



RESOURCE AND PATIENT MANAGEMENT SYSTEM

# **IHS Clinical Reporting System**

(BGP)

## **Other National Measures Report Performance Measure List and Definitions**

Version 13.0 Patch 1  
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Office of Information Technology  
Division of Information Resource Management  
Albuquerque, New Mexico

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## 1.0 Introduction

The Other National Measures (ONM) Report contains clinical quality measures for which national data is desired. The majority of these measures were historically reported in the National Government Performance and Results Act (GPRA) Report as non-GPRA measures. The ONM Report provides valuable information on the quality of care that is being provided to patients and can be used to address other national reporting requirements. Data for these measures will be collected and reported at least once annually.

### 1.1 CRS Denominator Definitions

#### 1.1.1 For All Denominators

- All patients with name “DEMO, PATIENT” or who are included in the Resource and Patient Management System (RPMS) Demo/Test Patient Search Template (DPST option located in the Patient Care Component (PCC) Management Reports, Other section) will be excluded automatically for all denominators.
- For all measures except as noted, patient age is calculated as of the beginning of the Report Period.

#### 1.1.2 Active Clinical Population

##### 1.1.2.1 National GPRA/GPRAMA Reporting

- The patient must have two visits to medical clinics in the past three years. Chart reviews and telephone calls from these clinics do not count; the visits must be face-to-face. At least one visit must be to a core medical clinic. Refer to the Clinical Reporting System for FY2013 Clinical Measures User Manual for listing of these clinics.
- The patient must be alive on the last day of the Report Period.
- The patient must be American Indian/Alaska Native (AI/AN); defined as Beneficiary 01.
- The patient must reside in a community specified in the site’s GPRA community taxonomy, defined as all communities of residence in the defined Contract Health Service (CHS) catchment area.

### 1.1.2.2 Local Reports

- The patient must have two visits to medical clinics in the past three years. Chart reviews and telephone calls from these clinics do not count; the visits must be face-to-face. At least one visit must be to a core medical clinic. Refer to the Clinical Reporting System for FY2013 Clinical Measures User Manual for listing of these clinics.
- The patient must be alive on the last day of the Report Period.
- The user defines the population type as one of the following:
  - AI/AN patients only
  - Non AI/AN
  - Both
- The user defines the general population: single community, group of multiple communities (community taxonomy), user-defined list of patients (patient panel), or all patients regardless of community of residence.

### 1.1.3 User Population

#### 1.1.3.1 National GPRA/GPRAMA Reporting

- The patient must have been seen at least once in the three years prior to the end of the time period, regardless of the clinic type, and the visit must be either ambulatory (including day surgery or observation) or a hospitalization; the rest of the service categories are excluded.
- The patient must be alive on the last day of the Report Period.
- The patient must be AI/AN; defined as Beneficiary 01.
- The patient must reside in a community specified in the site's GPRA community taxonomy, defined as all communities of residence in the defined CHS catchment area.

#### 1.1.3.2 Local Reports

- The patient must have been seen at least once in the three years prior to the end of the time period, regardless of the clinic type, and the visit must be either ambulatory (including day surgery or observation) or a hospitalization; the rest of the service categories are excluded.
- The patient must be alive on the last day of the Report Period.
- The user defines the population type as one of the following:
  - AI/AN patients only
  - Non AI/AN

- Both

- The user defines the general population: single community, group of multiple communities (community taxonomy), user-defined list of patients (patient panel), or all patients regardless of community of residence.

## 1.1.4 Active Clinical Plus BH Population

### 1.1.4.1 National GPRA/GPRAMA Reporting

- The patient must have two visits to medical clinics in the past three years. Chart reviews and telephone calls from these clinics do not count; the visits must be face-to-face. At least one visit must be to a core medical clinic. Refer to the Clinical Reporting System (CRS) for FY2013 Clinical Measures User Manual for listing of these clinics.
- The patient must be alive on the last day of the Report Period.
- The patient must be American Indian/Alaska Native (AI/AN); defined as Beneficiary 01.
- The patient must reside in a community specified in the site's GPRA community taxonomy, defined as all communities of residence in the defined Contract Health Service (CHS) catchment area.

### 1.1.4.2 Local Reports

- The patient must have two visits to medical clinics in the past three years. Chart reviews and telephone calls from these clinics do not count; the visits must be face-to-face. At least one visit must be to a core medical clinic. Refer to the Clinical Reporting System (CRS) for FY2013 Clinical Measures User Manual for listing of these clinics.
- The patient must be alive on the last day of the Report Period.
- The user defines the population type as one of the following:
  - AI/AN patients only
  - Non AI/AN
  - Both
- The user defines the general population: single community, group of multiple communities (community taxonomy), user-defined list of patients (patient panel), or all patients regardless of community of residence.

## 1.1.5 Active Clinical CHS Population

CHS-Only Sites

### 1.1.5.1 National GPRA/GPRAMA Reporting

- The patient must have two CHS visits in the three years prior to the end of the Report Period, and the visits must be either ambulatory (including day surgery or observation) or a hospitalization; the rest of the service categories are excluded.
- The patient must be alive on the last day of the Report period.
- The patient must be AI/AN; defined as Beneficiary 01. This data item is entered and updated during the Patient Registration process.
- The patient must reside in a community included in the site's "official" GPRA community taxonomy, defined as all communities of residence in the CHS catchment area specified in the community taxonomy specified by the user.

### 1.1.5.2 Local Reports

- The patient must have two CHS visits in the three years prior to the end of the Report Period, and the visits must be either ambulatory (including day surgery or observation) or a hospitalization; the rest of the service categories are excluded.
- The patient must be alive on the last day of the Report period.
- The user defines the population type as one of the following:
  - AI/AN patients only
  - Non AI/AN
  - Both
- The user defines the general population: single community, group of multiple communities (community taxonomy), user-defined list of patients (patient panel), or all patients regardless of community of residence.

## 1.1.6 Active Clinical Behavioral Health Population

### 1.1.6.1 National GPRA/GPRAMA Reporting

#### Urban Outreach and Referral-Only Sites

- The patient must have two Behavioral Health visits in the three years prior to the end of the report period, and the visits must be either ambulatory (including day surgery or observation) or a hospitalization; the rest of the service categories are excluded.
- The patient must be alive on the last day of the report period.
- The patient must be AI/AN; defined as Beneficiary 01. This data item is entered and updated during the Patient Registration process.

- The patient must reside in a community included in the site’s “official” GPRA community taxonomy, defined as all communities of residence in the CHS catchment area specified in the community taxonomy specified by the user.

#### **1.1.6.2 Local Reports**

- The patient must have two Behavioral Health visits in the three years prior to the end of the report period, and the visits must be either ambulatory (including day surgery or observation) or a hospitalization; the rest of the service categories are excluded.
- The patient must be alive on the last day of the report period.
- The user defines the population type as one of the following:
  - AI/AN patients only
  - Non AI/AN
  - Both
- The user defines the general population: single community, group of multiple communities (community taxonomy), user-defined list of patients (patient panel), or all patients regardless of community of residence.



## 2.0 Topics and Definitions

The following sections define the performance measure topics and their definitions that are included in the CRS 2013 Version 13.0 ONM Report.

**Note:** In this section, the asterisk (\*) frequently appears in codes (CPT, POV, Edu., etc.) as a 'wildcard' character indicating that the code given has one or more additional characters at this location.

### 2.1 Diabetes Group

#### 2.1.1 Diabetes Comprehensive Care

##### 2.1.1.1 Owner: Contact

Diabetes Program: Dr. Ann Bullock

##### 2.1.1.2 Denominators

1. Active Diabetic patients, defined as all Active Clinical patients diagnosed with diabetes (POV 250.00 through 250.93) prior to the Report Period, *and* at least two visits in the past year, *and* two DM-related visits ever.
2. Active Diabetic patients, defined as all Active Clinical patients diagnosed with diabetes prior to the Report Period, *and* at least 2 visits during the Report Period, *and* 2 DM-related visits ever, without a documented history of bilateral blindness.
3. Active Diabetic patients, defined as all Active Clinical patients diagnosed with diabetes prior to the Report Period, *and* at least two visits during the Report Period, *and* two DM-related visits ever, without a documented history of bilateral foot amputation or two separate unilateral foot amputations.

##### 2.1.1.3 Numerators

1. Patients with hemoglobin A1c documented during the Report Period, regardless of result.
2. Patients with blood pressure documented during the Report Period.
3. Patients with controlled blood pressure during the Report Period, defined as below 140/90.

**Note:** This measure is *not* included in the comprehensive measure (the last numerator).

4. Patients with LDL completed during the Report Period, regardless of result

5. Patients with nephropathy assessment defined as an estimated glomerular filtration rate (GFR) and a quantitative urinary protein assessment during the Report Period *or* with evidence of diagnosis or treatment of end-stage renal disease (ESRD) at any time before the end of the Report Period.
6. Patients receiving a qualified retinal evaluation during the Report Period.

**Note:** This numerator does *not* include refusals.

7. Patients with diabetic foot exam during the Report Period.

**Note:** This numerator does *not* include refusals.

8. Patients with A1c and Blood Pressure and LDL and Nephropathy Assessment and Retinal exam and Diabetic Foot Exam.

**Note:** This numerator does not include controlled Blood Pressure, only Blood Pressure assessment.

#### 2.1.1.4 Definitions

##### Diabetes

First Purpose of Visit (POV) 250.00 through 250.93 recorded in the V POV file prior to the report period.

##### A1c

Searches for most recent A1c test with a result during the report period. If none found, CRS searches for the most recent A1c test without a result. A1c defined as:

- CPT 83036, 83037, 3044F through 3046F, 3047F (old code)
- LOINC taxonomy
- Site-populated taxonomy DM AUDIT HGB A1C TAX

##### BP Documented

BP documented is defined as having a minimum of two blood pressures (BP) documented during the report period.

Exclusions: When calculating all BPs (using vital measurements or CPT codes), the following visits will be excluded:

- Service Category H (Hospitalization), I (In Hospital), S (Day Surgery), or O (Observation)
- Clinic code 23 (Surgical), 30 (ER), 44 (Day Surgery), C1 (Neurosurgery), or D4 (Anesthesiology)

CRS uses mean of last three BPs documented during the report period. If three BPs are not available, uses mean of last two BPs. If a visit contains more than one BP, the lowest BP will be used, defined as having the lowest systolic value. The mean Systolic value is calculated by adding the last three (or two) systolic values and dividing by three (or two). The mean Diastolic value is calculated by adding the diastolic values from the last three (or two) blood pressures and dividing by three (or two).

If CRS is not able to calculate a mean BP, it will search for Current Procedural Terminology (CPT) 0001F, 2000F, 3074F through 3080F or POV V81.1 documented during the report period.

### **Controlled BP**

CRS uses a mean, as described above. If the mean systolic and diastolic values do not *both* meet the criteria for controlled, then the value is considered not controlled.

### **BP Documented and Controlled BP**

If CRS is not able to calculate a mean BP from blood pressure measurements, it will search for the most recent of any of the following codes documented during the report period:

- BP Documented: CPT 0001F or 2000F or POV V81.1; OR
- Systolic: CPT 3074F, 3075F, or 3077F with Diastolic: CPT 3078F, 3079F, or 3080F. The systolic and diastolic values do not have to be recorded on the same day. If there are multiple values on the same day, the CPT indicating the lowest value will be used.
- The following combinations represent BP below 140/90 and will be included in the Controlled BP numerator: CPT 3074F or 3075F *and* 3078F or 3079F. All other combinations will not be included in the Controlled BP numerator.

### **LDL**

Finds last test done during the report period; defined as one of the following:

- CPT 80061, 83700, 83701, 83704, 83715 (old code), 83716 (old code), 83721, 3048F, 3049F, 3050F
- Logical Observations Identifiers, Names, Codes (LOINC) taxonomy
- Site-populated taxonomy DM AUDIT LDL CHOLESTEROL TAX

### **Nephropathy Assessment**

Defined as any of the following:

- Estimated GFR with result during the report period, defined as any of the following:

- Site-populated taxonomy BGP GPRA ESTIMATED GFR TAX
- LOINC taxonomy
- Quantitative Urinary Protein Assessment during the report period, defined as any of the following:
  - CPT 82042, 82043, 84156, 3060F, 3061F, or 3062F
  - LOINC taxonomy
  - Site-populated taxonomy BGP QUANT URINE PROTEIN

**Note:** Be sure to check with your laboratory supervisor that the names added to your taxonomy reflect quantitative test values.

- End Stage Renal Disease diagnosis or treatment defined as any of the following ever:
  - CPT 36145 (old code), 36147, 36800, 36810, 36815, 36818, 36819, 36820, 36821, 36831 through 36833, 50300, 50320, 50340, 50360, 50365, 50370, 50380, 90951 through 90970 or old codes 90918 through 90925, 90935, 90937, 90939 (old code), 90940, 90945, 90947, 90989, 90993, 90997, 90999, 99512, 3066F, G0257, G0308 through G0327 (old codes), G0392 (old code), G0393 (old code), S9339
  - POV 585.6, V42.0, V45.1 (old code), V45.11, V45.12, V56.\*
  - Procedure 38.95, 39.27, 39.42, 39.43, 39.53, 39.93 through 39.95, 54.98, 55.6\*

### Qualified Retinal Evaluation

- Diabetic retinal exam or
- Other eye exam

The following methods are qualifying for this measure:

- Dilated retinal evaluation by an optometrist or ophthalmologist.
- Seven standard fields stereoscopic photos (Early Treatment Diabetic Retinopathy Study [ETDRS]) evaluated by an optometrist or ophthalmologist.
- Any photographic method formally validated to seven standard fields (ETDRS).

**Diabetic Retinal Exam**

Any of the following during the report period:

- Exam code 03 Diabetic Eye Exam (dilated retinal examination or formally validated<sup>1</sup> ETDRS photographic equivalent).
- CPT 2022F Dilated retinal eye exam, 2024F Seven standard field stereoscopic photos with interpretation by an ophthalmologist or optometrist, 2026F Eye imaging formally validated<sup>2</sup> to match the diagnosis from seven standard field stereoscopic photos, S0620 Routine ophthalmological examination including refraction; new patient, S0621 Routine ophthalmological examination including refraction; established patient, S3000 Diabetic indicator; retinal eye exam, dilated, bilateral.

**Other Eye Exam**

- Non-DNKA (did not keep appointment) visits to ophthalmology, optometry or formally validated<sup>3</sup> tele-ophthalmology retinal evaluation clinics or
- Non-DNKA visits to an optometrist or ophthalmologist. Searches for the following codes in the following order:
  - Clinic codes A2 (Diabetic Retinopathy)<sup>4</sup>, 17, 18
  - Provider code 24, 79, 08
  - CPT 67028, 67038 (old code), 67039, 67040, 92002, 92004, 92012, 92014

**Bilateral Blindness**

- Diagnosis (POV or Problem List) 369.01, 369.03, 369.04

**Diabetic Foot Exam**

- Exam code 28 Diabetic Foot Exam, Complete
- Non-DNKA visit with a podiatrist (Provider codes 33, 84, 25)
- Non-DNKA visit to Podiatry Clinic (Clinic code 65), or
- CPT 2028F

**Bilateral foot amputation**

- CPT: 27290.50 through 27295.50, 27590.50 through 27592.50, 27598.50, 27880.50 through 27882.50 (50 modifier indicates bilateral)

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<sup>11</sup> Validation study properly powered and controlled against the ETDRS gold standard.

<sup>2</sup> Ibid.

<sup>3</sup> Validation study properly powered and controlled against the ETDRS gold standard.

<sup>4</sup> Validated photographic (teleophthalmology) retinal surveillance.

**Unilateral foot amputation**

- The patient must have two separate occurrences for either CPT or Procedure codes on two different dates of service:
  - CPT: 27290 through 27295, 27590 through 27592, 27598, 27880 through 27882
  - ICD Procedure codes: 84.10, 84.13 through 84.19

**2.1.1.5 Patient Lists**

- List of diabetic patients who did have their A1c assessed.
- List of diabetic patients who did not have their A1c assessed.
- List of diabetic patients who did have their BP assessed.
- List of diabetic patients who did not have their BP assessed.
- List of diabetic patients with controlled BP, defined as below 140/90.
- List of diabetic patients with uncontrolled BP, defined as above 140/90.
- List of diabetic patients with LDL completed.
- List of diabetic patients without LDL completed.
- List of diabetic patients with nephropathy assessment.
- List of diabetic patients without nephropathy assessment.
- List of diabetic patients with retinal evaluation.
- List of diabetic patients without retinal evaluation.
- List of diabetic patients with a diabetic foot exam.
- List of diabetic patients without a diabetic foot exam.
- List of diabetic patients with comprehensive diabetes care.
- List of diabetic patients without comprehensive diabetes care.

**2.1.2 RAS Antagonist Use in Diabetic Patients****2.1.2.1 Owner/Contact**

Chris Lamer, PharmD

**2.1.2.2 Denominators**

1. Active Diabetic patients with HTN, defined as all Active Clinical patients diagnosed with diabetes and hypertension prior to the Report Period, AND at least two visits during the Report Period, AND two DM-related visits ever.

### 2.1.2.3 Numerators

1. Patients receiving a RAS Antagonist medication during the Report Period.
2. Patients with contraindication or previous adverse reaction to RAS Antagonist therapy.

### 2.1.2.4 Definitions

#### Diabetes

First DM Purpose of Visit 250.00 through 250.93 recorded in the V POV file prior to the Report Period.

#### Hypertension

Diagnosis (POV or problem list) 401.\* prior to the Report period, and at least one hypertension POV during the Report period

#### RAS Antagonist Numerator Logic

Renin Angiotensin System (RAS) Antagonist medication codes defined with medication taxonomy BGP PQA RASA MEDS.

ACEI medications are:

- Angiotensin Converting Enzyme Inhibitors (Benazepril, Captopril, Enalapril, Fosinopril, Lisinopril, Moexipril, Perindopril, Quinapril, Ramipril, Trandolopril).
- Antihypertensive Combinations (Amlodipine-benazepril, Benazepril-hydrochlorothiazide, Captopril-hydrochlorothiazide, Enalapril-hydrochlorothiazide, Enalapril-Felodipine, Fosinopril-hydrochlorothiazide, Lisinopril-hydrochlorothiazide, Moexipril-hydrochlorothiazide, Quinapril-hydrochlorothiazide, Trandolopril-verapamil).

ARB medications are:

- Angiotensin II Inhibitors (Candesartan, Eprosartan, Irbesartan, Losartan, Olmesartan, Telmisartan, Valsartan).
- Antihypertensive Combinations (Aliskiren-valsartan, Amlodipine-valsartan, Amlodipine-hydrochlorothiazide-valsartan, Amlodipine-olmesartan, Candesartan-hydrochlorothiazide, Eprosartan-hydrochlorothiazide, Irbesartan-hydrochlorothiazide, Losartan-hydrochlorothiazide, Olmesartan-amlodipine-hydrochlorothiazide, Olmesartan-hydrochlorothiazide, Telmisartan-amlodipine, Telmisartan-hydrochlorothiazide, Valsartan-hydrochlorothiazide).

Direct Renin Inhibitor medications are:

- Direct Renin Inhibitors (Aliskiren).

- Direct Renin Inhibitor Combination Products (Aliskiren-amlodipine, Aliskiren-amlodipine-hydrochlorothiazide, Aliskiren-hydrochlorothiazide, Aliskiren-valsartan).

### Contraindications to RAS Antagonist

- Pregnancy, defined as at least two visits during the Report Period with POV or Problem diagnosis (640.03, 640.83, 640.93, 641.03, 641.13, 641.23, 641.33, 641.83, 641.93, 642.03, 642.13, 642.23, 642.33, 642.43, 642.53, 642.63, 642.73, 642.93, 643.03, 643.13, 643.23, 643.83, 643.93, 644.03, 644.13, 645.13, 645.23, 646.03, 646.13, 646.23, 646.33, 646.43, 646.53, 646.63, 646.73, 646.83, 646.93, 647.03, 647.13, 647.23, 647.33, 647.43, 647.53, 647.63, 647.83, 647.93, 648.03, 648.13, 648.23, 648.33, 648.43, 648.53, 648.63, 648.73, 648.83, 648.93, 649.03, 649.13, 649.23, 649.33, 649.43, 649.53, 649.63, 649.73, 651.03, 651.13, 651.23, 651.33, 651.43, 651.53, 651.63, 651.73, 651.83, 651.93, 652.03, 652.13, 652.23, 652.33, 652.43, 652.53, 652.63, 652.73, 652.83, 652.93, 653.03, 653.13, 653.23, 653.33, 653.43, 653.53, 653.63, 653.73, 653.83, 653.93, 654.03, 654.13, 654.23, 654.33, 654.43, 654.53, 654.63, 654.73, 654.83, 654.93, 655.03, 655.13, 655.23, 655.33, 655.43, 655.53, 655.63, 655.73, 655.83, 655.93, 656.03, 656.13, 656.23, 656.33, 656.43, 656.53, 656.63, 656.73, 656.83, 656.93, 657.03, 658.03, 658.13, 658.23, 658.33, 658.43, 658.83, 658.93, 659.03, 659.13, 659.23, 659.33, 659.43, 659.53, 659.63, 659.73, 659.83, 659.93, 660.03, 660.13, 660.23, 660.33, 660.43, 660.53, 660.63, 660.73, 660.83, 660.93, 661.03, 661.13, 661.23, 661.33, 661.43, 661.93, 662.03, 662.13, 662.23, 662.33, 663.03, 663.13, 663.23, 663.33, 663.43, 663.53, 663.63, 663.83, 663.93, 665.03, 665.83, 665.93, 668.03, 668.13, 668.23, 668.83, 668.93, 669.03, 669.13, 669.23, 669.43, 669.83, 669.93, 671.03, 671.13, 671.23, 671.33, 671.53, 671.83, 671.93, 673.03, 673.13, 673.23, 673.33, 673.83, 674.03, 674.53, 675.03, 675.13, 675.23, 675.83, 675.93, 676.03, 676.13, 676.23, 676.33, 676.43, 676.53, 676.63, 676.83, 676.93, 678.03, 678.13, 679.03, 679.13, V22.0 through V23.9, V28.81, V28.82, V28.89, V72.42, V89.01 through V89.09), where the primary provider is not a CHR (Provider code 53). Pharmacy-only visits (clinic code 39) will not count toward these two visits. If the patient has more than two pregnancy-related visits during the Report Period, CRS will use the first two visits in the Report Period. The patient must not have a documented miscarriage or abortion occurring after the second pregnancy-related visit.
  - Miscarriage definition
    - POV 630, 631, 632, 633\*, 634\*
    - CPT 59812, 59820, 59821, 59830
  - Abortion definition
    - POV 635\*, 636\*, 637\*



- CPT 59100, 59120, 59130, 59136, 59150, 59151, 59840, 59841, 59850, 59851, 59852, 59855, 59856, 59857, S2260 through S2267
- Procedure 69.01, 69.51, 74.91, 96.49
- Breastfeeding, defined as POV V24.1 or breastfeeding patient education codes BF-BC, BF-BP, BF-CS, BF-EQ, BF-FU, BF-HC, BF-ON, BF-M, BF-MK, or BF-N during the Report Period
- Diagnosis ever for moderate or severe aortic stenosis (POV 395.0, 395.2, 396.0, 396.2, 396.8, 424.1, 425.1, or 747.22)
- NMI (not medically indicated) refusal for any RAS Antagonist at least once during the Report Period

#### **Adverse drug reaction or documented RAS Antagonist allergy**

- POV 995.0 through 995.3 AND E942.6
- "ace inhibitor", "ACEI", "Angiotensin Receptor Blocker" or "ARB" entry in ART (Patient Allergies File)
- "ace i\*", "ACEI", "Angiotensin Receptor Blocker" or "ARB" contained within Problem List or in Provider Narrative field for any POV 995.0 through 995.3, V14.8

#### **2.1.2.5 Patient Lists**

- List of diabetic patients with hypertension and with RAS Antagonist medication.
- List of diabetic patients with hypertension and with no RAS Antagonist medication or with RAS Antagonist contraindication or ADR.

## **2.2 Dental Group**

### **2.2.1 Topical Fluoride**

#### **2.2.1.1 Owner: Contact**

Dental Program: Dr. Patrick Blahut

#### **2.2.1.2 Denominators**

No denominator. This measure is a total count only, not a percentage.

#### **2.2.1.3 Numerators**

1. Count only (no percentage comparison to denominator). For patients meeting the User Population definition, the total number of appropriate topical fluoride applications based on a maximum of four per patient per year.

#### 2.2.1.4 Definitions

##### Topical Fluoride Application

Defined as any of the following:

- Dental ADA codes 1201 (old code), 1203 (old code), 1204 (old code), 1205 (old code), 1206, 1208, 5986
- CPT codes D1203 (old code), D1204 (old code), D1206, D1208, D5986
- POV V07.31

A maximum of one application per patient per visit is allowed. A maximum of four topical fluoride applications are allowed per patient per year for the applications measure.

#### 2.2.1.5 Patient Lists

List of patients who received at least one topical fluoride application during Report period.

### 2.3 Immunization Group

#### 2.3.1 Influenza

##### 2.3.1.1 Owner: Contact

Epidemiology Program: Amy Groom, MPH

##### 2.3.1.2 Denominators

1. Active Clinical patients broken down by age groups (younger than 18 years, 18 through 49 years, 50 through 64 years, 65 years and older).
2. Active Clinical patients ages 18 through 49 years and considered high risk for influenza.
3. Active Diabetic patients, defined as all Active Clinical patients diagnosed with diabetes (POV 250.00 through 250.93) prior to the Report Period, and at least two visits in the past year, AND two DM-related visits ever.

##### 2.3.1.3 Numerators

1. Patients with influenza vaccine documented during the Report Period or with a contraindication documented at any time before the end of the Report Period.

**Note:** The only refusals included in this numerator are not medically indicated (NMI) refusals.

- A. Patients with a contraindication or a documented NMI refusal.

### 2.3.1.4 Definitions

#### Diabetes

First DM Purpose of Visit 250.00 through 250.93 recorded in the V POV file prior to the Report period.

#### Influenza Vaccine

Any of the following during the report period:

- Immunization (CVX) codes 88-Influenza Virus Vaccine, NOS, 15 Influenza Virus Vaccine SV, 16 Influenza Virus Vaccine WV, 111 Influenza Virus Vaccine Intranasal, 135 Influenza High Dose Seasonal, 140 Influenza Virus Vaccine SV Preservative Free, 141 Influenza Virus Vaccine SV, 144 Influenza Virus Vaccine SV Intradermal
- POV V04.8 (old code), V04.81 not documented with 90663, 90664, 90666 through 90668, 90470, G9141 or G9142, or V06.6 not documented with 90663, 90664, 90666 through 90668, 90470, G9141 or G9142
- CPT 90654 through 90662, 90724 (old code), G0008, G8108 (old code)
- ICD Procedure code: 99.52

#### Contraindication to Influenza Vaccine

Any of the following documented at any time before the end of the Report Period:

- Contraindication in the Immunization Package of “Egg Allergy” or “Anaphylaxis,”
- PCC NMI Refusal

#### Persons Considered High Risk for Influenza:

Those who have two or more visits in the past three years with a POV or Problem diagnosis of any of the following:

- HIV Infection: 042, 042.0 through 044.9 (old codes), 079.53, V08
- Diabetes: 250.00 through 250.93
- Rheumatic Heart Disease: 393. through 398.99
- Hypertensive Heart Disease: 402.00 through 402.91
- Hypertensive Heart or Renal Disease: 404.00 through 404.93
- Ischemic Heart Disease: 410.00 through 414.9
- Pulmonary Heart Disease: 415.0 through 416.9
- Other Endocardial Heart Disease: 424.0 through 424.9
- Cardiomyopathy: 425.0 through 425.9

- Congestive Heart Failure: 428.0 through 428.9, 429.2
- Chronic Bronchitis: 491.0 through 491.9
- Emphysema: 492.0 through 492.8
- Asthma: 493.00 through 493.91
- Bronchiectasis, CLD, COPD: 494.0 through 496.
- Pneumoconioses: 500 through 505
- Chronic Liver Disease: 571.0 through 571.9
- Nephrotic Syndrome: 581.0 through 581.9
- Renal Failure: 585.6, 585.9
- Transplant: 996.80 through 996.89
- Kidney Transplant: V42.0 through V42.89
- Chemotherapy: V58.1
- Chemotherapy follow-up: V67.2

#### **2.3.1.5 Patient Lists**

- List of patients with influenza vaccination, contraindication, or NMI refusal.
- List of patients without influenza vaccination, contraindication, or NMI refusal.
- List of diabetic patients with influenza vaccination, contraindication, or NMI refusal.
- List of diabetic patients without influenza vaccination, contraindication, or NMI refusal.

### **2.3.2 Adult Immunizations**

#### **2.3.2.1 Owner: Contact**

Epidemiology Program: Amy Groom, MPH

#### **2.3.2.2 Denominators**

1. Active Clinical patients ages 18 through 64 years and considered high risk for pneumococcal.
2. Active Diabetic patients, defined as all Active Clinical patients diagnosed with diabetes (POV 250.00 through 250.93) prior to the report period, and at least two visits in the past year, and two DM-related visits ever.
3. Active Clinical patients ages 18 and older.

### 2.3.2.3 Numerators

1. Patients with Pneumococcal vaccine or contraindication documented ever and, if patient is older than 65 years, either a dose of pneumovax after the age of 65 or a dose of pneumovax in the past five years.

**Note:** The only refusals included in this numerator are NMI refusals.

A. Patients with contraindication or a documented NMI refusal.

2. Patients who have received one dose of Tdap ever, including contraindications and evidence of disease.

**Note:** The only refusals included in this numerator are NMI refusals.

3. Patients who have received one dose of Tdap or Td in the past ten years, including contraindications and evidence of disease.

**Note:** The only refusals included in this numerator are NMI refusals.

### 2.3.2.4 Definitions

#### Diabetes

First DM Purpose of Visit 250.00 through 250.93 recorded in the V POV file prior to the report period.

#### Pneumococcal Immunization

Any of the following documented any time before the end of report period:

- Immunization (CVX) codes 33 Pneumo Polysaccharide, 100 Pneumo Conjugate, 109 Pneumo NOS, 133 Pneumo Conjugate
- POV V06.6, V03.82
- Procedure 99.55
- CPT 90669, 90670, 90732, G0009, G8115 (old code).

#### Pneumococcal Contraindication

Any of the following documented any time before the end of the report period:

- Contraindication in the Immunization Package of Anaphylaxis
- PCC NMI Refusal

**Persons Considered High Risk for Pneumococcal**

Those who have two or more visits in the past three years with a POV or Problem diagnosis of any of the following:

- HIV Infection: 042, 042.0 through 043.9 (old codes), 044.9 (old code), 079.53, V08
- Diabetes: 250.00 through 250.93
- Chronic alcoholism: 303.90, 303.91
- Congestive Heart Failure: 428.0 through 428.9, 429.2
- Emphysema: 492.0 through 492.8
- Asthma: 493.00 through 493.91
- Bronchiectasis, CLD, COPD: 494. through 496.
- Pneumoconioses: 501. through 505.
- Chronic Liver Disease: 571.0 through 571.9
- Nephrotic Syndrome: 581.0 through 581.9
- Renal Failure: 585.6, 585.9
- Injury to spleen: 865.00 through 865.19
- Transplant: 996.80 through 996.89
- Kidney Transplant: V42.0 through V42.89
- Chemotherapy: V58.1
- Chemotherapy follow-up: V67.2

**Tdap Immunization:**

Any of the following documented during the applicable time frame:

- Immunization (CVX) code: 115
- CPT 90715

**Tdap Contraindication**

Any of the following documented any time before the end of the Report Period:

- Immunization Package contraindication of "Anaphylaxis"
- PCC NMI Refusal

**Td Immunization**

Any of the following documented in the past ten years:

- Immunization (CVX) code 9, 113

- POV V06.5
- CPT 90714, 90718

**Td Contraindication**

Any of the following documented any time before the end of the Report Period:

- Immunization Package contraindication of "Anaphylaxis"
- PCC NMI Refusal

**2.3.2.5 Patient Lists**

- List of patients 18 through 64 years of age considered high risk for pneumococcal with pneumovax vaccination, contraindication, or NMI refusal.
- List of patients 18 through 64 years of age considered high risk for pneumococcal without pneumovax vaccination, contraindication, or NMI refusal.
- List of diabetic patients with pneumovax vaccination, contraindication, or NMI refusal.
- List of diabetic patients without pneumovax vaccination, contraindication, or NMI refusal.
- List of patients 18 years of age and older with Tdap vaccination, contraindication, evidence of disease or NMI refusal.
- List of patients 18 years of age and older without Tdap vaccination, contraindication, evidence of disease or NMI refusal.
- List of patients 18 years of age and older with Tdap or Td vaccination or NMI refusal in the past ten years, or contraindication or evidence of disease ever.
- List of patients 18 years of age and older without Tdap or Td vaccination or NMI refusal in the past ten years, or contraindication or evidence of disease ever.

**2.3.3 Adolescent Immunizations****2.3.3.1 Owner: Contact**

Epidemiology Program: Dr. Scott Hamstra, Amy Groom, MPH

**2.3.3.2 Denominators**

1. Active Clinical patients ages 13 through 17 years.
2. Male Active Clinical patients ages 13 through 17 years.
3. Female Active Clinical patients ages 13 through 17 years.

### 2.3.3.3 Numerators

1. Patients who have received the 1:3:2:1 combination (i.e., one Td or Tdap, three Hepatitis B, two MMR, one Varicella), including contraindications and evidence of disease.

**Note:** The only refusals included in this numerator are NMI refusals.

2. Patients who have received the 1:1:3 combination (i.e. one Tdap or Td, one Meningococcal, three HPV), including contraindications and evidence of disease.

**Note:** The only refusals included in this numerator are NMI refusals.

3. Patients who have received the 1:1 combination (i.e. one Tdap or Td, one Meningococcal), including contraindications and evidence of disease.

**Note:** The only refusals included in this numerator are NMI refusals.

4. Patients who have received one dose of Tdap ever, including contraindications and evidence of disease.

**Note:** The only refusals included in this numerator are NMI refusals.

5. Patients who have received one dose of meningococcal ever, including contraindications and evidence of disease.

**Note:** The only refusals included in this numerator are NMI refusals.

6. Patients who have received three doses of HPV ever, including contraindications and evidence of disease.

**Note:** The only refusals included in this numerator are NMI refusals.

### 2.3.3.4 Definitions

#### Timing of Doses

Because IZ data comes from multiple sources, any IZ codes documented on dates within ten days of each other will be considered as the same immunization.

#### Dosage and Types of Immunizations

- One dose of Td or Tdap



- Two doses of MMR:
  - Two MMRs
  - Two M/R and two Mumps
  - Two R/M and two Measles or
  - Two each of Measles, Mumps, and Rubella
- Three doses of Hepatitis B OR two doses if documented with CPT 90743
- One dose of Varicella
- One dose of Meningococcal
- Three doses of HPV

### **Not Medically Indicated Refusal, Contraindication, and Evidence of Disease Information**

Not Medically Indicated refusals, evidence of disease, and contraindications for individual immunizations will also count toward meeting the definition, as defined in the following section.

**Note:** NMI refusals are not counted as refusals; rather, they are counted as contraindications.

- Each immunization must be refused and documented separately. For example, if a patient has an NMI refusal for Rubella only, then there must be an immunization, contraindication, or separate NMI refusal for the Measles and Mumps immunizations.
- For immunizations where required number of doses is greater than one, only one NMI refusal is necessary to be counted in the numerator. For example, if there is a single NMI refusal for Hepatitis B, the patient will be included in the numerator.
- For immunizations where required number of doses is greater than one, only one contraindication is necessary to be counted in the numerator. For example, if there is a single contraindication for Haemophilus influenzae type B (HiB) vaccine, the patient will be included in the numerator.
- Evidence of disease will be checked for at any time in the child's life (prior to the end of the Report period.)
- To be counted as evidence of disease or contraindication or NMI refusal, a patient must have evidence of disease, a contraindication, or an NMI refusal for any of the immunizations in the numerator. For example, if a patient was Rubella immune but had a Measles and Mumps immunization, the patient would be counted as having evidence of disease for MMR.

## Refusal Definitions

PCC Refusal type NMI for any of the following codes:

- MMR
  - Immunization (CVX) codes 3, 94
  - CPT 90707, 90710
- M/R
  - Immunization (CVX) code 4
  - CPT 90708
- R/M
  - Immunization (CVX) code 38
  - CPT 90709 (old code)
- Measles
  - Immunization (CVX) code 5
  - CPT 90705
- Mumps
  - Immunization (CVX) code 7
  - CPT 90704
- Rubella
  - Immunization (CVX) code 6
  - CPT 90706
- Hepatitis B
  - Immunization (CVX) codes 8, 42 through 45, 51, 102, 104, 110, 132, 146
  - CPT 90636, 90723, 90731 (old code), 90740, 90743 through 90748, G0010, Q3021 (old code), Q3023 (old code)
- Varicella
  - Immunization (CVX) codes 21, 94
  - CPT 90710, 90716
- Tdap
  - Immunization (CVX) codes 115, Td: 9, 113
  - CPT 90715
- Td
  - CPT 90714, 90718
- Meningococcal

- Immunization (CVX) codes 32, 108, 114, 136, 147
- CPT 90733, 90734
- HPV
  - CPT 90649, 90650

**Immunization Definitions:**

- MMR
  - Immunization (CVX) codes 3, 94
  - POV V06.4
  - CPT 90707, 90710
  - Procedure 99.48
- MMR Contraindication
  - Immunization Package contraindication of “Anaphylaxis”, “Immune Deficiency”, or “Neomycin Allergy”
- M/R
  - Immunization (CVX) code 4
  - CPT 90708
- M/R Contraindication
  - Immunization Package contraindication of “Anaphylaxis”
- R/M:
  - Immunization (CVX) code 38
  - CPT 90709 (old code)
- R/M Contraindication
  - Immunization Package contraindication of “Anaphylaxis”
- Measles
  - Immunization (CVX) code 5
  - POV V04.2
  - CPT 90705
  - Procedure 99.45
- Measles Evidence of Disease
  - POV or PCC Problem List (active or inactive) 055\*
- Measles Contraindication
  - Immunization Package Contraindication of “Anaphylaxis”
- Mumps

- Immunization (CVX) code 7
- POV V04.6
- CPT 90704
- Procedure 99.46
- Mumps Evidence of Disease
  - POV or PCC Problem List (active or inactive) 072\*
- Mumps Contraindication
  - Immunization Package contraindication of “Anaphylaxis”
- Rubella
  - Immunization (CVX) code 6
  - POV V04.3
  - CPT 90706
  - Procedure 99.47
- Rubella Evidence of Disease
  - POV or PCC Problem List (active or inactive) 056\*, 771.0
- Rubella Contraindication
  - Immunization Package contraindication of “Anaphylaxis”
- Hepatitis B
  - Immunization (CVX) codes 8, 42 through 45, 51, 102, 104, 110, 132, 146
  - CPT 90636, 90723, 90731 (old code), 90740, 90743 through 90748, G0010, Q3021, Q3023
- Hepatitis B Evidence of Disease
  - POV or PCC Problem List (active or inactive) V02.61, 070.2, 070.3
- Hepatitis B Contraindication
  - Immunization Package contraindication of “Anaphylaxis”
- Varicella
  - Immunization (CVX) codes 21, 94
  - POV V05.4
  - CPT 90710, 90716
- Varicella Evidence of Disease
  - POV or PCC Problem List (active or inactive) 052\*, 053\*
  - Immunization Package contraindication of “Hx of Chicken Pox” or “Immune”
- Varicella Contraindication

- Immunization Package contraindication of “Anaphylaxis”, “Immune Deficiency”, or “Neomycin Allergy”
- Tdap
  - Immunization (CVX) code 115
  - CPT 90715
- Tdap Contraindication
  - Immunization Package contraindication of “Anaphylaxis”
- Td
  - Immunization (CVX) code 9, 113
  - POV V06.5
  - CPT 90714, 90718
- Td Contraindication
  - Immunization Package contraindication of “Anaphylaxis”
- Meningococcal
  - Immunization (CVX) codes 32, 108, 114, 136, 147
  - CPT 90733, 90734
- Meningococcal Contraindication
  - Immunization Package contraindication of “Anaphylaxis”
- HPV
  - Immunization (CVX) codes 62, 118, 137
  - CPT 90649, 90650
- HPV Contraindication
  - Immunization Package contraindication of “Anaphylaxis”

### 2.3.3.5 Patient Lists

- List of Active Clinical patients 13 through 17 years of age with 1:3:2:1 combination (i.e., one Td or Tdap, three Hepatitis B, two MMR, one Varicella).
- List of Active Clinical patients 13 through 17 years of age without 1:3:2:1 combination (i.e., one Td or Tdap, three Hepatitis B, two MMR, one Varicella). If a patient did not have all doses in a multiple dose vaccine, the IZ will not be listed. For example, if a patient only had two Hepatitis B, no IZ will be listed for Hepatitis B.
- List of Active Clinical patients 13 through 17 years of age with 1:1:3 combination (i.e. one Tdap or Td, one Meningococcal, three HPV).

- List of Active Clinical patients 13 through 17 years of age without 1:1:3 combination (i.e. one Tdap or Td, one Meningococcal, three HPV). If a patient did not have all doses in a multiple dose vaccine, the IZ will not be listed. For example, if a patient only had two HPV, no IZ will be listed for HPV.
- List of Active Clinical patients 13 through 17 years of age with 1:1 combination (i.e. one Tdap or Td, one Meningococcal).
- List of Active Clinical patients 13 through 17 years of age without 1:1 combination (i.e. one Tdap or Td, one Meningococcal).
- List of Active Clinical patients 13 through 17 years of age with one Tdap ever.
- List of Active Clinical patients 13 through 17 years of age without one Tdap ever.
- List of Active Clinical patients 13 through 17 years of age with one Meningococcal ever.
- List of Active Clinical patients 13 through 17 years of age without one Meningococcal ever.
- List of Active Clinical patients 13 through 17 years of age with three doses of HPV ever.
- List of Active Clinical patients 13 through 17 years of age without three doses of HPV ever. If a patient did not have all doses, the IZ will not be listed.

## 2.4 Behavioral Health Group

### 2.4.1 Alcohol Screening and Brief Intervention (ASBI) in the ER

#### 2.4.1.1 Owner: Contact

Peter Stuart, Cheryl Peterson, RN, MSN, Denise Grenier, LCSW

#### 2.4.1.2 Denominators

1. Number of visits for Active Clinical Plus BH patients age 15 through 34 years seen in the ER for injury during the Report Period.
2. Number of visits for Active Clinical Plus BH patients age 15 through 34 years seen in the ER for injury and screened positive for hazardous alcohol use during the Report Period.
3. Number of visits for User Population patients age 15 through 34 years seen in the ER for injury during the Report Period.
4. Number of visits for User Population patients age 15 through 34 years seen in the ER for injury and screened positive for hazardous alcohol use during the Report Period.

### 2.4.1.3 Numerators

1. Number of visits where patients were screened in the ER for hazardous alcohol use.
  - A. Number of visits where patients were screened positive.
2. Number of visits where patients were provided a brief negotiated interview (BNI) at or within seven days of the ER visit (used with denominators #2 and #4).
  - A. Number of visits where patients were provided a BNI at the ER visit.
  - B. Number of visits where patients were provided a BNI not at the ER visit but within seven days of the ER visit.

### 2.4.1.4 Definitions

#### ER Visit:

Clinic code 30

#### Injury

Primary or secondary POV 800.0 through 999.9 or E800.0 through E989

#### Denominator and Numerator Logic

If a patient has multiple ER visits for injury during the Report Period, each visit will be counted in the denominator. For the screening numerator, each ER visit with injury at which the patient was screened for hazardous alcohol use will be counted. For the positive alcohol use screen numerator, each ER visit with injury at which the patient screened positive for hazardous alcohol use will be counted. For the BNI numerators, each visit where the patient was either provided a BNI at the ER or within seven days of the ER visit will be counted.

An example of this logic is shown in Table 2-1.

Table 2-1: Denominator and Numerator Logic

ER Visit with Injury	Denom Count	Scm Num	Post Scm Num Count	BNI Num Count
John Doe, July 17, 2012, Screened Positive at ER, BNI at ER	1	1	1	1
John Doe, September 1, 2012, Screened Positive at ER, No BNI	1	1	1	0
John Doe, November 15, 2012, No Screen	1	0	0	0
Counts:	3	2	2	1

**ER Screening for Hazardous Alcohol Use**

Any of the following conducted during the ER visit:

- PCC Exam code 35
- Any Alcohol Health Factor (i.e., CAGE)
- POV V79.1 Screening for Alcoholism
- CPT G0396, G0397, H0050, 99408, 99409, 3016F
- Measurement in PCC AUDT, AUDC, or CRFT

**Positive Screen for Hazardous Alcohol Use**

Any of the following for the screening performed at the ER visit:

- Exam code 35 Alcohol Screening result of Positive
- Health factor of CAGE result of 1/4, 2/4, 3/4 or 4/4
- CPT G0396, G0397, 99408, 99409
- AUDT result of 8 or higher, AUDC result of 4 or higher for men and 3 or higher for women, CRFT results of 2 through 6

**Brief Negotiated Interview (BNI)**

Any of the following documented at the ER visit or within seven days of the ER visit at a face-to-face visit, which excludes chart reviews and telecommunication visits:

- CPT G0396, G0397, H0050, 99408, 99409
- Patient education code containing AOD-BNI , G0396, G0397, H0050, 99408, 99409

**2.4.1.5 Patient Lists**

- Patients 15 through 34 years of age seen in the ER for injury who were screened for hazardous alcohol use.
- Patients 15 through 34 years of age seen in the ER for injury who were not screened for hazardous alcohol use.
- Patients 15 through 34 years of age seen in the ER for injury with positive alcohol screen who received a BNI.
- Patients 15 through 34 years of age seen in the ER for injury with positive alcohol screen who did not receive a BNI.



## 2.4.2 Intimate Partner (Domestic) Violence Screening

### 2.4.2.1 Owner: Contact

Denise Grenier, LCSW and Dr. Peter Stuart

### 2.4.2.2 Denominators

1. GPRA Denominator: Female Active Clinical patients ages 15 through 40 years.

### 2.4.2.3 Numerators

1. GPRA Numerator: Patients screened for intimate partner violence/domestic violence (IPV/DV) at any time during the Report Period.

**Note:** This numerator does not include refusals.

- A. Patients with documented IPV/DV exam.
- B. Patients with IPV/DV related diagnosis.
- C. Patients provided with education or counseling about IPV/DV.

### 2.4.2.4 Definitions

#### IPV/DV Screening

Defined as at least one of the following:

- IPV/DV Screening
  - PCC Exam code 34
  - BHS IPV/DV exam
- IPV/DV Related Diagnosis
  - POV, Current PCC or BHS Problem List 995.80 through 83, 995.85, V15.41, V15.42, V15.49
  - BHS POV 43.\*, 44.\*
- IPV/DV Patient Education
  - Patient Education codes containing “DV-” or “-DV”, 995.80 through 83, 995.85, V15.41, V15.42, V15.49
- IPV/DV Counseling
  - POV V61.11

### 2.4.2.5 Patient Lists

- List of female patients 15 through 40 years of age with documented IPV/DV screening.

- List of female patients 15 through 40 years of age without documented IPV/DV screening.

### 2.4.3 Depression Screening

#### 2.4.3.1 Owner: Contact

Cheryl Peterson, RN, MSN, Denise Grenier, LCSW, Dr. David Sprenger and Dr. Peter Stuart

#### 2.4.3.2 Denominators

1. Active Diabetes patients, defined as: all Active Clinical patients diagnosed with diabetes prior to the Report Period, *and* at least two visits during the Report Period, *and* two DM-related visits ever. Broken out by gender.

#### 2.4.3.3 Numerators

1. Patients screened for depression or diagnosed with mood disorder at any time during the Report Period.

**Note:** This numerator does *not* include refusals.

- A. Patients screened for depression during the Report Period.
  - B. Patients with a diagnosis of a mood disorder during the Report Period.
2. Patients with depression-related education in past year.

#### 2.4.3.4 Definitions

##### Diabetes

First DM Purpose of Visit 250.00 through 250.93 recorded in the V POV file prior to the Report period

##### Depression Screening

Any of the following:

- Exam code 36
- POV V79.0
- CPT 1220F
- BHS Problem code 14.1 (screening for depression)
- V Measurement in PCC or BH of PHQ2 or PHQ9

**Mood Disorders**

At least two visits in PCC or BHS during the Report period with POV for: Major Depressive Disorder, Dysthymic Disorder, Depressive Disorder NOS, Bipolar I or II Disorder, Cyclothymic Disorder, Bipolar Disorder NOS, Mood Disorder Due to a General Medical Condition, Substance-induced Mood Disorder, or Mood Disorder NOS.

- These POV codes are: 296.\*, 291.89, 292.84, 293.83, 300.4, 301.13, 311 or BHS POV 14, 15.

**Depression-related patient education**

Any of the following during the report period:

- Patient education codes containing “DEP-” (depression), 296.2\*, 296.3\*, “BH-” (behavioral and social health), 290 through 319, 995.5\*, 995.80 through 995.85, “SB-” (suicidal behavior), 300.9, “PDEP-” (postpartum depression), 648.44

**2.4.3.5 Patient Lists**

- List of Active Diabetic patients screened for depression or diagnosed with mood disorder.
- List of Active Diabetic patients not screened for depression or diagnosed with mood disorder.

**2.4.4 Antidepressant Medication Management****2.4.4.1 Owner: Contact**

Denise Grenier, LCSW and Dr. David Sprenger

**2.4.4.2 Denominators**

1. As of the 120th day of the report period, Active Clinical Plus BH patients 18 years and older who were diagnosed with a new episode of depression and treated with antidepressant medication in the past year.

**2.4.4.3 Numerators**

1. Effective Acute Phase Treatment: Patients who filled a sufficient number of separate prescriptions or refills of antidepressant medication for continuous treatment of at least 84 days (12 weeks).
2. Effective Continuation Phase Treatment: Patients who filled a sufficient number of separate prescriptions or refills of antidepressant medication treatment to provide continuous treatment for at least 180 days (six months).

#### 2.4.4.4 Definitions

##### Major Depression

POV 296.2\*, 296.3\*, 298.0, 311.

The Index Episode Start Date is date of the patient's earliest visit during this period. For inpatient visits, the discharge date will be used.

##### Index Episode Start Date

The date of the patient's earliest visit during this period. For inpatient visits, the discharge date will be used.

##### Antidepressant Medications

Medication taxonomy BGP HEDIS ANTIDEPRESSANT MEDS.

- Medications are: Tricyclic antidepressants (TCA) and other cyclic antidepressants, Selective serotonin reuptake inhibitors (SSRI), Monoamine oxidase inhibitors (MAOI), Serotonin-norepinephrine reuptake inhibitors (SNRI), and other antidepressants. Medications must not have a comment of RETURNED TO STOCK.

##### To be included in the denominator, patient must meet both of the following conditions:

- One of the following from the 121st day of the year prior to the report period to the 120th day of the report period:
  - One visit in any setting with major depression diagnosis (see list of codes) as primary POV
  - Two outpatient visits occurring on different dates of service with secondary POV of major depression
  - An inpatient visit with secondary POV of major depression

For example, if report period is July 1, 2012 through June 30, 2013, patient must have one of the three scenarios above during November 01, 2011 through October 29, 2012.

- Filled a prescription for an antidepressant medication (see list of medications that follows) within 30 days before the Index Episode Start Date or 14 days on or after that date. In V Medication, Date Discontinued must not be equal to the prescription, (i.e., visit date). The Index Prescription Date is the date of earliest prescription for antidepressant medication filled during that time period.

##### Denominator Exclusions

Patients who had a new or refill prescription for antidepressant medication (see list of medications that follows) within 90 days (three months) prior to the Index

Prescription Date are excluded as they do not represent new treatment episodes, or

### Effective Acute Phase Treatment Numerator

For all antidepressant medication prescriptions filled (see list of medications that follows) within 114 days of the Index Prescription Date, from V Medication CRS counts the days prescribed (i.e., treatment days) from the Index Prescription Date until a total of 84 treatment days has been established. If the patient had a total gap exceeding 30 days or if the patient does not have 84 treatment days within the 114 day time frame, the patient is not included in the numerator.

**Note:** If a medication was started and then discontinued, CRS will recalculate the number of Days Prescribed by subtracting the prescription date (i.e., visit date) from the V Medication Discontinued Date. For example:

- Rx Date: November 15, 2013
- Discontinued Date: November 19, 2013

Recalculated number of Days Prescribed:  
*November 19, 2013 – November 15, 2013 = 4*

### Example of Patient Included in Numerator:

- First prescription:
  - Index Rx Date: November 1, 2012
  - Number of Days Prescribed: 30  
*November 1, 2012 + 30 days = December 1, 2012*Prescription covers the patient through December 1, 2012
  
- Second prescription:
  - Rx Date: December 15, 2012
  - Number of Days Prescribed: 30:
  - Gap #1 equals 14 days:  
*December 15, 2012 – December 1, 2012 = 14 days*Prescription covers the patient through January 14, 2013.
  
- Third prescription:
  - Rx Date: January 10, 2013
  - Number of Days Prescribed: 30
  - No gap days

*November 1, 2012 + 114 days = February 23, 2013*

Prescription covers the patient through February 13, 2013.

- Patient's 84th treatment day occurs on February 7, 2013:

*February 7, 2013 ≤ February 23, 2013*

*Number of gap days = 14, which is < 30*

Patient is included in the Numerator.

#### **Example of Patient Not Included in Numerator:**

- First prescription:

- Index Rx Date: November 1, 2012

- Number of Days Prescribed: 30

*November 1, 2012 + 30 days = December 1, 2012*

Prescription covers the patient through December 1, 2012.

- Second prescription:

- Rx Date: December 15, 2012

- Number of Days Prescribed: 30:

- Gap #1 equals 14 days:

*December 15, 2012 – December 1, 2012 = 14 days*

Prescription covers the patient through January 14, 2013.

- Third prescription:

- Rx Date: February 1, 2013

- Number of Days Prescribed: 30

- Gap #2 equals 18 days:

*February 1, 2013 – January 14, 2013 = 18*

- Total number of gap days equals 32:

*14 + 18 = 32*

Patient is not included in the numerator.

#### **Effective Continuation Phase Treatment Numerator**

For all antidepressant medication prescriptions (see the previous list of medications ) filled within 231 days of the Index Rx Date, CRS counts the days prescribed (i.e., treatment days) (from V Medication) from the Index Rx Date until a total of 180 treatment days has been established. If the patient had a total

gap exceeding 51 days or if the patient does not have 180 treatment days within the 231 day timeframe, the patient is not included in the numerator.

**Note:** If a medication was started and then discontinued, CRS will recalculate the number of Days Prescribed by subtracting the prescription date (i.e., visit date) from the V Medication Discontinued Date. For example:  
- Rx Date: November 15, 2013  
- Discontinued Date: November 19, 2013  
Recalculated number of Days Prescribed:  
*November 19, 2013 – November 15, 2013 = 4*

#### 2.4.4.5 Patient Lists

- List of Active Clinical Plus BH patients with new depression diagnosis and no acute phase treatment (APT).
- List of Active Clinical Plus BH patients with new depression diagnosis and no continuation phase treatment (CONPT).

## 2.5 Cardiovascular Disease Related Group

### 2.5.1 Physical Activity Assessment

#### 2.5.1.1 Owner: Contact

Patient Education Program: Chris Lamer, PharmD  
Nutrition Program: Jean Charles-Azure

#### 2.5.1.2 Denominators

1. Active Clinical patients ages five and older.
2. Numerator 1 (Active Clinical Patients assessed for physical activity during the Report Period).
3. User Population patients ages five and older.
4. Numerator 1 (User Population Patients assessed for physical activity during the Report Period).

#### 2.5.1.3 Numerators

1. Patients assessed for physical activity during the Report Period.
  - A. Patients from Numerator 1 who have received exercise education following their physical activity assessment.

#### **2.5.1.4 Definitions**

##### **Physical Activity Assessment**

Any health factor for category Activity Level documented during the Report Period.

##### **Exercise Education**

- POV V65.41 exercise counseling
- Patient education codes ending “-EX” (Exercise) or containing V65.41

#### **2.5.1.5 Patient Lists**

- List of Active Clinical patients five and older who had a physical activity assessment.
- List of Active Clinical patients five and older who did not have a physical activity assessment.
- List of Active Clinical patients five and older who had a physical activity assessment and received exercise education.
- List of Active Clinical patients five and older who had a physical activity assessment and did not receive exercise education.

### **2.5.2 Cardiovascular Disease and Cholesterol Screening**

#### **2.5.2.1 Owner: Contact**

Dr. Dena Wilson, Chris Lamer, PharmD, and Mark Veazie

#### **2.5.2.2 Denominators**

1. Active Clinical patients ages 23 and older.

#### **2.5.2.3 Numerators**

1. Patients with documented blood total cholesterol screening any time during past five years.



#### 2.5.2.4 Definitions

##### Total Cholesterol Panel

Searches for most recent cholesterol test with a result during the Report Period. If more than one cholesterol test is found on the same day or the same visit and one test has a result and the other does not, the test with the result will be used. If a cholesterol test with a result is not found, CRS searches for the most recent cholesterol test without a result.

Total Cholesterol:

- CPT 82465
- LOINC taxonomy
- Site-populated taxonomy DM AUDIT CHOLESTEROL TAX

#### 2.5.2.5 Patient Lists

- List of Active Clinical patients 23and older screened for total cholesterol in past five years.
- List of Active Clinical patients 23and older not screened for total cholesterol in past five years.

### 2.5.3 Cardiovascular Disease and Blood Pressure Control

#### 2.5.3.1 Owner: Contact

Dr. Dena Wilson, Chris Lamer, PharmD, and Mark Veazie

#### 2.5.3.2 Denominators

1. All Active Clinical patients ages 20 and over.
2. Active coronary heart disease (CHD) patients, defined as all Active Clinical patients diagnosed with CHD prior to the Report Period, *and* at least two visits during the Report Period, *and* two CHD-related visits ever.

#### 2.5.3.3 Numerators

1. Patients with BP values documented.
  - A. Patients with normal BP, below 120/80.
  - B. Prehypertension I, 120/80 or higher but below 130/80.
  - C. Prehypertension II, 130/80 or higher but below 140/90.
  - D. Stage 1 hypertension, 140/90 or higher but below 160/100.
  - E. Stage 2 hypertension, 160/100 or higher.

### 2.5.3.4 Definitions

#### CHD

- POV 410.0 through 413.\*, 414.0 through 414.9, 429.2
- One or more Coronary Artery Bypass Graft (CABG) or Percutaneous Coronary Interventions (PCI) procedures, defined as any of the following:
  - CABG Procedure
    - POV V45.81
    - CPT 33510 through 33514, 33516 through 33519, 33521 through 33523, 33533 through 33536, S2205 through S2209
    - Procedure 36.1\*, 36.2\*
  - PCI Procedure
    - POV V45.82
    - CPT 92980, 92982, 92995, G0290
    - Procedure 00.66, 36.01 (old code), 36.02 (old code), 36.05, (old code), 36.06 through 36.07

#### BP Values (all numerators)

Exclusions: When calculating all BPs (using vital measurements or CPT codes), the following visits will be excluded:

- Service Category H (Hospitalization), I (In Hospital), S (Day Surgery), or O (Observation)
- Clinic code 23 (Surgical), 30 (ER), 44 (Day Surgery), C1 (Neurosurgery), or D4 (Anesthesiology)

CRS uses mean of last three BPs documented in the past two years. If three BPs are not available, uses the mean of last two BPs. If a visit contains more than one BP, the lowest BP will be used, defined as having the lowest systolic value. The mean Systolic value is calculated by adding the last three (or two) systolic values and dividing by three (or two). The mean Diastolic value is calculated by adding the diastolic values from the last three (or two) blood pressures and dividing by three (or two). If the systolic and diastolic values do not *both* meet the current category, then the value that is least controlled determines the category.

For the BP documented numerator only, if CRS is not able to calculate a mean BP, it will search for CPT 0001F, 2000F, 3074F through 3080F or POV V81.1 documented during the Report Period.

### 2.5.3.5 Patient Lists

- List of Active Clinical patients 20 and older or who have CHD who had their BP assessed twice in past two years.
- List of Active Clinical patients 20 and older or who have CHD who have not had their BP assessed twice in past two years.
- List of Active Clinical patients 20 and older or who have CHD who have normal BP (below 120/80).
- List of Active Clinical patients 20 and older or who have CHD who have uncontrolled BP (120/80 or higher).

## 2.5.4 Appropriate Medication Therapy after a Heart Attack

### 2.5.4.1 Owner: Contact

Dr. Dena Wilson, Chris Lamer, PharmD, and Mark Veazie

### 2.5.4.2 Denominators

1. Active Clinical patients 35 and older discharged for an Acute Myocardial Infarction (AMI) during the first 51 weeks of the report period and were not readmitted for any diagnosis within seven days of discharge.

### 2.5.4.3 Numerators

**Note:** These numerators do *not* include refusals.

1. Patients with active prescription for or who have a contraindication or previous adverse reaction to beta-blockers.
2. Patients with active prescription for or who have a contraindication or previous adverse reaction to ASA or other anti-platelet agent.
3. Patients with active prescription for or who have a contraindication or previous adverse reaction to ACEIs or ARBs.
4. Patients with active prescription for or who have a contraindication or previous adverse reaction to statins.
5. Patients with active prescriptions for all post-AMI medications (i.e. beta-blocker, ASA or anti-platelet, ACEI or ARB, AND statin) or who have a contraindication or previous adverse reaction.

#### 2.5.4.4 Definitions

##### AMI:

POV 410.\*1 (i.e., first eligible episode of an AMI) with Service Category H. If patient has more than one episode of AMI during the first 51 weeks of the Report period, CRS will include only the first discharge.

##### Denominator Exclusions

Patients meeting any of the following conditions will be excluded from the denominator:

- Patients with Discharge Type of Irregular (AMA), Transferred, or contains “Death”
- Patients readmitted for any diagnosis within seven days of discharge
- Patients with a Diagnosis Modifier of C (Consider), D (Doubtful), M (Maybe, Possible, Perhaps), O (Rule Out), P (Probable), R (Resolved), S (Suspect, Suspicious), T (Status Post)
- Patients with a Provider Narrative beginning with “Consider”, “Doubtful”, “Maybe”, “Possible”, “Perhaps”, “Rule Out”, “R/O”, “Probable”, “Resolved”, “Suspect”, “Suspicious”, “Status Post”

##### To Be Included in the Numerators

A patient must meet one of the two conditions that follow:

- An active prescription (not discontinued as of discharge date plus 7 days and does not have a comment of RETURNED TO STOCK) that was prescribed prior to admission, during the inpatient stay, or within seven days after discharge. “Active” prescription defined as:

$$\text{Days Prescribed} > (\text{Discharge Date} + 7 \text{ days}) - \text{Order Date}$$

- Have a contraindication or previous adverse reaction to the indicated medication.

Contraindications or previous adverse drug reactions (ADR) or allergies are only counted if a patient did not have a prescription for the indicated medication. Patients without a prescription who have a contraindication or ADR or allergy will be counted toward meeting the numerator.

**Note:** If a medication was started and then discontinued, CRS will recalculate the number of Days Prescribed by subtracting the prescription date (i.e., visit date) from the V Medication Discontinued Date. For example:

- Rx Date: November 15, 2013
- Discontinued Date: November 19, 2013

Recalculated number of Days Prescribed:  
*November 19, 2013 – November 15, 2013 = 4*

### Numerator Logic

In the logic that follows, “ever” is defined as anytime through the end of the report period.

### Beta-Blocker Numerator Logic

- Beta-blocker medication codes
  - Defined with medication taxonomy BGP HEDIS BETA BLOCKER MEDS
  - Medications are:
    - Noncardioselective Beta Blockers: Carteolol, Carvedilol, Labetalol, Nadolol, Penbutolol, Pindolol, Propranolol, Timolol, Sotalol
    - Cardioselective Beta Blockers: Acebutolol, Atenolol, Betaxolol, Bisoprolol, Metoprolol, Nebivolol
    - Antihypertensive Combinations: Atenolol-chlorthalidone, Bendroflumethiazide-nadolol, Bisoprolol-hydrochlorothiazide, Hydrochlorothiazide-metoprolol, and Hydrochlorothiazide-propranolol.
  - Contraindications to beta-blockers  
 Defined as any of the following occurring ever unless otherwise noted:
    - Asthma—two diagnoses (POV) of 493\* on different visit dates
    - Hypotension—one diagnosis of 458\*
    - Heart block greater than one degree—one diagnosis of 426.0, 426.12, 426.13, 426.2, 426.3, 426.4, 426.51, 426.52, 426.53, 426.54, 426.7
    - Sinus bradycardia—one diagnosis of 427.81
    - COPD - two diagnoses on different visit dates of 491.2\*, 496, 506.4, or a combination of any of these codes, such as one visit with 491.20 and one with 496

- NMI refusal for any beta-blocker at least once during hospital stay through seven days after discharge date
- CPT G8011 (Clinician documented that AMI patient was not an eligible candidate for beta-blocker at arrival) (old code) at least once during hospital stay through seven days after discharge date
- Adverse drug reaction or documented beta blocker allergy  
Defined as any of the following occurring ever:
  - POV 995.0 through 995.3 and E942.0
  - “beta block\*” entry in ART (Patient Allergies File)
  - “beta block\*”, “bblock\*” or “b block\*” contained within Problem List or in Provider Narrative field for any POV 995.0 through 995.3, V14.8

### **ASA or Other Anti-Platelet Numerator Logic**

- ASA medication codes
  - Defined with medication taxonomy DM AUDIT ASPIRIN DRUGS
- Other anti-platelet medication codes
  - Defined with medication taxonomy site-populated BGP ANTI-PLATELET DRUGS taxonomy
- Contraindications to ASA or other antiplatelet. Defined as any of the following occurring ever unless otherwise noted:
  - Patients with active prescription for Warfarin or Coumadin at time of arrival or prescribed at discharge, using site-populated BGP CMS WARFARIN MEDS taxonomy
  - Hemorrhage diagnosis (POV 459.0)
  - NMI refusal for any aspirin at least once during hospital stay through seven days after discharge date
  - CPT G8008 (Clinician documented that AMI patient was not an eligible candidate to receive aspirin at arrival) (old code) at least once during hospital stay through seven days after discharge date
- Adverse drug reaction or documented ASA or other antiplatelet allergy. Defined as any of the following occurring ever:
  - POV 995.0 through 995.3 and E935.3
  - Aspirin entry in ART (Patient Allergies File)
  - ASA or aspirin contained within Problem List or in Provider Narrative field for any POV 995.0 through 995.3, V14.8

### ACEI/ARB Numerator Logic

- Ace Inhibitor (ACEI) medication codes. Defined with medication taxonomy BGP HEDIS ACEI MEDS.
  - ACEI medications are: Angiotensin Converting Enzyme Inhibitors (Benazepril, Captopril, Enalapril, Fosinopril, Lisinopril, Moexipril, Perindopril, Quinapril, Ramipril, Trandolopril).
- Antihypertensive Combinations: (Amlodipine-benazepril, Benazepril-hydrochlorothiazide, Captopril-hydrochlorothiazide, Enalapril-hydrochlorothiazide, Fosinopril-hydrochlorothiazide, Hydrochlorothiazide-lisinopril, Hydrochlorothiazide-moexipril, Hydrochlorothiazide-quinapril, Trandolapril-verapamil).
- Contraindications to ACEI defined as any of the following:
  - Pregnancy: See definition that follows
  - Breastfeeding: defined as POV V24.1 or breastfeeding patient education codes BF-BC, BF-BP, BF-CS, BF-EQ, BF-FU, BF-HC, BF-ON, BF-M, BF-MK, or BF-N during the Report Period
  - Diagnosis ever for moderate or severe aortic stenosis
  - POV 395.0, 395.2, 396.0, 396.2, 396.8, 424.1, 425.1, 747.22
  - NMI refusal for any ACEI at least once during hospital stay through seven days after discharge date.
- Adverse drug reaction or documented ACEI allergy. Defined as any of the following occurring ever:
  - POV 995.0 through 995.3 AND E942.6
  - Ace inhibitor or ACEI entry in ART (Patient Allergies File)
  - Ace i\* or ACEI contained within Problem List or in Provider Narrative field for any POV 995.0 through 995.3, V14.8.
- ARB (Angiotensin Receptor Blocker) medication codes. Defined with medication taxonomy BGP HEDIS ARB MEDS
  - ARB medications are: Angiotensin II Inhibitors (Azilsartan, Candesartan, Eprosartan, Irbesartan, Losartan, Olmesartan, Telmisartan, Valsartan.)
- Antihypertensive Combinations
  - Aliskiren-Amlodipine-hydrochlorothiazide, Aliskiren-valsartan, Amlodipine-hydrochlorothiazide-olmesartan, Amlodipine-hydrochlorothiazide-valsartan, Amlodipine-olmesartan, Amlodipine-Telmisartan, Candesartan-hydrochlorothiazide, Eprosartan-hydrochlorothiazide, Hydrochlorothiazide-Irbesartan, Hydrochlorothiazide-Losartan, Hydrochlorothiazide-olmesartan, Hydrochlorothiazide-Telmisartan, Hydrochlorothiazide-Valsartan

- Contraindications to ARB defined as any of the following:
  - Pregnancy: See definition that follows
  - Breastfeeding: defined as POV V24.1 or breastfeeding patient education codes BF-BC, BF-BP, BF-CS, BF-EQ, BF-FU, BF-HC, BF-ON, BF-M, BF-MK, or BF-N during the Report Period
  - Diagnosis ever for moderate or severe aortic stenosis
  - POV 395.0, 395.2, 396.0, 396.2, 396.8, 424.1, 425.1, 747.22
  - NMI refusal for any ARB at least once during hospital stay through seven days after discharge date.
- Adverse drug reaction or documented ARB allergy. Defined as any of the following occurring ever:
  - POV 995.0 through 995.3 and E942.6
  - Angiotensin Receptor Blocker or ARB entry in ART (Patient Allergies File)
  - Angiotensin Receptor Blocker or ARB contained within Problem List or in Provider Narrative field for any POV 995.0 through 995.3, V14.8.

**Statins Numerator Logic:**

- Statin medication codes
  - Defined with medication taxonomy BGP PQA STATIN MEDS.
  - Statin medications are: Atorvastatin (Lipitor), Fluvastatin (Lescol), Lovastatin (Altocor, Altoprev, Mevacor), Pravastatin (Pravachol), Pitavastatin (Livalo), Simvastatin (Zocor), Rosuvastatin (Crestor).
- Statin Combination Products
  - Advicor, Caduet, PraviGard Pac, Vytorin.
- Contraindications to Statins: defined as any of the following:
  - Pregnancy: See definition that follows
  - Breastfeeding: defined as POV V24.1 or breastfeeding patient education codes BF-BC, BF-BP, BF-CS, BF-EQ, BF-FU, BF-HC, BF-ON, BF-M, BF-MK, or BF-N during the Report Period
  - Acute Alcoholic Hepatitis: defined as POV 571.1 during the Report Period
  - NMI refusal for any statin at least once during hospital stay through seven days after discharge date.
- Adverse drug reaction or documented statin allergy. Defined as any of the following:
  - ALT or AST more than three times the Upper Limit of Normal (ULN) (i.e., Reference High) on two or more consecutive visits during the Report Period



- Creatine Kinase (CK) levels more than ten times ULN or CK higher than 10,000 IU/L during the Report Period
- Myopathy or Myalgia, defined as any of the following during the Report Period:
  - POV 359.0 through 359.9, 729.1, 710.5, 074.1
- Any of the following occurring ever:
  - POV 995.0 through 995.3 and E942.9
  - “Statin” or “Statins” entry in ART (Patient Allergies File)
  - “Statin” or “Statins” contained within Problem List or in Provider Narrative field for any POV 995.0 through 995.3, V14.8

### Pregnancy Definition

At least two visits during the Report Period with POV or Problem diagnosis (640.03, 640.83, 640.93, 641.03, 641.13, 641.23, 641.33, 641.83, 641.93, 642.03, 642.13, 642.23, 642.33, 642.43, 642.53, 642.63, 642.73, 642.93, 643.03, 643.13, 643.23, 643.83, 643.93, 644.03, 644.13, 645.13, 645.23, 646.03, 646.13, 646.23, 646.33, 646.43, 646.53, 646.63, 646.73, 646.83, 646.93, 647.03, 647.13, 647.23, 647.33, 647.43, 647.53, 647.63, 647.83, 647.93, 648.03, 648.13, 648.23, 648.33, 648.43, 648.53, 648.63, 648.73, 648.83, 648.93, 649.03, 649.13, 649.23, 649.33, 649.43, 649.53, 649.63, 649.73, 651.03, 651.13, 651.23, 651.33, 651.43, 651.53, 651.63, 651.73, 651.83, 651.93, 652.03, 652.13, 652.23, 652.33, 652.43, 652.53, 652.63, 652.73, 652.83, 652.93, 653.03, 653.13, 653.23, 653.33, 653.43, 653.53, 653.63, 653.73, 653.83, 653.93, 654.03, 654.13, 654.23, 654.33, 654.43, 654.53, 654.63, 654.73, 654.83, 654.93, 655.03, 655.13, 655.23, 655.33, 655.43, 655.53, 655.63, 655.73, 655.83, 655.93, 656.03, 656.13, 656.23, 656.33, 656.43, 656.53, 656.63, 656.73, 656.83, 656.93, 657.03, 658.03, 658.13, 658.23, 658.33, 658.43, 658.83, 658.93, 659.03, 659.13, 659.23, 659.33, 659.43, 659.53, 659.63, 659.73, 659.83, 659.93, 660.03, 660.13, 660.23, 660.33, 660.43, 660.53, 660.63, 660.73, 660.83, 660.93, 661.03, 661.13, 661.23, 661.33, 661.43, 661.93, 662.03, 662.13, 662.23, 662.33, 663.03, 663.13, 663.23, 663.33, 663.43, 663.53, 663.63, 663.83, 663.93, 665.03, 665.83, 665.93, 668.03, 668.13, 668.23, 668.83, 668.93, 669.03, 669.13, 669.23, 669.43, 669.83, 669.93, 671.03, 671.13, 671.23, 671.33, 671.53, 671.83, 671.93, 673.03, 673.13, 673.23, 673.33, 673.83, 674.03, 674.53, 675.03, 675.13, 675.23, 675.83, 675.93, 676.03, 676.13, 676.23, 676.33, 676.43, 676.53, 676.63, 676.83, 676.93, 678.03, 678.13, 679.03, 679.13, V22.0 through V23.9, V28.81, V28.82, V28.89, V72.42, V89.01 through V89.09), where the primary provider is not a CHR (Provider code 53). Pharmacy-only visits (clinic code 39) will not count toward these two visits. If the patient has more than two pregnancy-related visits during the Report Period, CRS will use the first two visits in the Report Period. The patient must not have a documented miscarriage or abortion occurring after the second pregnancy-related visit.

- Miscarriage definition:
  - POV 630, 631, 632, 633\*, 634\*
  - CPT 59812, 59820, 59821, 59830
- Abortion definition:
  - POV 635\*, 636\* 637\*
  - CPT 59100, 59120, 59130, 59136, 59150, 59151, 59840, 59841, 59850, 59851, 59852, 59855, 59856, 59857, S2260 through S2267,
  - Procedure 69.01, 69.51, 74.91, 96.49

### All Medications Numerator Logic

To be included in this numerator, a patient must have a prescription or a contraindication for *all* of the four medication classes (i.e., beta-blocker, ASA or other anti-platelet, ACEI or ARB, *and* statin).

### Test Definitions

- ALT
  - Site-populated taxonomy DM AUDIT ALT TAX
  - LOINC taxonomy
- AST
  - Site-populated taxonomy DM AUDIT AST TAX
  - LOINC taxonomy
- Creatine Kinase
  - Site-populated taxonomy BGP CREATINE KINASE TAX
  - LOINC taxonomy

#### 2.5.4.5 Patient Lists

- List of Active Clinical patients 35 and older discharged for AMI with beta-blocker therapy.
- List of Active Clinical patients 35 and older discharged for AMI without beta-blocker therapy.
- List of Active Clinical patients 35 and older discharged for AMI with ASA therapy.
- List of Active Clinical patients 35 and older discharged for AMI without ASA therapy.
- List of Active Clinical patients 35 and older discharged for AMI with ACEI or ARB therapy.

- List of Active Clinical patients 35 and older discharged for AMI without ACEI or ARB therapy.
- List of Active Clinical patients 35 and older discharged for AMI with statin therapy.
- List of Active Clinical patients 35 and older discharged for AMI without statin therapy.
- List of Active Clinical patients 35 and older discharged for AMI with all appropriate medications.
- List of Active Clinical patients 35 and older discharged for AMI without all appropriate medications.

## 2.5.5 Persistence of Appropriate Medication Therapy after a Heart Attack

### 2.5.5.1 Owner: Contact

Dr. Dena Wilson, Chris Lamer, PharmD, and Mark Veazie

### 2.5.5.2 Denominators

1. Active Clinical patients 35 and older diagnosed with an AMI six months prior to the Report period through the first six months of the Report period.

### 2.5.5.3 Numerators

**Note:** These numerators do *not* include refusals.

1. Patients with a 135-day course of treatment with beta-blockers or who have a contraindication or previous adverse reaction to beta-blocker therapy.
2. Patients with a 135-day course of treatment with ASA or other antiplatelet agent or who have a contraindication or previous adverse reaction to ASA or antiplatelet therapy.
3. Patients with a 135-day course of treatment with ACEIs or ARBs or who have a contraindication or previous adverse reaction to ACEI or ARB therapy.
4. Patients with a 135-day course of treatment with statins or who have a contraindication or previous adverse reaction to statin therapy.
5. Patients with a 135-day course of treatment for all post-AMI medications, (i.e. beta-blocker, ASA or anti-platelet, ACEI or ARB, AND statin) following first discharge date or visit date, including previous active prescriptions; or who have a contraindication or previous adverse reaction.

#### 2.5.5.4 Definitions

##### AMI

POV or Problem List 410.0\* through 410.9\* or 412. AMI diagnosis may be made at an inpatient or outpatient visit but must occur between six months prior to beginning of Report period through first six months of the Report period.

Inpatient visit defined as Service Category of H (Hospitalization). If patient has more than one episode of AMI during the timeframe, CRS will include only the first hospital discharge or ambulatory visit.

##### Denominator Exclusions

Patients meeting any of the following conditions will be excluded from the denominator.

- If inpatient visit, patients with Discharge Type of Irregular (AMA), Transferred, or contains “Death”
- Patients with a Diagnosis Modifier of C (Consider), D (Doubtful), M (Maybe, Possible, Perhaps), O (Rule Out), P (Probable), R (Resolved), S (Suspect, Suspicious), or T (Status Post)
- Patients with a Provider Narrative beginning with “Consider”, “Doubtful”, “Maybe”, “Possible”, “Perhaps”, “Rule Out”, “R/O”, “Probable”, “Resolved”, “Suspect”, “Suspicious”, or “Status Post”

##### To Be Included in the Numerators

A patient must meet one of the two conditions that follow:

- A total days’ supply of 135 days or more in the 180 days following discharge date for inpatient visits or visit date for ambulatory visits. Medications must not have a comment of RETURNED TO STOCK. Prior active prescriptions can be included if the treatment days fall within the 180 days following discharge or visit date. Prior active prescription defined as most recent prescription (see codes that follow) prior to admission or visit date with the number of days’ supply equal to or greater than the discharge or visit date minus the prescription date; or
- Have a contraindication or previous adverse reaction to the indicated medication. Contraindications or previous adverse drug reactions (ADR) or allergies are only counted if a patient did not have a prescription for the indicated medication. Patients without a prescription who have a contraindication or ADR or allergy will be counted toward meeting the numerator.

**Note:** If a medication was started and then discontinued, CRS will recalculate the number of Days Prescribed by subtracting the prescription date (i.e., visit date) from the V Medication Discontinued Date. For example:

- Rx Date: November 15, 2013
- Discontinued Date: November 19, 2013

Recalculated number of Days Prescribed:  
*November 19, 2013 – November 15, 2013 = 4*

**Example of patient included in the beta-blocker numerator who has prior active prescription**

- Admission Date: February 1, 2013
- Discharge Date: February 15, 2013
- Must have 135 days prescribed by August 13, 2013:  
*Discharge Date + 180 days*
- Prior Beta-Blocker Rx Date: January 15, 2013
- Number of Days Prescribed: 60 (treats patient through March 15, 2013)
- Discharge Date minus Rx Date:  
*February 15, 2013 – January 15, 2013 = 31 days*  
 $60 \geq 31$   
 Prescription is considered Prior Active Rx
- March 15, 2013 is between February 15 and August 13, 2013, thus remainder of Prior Active Rx can be counted toward 180-day treatment period
- Number of Remaining Days Prescribed from Prior Active Rx:  
 $60 - (\text{Discharge Date} - \text{Prior Prescription Date}) = \text{Remaining Days}$   
 $60 - (\text{February 15, 2013} - \text{January 15, 2013}) = \text{Remaining Days}$   
 $60 - 31 = 29$
- Second Prescription: April 1, 2013
- Number of Days Prescribed: 90
- Third Prescription: July 10, 2013
- Number of Days Prescribed: 90
- Total Days' Supply Prescribed between February 15 and August 13, 2013:

$$29 + 90 + 90 = 209$$

### Numerator Logic

In the logic that follows, “ever” is defined as anytime through the end of the report period.

### Beta-Blocker Numerator Logic

- Beta-blocker medication codes:
  - Defined with medication taxonomy BGP HEDIS BETA BLOCKER MEDS
  - Medications are:
    - Noncardioselective Beta Blockers: Carteolol, Carvedilol, Labetalol, Nadolol, Penbutolol, Pindolol, Propranolol, Timolol, Sotalol
    - Cardioselective Beta Blockers: Acebutolol, Atenolol, Betaxolol, Bisoprolol, Metoprolol, Nebivolol, and
    - Antihypertensive Combinations: Atenolol-chlorthalidone, Bendroflumethiazide-nadolol, Bisoprolol-hydrochlorothiazide, Hydrochlorothiazide-metoprolol, and Hydrochlorothiazide-propranolol.
- Contraindications to beta-blockers. Defined as any of the following occurring ever unless otherwise noted:
  - Asthma—two diagnoses (POV) of 493\* on different visit dates
  - Hypotension—one diagnosis of 458\*
  - Heart block greater than one degree—one diagnosis of 426.0, 426.12, 426.13, 426.2, 426.3, 426.4, 426.51, 426.52, 426.53, 426.54, 426.7
  - Sinus bradycardia—one diagnosis of 427.81
  - COPD - two diagnoses on different visit dates of 491.2\*, 496, 506.4, or a combination of any of these codes, such as one visit with 491.20 and one with 496
  - NMI refusal for any beta-blocker at least once during the period admission or visit date through the 180 days after discharge or visit date
  - CPT G8011 (Clinician documented that AMI patient was not an eligible candidate for beta-blocker at arrival) (old code) at least once during the period admission or visit date through the 180 days after discharge or visit date
- Adverse drug reaction or documented beta blocker allergy. Defined as any of the following occurring anytime up to the 180 days after discharge or visit date:
  - POV 995.0 through 995.3 AND E942.0

- “beta block\*” entry in ART (Patient Allergies File)
- “beta block\*”, “bblock\*” or “b block\*” contained within Problem List or in Provider Narrative field for any POV 995.0 through 995.3, V14.8

### **ASA Numerator Logic**

- ASA medication codes
  - Defined with medication taxonomy DM AUDIT ASPIRIN DRUGS
- Other antiplatelet medication codes
  - Defined with medication taxonomy site-populated BGP ANTI-PLATELET DRUGS taxonomy
- Contraindications to ASA or other antiplatelet. Defined as any of the following occurring ever unless otherwise noted:
  - Patients with prescription for Warfarin or Coumadin using site-populated BGP CMS WARFARIN MEDS taxonomy during the period admission or visit date through the 180 days after discharge or visit date
  - Hemorrhage diagnosis (POV 459.0)
  - NMI refusal for any aspirin at least once during the period admission or visit date through the 180 days after discharge or visit date
  - CPT G8008 (Clinician documented that AMI patient was not an eligible candidate to receive aspirin at arrival) (old code) at least once during the period admission or visit date through the 180 days after discharge or visit date
- Adverse drug reaction or documented ASA or other antiplatelet allergy. Defined as any of the following occurring anytime up to the 180 days after discharge or visit date:
  - POV 995.0 through 995.3 AND E935.3
  - Aspirin entry in ART (Patient Allergies File)
  - ASA or aspirin contained within Problem List or in Provider Narrative field for any POV 995.0 through 995.3, V14.8

### **ACEI/ARB Numerator Logic**

- Ace Inhibitor (ACEI) medication codes. Defined with medication taxonomy BGP HEDIS ACEI MEDS.
  - ACEI medications are: Angiotensin Converting Enzyme Inhibitors (Benazepril, Captopril, Enalapril, Fosinopril, Lisinopril, Moexipril, Perindopril, Quinapril, Ramipril, Trandolopril).
- Antihypertensive Combinations: (Amlodipine-benazepril, Benazepril-hydrochlorothiazide, Captopril-hydrochlorothiazide, Enalapril-hydrochlorothiazide, Fosinopril-hydrochlorothiazide, Hydrochlorothiazide-

lisinopril, Hydrochlorothiazide-moexipril, Hydrochlorothiazide-quinapril, Trandolapril-verapamil).

- Contraindications to ACEI defined as any of the following:
  - Pregnancy: See definition that follows
  - Breastfeeding: defined as POV V24.1 or breastfeeding patient education codes BF-BC, BF-BP, BF-CS, BF-EQ, BF-FU, BF-HC, BF-ON, BF-M, BF-MK, or BF-N during the period admission or visit date through the 180 days after discharge or visit date
  - Diagnosis ever for moderate or severe aortic stenosis
  - POV 395.0, 395.2, 396.0, 396.2, 396.8, 424.1, 425.1, 747.22
  - NMI refusal for any ACEI at least once during the period admission or visit date through the 180 days after discharge or visit date.
- Adverse drug reaction or documented ACEI allergy. Defined as any of the following occurring ever:
  - POV 995.0995.3 AND E942.6
  - Ace inhibitor or ACEI entry in ART (Patient Allergies File)
  - Ace i\* or “ACEI” contained within Problem List or in Provider Narrative field for any POV 995.0 through 995.3, V14.8.
- ARB (Angiotensin Receptor Blocker) medication codes. Defined with medication taxonomy BGP HEDIS ARB MEDS
  - ARB medications are: Angiotensin II Inhibitors (Azilsartan, Candesartan, Eprosartan, Irbesartan, Losartan, Olmesartan, Telmisartan, Valsartan.)
- Antihypertensive Combinations
  - Aliskiren-Amlodipine-hydrochlorothiazide, Aliskiren-valsartan, Amlodipine-hydrochlorothiazide-olmesartan, Amlodipine-hydrochlorothiazide-valsartan, Amlodipine-olmesartan, Amlodipine-Telmisartan, Candesartan-hydrochlorothiazide, Eprosartan-hydrochlorothiazide, Hydrochlorothiazide-Irbesartan, Hydrochlorothiazide-Losartan, Hydrochlorothiazide-olmesartan, Hydrochlorothiazide-Telmisartan, Hydrochlorothiazide-Valsartan
- Contraindications to ARB defined as any of the following:
  - Pregnancy: See definition that follows
  - Breastfeeding: Defined as POV V24.1 or breastfeeding patient education codes BF-BC, BF-BP, BF-CS, BF-EQ, BF-FU, BF-HC, BF-ON, BF-M, BF-MK, or BF-N during the period admission or visit date through the 180 days after discharge or visit date
  - Diagnosis ever for moderate or severe aortic stenosis
  - POV 395.0, 395.2, 396.0, 396.2, 396.8, 424.1, 425.1, 747.22



- NMI refusal for any ARB at least once during the period admission or visit date through the 180 days after discharge or visit date.
- Adverse drug reaction or documented ARB allergy. Defined as any of the following occurring anytime up to the 180 days after discharge or visit date:
  - POV 995.0 through 995.3 AND E942.6
  - Angiotensin Receptor Blocker or ARB entry in ART (Patient Allergies File)
  - Angiotensin Receptor Blocker or ARB contained within Problem List or in Provider Narrative field for any POV 995.0 through 995.3, V14.8

### Statins Numerator Logic

- Statin medication codes
  - Defined with medication taxonomy BGP PQA STATIN MEDS
  - Statin medications are: Atorvastatin (Lipitor), Fluvastatin (Lescol), Lovastatin (Altacor, Altoprev, Mevacor), Pravastatin (Pravachol), Pitavastatin (Livalo), Simvastatin (Zocor), Rosuvastatin (Crestor).
- Statin Combination Products
  - Advicor, Caduet, PraviGard Pac, Vytorin
- Contraindications to Statins: Defined as any of the following:
  - Pregnancy: See definition that follows
  - Breastfeeding: Defined as POV V24.1 or breastfeeding patient education codes BF-BC, BF-BP, BF-CS, BF-EQ, BF-FU, BF-HC, BF-ON, BF-M, BF-MK, BF-N during the period admission or visit date through the 180 days after discharge or visit date
  - Acute Alcoholic Hepatitis: Defined as POV 571.1 during the period admission or visit date through the 180 days after discharge or visit date
  - NMI refusal for any statin at least once during the period admission or visit date through the 180 days after discharge or visit date.
- Adverse drug reaction or documented statin allergy. Defined as any of the following:
  - ALT or AST greater than three times the Upper Limit of Normal (ULN) (i.e., Reference High) on two or more consecutive visits during the period admission or visit date through the 180 days after discharge or visit date
  - Creatine Kinase (CK) levels greater than ten times ULN or CK greater than 10,000 IU/L during the period admission or visit date through the 180 days after discharge or visit date
  - Myopathy or Myalgia, defined as any of the following during the period admission or visit date through the 180 days after discharge or visit date:

- POV 359.0 through 359.9, 729.1, 710.5, 074.1
- Any of the following occurring anytime up to the 180 days after discharge or visit date:
  - POV 995.0 through 995.3 and E942.9
  - "Statin" or "Statins" entry in ART (Patient Allergies File)
  - "Statin" or "Statins" contained within Problem List or in Provider Narrative field for any POV 995.0 through 995.3, V14.8

### Pregnancy Definition

At least two visits during the Report Period with POV or Problem diagnosis (640.03, 640.83, 640.93, 641.03, 641.13, 641.23, 641.33, 641.83, 641.93, 642.03, 642.13, 642.23, 642.33, 642.43, 642.53, 642.63, 642.73, 642.93, 643.03, 643.13, 643.23, 643.83, 643.93, 644.03, 644.13, 645.13, 645.23, 646.03, 646.13, 646.23, 646.33, 646.43, 646.53, 646.63, 646.73, 646.83, 646.93, 647.03, 647.13, 647.23, 647.33, 647.43, 647.53, 647.63, 647.83, 647.93, 648.03, 648.13, 648.23, 648.33, 648.43, 648.53, 648.63, 648.73, 648.83, 648.93, 649.03, 649.13, 649.23, 649.33, 649.43, 649.53, 649.63, 649.73, 651.03, 651.13, 651.23, 651.33, 651.43, 651.53, 651.63, 651.73, 651.83, 651.93, 652.03, 652.13, 652.23, 652.33, 652.43, 652.53, 652.63, 652.73, 652.83, 652.93, 653.03, 653.13, 653.23, 653.33, 653.43, 653.53, 653.63, 653.73, 653.83, 653.93, 654.03, 654.13, 654.23, 654.33, 654.43, 654.53, 654.63, 654.73, 654.83, 654.93, 655.03, 655.13, 655.23, 655.33, 655.43, 655.53, 655.63, 655.73, 655.83, 655.93, 656.03, 656.13, 656.23, 656.33, 656.43, 656.53, 656.63, 656.73, 656.83, 656.93, 657.03, 658.03, 658.13, 658.23, 658.33, 658.43, 658.83, 658.93, 659.03, 659.13, 659.23, 659.33, 659.43, 659.53, 659.63, 659.73, 659.83, 659.93, 660.03, 660.13, 660.23, 660.33, 660.43, 660.53, 660.63, 660.73, 660.83, 660.93, 661.03, 661.13, 661.23, 661.33, 661.43, 661.93, 662.03, 662.13, 662.23, 662.33, 663.03, 663.13, 663.23, 663.33, 663.43, 663.53, 663.63, 663.83, 663.93, 665.03, 665.83, 665.93, 668.03, 668.13, 668.23, 668.83, 668.93, 669.03, 669.13, 669.23, 669.43, 669.83, 669.93, 671.03, 671.13, 671.23, 671.33, 671.53, 671.83, 671.93, 673.03, 673.13, 673.23, 673.33, 673.83, 674.03, 674.53, 675.03, 675.13, 675.23, 675.83, 675.93, 676.03, 676.13, 676.23, 676.33, 676.43, 676.53, 676.63, 676.83, 676.93, 678.03, 678.13, 679.03, 679.13, V22.0 through V23.9, V28.81, V28.82, V28.89, V72.42, V89.01 through V89.09), where the primary provider is not a CHR (Provider code 53). Pharmacy-only visits (clinic code 39) will not count toward these two visits. If the patient has more than two pregnancy-related visits during the Report Period, CRS will use the first two visits in the Report Period. The patient must not have a documented miscarriage or abortion occurring after the second pregnancy-related visit.

- Miscarriage definition:
  - POV 630, 631, 632, 633\*, 634\*

- CPT 59812, 59820, 59821, 59830
- Abortion definition:
  - POV 635\*, 636\* 637\*
  - CPT 59100, 59120, 59130, 59136, 59150, 59151, 59840, 59841, 59850, 59851, 59852, 59855, 59856, 59857, S2260 through S2267,
  - Procedure 69.01, 69.51, 74.91, 96.49

### All Medications Numerator Logic

To be included in this numerator, a patient must have a prescription or a contraindication for *all* of the four medication classes (i.e., beta-blocker, ASA or other anti-platelet, ACEI or ARB, *and* statin).

### Test Definitions

- ALT
  - Site-populated taxonomy DM AUDIT ALT TAX
  - LOINC taxonomy
- AST
  - Site-populated taxonomy DM AUDIT AST TAX
  - LOINC taxonomy
- Creatine Kinase
  - Site-populated taxonomy BGP CREATINE KINASE TAX
  - LOINC taxonomy

#### 2.5.5.5 Patient Lists

- List of Active Clinical patients 35 and older with AMI diagnosis with 135-day beta-blocker therapy.
- List of Active Clinical patients 35 and older with AMI diagnosis without 135-day beta-blocker therapy.
- List of Active Clinical patients 35 and older with AMI diagnosis with 135-day ASA therapy.
- List of Active Clinical patients 35 and older with AMI diagnosis without ASA therapy.
- List of Active Clinical patients 35 and older with AMI diagnosis with 135-day ACEI or ARB therapy.
- List of Active Clinical patients 35 and older with AMI diagnosis without 135-day ACEI or ARB therapy.

- List of Active Clinical patients 35 and older with AMI diagnosis with 135-day statin therapy.
- List of Active Clinical patients 35 and older with AMI diagnosis without 135-day statin therapy.
- List of Active Clinical patients 35 and older with AMI diagnosis with 135-day therapy for all appropriate meds.
- List of Active Clinical patients 35 and older with AMI diagnosis without 135-day therapy for all appropriate meds.

## 2.5.6 Appropriate Medication Therapy in High Risk Patients

### 2.5.6.1 Owner: Contact

Dr. Dena Wilson, Chris Lamer, PharmD, and Mark Veazie

### 2.5.6.2 Denominators

1. Active CHD patients ages 22 and older, defined as all Active Clinical patients diagnosed with CHD prior to the Report Period, *and* at least two visits during the Report Period, *and* two CHD -related visits ever.

### 2.5.6.3 Numerators

**Note:** These numerators do *not* include refusals.

1. Patients with a 180-day course of treatment with beta-blockers during the report period, or who have a contraindication or previous adverse reaction to beta-blocker therapy.
2. Patients with a 180-day course of treatment with ASA or other antiplatelet agent during the report period, or who have a contraindication or previous adverse reaction to ASA or antiplatelet therapy.
3. Patients with a 180-day course of treatment with ACEIs or ARBs during the report period, or who have a contraindication or previous adverse reaction to ACEI or ARB therapy.
4. Patients with a 180-day course of treatment with statins during the report period, or who have a contraindication or previous adverse reaction to statin therapy.
5. Patients with a 180-day course of treatment for all medications (i.e. beta-blocker, aspirin or antiplatelet, ACEI or ARB, *and* statin) during the report period or who have a contraindication or previous adverse reaction.

#### 2.5.6.4 Definitions

##### CHD

- POV 410.0 through 413.\*, 414.0 through 414.9, 429.2
- One or more Coronary Artery Bypass Graft (CABG) or Percutaneous Coronary Interventions (PCI) procedures, defined as any of the following:
  - CABG Procedure
    - POV V45.81
    - CPT 33510 through 33514, 33516 through 33519, 33521 through 33523, 33533 through 33536, S2205 through S2209
    - Procedure 36.1\*, 36.2\*
  - PCI Procedure
    - POV V45.82
    - CPT 92980, 92982, 92995, G0290
    - Procedure 00.66, 36.01 (old code), 36.02 (old code), 36.05, (old code), 36.06 through 36.07

##### To Be Included in the Numerators

A patient must meet one of the following conditions:

- Prescription for the indicated medication with a total days' supply of 180 days or more during the Report Period. Medications must not have a comment of RETURNED TO STOCK.
- Have a contraindication or previous adverse reaction to the indicated medication.

Contraindications or previous ADR or allergies are only counted if a patient did not have a prescription for the indicated medication. Patients without a prescription who have a contraindication or ADR or allergy will be counted toward meeting the numerator. For prescriptions, the days' supply requirement may be met with a single prescription or from a combination of prescriptions for the indicated medication that were filled during the Report Period and prescriptions filled prior to the Report Period but which are still active (i.e., prior active prescription). Prior active prescriptions can be included if the treatment days fall within the Report Period. Prior active prescription defined as most recent prescription for the indicated medication (see codes that follow) prior to Report Period Start Date with the number of days' supply equal to or greater than the Report Period Start Date minus the prescription date.

**Note:** If a medication was started and then discontinued, CRS will recalculate the number of Days Prescribed by subtracting the prescription date (i.e., visit date) from the V Medication Discontinued Date. For example:

- Rx Date: November 15, 2013
- Discontinued Date: November 19, 2013

Recalculated number of Days Prescribed:  
*November 19, 2013 – November 15, 2013 = 4*

**Example of patient included in the beta-blocker numerator with prior active prescription**

- Report period: July 1, 2012 through June 30, 2013
- Must have 180 days' supply of indicated medication June 30, 2013 (end of report period)
- Prior Beta-Blocker Rx Date: June 1, 2012
- Number of Days Prescribed: 60 (treats patient through July 31, 2012)
- Report Period Start Date minus Rx Date:  
*July 1, 2012 – June 1, 2012 = 30 days*  
*Number of Days Prescribed = 60 and  $60 \geq 30$  so:*  
 Prescription is considered Prior Active Rx
- July 31, 2010 falls within the report period of July 1, 2012 to June 30, 2013, thus the remainder of the Prior Active Rx can be counted toward 180 days' supply
- Number of Remaining Days Prescribed from Prior Active Rx:  
*Days Prescribed – (Report Period Start Date – Prior Rx Date)*  
*60 – (July 1, 2012 – June 1, 2012)*  
*60 – 30 = 30*
- Second Prescription: August 5, 2012
- Number of Days Prescribed: 90
- Third Prescription: January 10, 2012
- Number of Days Prescribed: 90
- Total Days' Supply Prescribed between July 1, 2012 and June 30, 2013, including prior active prescription:

$$30 + 90 + 90 = 210$$

### Numerator Logic

In the logic that follows, "ever" is defined as anytime through the end of the Report Period.

### Beta-Blocker Numerator Logic:

- Beta-blocker medication codes
  - Defined with medication taxonomy BGP HEDIS BETA BLOCKER MEDS
  - Medications are:
    - Noncardioselective Beta Blockers: Carteolol, Carvedilol, Labetalol, Nadolol, Penbutolol, Pindolol, Propranolol, Timolol, Sotalol
    - Cardioselective Beta Blockers: Acebutolol, Atenolol, Betaxolol, Bisoprolol, Metoprolol, Nebivolol, and
    - Antihypertensive Combinations: Atenolol-chlorthalidone, Bendroflumethiazide-nadolol, Bisoprolol-hydrochlorothiazide, Hydrochlorothiazide-metoprolol, and Hydrochlorothiazide-propranolol
- Contraindications to beta-blockers. Defined as any of the following occurring ever unless otherwise noted:
  - Asthma—two diagnoses (POV) of 493\* on different visit dates
  - Hypotension—one diagnosis of 458\*
  - Heart block greater than one degree—one diagnosis of 426.0, 426.12, 426.13, 426.2, 426.3, 426.4, 426.51, 426.52, 426.53, 426.54, 426.7
  - Sinus bradycardia—one diagnosis of 427.81
  - COPD—two diagnoses on different visit dates of 491.2\*, 496, 506.4, or a combination of any of these codes, such as one visit with 491.20 and one with 496
  - NMI refusal for any beta-blocker at least once during the Report Period
  - CPT G8011 (Clinician documented that AMI patient was not an eligible candidate for beta-blocker at arrival) (old code) at least once during the Report Period.
- Adverse drug reaction or documented beta blocker allergy. Defined as any of the following occurring ever:
  - POV 995.0 through 995.3 and E942.0
  - Beta block\* entry in ART (Patient Allergies File)

- Beta block\*, bblock\* or b block\* contained within Problem List or in Provider Narrative field for any POV 995.0 through 995.3, V14.8.

### **ASA and Other Anti-Platelet Numerator Logic**

- ASA medication codes
  - Defined with medication taxonomy DM AUDIT ASPIRIN DRUGS.
- Other anti-platelet medication codes
  - Defined with medication taxonomy site-populated BGP ANTI-PLATELET DRUGS taxonomy.
- Contraindications to ASA or other antiplatelet. Defined as any of the following occurring ever unless otherwise noted:
  - Patients with a 180-day course of treatment for Warfarin or Coumadin during the Report Period, using site-populated BGP CMS WARFARIN MEDS taxonomy
  - Hemorrhage diagnosis (POV 459.0)
  - NMI refusal for any aspirin at least once during the Report Period
  - CPT G8008 (Clinician documented that AMI patient was not an eligible candidate to receive aspirin at arrival) (old code) at least once during the report period
- Adverse drug reaction or documented ASA or other antiplatelet allergy. Defined as any of the following occurring ever:
  - POV 995.0 through 995.3 and E935.3
  - Aspirin entry in ART (Patient Allergies File)
  - ASA or aspirin contained within Problem List or in Provider Narrative field for any POV 995.0 through 995.3, V14.8

### **ACEI/ARB Numerator Logic**

- ACEI medication codes, Defined with medication taxonomy BGP HEDIS ACEI MEDS:
  - ACEI medications are: Angiotensin Converting Enzyme Inhibitors (Benazepril, Captopril, Enalapril, Fosinopril, Lisinopril, Moexipril, Perindopril, Quinapril, Ramipril, Trandolopril).
- Antihypertensive Combinations: Amlodipine-benazepril, Benazepril-hydrochlorothiazide, Captopril-hydrochlorothiazide, Enalapril-hydrochlorothiazide, Fosinopril-hydrochlorothiazide, Hydrochlorothiazide-lisinopril, Hydrochlorothiazide-moexipril, Hydrochlorothiazide-quinapril, Trandolapril-verapamil.
- Contraindications to ACEI defined as any of the following:
  - Pregnancy: See definition that follows



- Breastfeeding: defined as POV V24.1 or breastfeeding patient education codes BF-BC, BF-BP, BF-CS, BF-EQ, BF-FU, BF-HC, BF-ON, BF-M, BF-MK, or BF-N during the Report Period
- Diagnosis ever for moderate or severe aortic stenosis
  - POV 395.0, 395.2, 396.0, 396.2, 396.8, 424.1, 425.1, 747.22
- NMI refusal for any ACEI at least once during the Report Period.
- Adverse drug reaction or documented ACEI allergy. Defined as any of the following occurring anytime through the end of the report period:
  - POV 995.0 through 995.3 and E942.6
  - Ace inhibitor or ACEI entry in ART (Patient Allergies File)
  - Ace i\* or ACEI contained within Problem List or in Provider Narrative field for any POV 995.0 through 995.3, V14.8.
- ARB (Angiotensin Receptor Blocker) medication codes. Defined with medication taxonomy BGP HEDIS ARB MEDS
  - ARB medications are: Angiotensin II Inhibitors (Azilsartan, Candesartan, Eprosartan, Irbesartan, Losartan, Olmesartan, Telmisartan, Valsartan.)
- Antihypertensive Combinations
  - Aliskiren-Amlodipine-hydrochlorothiazide, Aliskiren-valsartan, Amlodipine-hydrochlorothiazide-olmesartan, Amlodipine-hydrochlorothiazide-valsartan, Amlodipine-olmesartan, Amlodipine-Telmisartan, Candesartan-hydrochlorothiazide, Eprosartan-hydrochlorothiazide, Hydrochlorothiazide-Irbesartan, Hydrochlorothiazide-Losartan, Hydrochlorothiazide-olmesartan, Hydrochlorothiazide-Telmisartan, Hydrochlorothiazide-Valsartan
- Contraindications to ARB defined as any of the following:
  - Pregnancy: See definition that follows
  - Breastfeeding: defined as POV V24.1 or breastfeeding patient education codes BF-BC, BF-BP, BF-CS, BF-EQ, BF-FU, BF-HC, BF-ON, BF-M, BF-MK, or BF-N during the Report Period
  - Diagnosis ever for moderate or severe aortic stenosis
  - POV 395.0, 395.2, 396.0, 396.2, 396.8, 424.1, 425.1, 747.22
  - NMI refusal for any ARB at least once during the Report Period.
- Adverse drug reaction or documented ARB allergy. Defined as any of the following occurring anytime through the end of the Report Period:
  - POV 995.0 through 995.3 and E942.6
  - Angiotensin Receptor Blocker or ARB entry in ART (Patient Allergies File)

- Angiotensin Receptor Blocker or ARB contained within Problem List or in Provider Narrative field for any POV 995.0 through 995.3, V14.8

### Statins Numerator Logic

- Statin medication codes
  - Defined with medication taxonomy BGP PQA STATIN MEDS
  - Statin medications are: Atorvastatin (Lipitor), Fluvastatin (Lescol), Lovastatin (Altacor, Altoprev, Mevacor), Pravastatin (Pravachol), Pitavastatin (Livalo), Simvastatin (Zocor), Rosuvastatin (Crestor).
- Statin Combination Products
  - Advicor, Caduet, PraviGard Pac, Vytorin
- Contraindications to Statins: defined as any of the following:
  - Pregnancy: See definition that follows
  - Breastfeeding: Defined as POV V24.1 or breastfeeding patient education codes BF-BC, BF-BP, BF-CS, BF-EQ, BF-FU, BF-HC, BF-ON, BF-M, BF-MK, or BF-N during the Report Period
  - Acute Alcoholic Hepatitis: Defined as POV 571.1 during the Report Period, or
  - NMI refusal for any statin at least once during the report period.
- Adverse drug reaction or documented statin allergy. Defined as any of the following:
  - ALT or AST greater than three times the Upper Limit of Normal (ULN) (i.e., Reference High) on two or more consecutive visits during the Report Period
  - Creatine Kinase (CK) levels greater than ten times ULN or CK greater than 10,000 IU/L during the Report Period
  - Myopathy or Myalgia, defined as any of the following during the Report Period:
    - POV 359.0 through 359.9, 729.1, 710.5, 074.1
  - Any of the following occurring anytime through the end of the Report Period:
    - POV 995.0 through 995.3 and E942.9
    - Statin or Statins entry in ART (Patient Allergies File)
    - Statin or Statins contained within Problem List or in Provider Narrative field for any POV 995.0 through 995.3, V14.8.

## Pregnancy Definition

At least two visits during the Report Period with POV or Problem diagnosis (640.03, 640.83, 640.93, 641.03, 641.13, 641.23, 641.33, 641.83, 641.93, 642.03, 642.13, 642.23, 642.33, 642.43, 642.53, 642.63, 642.73, 642.93, 643.03, 643.13, 643.23, 643.83, 643.93, 644.03, 644.13, 645.13, 645.23, 646.03, 646.13, 646.23, 646.33, 646.43, 646.53, 646.63, 646.73, 646.83, 646.93, 647.03, 647.13, 647.23, 647.33, 647.43, 647.53, 647.63, 647.83, 647.93, 648.03, 648.13, 648.23, 648.33, 648.43, 648.53, 648.63, 648.73, 648.83, 648.93, 649.03, 649.13, 649.23, 649.33, 649.43, 649.53, 649.63, 649.73, 651.03, 651.13, 651.23, 651.33, 651.43, 651.53, 651.63, 651.73, 651.83, 651.93, 652.03, 652.13, 652.23, 652.33, 652.43, 652.53, 652.63, 652.73, 652.83, 652.93, 653.03, 653.13, 653.23, 653.33, 653.43, 653.53, 653.63, 653.73, 653.83, 653.93, 654.03, 654.13, 654.23, 654.33, 654.43, 654.53, 654.63, 654.73, 654.83, 654.93, 655.03, 655.13, 655.23, 655.33, 655.43, 655.53, 655.63, 655.73, 655.83, 655.93, 656.03, 656.13, 656.23, 656.33, 656.43, 656.53, 656.63, 656.73, 656.83, 656.93, 657.03, 658.03, 658.13, 658.23, 658.33, 658.43, 658.83, 658.93, 659.03, 659.13, 659.23, 659.33, 659.43, 659.53, 659.63, 659.73, 659.83, 659.93, 660.03, 660.13, 660.23, 660.33, 660.43, 660.53, 660.63, 660.73, 660.83, 660.93, 661.03, 661.13, 661.23, 661.33, 661.43, 661.93, 662.03, 662.13, 662.23, 662.33, 663.03, 663.13, 663.23, 663.33, 663.43, 663.53, 663.63, 663.83, 663.93, 665.03, 665.83, 665.93, 668.03, 668.13, 668.23, 668.83, 668.93, 669.03, 669.13, 669.23, 669.43, 669.83, 669.93, 671.03, 671.13, 671.23, 671.33, 671.53, 671.83, 671.93, 673.03, 673.13, 673.23, 673.33, 673.83, 674.03, 674.53, 675.03, 675.13, 675.23, 675.83, 675.93, 676.03, 676.13, 676.23, 676.33, 676.43, 676.53, 676.63, 676.83, 676.93, 678.03, 678.13, 679.03, 679.13, V22.0 through V23.9, V28.81, V28.82, V28.89, V72.42, V89.01 through V89.09), where the primary provider is not a CHR (Provider code 53). Pharmacy-only visits (clinic code 39) will not count toward these two visits. If the patient has more than two pregnancy-related visits during the Report Period, CRS will use the first two visits in the Report Period. The patient must not have a documented miscarriage or abortion occurring after the second pregnancy-related visit.

- Miscarriage definition:
  - POV 630, 631, 632, 633\*, 634\*
  - CPT 59812, 59820, 59821, 59830
- Abortion definition:
  - POV 635\*, 636\*, 637\*
  - CPT 59100, 59120, 59130, 59136, 59150, 59151, 59840, 59841, 59850, 59851, 59852, 59855, 59856, 59857, S2260 through S2267,
  - Procedure 69.01, 69.51, 74.91, 96.49

### All Medications Numerator Logic

To be included in this numerator, a patient must have a prescription or a contraindication for *all* of the four medication classes (i.e., beta-blocker, ASA or other antiplatelet, ACEI or ARB, *and* statin).

### Test Definitions

- ALT
  - Site-populated taxonomy DM AUDIT ALT TAX
  - LOINC taxonomy
- AST
  - Site-populated taxonomy DM AUDIT AST TAX
  - LOINC taxonomy
- Creatine Kinase
  - Site-populated taxonomy BGP CREATINE KINASE TAX
  - LOINC taxonomy

### 2.5.6.5 Patient Lists

- List of Active IHD patients 22 and older with 180-day beta-blocker therapy.
- List of Active IHD patients 22 and older without 180-day beta-blocker therapy.
- List of Active IHD patients 22 and older with 180-day ASA therapy.
- List of Active IHD patients 22 and older without 180-day ASA therapy.
- List of Active IHD patients 22 and older with 180-day ACEI or ARB therapy.
- List of Active IHD patients 22 and older without 180-day ACEI or ARB therapy.
- List of Active IHD patients 22 and older with 180-day statin therapy.
- List of Active IHD patients 22 and older without 180-day statin therapy.
- List of Active IHD patients 22 and older with 180-day therapy for all appropriate meds.
- List of Active IHD patients 22 and older without 180-day therapy for all appropriate meds.

## 2.5.7 Cholesterol Management for Patients with Cardiovascular Conditions

### 2.5.7.1 Owner: Contact

Dr. Dena Wilson, Chris Lamer, PharmD, and Mark Veazie

**2.5.7.2 Denominators**

1. Active Clinical patients ages 18 through 75 years who, during the first ten months of the year prior to the beginning of the Report period, were diagnosed with AMI, coronary artery bypass graft (CABG), or percutaneous coronary interventions (PCI), or who were diagnosed with ischemic vascular disease (IVD) during the Report Period and the year prior to the Report Period.

**2.5.7.3 Numerators**

1. Patients with LDL completed during the report period, regardless of result.
  - A. Patients with LDL of 100 or lower, completed during the report period.
  - B. Patients with LDL 101 through 130, completed during the report period.
  - C. Patients with LDL above 130, completed during the report period.

**2.5.7.4 Definitions****AMI**

POV 410.\*0, 410.\*1

**PCI**

- Procedure 00.66, 36.01 (old code), 36.02 (old code), 36.05, (old code), 36.06 through 36.07
- POV V45.82
- CPT 92980, 92982, 92995, G0290

**CABG**

- Procedure 36.1\*, 36.2
- POV V45.81
- CPT 33510 through 33514, 33516 through 33519, 33521 through 33523, 33533 through 33536, S2205 through S2209

**IVD**

- POV 411.\*, 413.\*, 414.0\*, 414.2, 414.8, 414.9, 429.2, 433.\* through 434.\*, 440.1, 440.2\*, 440.4, 444.\*, 445.\*

**LDL**

Searches for most recent LDL test with a result during the report period. If more than one LDL test is found on the same day or the same visit and one test has a result and the other does not, the test with the result will be used. If an LDL test with a result is not found, CRS searches for the most recent LDL test without a result. LDL defined as:

- CPT 80061, 83700, 83701, 83704, 83715 (old code), 83716 (old code), 83721, 3048F, 3049F, 3050F
- LOINC taxonomy
- Site-populated taxonomy DM AUDIT LDL CHOLESTEROL TAX
- For numerator LDL of 100 or lower, CPT 3048F will count as meeting the measure

**2.5.7.5 Patient Lists**

- List of Active Clinical patients 18 through 75 years of age with diagnosis of AMI, CABG, PCI, or IVD with LDL completed, regardless of result.
- List of Active Clinical patients 18 through 75 years of age with diagnosis of AMI, CABG, PCI, or IVD without LDL completed.
- List of Active Clinical patients 18 through 75 years of age with diagnosis of AMI, CABG, PCI, or IVD with LDL 100 or lower.
- List of Active Clinical patients 18 through 75 years of age with diagnosis of AMI, CABG, PCI, or IVD with LDL 101 through 130.
- List of Active Clinical patients 18 through 75 years of age with diagnosis of AMI, CABG, PCI, or IVD with LDL above 130.

**2.5.8 Heart Failure and Evaluation of LVS Function****2.5.8.1 Owner: Contact**

Dr. Dena Wilson, Chris Lamer, PharmD, and Mark Veazie

**2.5.8.2 Denominators**

1. Active Clinical ages 18 or older discharged with heart failure during the Report Period.

**2.5.8.3 Numerators**

1. Patients whose LVS function was evaluated before arrival, during hospitalization, or is planned for after discharge.

## 2.5.8.4 Definitions

### Heart Failure

- Primary diagnosis code of 398.91, 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, 429.1, 997.1 and with Service Category H (hospitalization).

**Note:** If a patient has multiple admissions matching this criteria during the Report Period, the earliest admission will be used.

### Denominator Exclusions

Defined as any of the following:

- Patients receiving comfort measures only (i.e., patients who received palliative care and usual interventions were not received because a medical decision was made to limit care).
- Patients with a Discharge Type of Transferred or Irregular or containing “Death.”
- Patients who had a left ventricular assistive device (LVAD) or heart transplant procedure during hospitalization.

### Comfort Measures

- V66.7 (Encounter for palliative care) documented during hospital stay.

### LVAD/Heart Transplant

Any of the following during hospital stay:

- Procedure 33.6, 37.41, 37.51 through 37.54, 37.61 through 37.66, 37.68

### Evaluation of LVS (Left Ventricular Systolic) Function

Any of the following:

- An ejection fraction ordered or documented anytime one year prior to discharge date, defined as any of the following:
  - V Measurement “CEF”
  - Procedure 88.53, 88.54
  - CPT 78414, 78468, 78472, 78473, 78480, 78481, 78483, 78494, 93303, 93304, 93307, 93308, 93312, 93314 through 93318, 93350, 93543, 93555
- RCIS order for Cardiovascular Disorders referral that is ordered during the hospital stay but no later than the hospital discharge date. (RCIS referral defined as:

- ICD Diagnostic Category "Cardiovascular Disorders" combined with any of the following CPT Categories: "Evaluation and/or Management, "Non-surgical Procedures" or "Diagnostic Imaging.")
- Any of the following documented anytime one year prior to discharge date:
  - Echocardiogram: Procedure 88.72, 37.28, 00.24
  - Nuclear Medicine Test: Procedure 92.2\*
  - Cardiac Catheterization with a Left Ventriculogram: Procedure 37.22, 37.23, 88.53, 88.54

### 2.5.8.5 Patient Lists

- List of Active Clinical heart failure patients 18 and older who received evaluation of LVS function.
- List of Active Clinical heart failure patients 18 and older who did not receive evaluation of LVS function.

## 2.6 STD-Related Group

### 2.6.1 HIV Quality of Care

#### 2.6.1.1 Owner: Contact

Lisa Neel, MPH, Dr. Marie Russell, and Jonathan Iralu

#### 2.6.1.2 Denominators

1. User Population patients 13 and older with at least two direct care visits, (i.e., not contract or CHS) during the report period with HIV diagnosis *and* one HIV visit in last six months.

#### 2.6.1.3 Numerators

1. Patients who received CD4 test only (without HIV viral load) during the report period.
2. Patients who received HIV Viral load only (without CD4), during the report period.
3. Patients who received both CD4 and HIV viral load tests during the report period.
4. Total Numerators 1, 2 and 3.

#### 2.6.1.4 Definitions

##### HIV

POV or Problem List 042, 042.0 through 044.9 (old codes), 079.53, V08, 795.71



**Lab Test CD4**

- CPT 86359, 86360, 86361
- LOINC taxonomy
- Site-populated taxonomy BGP CD4 TAX

**HIV Viral Load**

- CPT 87536, 87539
- LOINC taxonomy
- Site-populated taxonomy BGP HIV VIRAL TAX

**2.6.1.5 Patient Lists**

- List of patients 13 and older with HIV diagnosis during the Report Period who received CD4 test only.
- List of patients 13 and older with HIV diagnosis during the Report Period who did not receive CD4 test only.
- List of patients 13 and older with HIV diagnosis during the Report Period who received HIV viral load only.
- List of patients 13 and older with HIV diagnosis during the Report Period who did not receive HIV viral load only.
- List of patients 13 and older with HIV diagnosis during the Report Period who received CD4 and HIV viral load.
- List of patients 13 and older with HIV diagnosis during the Report Period who did not receive CD4 and HIV viral load.
- List of patients 13 and older with HIV diagnosis during the Report Period who received CD4 or HIV viral load.
- List of patients 13 and older with HIV diagnosis during the Report Period who did not receive CD4 or HIV viral load.

**2.6.2 Hepatitis C Screening****2.6.2.1 Owner: Contact**

Brigg Reilley

**2.6.2.2 Denominators**

1. User Population patients born between 1945 and 1965 with no recorded Hepatitis C diagnosis. Broken down by gender.

**2.6.2.3 Numerators**

1. Patients screened for Hepatitis C ever.

**2.6.2.4 Definitions****Hepatitis C Diagnosis**

Any of the following documented any time prior to the end of the Report Period:

- POV or Problem List codes 070.41, 070.44, 070.51, 070.54, 070.70 through 070.71

**Hepatitis C Screening**

- CPT 86803
- LOINC taxonomy
- Site-populated taxonomy BGP HEP C TEST TAX

**2.6.2.5 Patient Lists**

- List of patients born between 1945 and 1965 with no prior Hepatitis C diagnosis who were ever screened for Hepatitis C.
- List of patients born between 1945 and 1965 with no prior Hepatitis C diagnosis or screening who were ever screened for Hepatitis C.

**2.6.3 Chlamydia Testing****2.6.3.1 Owner: Contact**

Epidemiology Program: Scott Tulloch

**2.6.3.2 Denominators**

1. Female Active Clinical patients ages 16 through 25 years, broken down into age groups 16 through 20 years and 21 through 25 years.
2. Female User Population patients ages 16 through 25 years, broken down into age groups 16 through 20 years and 21 through 25 years.

**2.6.3.3 Numerators**

1. Patients tested for Chlamydia trachomatis during the report period.

**2.6.3.4 Definitions****Chlamydia**

- V73.88, V73.98

- CPT: 86631, 86632, 87110, 87270, 87320, 87490 through 87492, 87810, 3511F
- Site-populated taxonomy BGP GPRA CHLAMYDIA TESTS
- LOINC taxonomy

### **2.6.3.5 Patient Lists**

- List of Active Clinical patients with documented Chlamydia screening.
- List of Active Clinical patients without documented Chlamydia screening.

## **2.6.4 Sexually Transmitted Infection Screening**

### **2.6.4.1 Owner: Contact**

Scott Tulloch

### **2.6.4.2 Denominators**

1. Number of key sexually transmitted infections (STI) incidents for Active Clinical patients that occurred during the period 60 days prior to the beginning of the report period through the first 300 days of the report period. Key STIs defined as Chlamydia, gonorrhea, HIV/AIDS, and syphilis. Two or more key STIs on the same visit will be counted once. Broken down by gender.
2. HIV/AIDS screenings needed for key STI incidents for Active Clinical patients that occurred during the defined period. Broken down by gender.
3. Number of key sexually transmitted infections (STI) incidents for User Population patients that occurred during the period 60 days prior to the beginning of the report period through the first 300 days of the report period. Key STIs defined as Chlamydia, gonorrhea, HIV/AIDS, and syphilis. Two or more key STIs on the same visit will be counted once. Broken down by gender.
4. HIV/AIDS screenings needed for key STI incidents for User Population patients that occurred during the defined period. Broken down by gender.

### **2.6.4.3 Numerators**

1. No denominator; count only. The total count of Active Clinical patients who were diagnosed with one or more key sexually transmitted infections (STIs) during the period 60 days prior to the Report Period through the first 300 days of the Report Period.
2. No denominator; count only. The total count of separate key STI incidents for Active Clinical patients during the defined period.

3. For use with denominator 1 and 3: Number of complete screenings, defined as all screenings necessary for a specific STI incident, performed from one month prior to the date of relevant STI incident through two months after.

**Note:** This numerator does not include refusals.

4. For use with denominator 2 and 4: Number of needed HIV/AIDS screenings performed from one month prior to the date of first STI diagnosis of each incident through two months after.

**Note:** This numerator does not include refusals.

#### 2.6.4.4 Definitions

##### Key STIs

Chlamydia, gonorrhea, HIV/AIDS, and syphilis. Key STIs defined with the following POVS:

- Chlamydia: 079.88, 079.98, 099.41, 099.50 through 099.59
- Gonorrhea: 098.0 through 098.89
- HIV/AIDS: 042, 042.0 through 044.9, 079.53, 795.71, V08
- Syphilis: 090.0 through 093.9, 094.1 through 097.9

##### Logic for Identifying Patients Diagnosed with Key STI (numerator #1)

Any patient with one or more diagnoses of any of the key STIs defined above during the period 60 days prior to the beginning of the Report Period through the first 300 days of the Report Period.

##### Logic for Identifying Separate Incidents of Key STIs (numerator #2)

One patient may have one or multiple occurrences of one or multiple STIs during the year, except for HIV. An occurrence of HIV is only counted if it is the initial HIV diagnosis for the patient ever. Incidents of an STI are identified beginning with the date of the first key STI diagnosis (see definition above) occurring between 60 days prior to the beginning of the report period through the first 300 days of the report period. A second incident of the same STI (other than HIV) is counted if another diagnosis with the same STI occurs two months or more after the initial diagnosis. A different STI diagnosis that occurs during the same 60-day time period as the first STI counts as a separate incident.

Table 2-2: Example of Patient with Multiple Incidents of Single STI

Date	Visit	Total Incidents
August 1, 2012	Patient screened for Chlamydia	0

Date	Visit	Total Incidents
August 8, 2012	Patient diagnosed with Chlamydia	1
August 15, 2012	Patient diagnosed with Chlamydia	2
October 25, 2012	Follow-up for Chlamydia	2
November 15, 2012	Patient diagnosed with Chlamydia	2
March 1, 2013	Patient diagnosed with Chlamydia	3

### Denominator Logic for Needed Screenings (Denominator #1)

One patient may need multiple screening tests based on one or more STI incidents occurring during the time period.

To be included in the needed screening tests denominator, the count will be derived from the number of separate STI incidents and the types of screenings recommended for each incident. The recommended screenings for each key STI are listed in Table 2-3.

Table 2-3: Recommended STI screenings

STI	Screenings Needed
Chlamydia	Gonorrhea, HIV/AIDS, Syphilis
Gonorrhea	Chlamydia, HIV/AIDS, Syphilis
HIV/AIDS	Chlamydia, Gonorrhea, Syphilis
Syphilis	Chlamydia, Gonorrhea, HIV/AIDS

“Needed” screenings are recommended screenings that are further evaluated for contraindications. The following are reasons that a recommended screening is identified as not needed (i.e., contraindicated).

- The patient has a documented STI diagnosis corresponding to the screening type in the same time period. For example, a patient with both a Chlamydia and a gonorrhea diagnosis on the same visit does not need the recommended Chlamydia screening based on the gonorrhea diagnosis.
- Only one screening for each type of STI is needed during the relevant time period, regardless of the number of different STI incidents identified. For example, if a patient is diagnosed with Chlamydia and Gonorrhea on the same visit, only one screening each is needed for HIV/AIDS and Syphilis.
- A patient with HIV/AIDS diagnosis prior to any STI diagnosis that triggers a recommended HIV/AIDS screening does not need the screening ever.

### Numerator Logic

To be counted in the numerator, each needed screening in the denominator must have a corresponding lab test or test refusal documented in the period from one

month prior to the relevant STI diagnosis date through two months after the STI incident.

### **Chlamydia Screening**

Any of the following during the specified time period:

- POV V73.88, V73.98
- CPT 86631 through 86632, 87110, 87270, 87320, 87490 through 87492, 87810, 3511F
- Site-populated taxonomy BGP CHLAMYDIA TESTS TAX
- LOINC taxonomy

### **Gonorrhea Screening**

Any of the following during the specified time period:

- CPT 87590 through 87592, 87850, 3511F
- Site-populated taxonomy BKM GONORRHEA TEST TAX
- LOINC taxonomy

### **HIV/AIDS Screening**

Any of the following during the specified time period:

- CPT 86689, 86701 through 86703, 87390 through 87391, 87534 through 87539
- Site-populated taxonomy BGP HIV TEST TAX
- LOINC taxonomy

### **Syphilis Screening**

Any of the following during the specified time period:

- CPT 86592 through 86593, 86781, 87285, 3512F
- site-populated taxonomy BKM FTA-ABS TESTS TAX or BKM RPR TESTS TAX
- LOINC taxonomy

### **Logic Examples**

- Example of Patient with Single Diagnosis of Single STI
  - August 1, 2012: Patient screened for Chlamydia
  - August 8, 2012: Patient diagnosed with Chlamydia—three screens needed: Gonorrhea, HIV/AIDS, Syphilis
  - August 13, 2012: Patient screened for Gonorrhea, HIV/AIDS, Syphilis

- Result:
  - Denominator: One key STI incident
  - Numerator: One complete screening
- Example of Patient with Multiple Diagnoses of Single STI
  - August 1, 2012: Patient screened for Chlamydia
  - August 8, 2012: Patient diagnosed with Chlamydia (Incident #1)–three screens needed: Gonorrhea, HIV/AIDS, Syphilis
  - August 13, 2012: Patient screened for Gonorrhea, HIV/AIDS, Syphilis
  - December 1, 2012: Patient screened for Chlamydia
  - December 8, 2012: Patient diagnosed with Chlamydia (Incident #2)– three screens needed: Gonorrhea, HIV/AIDS, Syphilis
  - Result:
    - Denominator: Two key STI incidents,
    - Numerator: One complete screening (one each of three types)
- Example of Patient with Single Diagnosis of Multiple STIs
  - October 15, 2012: Patient screened for Chlamydia, Gonorrhea, HIV/AIDS, Syphilis
  - October 18, 2012: Patient diagnosed with Chlamydia–three screens needed: Gonorrhea, HIV/AIDS, Syphilis
  - October 20, 2012: Patient diagnosed with Syphilis–removes needed screen for Syphilis (see above)
  - Result:
    - Denominator: Two key STI incidents
    - Numerator: One complete screening (prior to triggering diagnoses but within timeframe)
- Example of Patient with Multiple Diagnoses of Multiple STIs
  - June 15, 2005: Patient diagnosed with HIV/AIDS
  - August 1, 2012: Patient screened for Chlamydia and Gonorrhea
  - August 8, 2012: Patient diagnosed with Chlamydia and Gonorrhea (Incident #1–one screen needed: Syphilis (HIV/AIDS not needed since prior diagnosis)
  - August 8, 2012: Patient screened for HIV/AIDS and Syphilis - since only the Syphilis screen is needed, the HIV/AIDS screen is not counted at all
  - December 1, 2012: Patient screened for Chlamydia
  - December 8, 2012: Patient diagnosed with Chlamydia (Incident #2)– two screens needed: Gonorrhea and Syphilis

- December 10, 2012: Patient screened for Syphilis
- Result: Denominator:
  - Two key STI incidents
  - Numerator: One complete screening

#### **2.6.4.5 Patient Lists**

- List of Active Clinical patients diagnosed with an STI who were screened for other key STIs.
- List of Active Clinical patients diagnosed with an STI who were not screened for other key STIs.

## **2.7 Other Clinical Measures Group**

### **2.7.1 Asthma**

#### **2.7.1.1 Owner: Contact**

Chris Lamer, PharmD

#### **2.7.1.2 National Reporting**

Not reported nationally

#### **2.7.1.3 Denominators**

1. Active Clinical patients, broken down by age groups: under 15 years, 15 through 34 years, 35 through 64 years, 65 years and older.

#### **2.7.1.4 Numerators**

1. Patients who have had two asthma-related visits during the report period or with persistent asthma.

#### **2.7.1.5 Definitions**

##### **Asthma Visits**

Asthma visits are defined as diagnosis (POV) 493.\*.

##### **Persistent Asthma**

Any of the following:

- Active entry in PCC Problem List for 493.\* with Severity of 2, 3 or 4 at any time before the end of the report period
- Most recent visit-related asthma entry (i.e., V Asthma) with Severity of 2, 3, or 4 documented any time before the end of the report period.



**2.7.1.6 Patient Lists**

List of Active Clinical patients diagnosed with asthma.

**2.7.2 Medication Therapy for Persons with Asthma****2.7.2.1 Owner: Contact**

Chris Lamer, PharmD

**2.7.2.2 Denominators**

1. Active Clinical patients ages 5 through 50 years with persistent asthma within the year prior to the beginning of the Report Period and during the Report Period, without a documented history of emphysema or chronic obstructive pulmonary disease (COPD).

**2.7.2.3 Numerators**

1. Suboptimal Control: Patients who were dispensed more than three canisters of a short-acting Beta-2 agonist inhaler during the same 90-day period during the Report Period.
2. Absence of Controller Therapy: Patients who were dispensed more than three canisters of short acting Beta-2 agonist inhalers over a 90-day period and who did not receive controller therapy during the same 90-day period.

**2.7.2.4 Definitions****Denominator Exclusions**

Patients diagnosed with emphysema or COPD at any time on or before the end of the report period are excluded from the denominator.

**Emphysema**

Any visit at any time on or before the end of the report period with POV codes: 492.\*, 506.4, 518.1, 518.2.

**COPD**

Any visit at any time on or before the end of the report period with POV codes: 491.20, 491.21, 491.22, 493.2\*, 496, 506.4.

**Persistent Asthma**

Meeting any of the following four criteria within the year prior to the beginning of the report period and during the report period:

- At least one visit to Clinic code 30 (Emergency Medicine) with primary diagnosis 493.\* (asthma)

- At least one acute inpatient discharge with primary diagnosis 493.\* Acute inpatient discharge defined as Service Category of H
- At least four outpatient visits, defined as Service Categories A, S, or O, with primary or secondary diagnosis of 493.\* and at least two asthma medication dispensing events (see definition that follows)
- At least four asthma medication dispensing events (see definition that follows). If the sole medication was leukotriene modifiers, then must also have at least one visit with POV 493.\* in the same year as the leukotriene modifier (i.e. during the report period or within the year prior to the beginning of the report period.), or

Meeting any of the following criteria:

- Active entry in PCC Problem List for 493.\* with Severity of 2, 3 or 4 at any time before the end of the report period
- Most recent visit-related asthma entry (i.e., V Asthma) with Severity of 2, 3, or 4 documented any time before the end of the report period.

### Dispensing Event

One prescription of an amount lasting 30 days or less. For prescriptions longer than 30 days, divide the days' supply by 30 and round down to convert. For example, a 100-day prescription is equal to three dispensing events:

$$100 \div 30 = 3.33, \text{ rounded down to } 3$$

Also, two different prescriptions dispensed on the same day are counted as two different dispensing events. Inhalers should also be counted as one dispensing event.

**Note:** If a medication was started and then discontinued, CRS will recalculate the number of Days Prescribed by subtracting the prescription date (i.e., visit date) from the V Medication Discontinued Date. For example:

- Rx Date: November 15, 2013
- Discontinued Date: November 19, 2013

Recalculated number of Days Prescribed:  
*November 19, 2013 – November 15, 2013 = 4*

- Asthma medication codes for denominator defined with medication taxonomies:
  - BGP HEDIS ASTHMA MEDS
  - BGP HEDIS ASTHMA LEUK MEDS
  - BGP HEDIS ASTHMA INHALED MEDS

- Medications are: Antiasthmatic Combinations (Dyphylline-Guaifenesin, Guaifenesin-Theophylline, Potassium Iodide-Theophylline), Antibody Inhibitor (Omalizumab), Inhaled Steroid Combinations (Budesonide-Formoterol, Fluticasone-Salmeterol, Formoterol-Mometasone), Inhaled Corticosteroids (Beclomethasone, Budesonide, Ciclesonide CFC Free, Flunisolide, Fluticasone CFC Free, Mometasone, Triamcinolone), Leukotriene Modifiers (Montelukast, Zafirlukast, Zileuton), Long-Acting, Inhaled Beta-2 Agonists (Aformoterol, Formoterol, Indacaterol, Salmeterol), Mast Cell Stabilizers (Cromolyn, Nedocromil), Methylxanthines (Aminophylline, Dyphylline, Oxtriphylline, Theophylline), Short-Acting, Inhaled Beta-2 Agonists (Albuterol, Levalbuterol, Metaproterenol, Pirbuterol. Medications must not have a comment of RETURNED TO STOCK.

### **Numerator Inclusion**

To be included in the Suboptimal Control and Absence of Controller Therapy numerators, patient must have one or more non-discontinued prescriptions for short acting Beta-2 Agonist inhalers totalling at least four canisters in one 90 day period. Short acting Beta-2 Agonist inhaler medications defined with medication taxonomy BGP PQA SABA MEDS. (Medications are: Albuterol, Levalbuterol, Pirbuterol). Medications must not have a comment of RETURNED TO STOCK.

### **Controller Therapy**

At least one non-discontinued prescription of controller therapy medications during the same 90 day period.

### **Controller Therapy Medications**

Controller therapy medications defined with medication taxonomy BGP PQA CONTROLLER MEDS. (Medications are: Beclomethasone, Budesonide, Budesonide-Formoterol, Ciclesonide, Cromolyn, Flunisolide, Fluticasone, Fluticasone-Salmeterol, Formoterol, Mometasone, Mometasone-Formoterol, Montelukast, Nedocromil, Salmeterol, Theophylline, Triamcinolone, Zafirlukast, Zileuton). Medications must not have a comment of RETURNED TO STOCK.

#### **2.7.2.5 Patient Lists**

- List of Active Clinical patients ages 5 through 50 years with asthma who were dispensed more than three canisters of a short-acting Beta-2 agonist inhaler during the same 90-day period.
- List of Active Clinical patients' ages 5 through 50 years with asthma who were not dispensed more than three canisters of a short-acting Beta-2 agonist inhaler during the same 90-day period.

- List of Active Clinical patients ages 5 through 50 years with asthma who did not receive controller therapy.

### 2.7.3 Prediabetes/Metabolic Syndrome

#### 2.7.3.1 Owner: Contact

Drs. Stephen J. Rith Najarian and Kelly Moore

#### 2.7.3.2 Denominators

1. Active Clinical patients ages 18 and older diagnosed with prediabetes/metabolic syndrome without a documented history of diabetes.

#### 2.7.3.3 Numerators

1. Patients with all screenings (BP, LDL, fasting glucose or A1c, tobacco screening, BMI, lifestyle counseling, and depression screening)
2. Patients with BP documented at least twice during the report period.
3. Patients with LDL completed, regardless of result, during the report period.
4. Patients with fasting glucose test or A1c assessed, regardless of result, during the report period.
5. Patients with A1c less than (<) 5.7.
6. Patients with A1c equal to or greater (=>) than 5.7 and less than (<) 6.5.
7. Patients with A1c equal to or greater than (=>) 6.5.
8. Patients with no A1c during the Report Period.
9. Patients who have been screened for tobacco use during the report period.
10. Patients for whom a BMI could be calculated.

**Note:** This numerator does *not* include refusals.

11. Patients who have received any lifestyle adaptation therapy, including medical nutrition counseling, or nutrition, exercise or other lifestyle education during the report period.
12. Patients screened for depression or diagnosed with a mood disorder at any time during the report period, including documented refusals in past year.

#### 2.7.3.4 Definitions

##### Prediabetes/Metabolic Syndrome

- Diagnosis of prediabetes/metabolic syndrome, defined as: two visits during the Report Period with POV 277.7, or

- One each of at least three different conditions that follow, occurring during the Report Period except as otherwise noted:
  - BMI of 30 or higher, or Waist Circumference 40 inches or larger for men or 35 inches or larger for women,
  - Triglyceride value of 150 or higher,
  - HDL value below 40 for men or below 50 for women,
  - Patient diagnosed with hypertension or mean Blood Pressure value of 130/85 or higher where systolic is 130 or higher or diastolic is 85 or higher,
  - Fasting Glucose value 100 or higher but below 126.

**Note:** Waist circumference and fasting glucose values will be checked last.

### **Patients without Diabetes**

No diabetes diagnosis ever (POV 250.00 through 250.93).

## **2.7.3.5 Tests and Other Definitions**

### **BMI**

CRS calculates BMI at the time the report is run, using NHANES II. For ages 18 years and under, a height and weight must be taken on the same day any time during the Report Period. For ages 19 through 50 years, height and weight must be recorded within last five years, not required to be on the same day. For ages over 50 years, height and weight within last two years not required to be recorded on same day.

### **Triglyceride**

- LOINC taxonomy
- Site-populated taxonomy DM AUDIT TRIGLYCERIDE TAX with a non-null, numeric result

### **HDL**

- CPT 83718
- LOINC taxonomy
- Site-populated taxonomy DM AUDIT HDL TAX with a non-null, numeric result

### **Fasting Glucose**

- Denominator definition
  - LOINC taxonomy

- Site-populated taxonomy DM AUDIT FASTING GLUCOSE TESTS with a non-null, numeric result
- Numerator definition
  - POV 790.21
  - LOINC taxonomy
  - Site-populated taxonomy DM AUDIT FASTING GLUCOSE TESTS

**A1c**

- Searches for most recent A1c test with a result during the report period. If more than one A1c test is found on the same day or the same visit and one test has a result and the other does not, the test with the result will be used. If both tests have a result, the last test done on the visit will be used.
- If an A1c test with a result is not found, CRS searches for the most recent A1c test without a result.
- A1c defined as:
  - CPT 83036, 83037, 3044F through 3046F, 3047F (old code)
  - LOINC taxonomy
  - Site-populated taxonomy DM AUDIT HGB A1C TAX
  - Without result is defined as A1c documented but with no value.

**LDL**

Finds last test done during the report period; defined as:

- CPT 80061, 83700, 83701, 83704, 83715 (old code), 83716 (old code), 83721, 3048F, 3049F, 3050F
- LOINC taxonomy
- Site-populated taxonomy DM AUDIT LDL CHOLESTEROL TAX

**BP**

Exclusions: When calculating all BPs (using vital measurements or CPT codes), the following visits will be excluded:

- Service Category H (Hospitalization), I (In Hospital), S (Day Surgery), or O (Observation)
- Clinic code 23 (Surgical), 30 (ER), 44 (Day Surgery), C1 (Neurosurgery), or D4 (Anesthesiology)

CRS uses mean of last three BPs documented during the Report Period. If three BPs are not available, use mean of the last two BPs. If a visit contains more than one BP, the lowest BP will be used, defined as having the lowest systolic value. The mean Systolic value is calculated by adding the last three (or two) systolic

values and dividing by three (or two). The mean Diastolic value is calculated by adding the diastolic values from the last three (or two) blood pressures and dividing by three (or two).

- For the BP documented numerator, if CRS is not able to calculate a mean BP, it will search for CPT 0001F, 2000F, 3074F through 3080F or POV V81.1 documented during the report period.

### **Hypertension**

Diagnosis of (POV or problem list) 401.\* occurring prior to the report period, and at least one hypertension POV during the report period.

### **Tobacco Screening**

At least one of the following during the report period:

- Any health factor for category Tobacco, TOBACCO (SMOKING), TOBACCO (SMOKELESS – CHEWING/DIP), TOBACCO (EXPOSURE) documented during current report period
- Tobacco-related diagnoses (POV or current Active Problem List) 305.1, 305.1\* (old codes), 649.00 through 649.04, V15.82
- Dental code 1320
- Any patient education code containing "TO-", "-TO", "-SHS", 305.1, 305.1\* (old codes), 649.00 through 649.04, V15.82, D1320, 99406, 99407, G0375 (old code), G0376 (old code), 1034F, 1035F, 1036F, 1000F, G8455 through G8457 (old codes), G8402 (old code), G8453 (old code)
- CPT D1320, 99406, 99407, G0375 (old code), G0376 (old code), 1034F, 1035F, 1036F, 1000F, G8455 through G8457 (old codes), G8402 (old code), G8453 (old code)

### **Lifestyle Counseling**

Any of the following during the report period:

- Medical nutrition therapy defined as:
  - CPT 97802 through 97804, G0270, G0271
  - Primary or secondary provider codes 07, 29
  - Clinic codes 67 (dietary) or 36 (WIC)
- Nutrition education defined as:
  - POV V65.3 dietary surveillance and counseling
  - Patient education codes ending "-N" (Nutrition) or "-MNT" (or old code "-DT" (Diet)) or containing V65.3, 97802 through 97804, G0270, G0271
- Exercise education defined as:

- POV V65.41 exercise counseling
- Patient education codes ending "-EX" (Exercise) or containing V65.41
- Related exercise and nutrition education defined as:
  - Patient education codes ending "-LA" (lifestyle adaptation) or containing "OBS-" (obesity) or 278.00, 278.01

### **Depression Screening**

Any of the following during the report period:

- Depression Screening:
  - Exam code 36
  - POV V79.0
  - CPT 1220F
  - BHS Problem code 14.1 (screening for depression)
  - V Measurement in PCC or BH of PHQ2 or PHQ9
  - Refusal, defined as any PCC refusal in past year with Exam code 36

### **Mood Disorder diagnosis**

- At least two visits in PCC or BHS during the Report period with POV for: Major Depressive Disorder, Dysthymic Disorder, Depressive Disorder NOS, Bipolar I or II Disorder, Cyclothymic Disorder, Bipolar Disorder NOS, Mood Disorder Due to a General Medical Condition, Substance-induced Mood Disorder, or Mood Disorder NOS.
  - These POV codes are: 296.\*, 291.89, 292.84, 293.83, 300.4, 301.13, 311 or BHS POV 14, 15.

#### **2.7.3.6 Patient Lists**

- List of Active Clinical patients 18 or older with Prediabetes/Metabolic Syndrome with all assessments.
- List of Active Clinical patients 18 or older with Prediabetes/Metabolic Syndrome without all assessments.

#### **2.7.4 Proportion of Days Covered by Medication Therapy**

##### **2.7.4.1 Owner: Contact**

Chris Lamer, PharmD

##### **2.7.4.2 Denominators**

1. Active Clinical patients ages 18 and older who had two or more prescriptions for beta-blockers during the Report Period.



2. Active Clinical patients ages 18 and older who had two or more prescriptions for RAS Antagonists during the Report Period.
3. Active Clinical patients ages 18 and older who had two or more prescriptions for calcium channel blockers (CCB) during the Report Period.
4. Active Clinical patients ages 18 and older who had two or more prescriptions for biguanides during the Report Period.
5. Active Clinical patients ages 18 and older who had two or more prescriptions for sulfonlureas during the Report Period.
6. Active Clinical patients ages 18 and older who had two or more prescriptions for thiazolidinediones during the Report Period.
7. Active Clinical patients ages 18 and older who had two or more prescriptions for statins during the Report Period.
8. Active Clinical patients ages 18 and older who had two or more prescriptions for antiretroviral agents during the Report Period.

#### **2.7.4.3 Numerators**

1. Patients with proportion of days covered (PDC) 80% or more during the Report Period.
2. Patients with a gap in medication therapy 30 days or longer.
3. For use with denominator #8: Patients with proportion of days covered (PDC) 90% or higher during the Report Period.

#### **2.7.4.4 Definitions**

##### **Denominator Inclusion**

Patients must have at least two prescriptions for that particular type of medication on two unique dates of service at any time during the Report Period. Medications must not have a comment of RETURNED TO STOCK.

##### **Index Prescription Start Date**

The date when the medication was first dispensed within the Report Period. This date must be greater than 90 days from the end of the Report Period to be counted in the denominator.

##### **Medications**

Medications are defined with the following taxonomies: BGP PQA BETA BLOCKER MEDS, BGP PQA RASA MEDS, BGP PQA CCB MEDS, BGP PQA BIGUANIDE MEDS, BGP PQA SULFONYLUREA MEDS, BGP PQA THIAZOLIDINEDIONE MEDS, BGP PQA STATIN MEDS, BGP PQA ANTIRETROVIRAL MEDS.

### Each PDC Numerator

The proportion of days covered equals the number of days the patient was covered by at least one drug in the class divided by the number of days in the patient's measurement period.

The patient's measurement period is defined as the number of days between the Index Prescription Start Date and the end of the Report Period. When calculating the number of days the patient was covered by at least one drug in the class, if prescriptions for the same drug overlap, the prescription start date for the second prescription will be adjusted to be the day after the previous fill has ended.

**Note:** If a medication was started and then discontinued, CRS will recalculate the number of Days Prescribed by subtracting the prescription date (i.e., visit date) from the V Medication Discontinued Date. For example:

- Rx Date: November 15, 2013
- Discontinued Date: November 19, 2013

Recalculated number of Days Prescribed:  
*November 19, 2013 – November 15, 2013 = 4*

### Example of Proportion of Days Covered

Report Period: January 1 through December 31, 2013

- First prescription:
  - Index Rx Start Date: March 1, 2013
  - Days' Supply: 90
  - Prescription covers patient through May 29, 2013
- Second prescription:
  - Rx Date: May 26, 2013
  - Days' Supply: 90
  - Prescription covers patient through August 27, 2013
- Third prescription:
  - Rx Date: September 11, 2013
  - Days' Supply: 180
  - Gap:  
*September 11, 2013 – August 27, 2013 = 15 days*
  - Prescription covers patient through March 8, 2014

Patient's measurement period:

*March 1, 2013 through December 31, 2013 = 306 days*

Days patient was covered:

*March 1, 2013 through August 27, 2013 +  
September 11, 2013 through December 31, 2013 = 292 days*

PDC:

$292 \div 306 = 95\%$

### **Each Gap Numerator**

CRS will calculate whether a gap in medication therapy of 30 or more days has occurred between each consecutive medication dispensing event during the Report Period. A gap is calculated as the days not covered by the days supply between consecutive medication fills.

### **Example of Medication Gap 30 Days or Longer:**

Report Period: January 1 through December 31, 2013

- First prescription:
  - Rx Date: April 1, 2013
  - Days' Supply: 30
  - Prescription covers patient through April 30, 2013
- Second prescription:
  - Rx Date: July 1, 2013
  - Days' Supply: 90
  - Gap #1:
    - July 1, 2013 – April 30, 2013 = 61 days*
  - Prescription covers patient through September 28, 2013
- Third prescription:
  - Rx Date: October 1, 2013
  - Days' Supply: 90
  - Gap #2:
    - October 1, 2013 – September 28 – 2013 = 2 days*
  - Prescription covers patient through December 29, 2013

*Gap #1  $\geq$  30 days*

Patient will be included in the numerator for that medication.

**2.7.4.5 Patient List**

- List of Active Clinical patients 18 and older whose proportion of days covered for beta-blockers is 80% or more.
- List of Active Clinical patients 18 and older whose proportion of days covered for beta-blockers is less than 80%.
- List of Active Clinical patients 18 and older who had a gap of 30 days or more in their beta-blocker medication therapy.
- List of Active Clinical patients 18 and older whose proportion of days covered for RAS Antagonists is 80% or more.
- List of Active Clinical patients 18 and older whose proportion of days covered for RAS Antagonists is less than 80%.
- List of Active Clinical patients 18 and older who had a gap of 30 days or more in their RAS Antagonist medication therapy.
- List of Active Clinical patients 18 and older whose proportion of days covered for calcium channel blockers is 80% or more.
- List of Active Clinical patients 18 and older whose proportion of days covered for calcium channel blockers is less than 80%.
- List of Active Clinical patients 18 and older who had a gap of 30 days or more in their calcium channel blocker medication therapy.
- List of Active Clinical patients 18 and older whose proportion of days covered for biguanides is 80% or more.
- List of Active Clinical patients 18 and older whose proportion of days covered for biguanides is less than 80%.
- List of Active Clinical patients 18 and older who had a gap of 30 days or more in their biguanide medication therapy.
- List of Active Clinical patients 18 and older whose proportion of days covered for sulfonylureas is 80% or more.
- List of Active Clinical patients 18 and older whose proportion of days covered for sulfonylureas is less than 80%.
- List of Active Clinical patients 18 and older who had a gap of 30 days or more in their sulfonylurea medication therapy.
- List of Active Clinical patients 18 and older whose proportion of days covered for thiazolidinediones is 80% or more.
- List of Active Clinical patients 18 and older whose proportion of days covered for thiazolidinediones is less than 80%.

- List of Active Clinical patients 18 and older who had a gap of 30 days or more in their thiazolidinedione medication therapy.
- List of Active Clinical patients 18 and older whose proportion of days covered for statins is 80% or more.
- List of Active Clinical patients 18 and older whose proportion of days covered for statins is less than 80%.
- List of Active Clinical patients 18 and older who had a gap of 30 days or more in their statin medication therapy.
- List of Active Clinical patients 18 and older whose proportion of days covered for antiretroviral agents is 90% or more.
- List of Active Clinical patients 18 and older whose proportion of days covered for antiretroviral agents is less than 90%.

## 2.7.5 Medication Therapy Management Services

### 2.7.5.1 Owner: Contact

Chris Lamer, PharmD

### 2.7.5.2 National Reporting

Not reported nationally

### 2.7.5.3 Denominators

1. Active Clinical patients 18 and older with Medications dispensed at their facility during the Report Period.

### 2.7.5.4 Numerators

1. Patients who received medication therapy management (MTM) during the Report Period.

### 2.7.5.5 Definitions

#### Patients receiving medications

Are identified any entry in the VMed file for your facility.

#### Medication Therapy Management

Medication Therapy Management (MTM) defined as:

- CPT: 99605 through 99607
- Clinic codes: D1, D2

**2.7.5.6 Patient List**

List of patients 18 and older receiving medications with medication therapy management, if any.

**2.7.6 Public Health Nursing****2.7.6.1 Owner: Contact**

Tina Tah, RN, BSN, MBA

**2.7.6.2 Denominators**

1. No numerator; count of visits only. Number of visits to User Population patients by PHNs in any setting, including Home.
  - A. Number of visits to patients ages 0 through 28 days (Neonate) in any setting.
  - B. Number of visits to patients ages 29 days through 12 months (infants) in any setting.
  - C. Number of visits to patients ages 1 through 64 years in any setting.
  - D. Number of visits to patients ages 65 and older (Elders) in any setting.
2. No numerator; count of visits only. Number of visits to User Population patients by PHNs in Home setting.
  - A. Number of Home visits to patients ages 0 through 28 days (Neonate).
  - B. Number of Home visits to patients ages 29 days through 12 months (infants).
  - C. Number of Home visits to patients ages 1 through 64 years.
  - D. Number of visits to patients ages 65 and older (Elders) in any setting.
  - E. Number of PHN driver/interpreter (Provider code 91) visits in a HOME setting.

**2.7.6.3 Numerator**

None

**2.7.6.4 Definitions****PHN Visit-Any Setting**

Any visit with primary or secondary Provider codes 13 or 91.

**PHN Visit-Home**

Any visit with one of the following:

- Clinic code 11 and a primary or secondary provider code of 13 or 91, or

- Location Home (as defined in Site Parameters) and a primary or secondary Provider code 13 or 91

#### 2.7.6.5 Patient Lists

- List of patients with a PHN visit in any setting, including Home.
- List of patients with a PHN visit in Home setting

### 2.7.7 Use of High Risk Medications in the Elderly

#### 2.7.7.1 Owner and Contact

Dr. Bruce Finke

#### 2.7.7.2 National Reporting

Not reported nationally

#### 2.7.7.3 Denominators

1. Active Clinical patients ages 65 years and older, broken down by gender and age groups (65 years and older, 65 through 74 years, 75 through 84 years, and 85 years and older).

#### 2.7.7.4 Numerators

1. Patients who received at least one high risk medication for the elderly during the report period.
2. Patients who received at least two different high risk medications for the elderly during the report period.

#### 2.7.7.5 Definitions

**Note:** The logic below is a deviation from the logic written by PQA, as PQA requires at least two prescriptions fills for the same high-risk medication during the Report Period, while the logic below only requires one prescription fill.

- For nitrofurantoin, a patient must have received a cumulative days supply for any nitrofurantoin product greater than 90 days during the Report Period.
- For nonbenzodiazepine hypnotics (BGP HEDIS NONBENZODIAZ MEDS), a patient must have received a cumulative days supply for any nonbenzodiazepine hypnotic products greater than 90 days during the Report Period.

## High Risk Medications for the Elderly

Defined with medication taxonomies:

- BGP HEDIS ANTICHOLINERGIC MEDS
  - First-generation antihistamines (Includes combination drugs) (Brompheniramine, Carbinoxamine, Chlorpheniramine, Clemastine, Cyproheptadine, Dexbrompheniramine, Dexchlorpheniramine, Diphenhydramine (oral), Doxylamine, Hydroxyzine, Promethazine, Triprolidine); Antiparkinson agents (Benztropine (oral), Trihexyphenidyl)
- BGP HEDIS ANTITHROMBOTIC MEDS
  - (Ticlopidine, Dipyridamole, oral short-acting)
- BGP HEDIS ANTI-INFECTIVE MEDS
  - (Nitrofurantoin)
- BGP HEDIS CARDIOVASCULAR MEDS
  - Alpha blockers, central (Guanabenz, Guanfacine, Methyldopa, Reserpine); Cardiovascular, other (Disopyramide, Digoxin, Nifedipine, immediate release)
- BGP HEDIS CENTRAL NERVOUS MEDS
  - Tertiary TCAs (Includes combination drugs) (Amitriptyline, Clomipramine, Doxepin, Imipramine, Trimipramine); Antipsychotics, first-generation (conventional) (Thioridazine, Mesoridazine); Barbiturates (Amobarbital, Butobarbital, Butalbital, Mephobarbital, Pentobarbital, Phenobarbital, Secobarbital); Central Nervous System, other (Chloral hydrate, Meprobamate); Nonbenzodiazepine hypnotics (Eszopiclone, Zolpidem, Zaleplon); Vasodilators (Ergoloid mesylates, Isoxsuprine)
- BGP HEDIS ENDOCRINE MEDS
  - Endocrine (Desiccated thyroid, Estrogens with or without progesterone (oral and topical patch products only), Megestrol); Sulfonylureas, long-duration (Chlorpropamide, Glyburide)
- BGP HEDIS GASTROINTESTINAL MED
  - (Trimethobenzamide)
- BGP HEDIS PAIN MEDS
  - Other (Meperidine, Pentazocine); Non-COX-selective NSAIDs (Indomethacin, Ketorolac)
- BGP HEDIS SKL MUSCLE RELAX MED
  - (Includes combination drugs) (Carisoprodol, Chlorzoxazone, Cyclobenzaprine, Metaxalone, Methocarbamol, Orphenadrine)



**Note:** For each medication, the days' supply must be > 0. If a medication was started and then discontinued, CRS will recalculate the number of Days Prescribed by subtracting the prescription date (i.e., visit date) from the V Medication Discontinued Date. For example:

- Rx Date: November 15, 2013
- Discontinued Date: November 19, 2013

Recalculated number of Days Prescribed:  
*November 19, 2013 – November 15, 2013 = 4*

Medications must not have a comment of RETURNED TO STOCK.

#### 2.7.7.6 Patient Lists

- List of Active Clinical patients 65 years of age and older with at least one high-risk medication.
- List of Active Clinical patients 65 years of age and older without at least one high-risk medication.

## List of Acronyms

<b>ABG</b>	Arterial Blood Gas
<b>ACEI</b>	Angiotensin Converting Enzyme Inhibitors
<b>ADR</b>	Adverse Drug Reactions
<b>AI/AN</b>	American Indian/Alaska Native
<b>AMA</b>	Against Medical Advice
<b>AMI</b>	Acute Myocardial Infarction
<b>APT</b>	Acute Phase Treatment
<b>ARB</b>	Angiotensin Receptor Blocker
<b>ART</b>	Patient Allergies File
<b>ASA</b>	Aspirin (acetylsalicylic acid)
<b>ASBI</b>	Alcohol Screening and Brief Intervention
<b>BH</b>	Behavioral Health
<b>BHS</b>	Behavioral Health System
<b>BMI</b>	Body Mass Index
<b>BNI</b>	Brief Negotiated Interview
<b>BP</b>	Blood Pressure
<b>CABG</b>	Coronary Artery Bypass Graft
<b>CBC</b>	Complete Blood Count
<b>CCB</b>	Calcium Channel Blocker

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<b>CHR</b>	Community Health Representative
<b>CHS</b>	Contract Health Service
<b>CK</b>	Creatine Kinase
<b>CONPT</b>	Continuation Phase Treatment
<b>COPD</b>	Chronic Obstructive Pulmonary Disease
<b>CPT</b>	Current Procedural Terminology
<b>CRC</b>	Colorectal Cancer
<b>CRS</b>	Clinical Reporting System
<b>CVD</b>	Cardiovascular Disease
<b>CVX</b>	Vaccine Code
<b>DCBE</b>	Double Contrast Barium Enema
<b>DM</b>	Diabetes Mellitus
<b>DNKA</b>	Did Not Keep Appointment
<b>DPST</b>	Demo/Test Patient Search Template
<b>ER</b>	Emergency Room
<b>ESRD</b>	End Stage Renal Disease
<b>ETDRS</b>	Early Treatment Diabetic Retinopathy Study
<b>ETS</b>	Environmental Tobacco Smoke
<b>FAS</b>	Fetal Alcohol Syndrome
<b>FIT</b>	Fecal Immunochemical Test
<b>FOBT</b>	Fecal Occult Blood Test

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<b>FY</b>	Fiscal Year
<b>GFR</b>	Glomerular Filtration Rate
<b>GPRA</b>	Government Performance and Results Act of 1993
<b>HIV</b>	Human Immunodeficiency Virus
<b>ICD</b>	International Classification of Diseases
<b>IFC</b>	Infant Feeding Choice
<b>IHD</b>	Ischemic Heart Disease
<b>IHS</b>	Indian Health Service
<b>IMM</b>	Immunization
<b>IPV/DV</b>	Intimate Partner Violence/Domestic Violence
<b>IVD</b>	Ischemic Vascular Disease
<b>LABA</b>	Long-Acting Beta2 Agonist
<b>LDL</b>	Low-Density Lipoprotein
<b>LOINC</b>	Logical Observations Identifiers, Names, Codes
<b>LVAD</b>	Left Ventricular Assistive Device
<b>LVS</b>	Left Ventricular Systolic
<b>MAOI</b>	Monoamine Oxidase Inhibitors
<b>MTM</b>	Medication Therapy Management
<b>NMI</b>	Not Medically Indicated
<b>OA</b>	Osteoarthritis
<b>OMB</b>	Office of Management and Budget

<b>OPC</b>	Optimal Practitioner Contact
<b>PCC</b>	Patient Care Component
<b>PCI</b>	Percutaneous Coronary Interventions
<b>PDC</b>	Proportion of Days Covered
<b>PEPC</b>	Patient and Family Education Protocols and Codes
<b>POV</b>	Purpose of Visit
<b>RA</b>	Rheumatoid Arthritis
<b>RAS</b>	Renin Angiotensin System
<b>RCIS</b>	Referred Care Information System
<b>RPMS</b>	Resource and Patient Management System
<b>SNRI</b>	Serotonin-Norepinephrine Reuptake Inhibitors
<b>SSRI</b>	Selective Serotonin Reuptake Inhibitors
<b>STI</b>	Sexually Transmitted Infection
<b>TCA</b>	Tricyclic Antidepressants
<b>TIA</b>	Transient Ischemic Attack
<b>ULN</b>	Upper Limit of Normal
<b>URI</b>	Upper Respiratory Infection

## 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>

**E-mail:** [support@ihs.gov](mailto:support@ihs.gov)