O (Rule Out), P (Probable) or S (Suspect, Suspicious)
- Patients enrolled in a Clinical Trial documented in the PROBLEM List (active problems only) or during the visit in the V POV file. This is determined by:
  --ICD-9: V70.7
  --V POV Modifier, if present, is not equal to: C (Consider), D (Doubtful), M (Maybe, Possible, Perhaps), O (Rule Out), P (Probable) or S (Suspect, Suspicious)

- MU searches for all of the following during the visit:
 1. MU searches PATIENT MOVEMENT file for patients who are direct admits to 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, calculated as: ICU Admit Date minus Admit Date AND ICU Admit Date minus ICU Discharge Date. This is determined by checking in facility location on the PATIENT MOVEMENT file for ward names that contain "ICU".
AND
 2. MU searches PATIENT REFUSALS for refusal of VTE Prophylaxis. This is determined by:
    --VTE Prophylaxis - Application of Mechanical Device ICD-9 code: 93.59
    --VTE Prophylaxis - Application of Mechanical Device CPT code: E0676
    --Refusal: REF or NMI refusal of any VTE prophylaxis medication included in taxonomy BGPMU VTE PROPHYLAXIS documented during the visit.
AND
 3. MU searches V POV for a reason for not VTE Prophylaxis – Hospital Admission Surgery. This is determined by:
    --Reason for no VTE Prophylaxis – Mechanical ICD-9 codes: V49.89, V49.75, V49.76, V49.70, 897.7, 897.6, 959.7, 443.9, 459.9.
    --Reason for no VTE Prophylaxis – Pharmacologic ICD-9 codes: 995.27, 289.84, 286.9, 434.91, 431.2, 434.91, 593.9, 286.7, 790.99, 459.0.
    --V POV Modifier, if present, is not equal to: C (Consider), D (Doubtful), M (Maybe, Possible, Perhaps), O (Rule Out), P (Probable) or S (Suspect, Suspicious)

- MU searches for patients with a diagnosis of mental disorders [Patients with service delivery of behavioral health] during the visit by checking treating specialty on the PATIENT MOVEMENT file for mental health names: "MENTAL HEALTH", "ALCOHOLISM", "BEHAVIORAL HEALTH", and "SUBSTANCE ABUSE".

- MU searches for primary diagnosis of ischemic or hemorrhagic stroke during the visit.  This is determined by meeting the criteria for ischemic or hemorrhagic stroke, primary diagnosis, V POV modifier, AND discharge status shown below.
   --Ischemic Stroke ICD-9 codes: 433.0, 433.00, 433.01, 433.1, 433.10, 433.11, 433.2, 433.20, 433.21, 433.3, 433.30, 433.31, 433.8, 433.80, 433.81, 433.9, 433.90, 433.91, 434.0, 434.00, 434.01, 434.1, 434.10, 434.11, 434.9, 434.90, 434.91, 435.8, 435.9, 436.
   --Hemorrhagic Stroke ICD-9: 430-432.99.
   --Diagnosis is Primary
   --V POV Modifier, if present, is not equal to: C (Consider), D (Doubtful), M (Maybe, Possible, Perhaps), O (Rule Out), P (Probable) or S (Suspect, Suspicious)

- MU searches V POV for patients with a diagnosis of obstetrics [Patients with service delivery of obstetrics] during the visit.  This is determined by:
   --Obstetric Inpatient Treatment Locations: BGPMU VTE OB DXS.
   --V POV Modifier, if present, is not equal to: C (Consider), D (Doubtful), M (Maybe, Possible, Perhaps), O (Rule Out), P (Probable) or S (Suspect, Suspicious)

- MU searches for primary diagnosis of VTE during the visit. This is determined by meeting the criteria for VTE confirmed, primary diagnosis, and V POV modifier shown below:
   --VTE Confirmed ICD-9 codes: 453.40-453.42, 453.50-453.52, 453.6, 453.71-453.79, 453.81-453.89.
   --Diagnosis is Primary
   --V POV Modifier, if present, is not equal to: C (Consider), D (Doubtful), M (Maybe, Possible, Perhaps), O (Rule Out), P (Probable) or S (Suspect, Suspicious)

## 1.2.3.2   ICU VTE Prophylaxis (VTE-2) NQF0372

**Meaningful Use, Stage 1**

**Denominators**

Number of inpatient discharges for ICU patients with ICU Length of Stay (LOS) greater than or equal to 1 day.

**Numerators**

Number of inpatient discharges for patients who received VTE prophylaxis or have documentation why no VTE prophylaxis was given:
--the day of or the day after ICU admission (or transfer)
--the day of or the day after surgery end date for surgeries that start the day of or the day after ICU admission (or transfer)

**Exclusions**

Number of inpatient discharges for
--Patients with Age < 18
--Patients who have a Length of Stay < 2 days
--Patients with Length of Stay > 120 Days

--Patients with Comfort Measures Only documented on day of or day after hospital
  arrival
--Patients enrolled in Clinical Trial
--Patients with ICU LOS < one day without VTE prophylaxis administered and
[without] documentation for no VTE prophylaxis
--Patients with Principal Diagnosis of Obstetrics
--Patients with Principal Diagnosis of VTE

**Definitions**

Denominator Logic:

MU searches for the inpatient (VISIT) file with a service category equal to "H"
during the reporting period.

Numerator Logic:

To be included in the numerator, the patient must meet ALL conditions shown below.

1. MU searches PATIENT MOVEMENT for ward names that contain "ICU" and
   searches BCMA MEDICATION LOG file for patients who received VTE
   prophylaxis included in taxonomy BGPMU VTE PROPHYLAXIS
   --the day of or the day after ICU admission (or transfer), calculated as: VTE
     Prophylaxis Date/Time minus ICU Admit Date/Time
   --the day of or the day after surgery end date for surgeries that start the day of or
     the day after ICU admission (or transfer), calculated as: VTE Prophylaxis
     Date/Time minus Procedure End Date/Time AND Procedure Start Date/Time
     minus ICU Admit Date/Time

2. MU searches PATIENT REFUSALS for refusal of VTE Prophylaxis. This is
   determined by:
   --VTE Prophylaxis - Application of Mechanical Device ICD-9 code: 93.59
   --VTE Prophylaxis - Application of Mechanical Device CPT code: E0676
   --Refusal: REF or NMI refusal of any VTE prophylaxis medication included in
     taxonomy BGPMU VTE PROPHYLAXIS documented during the visit.

3. MU searches V POV for a reason for not VTE Prophylaxis – ICU. This is
   determined by:
   --Reason for no VTE Prophylaxis – Mechanical ICD-9 codes: V49.89, V49.75,
     V49.76, V49.70, 897.7, 897.6, 959.7, 443.9, 459.9.
   --Reason for no VTE Prophylaxis – Pharmacologic ICD-9 codes: 995.27, 289.84,
     286.9, 434.91, 431.2, 434.91, 593.9, 286.7, 790.99, 459.0.
   --V POV Modifier, if present, is not equal to: C (Consider), D (Doubtful), M
     (Maybe, Possible, Perhaps), O (Rule Out), P (Probable) or S (Suspect,
     Suspicious)

Exclusion Logic:

MU searches the Inpatient (VISIT) file and excludes patient discharge records which have attributes which match any of the following criteria:

- Patients with age < 18, calculated as:  Admission Date minus Birthdate.

- Patients who have a Length of Stay < 2 days, calculated as: Discharge Date/Time minus Admission Date/Time.

- Patients who have a Length of Stay > 120 days, calculated as:  Discharge Date/Time minus Admission Date/Time.

- Patients with Comfort Measures Only documented in the PROBLEM List (active problems only) or day of or day after arrival in the V POV and V CPT file. This is determined by:
--Palliative Care Measures Only – ICD-9 code: V66.7
--Palliative Care Measures Only – CPT code: 1152F
--V POV Modifier, if present, is not equal to: C (Consider), D (Doubtful), M (Maybe, Possible, Perhaps), O (Rule Out), P (Probable) or S (Suspect, Suspicious)

- Patients enrolled in a Clinical Trial documented in the PROBLEM List (active problems only) or during the visit in the POV file. This is determined by:
--ICD-9 code:  V70.7
--V POV Modifier, if present, is not equal to: C (Consider), D (Doubtful), M (Maybe, Possible, Perhaps), O (Rule Out), P (Probable) or S (Suspect, Suspicious)

- MU searches for all of the following during the visit:

1.  MU searches PATIENT MOVEMENT file for patients with ICU length of stay less than one day, calculated as: ICU Discharge Date minus ICU Admit Date equal to zero.  This is determined by checking in facility location on the PATIENT MOVEMENT file for ward names that contain "ICU".
AND
2.  MU searches PATIENT REFUSALS for refusal of VTE Prophylaxis.  This is determined by:
    --VTE Prophylaxis - Application of Mechanical Device ICD-9: 93.59
    --VTE Prophylaxis - Application of Mechanical Device CPT: E0676
    --Refusal: REF or NMI refusal of any VTE prophylaxis medication included in taxonomy BGPMU VTE PROPHYLAXIS documented during the visit.
AND
3.  MU searches POV for a reason for not VTE Prophylaxis – ICU. This is determined by:
    --Reason for no VTE Prophylaxis – Mechanical ICD-9 codes: V49.89, V49.75, V49.76, V49.70, 897.7, 897.6, 959.7, 443.9, 459.9.

--Reason for no VTE Prophylaxis – Pharmacologic ICD-9 codes: 995.27, 289.84, 286.9, 434.91, 431.2, 434.91, 593.9, 286.7, 790.99, 459.0.

--V POV Modifier, if present, is not equal to: C (Consider), D (Doubtful), M (Maybe, Possible, Perhaps), O (Rule Out), P (Probable) or S (Suspect, Suspicious)

- MU searches V POV for patients with a diagnosis of obstetrics [Patients with service delivery of obstetrics] during the visit.  This is determined by:
--Obstetric Inpatient Treatment Locations: BGPMU VTE OB DXS.
--V POV Modifier, if present, is not equal to: C (Consider), D (Doubtful), M (Maybe, Possible, Perhaps), O (Rule Out), P (Probable) or S (Suspect, Suspicious)

- MU searches for primary diagnosis of VTE during the visit.  This is determined by meeting the criteria for VTE confirmed, primary diagnosis, and V POV modifier shown below:

--VTE Confirmed ICD-9 codes: 453.40-453.42, 453.50-453.52, 453.6, 453.71-453.79, 453.81-453.89.

--Diagnosis is Primary

--V POV Modifier, if present, is not equal to:  C (Consider), D (Doubtful), M (Maybe, Possible, Perhaps), O (Rule Out), P (Probable) or S (Suspect, Suspicious)

### 1.2.3.3    VTE With Anticoag Overlap (VTE-3) NQF0373

**Meaningful Use, Stage 1**

**Denominators**

Number of inpatient discharges for patients with confirmed VTE who received warfarin.

**Numerators**

Number of inpatient discharges for patients who received overlap therapy.

**Exclusions**

Number of inpatient discharges
--Patients with Age < 18
--Patients with Length of Stay > 120 Days
--Patients with Comfort Measures Only
--Patients enrolled in Clinical Trial
-- Patients without warfarin therapy during hospitalization
--Patients without warfarin prescribed at discharge
--Patients without VTE confirmed by diagnostic testing

**Definitions**

Denominator Logic:

Age is calculated at the beginning of the reporting period.

To be included in the denominator, the patient must meet ALL conditions shown below.

1. MU searches for the inpatient (VISIT) file with a service category equal to "H" during the reporting period.
2. MU searches V POV for primary diagnosis of VTE during the inpatient visit. This is determined by meeting the criteria for VTE confirmed, primary diagnosis, and V POV modifier shown below:
   --VTE Confirmed ICD-9 codes: 453.40-453.42, 453.50-453.52, 453.6, 453.71-453.79, 453.81-453.89.
   --Diagnosis is Primary
   --V POV Modifier, if present, is not equal to: C (Consider), D (Doubtful), M (Maybe, Possible, Perhaps), O (Rule Out), P (Probable) or S (Suspect, Suspicious)
3. MU searches V MEDICATION for patients who received warfarin medication included in taxonomy BGPMU WARFARIN NDCS during the inpatient visit.

Numerator Logic:

To be included in the numerator, the patient must meet at least one of the following three conditions shown below.

1. MU searches BCMA MEDICATION LOG file for patients who received warfarin and parenteral anticoagulation greater or equal to 5 days, calculated as: MAX(Medication Administered date/time) minus MIN(Medication Administered date/time). This is determined by
   --Warfarin Medication NDC: BGPMU WARFARIN NDCS
   --Anticoagulant Medications - VTE NDC: BGPMU ANTICOAG NDCS

   AND

   MU searches both V LAB and BCMA MEDICATION LOG file for patients with an INR Value greater than or equal to 2 prior to discontinuation anticoagulant therapy, calculated as: Report Date/Time less than Discontinue Order Date/Time. This is determined by:
   --INR Laboratory Test Result LOINC codes: 34714-6, 38875-1, 46418-0, 52129-4, 6301-6, 34714-6.
   --Anticoagulant Medications - VTE NDC: BGPMU ANTICOAG NDCS

2. MU searches BCMA MEDICATION LOG file for patients who received warfarin and parenteral anticoagulation greater or equal to 5 days, calculated as: MAX(Medication Administered date/time) minus MIN(Medication Administered date/time). This is determined by
   --Warfarin Medication NDC: BGPMU WARFARIN NDCS
   --Anticoagulant Medications - VTE NDC: BGPMU ANTICOAG NDCS

   AND

MU searches both V LAB and BCMA MEDICATION LOG file for patients with an INR Value less than 2 prior to discontinuation anticoagulant therapy, calculated as: Report Date/Time less than Discontinue Order Date/Time. This is determined by:
--INR Laboratory Test Result LOINC codes: 34714-6, 38875-1, 46418-0, 52129-4, 6301-6, 34714-6.
--Anticoagulant Medications - VTE NDC: BGPMU ANTICOAG NDCS

3. MU searches BCMA MEDICATION LOG file for patients who received warfarin and parenteral anticoagulation less than 5 days, calculated as: MAX(Medication Administered date/time) minus MIN(Medication Administered date/time). This is determined by
--Warfarin Medication NDC: BGPMU WARFARIN NDCS
--Anticoagulant Medications - VTE NDC: BGPMU ANTICOAG NDCS

   AND

   MU searches V MEDICATION for patients with warfarin and anticoagulant – VTE medication prescription active as of midnight on the day after visit discharge. This is determined by:
   --Warfarin Medication NDC: BGPMU WARFARIN NDCS
   --Anticoagulant Medications - VTE NDC: BGPMU ANTICOAG NDCS

Exclusion Logic:

MU searches the Inpatient (VISIT) file and excludes patient discharge records which have attributes which match any of the following criteria:
- Patients with age < 18, calculated as:  Admission Date minus Birthdate.
- Patients who have a Length of Stay < 2 days, calculated as: Discharge Date/Time minus Admission Date/Time.
- Patients who have a Length of Stay > 120 days, calculated as:  Discharge Date/Time minus Admission Date/Time.
- Patients with Comfort Measures Only documented in the PROBLEM List (active problems only) or during the visit in the V POV and V CPT file. This is determined by:
  --Palliative Care Measures Only – ICD-9 code: V66.7
  --Palliative Care Measures Only – CPT code: 1152F
  --V POV Modifier, if present, is not equal to: C (Consider), D (Doubtful), M (Maybe, Possible, Perhaps), O (Rule Out), P (Probable) or S (Suspect, Suspicious)

- Patients enrolled in a Clinical Trial documented in the PROBLEM List (active problems only) or during the visit in the V POV file. This is determined by:
  --ICD-9 code:  V70.7

--V POV Modifier, if present, is not equal to: C (Consider), D (Doubtful), M (Maybe, Possible, Perhaps), O (Rule Out), P (Probable) or S (Suspect, Suspicious)

- MU searches V MEDICATION for patients without warfarin therapy during the visit. This is determined by:
  --Warfarin Medication NDC: BGPMU WARFARIN NDCS

- MU searches V MEDICATION for patients without a warfarin prescription active as of midnight on the day after visit discharge. This is determined by:
  --Discharge Medication NDC: BGPMU WARFARIN NDCS

- MU searches V CPT for patients without VTE confirmed by diagnostic testing during the visit.  This is determined by:
  --VTE Diagnostic Test CPT codes: 75820-75822, [75820-75822 + 76000], 76001, [76001 + 37224 – 37227], 35476, [35476 + 75978 + 77001], [75820 – 75822 + [37224 – 37227], [35476 + 75978], 77001, 75820 - 75822, 75820, 75821, [35476 + 77001], 93965, 93970 - 93971, [75820 - 75822 + 76881], 75822, 75820, 93922 - 93924, 78456 - 78458, 75945, 75946, 75952, 75741,   75743, [75746 + 76000], 37224 - 37227, [75746 + 93770], [75746 + 77001], [75746 + 77001 + 93568], 75741, 75746, 71250 - 71275, 93965 - 93971, 78456 - 78457, 78580 - 78585, 78586 - 78594, 78588, 78591, 78593,  78594, 78580, 78584, 78596, 78580 - 78585, 71550 - 71552, 71551, 71552, 73718 - 73720, 73719, 73720, 71260, 71270, 75741 – 75746.

### 1.2.3.4   VTE Patients Receiving UnFractionated Heprain with Dosages/Platelet Count Monitoring by Protocol (or Nomogram) (VTE-4) NQF0374

**Meaningful Use, Stage 1**
**Denominators**

Number of inpatient discharges for patients with confirmed VTE receiving IV UFH therapy.

**Numerators**

Number of inpatient discharges for patients who have their IV UFH therapy dosages AND platelet counts monitored according to defined parameters such as a nomogram or protocol.

**Exclusions**

Number of inpatient discharges for
--Patients with Age < 18
--Patients with Length of Stay > 120 Days
--Patients with Comfort Measures Only
--Patients enrolled in Clinical Trial
--Patients without UFH Therapy Administration

--Patients without VTE confirmed by diagnostic testing

**Definitions**

Denominator Logic:

Age is calculated at the beginning of the reporting period.

To be included in the denominator, the patient must meet ALL conditions shown below.

1. MU searches for the inpatient (VISIT) file with a service category equal to "H" during the reporting period.

2. MU searches V POV for any diagnosis of VTE during the inpatient visit. This is determined by meeting the criteria for VTE confirmed and V POV modifier shown below:
--VTE Confirmed ICD-9 codes: 453.40-453.42, 453.50-453.52, 453.6, 453.71-453.79, 453.81-453.89.
--V POV Modifier, if present, is not equal to: C (Consider), D (Doubtful), M (Maybe, Possible, Perhaps), O (Rule Out), P (Probable) or S (Suspect, Suspicious)

3. MU searches PHARMACY PATIENT for patients receiving IV unfractionated heparin therapy included in taxonomy BGPMU HEPARIN NDCS during the inpatient visit.

Numerator Logic:

To be included in the numerator, the patient must meet ALL conditions shown below.

1. MU searches PHARMACY PATIENT for patients who have their IV unfractionated heparin therapy dosages monitored during the visit according to defined parameters such as a nomogram or protocol. This is determined by:
--Unfractionated Heparin Medication NDC: BGPMU HEPARIN NDCS

2. MU searches V LAB for patients who have their platelet counts monitored during the visit according to defined parameters such as a nomogram or protocol. This is determined by:
--Platelet Count Laboratory Test Result LOINC codes: 15201-7, 24317-0, 24361-8, 26515-7, 32207-3, 32623-1, 32712-2, 34167-7, 34527-2, 40741-1, 48386-7, 49497-1, 51632-8, 53800-9, 777-3, 778-1, 9317-9.

Exclusion Logic
MU searches the Inpatient (VISIT) file and excludes patient discharge records which have attributes which match any of the following criteria:

- Patients with age < 18, calculated as:  Admission Date minus Birthdate.

- Patients who have a Length of Stay < 2 days, calculated as: Discharge Date/Time minus Admission Date/Time.

- Patients who have a Length of Stay > 120 days, calculated as:  Discharge Date/Time minus Admission Date/Time.

- Patients with Comfort Measures Only documented in the PROBLEM List (active problems only) or during the visit in the V POV and V CPT file.  This is determined by:
--Palliative Care Measures Only – ICD-9 code: V66.7
--Palliative Care Measures Only – CPT code: 1152F
--V POV Modifier, if present, is not equal to: C (Consider), D (Doubtful), M (Maybe, Possible, Perhaps), O (Rule Out), P (Probable) or S (Suspect, Suspicious)

- Patients enrolled in a Clinical Trial documented in the PROBLEM List (active problems only) or during the visit in the V POV file.  This is determined by:
--ICD-9 code:  V70.7
--V POV Modifier, if present, is not equal to: C (Consider), D (Doubtful), M (Maybe, Possible, Perhaps), O (Rule Out), P (Probable) or S (Suspect, Suspicious)

- MU searches V MEDICATION for patients without an unfractionated heparin therapy administration prescription active as of midnight on the day after visit discharge.  This is determined by:
--Unfractionated Heparin Medication NDC: BGPMU HEPARIN NDCS

- MU searches V CPT for patients without VTE confirmed by diagnostic testing during the visit. This is determined by:
--VTE Diagnostic Test CPT codes: 75820-75822, [75820-75822 + 76000], 76001, [76001 + 37224 – 37227], 35476, [35476 + 75978 + 77001], [75820 – 75822 + [37224 – 37227], [35476 + 75978], 77001, 75820 - 75822, 75820, 75821, [35476 + 77001], 93965, 93970 - 93971, [75820 - 75822 + 76881], 75822, 75820, 93922 - 93924, 78456 - 78458, 75945, 75946, 75952, 75741,   75743, [75746 + 76000], 37224 - 37227, [75746 + 93770], [75746 + 77001], [75746 + 77001 + 93568], 75741, 75746, 71250 - 71275, 93965 - 93971, 78456 - 78457, 78580 - 78585, 78586 - 78594, 78588, 78591, 78593,  78594, 78580, 78584, 78596, 78580 - 78585, 71550 - 71552, 71551, 71552, 73718 - 73720, 73719, 73720, 71260, 71270, 75741 – 75746.

### 1.2.3.5   VTE Discharge Instructions (VTE-5) NQF0375
**Meaningful Use, Stage 1**
**Denominators**

Number of inpatient discharges for patients with confirmed VTE discharged on warfarin therapy.

**Numerators**

Number of inpatient discharges for patients with documentation that they or their caregivers were given written discharge instructions or other educational material about warfarin that addressed all of the following:
--compliance issues
--dietary advice
--follow-up monitoring
--potential for adverse drug reactions and interactions

**Exclusions**

Number of inpatient discharges for
--Patients with Age < 18
--Patients with Length of Stay > 120 Days
--Patients enrolled in Clinical Trial
--Patients without Warfarin Prescribed at Discharge
--Patients without VTE confirmed by diagnostic testing

**Definitions**

Denominator Logic:

Age is calculated at the beginning of the reporting period.

To be included in the denominator, the patient must meet ALL conditions shown below.

1. MU searches for the inpatient (VISIT) file with a service category equal to "H" during the reporting period.

2. MU searches V POV for any diagnosis of VTE during the inpatient visit. This is determined by meeting the criteria for VTE confirmed and V POV modifier shown below:
--VTE Confirmed ICD-9: 453.40-453.42, 453.50-453.52, 453.6, 453.71-453.79, 453.81-453.89.
--V POV Modifier, if present, is not equal to: C (Consider), D (Doubtful), M (Maybe, Possible, Perhaps), O (Rule Out), P (Probable) or S (Suspect, Suspicious)

3. MU searches V MEDICATION for patients with a warfarin prescription active as of midnight on the day after discharge. This is determined by:
-- Warfarin Medication NDC: BGPMU WARFARIN NDCS

4. MU searches PATIENT MOVEMENT for patients discharged to home care or self-care defined by Discharge Status-UB92 codes: 01 DISCHARGED HOME, 06 UNDER CARE OF HOME HEALTH ORG, 50 HOSPICE - HOME.

Numerator Logic:

MU searches V PATIENT ED to determine if patients or their caregivers were given educational material addressing all of the following:
--compliance issue
--dietary advice
--follow-up monitoring
--potential for adverse drug reactions and interactions

This is determined by TOPIC:
M-[any code] or any code with –M or –MEDICATION
-N or –NUTRITION or -MNT or –MEDICAL NUTRITION THERAPY

Exclusion Logic:

MU searches the Inpatient (VISIT) file and excludes patient records which have attributes which match any of the following criteria:

- Patients with age < 18, calculated as:  Admission Date minus Birthdate.

- Patients who have a Length of Stay > 120 days, calculated as:  Discharge Date/Time minus Admission Date/Time.

- Patients enrolled in a Clinical Trial documented in the PROBLEM List (active problems only) or during the visit in the V POV file.  This is determined by:
--ICD-9 code:  V70.7
--V POV Modifier, if present, is not equal to: C (Consider), D (Doubtful), M (Maybe, Possible, Perhaps), O (Rule Out), P (Probable) or S (Suspect, Suspicious)

- MU searches V MEDICATION for patients without a warfarin prescription active as of midnight on the day after visit discharge.  This is determined by:
--Discharge Medication NDC: BGPMU WARFARIN NDCS

- MU searches V CPT for patients without VTE confirmed by diagnostic testing during the visit.  This is determined by:
-- VTE Diagnostic Test CPT codes: 75820-75822, [75820-75822 + 76000], 76001, [76001 + 37224 – 37227], 35476, [35476 + 75978 + 77001], [75820 – 75822 + [37224 – 37227], [35476 + 75978], 77001, 75820 - 75822, 75820, 75821, [35476 + 77001], 93965, 93970 - 93971, [75820 - 75822 + 76881], 75822, 75820, 93922 - 93924, 78456 - 78458, 75945, 75946, 75952, 75741,   75743, [75746 + 76000], 37224 - 37227, [75746 + 93770], [75746 + 77001], [75746 + 77001 + 93568], 75741, 75746, 71250 - 71275, 93965 - 93971, 78456 - 78457, 78580 - 78585, 78586 - 78594, 78588, 78591, 78593,  78594, 78580, 78584, 78596, 78580 - 78585, 71550 - 71552, 71551, 71552, 73718 - 73720, 73719, 73720, 71260, 71270, 75741 – 75746.

## 1.2.3.6    Incidence of Potentially Preventable VTE (VTE-6) NQF0376

**Meaningful Use, Stage 1**

**Denominators**

Number of inpatient discharges for patients who developed confirmed VTE during hospitalization.

**Numerators**

Number of inpatient discharges for patients who received no VTE prophylaxis prior to the VTE diagnostic test order date.

**Exclusions**

Number of inpatient discharges for
--Patients with Age < 18
--Patients with Length of Stay > 120 Days
--Patients enrolled in Clinical Trial
--Patients with Comfort Measures Only documented
--Patients with VTE Present on Arrival
--Patients with reasons for not administering mechanical and pharmacologic prophylaxis
--Patients without VTE confirmed by diagnostic testing

**Definitions**

Denominator Logic:

Age is calculated at the beginning of the reporting period.

To be included in the denominator, the patient must meet both conditions shown below.

1.  MU searches for the inpatient (VISIT) file with a service category equal to "H" during the reporting period.
2.  MU searches V POV for patients who developed VTE during the inpatient visit. This is determined by meeting the criteria for VTE confirmed and V POV modifier shown below:
    --VTE Confirmed ICD-9: 453.40-453.42, 453.50-453.52, 453.6, 453.71-453.79, 453.81-453.89.
    --V POV Modifier, if present, is not equal to: C (Consider), D (Doubtful), M (Maybe, Possible, Perhaps), O (Rule Out), P (Probable) or S (Suspect, Suspicious

Numerator Logic:

MU searches BCMA MEDICATION LOG file for patients who received no VTE prophylaxis prior to the VTE diagnostic test order date, calculated as: VTE Prophylaxis Date/Time greater than Arrival Date/Time AND VTE Prophylaxis Date/Time greater than or equal to VTE Diagnostic Test Order Date minus 1 day.

This is determined by:

-- Medication Administered date/time: BCMA MEDICATION LOG
-- VTE Diagnostic Test CPT codes: 75820-75822, [75820-75822 + 76000], 76001,
[76001 + 37224 – 37227], 35476, [35476 + 75978 + 77001], [75820 – 75822 +
[37224 – 37227], [35476 + 75978], 77001, 75820 - 75822, 75820, 75821, [35476 +
77001], 93965, 93970 - 93971, [75820 - 75822 + 76881], 75822, 75820, 93922 -
93924, 78456 - 78458, 75945, 75946, 75952, 75741,   75743, [75746 + 76000],
37224 - 37227, [75746 + 93770], [75746 + 77001], [75746 + 77001 + 93568], 75741,
75746, 71250 - 71275, 93965 - 93971, 78456 - 78457, 78580 - 78585, 78586 - 78594,
78588, 78591, 78593,  78594, 78580, 78584, 78596, 78580 - 78585, 71550 - 71552,
71551, 71552, 73718 - 73720, 73719, 73720, 71260, 71270, 75741 – 75746.

Exclusion Logic

MU searches the Inpatient (VISIT) file and excludes patient records which have
attributes which match any of the following criteria:

- Patients with age < 18, calculated as:  Admission Date minus Birthdate.

- Patients who have a Length of Stay < 2 days, calculated as: Discharge Date/Time
minus Admission Date/Time.

- Patients who have a Length of Stay > 120 days, calculated as:  Discharge Date/Time
minus Admission Date/Time.

- Patients with Comfort Measures Only documented in the PROBLEM List (active
problems only) or during the visit in the V POV and V CPT file.  This is determined
by:
  --Palliative Care Measures Only – ICD-9 code: V66.7
  --Palliative Care Measures Only – CPT code: 1152F
  --POV Modifier, if present, is not equal to: C (Consider), D (Doubtful), M (Maybe,
    Possible, Perhaps), O (Rule Out), P (Probable) or S (Suspect, Suspicious)

- Patients enrolled in a Clinical Trial documented in the PROBLEM List (active
problems only) or during the visit in the V POV file.  This is determined by:
  --ICD-9 code:  V70.7
  --V POV Modifier, if present, is not equal to: C (Consider), D (Doubtful), M
    (Maybe, Possible, Perhaps), O (Rule Out), P (Probable) or S (Suspect, Suspicious)

- MU searches V POV for patients with VTE present on visit arrival, calculated as:
Problem/Diagnosis Date/Time less than or equal to Arrival Date/Time.  This is
determined by:
  --VTE Confirmed ICD-9 codes: 453.40-453.42, 453.50-453.52, 453.6, 453.71-
    453.79, 453.81-453.89.
  --VTE Suspected ICD-9 codes: 415.11, 415.12, 415.19, 416.2, 453.40, 453.41,
    453.42, 453.50, 453.51, 453.52, 453.50, 453.51, 453.52, 453.6, 453.72, 453.82.

--V POV Modifier, if present, is not equal to: C (Consider), D (Doubtful), M (Maybe, Possible, Perhaps), O (Rule Out), P (Probable) or S (Suspect, Suspicious)

- MU searches for both of the following during the visit:

1.  MU searches PATIENT REFUSALS for refusal of VTE Prophylaxis.  This is determined by:
   --VTE Prophylaxis - Application of Mechanical Device ICD-9 code: 93.59
   --VTE Prophylaxis - Application of Mechanical Device CPT code: E0676
   --Refusal: REF or NMI refusal of any VTE prophylaxis medication included in taxonomy BGPMU VTE PROPHYLAXIS documented during the visit.

AND

2.  MU searches V POV for reasons for not administering mechanical and pharmacologic prophylaxis.  This is determined by:
   --Reason for no VTE Prophylaxis – Mechanical ICD-9 codes: V49.89, V49.75, V49.76, V49.70, 897.7, 897.6, 959.7, 443.9, 459.9.
   --Reason for no VTE Prophylaxis – Pharmacologic ICD-9 codes: 995.27, 289.84, 286.9, 434.91, 431.2, 434.91, 593.9, 286.7, 790.99, 459.0.
   --V POV Modifier, if present, is not equal to: C (Consider), D (Doubtful), M (Maybe, Possible, Perhaps), O (Rule Out), P (Probable) or S (Suspect, Suspicious)

- MU searches V CPT for patients without VTE confirmed by diagnostic testing during the visit.  This is determined by:
   --VTE Diagnostic Test CPT codes: 75820-75822, [75820-75822 + 76000], 76001, [76001 + 37224 – 37227], 35476, [35476 + 75978 + 77001], [75820 – 75822 + [37224 – 37227], [35476 + 75978], 77001, 75820 - 75822, 75820, 75821, [35476 + 77001], 93965, 93970 - 93971, [75820 - 75822 + 76881], 75822, 75820, 93922 - 93924, 78456 - 78458, 75945, 75946, 75952, 75741,   75743, [75746 + 76000], 37224 - 37227, [75746 + 93770], [75746 + 77001], [75746 + 77001 + 93568], 75741, 75746, 71250 - 71275, 93965 - 93971, 78456 - 78457, 78580 - 78585, 78586 - 78594, 78588, 78591, 78593,  78594, 78580, 78584, 78596, 78580 - 78585, 71550 - 71552, 71551, 71552, 73718 - 73720, 73719, 73720, 71260, 71270, 75741 – 75746.

# 2.0     Contact Information

If you have any questions or comments regarding this distribution, please contact the OIT Help Desk (IHS).

**Phone:**   (505) 248-4371 or (888) 830-7280 (toll free)

**Fax:**     (505) 248-4363

**Web:**     http://www.ihs.gov/GeneralWeb/HelpCenter/Helpdesk/index.cfm

**Email:**   support@ihs.gov