



RESOURCE AND PATIENT MANAGEMENT SYSTEM

IHS Clinical Reporting System

(BGP)

Other National Measures (ONM) Report Performance Measure List and Definitions

Version 11.1 May 2011

Office of Information Technology (OIT)
Division of Information Resource Management
Albuquerque, New Mexico

REVISION HISTORY

Date	Revision	Description	Author
	N/A	Distribution to field leads for review.	M. Powers
5/11/11	1	Updated measure logic.	M. Powers

Table of Contents

1.0	Introdu	ıction	1
	1.1	CRS Denominator Definitions	1
	1.1.1	For All Denominators	1
	1.1.2	Active Clinical Population for National GPRA & PART	
		Reporting	1
	1.1.3	Active Clinical Population for Local Reports	2
	1.1.4	User Population for National GPRA & PART Reporting	2
	1.1.5	User Population for Local Reports	2
	1.1.6	Active Clinical CHS Population for National GPRA & PART	
		Reporting (CHS-Only Sites)	3
	1.1.7	Active Clinical CHS Population for Local Reports (CHS-Only Sites)	
	1.1.8	Active Clinical Behavioral Health Population for National	0
		GPRA and PART Reporting (Urban Outreach and	_
	4.4.0	Referral-Only Sites)	3
	1.1.9	Active Clinical Behavioral Health Population for Local	4
		Reports (Urban Outreach and Referral-Only Sites)	4
2.0	Topics	and Definitions	5
	2.1	Diabetes Group	5
	2.1.1	·	
	2.1.2	ACEI/ARB Use in Diabetic Patients	11
	2.2	Dental Group	13
	2.2.1		
	2.3	Immunization Group	14
	2.3.1	Adult Immunizations: Influenza	14
	2.3.2	Adult Immunizations: Pneumovax	
	2.3.3	Adolescent immunizations	20
	2.4	Behavioral Health Group	
	2.4.1	Alcohol Screening and Brief Intervention (ASBI) in the ER	
	2.4.2	\	
	2.4.3	Depression Screening	
	2.4.4	Antidepressant Medication Management	
	2.5	Cardiovascular Disease Related Group	
	2.5.1	Physical Activity Assessment	
	2.5.2	Cardiovascular Disease and Cholesterol Screening	
	2.5.3	Cardiovascular Disease and Blood Pressure Control	
	2.5.4	Appropriate Medication Therapy after a Heart Attack	41
	2.5.5	Persistence of Appropriate Medication Therapy after a Heart	
		Attack	50

2.5.6	Appropriate Medication Therapy in High Risk Patients	60
2.5.7	Cholesterol Management for Patients with Cardiovascular	
	Conditions	69
2.5.8	Heart Failure and Evaluation of LVS Function	71
2.6	STD-Related Group	73
2.6.1	HIV Quality of Care	73
2.6.2	Chlamydia Testing	74
2.6.3	Sexually Transmitted Infection (STI) Screening	
2.7	Other Clinical Measures Group	80
2.7.1	Medication Therapy for Persons with Asthma	80
2.7.2	Prediabetes/Metabolic Syndrome	82
2.7.3	Proportion of Days Covered by Medication Therapy	
2.7.4	Public Health Nursing	
Contact Infor	mation	94

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 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 for National GPRA & PART Reporting

- 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 FY2011 Clinical Measures User Manual for listing of these clinics
- Must be alive on the last day of the Report Period
- Must be American Indian/Alaska Native (AI/AN)–defined as Beneficiary 01
- 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

1.1.3 Active Clinical Population for Local Reports

- 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 FY2011 Clinical Measures User Manual for listing of these clinics.
- Must be alive on the last day of the Report Period.
- User defines population type: AI/AN patients only, non AI/AN, or both.
- User defines 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 User Population for National GPRA & PART Reporting

- 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
- Must be alive on the last day of the Report Period
- Must be AI/AN–defined as Beneficiary 01
- 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

1.1.5 User Population for Local Reports

- 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
- Must be alive on the last day of the Report Period
- User defines population type: AI/AN patients only, non AI/AN, or both
- User defines 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 CHS Population for National GPRA & PART Reporting (CHS-Only Sites)

- 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
- Must be alive on the last day of the Report period
- Must be AI/AN-defined as Beneficiary 01. This data item is entered and updated during the Patient Registration process
- 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

1.1.7 Active Clinical CHS Population for Local Reports (CHS-Only Sites)

- 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
- Must be alive on the last day of the Report period
- User defines population type: AI/AN patients only, non AI/AN, or both
- User defines 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

1.1.8 Active Clinical Behavioral Health Population for National GPRA and PART Reporting (Urban Outreach and Referral-Only Sites)

- 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.
- Must be alive on the last day of the report period.
- Must be AI/AN—defined as Beneficiary 01. This data item is entered and updated during the Patient Registration process.
- 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.

1.1.9 Active Clinical Behavioral Health Population for Local Reports (Urban Outreach and Referral-Only Sites)

- 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
- Must be alive on the last day of the report period
- User defines population type: AI/AN patients only, non-AI/AN, or both
- User defines 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 2011 Version 11.1 ONM Report.

Note: **Bold italic** font indicates new or edited definitions.

Bold italic strikethrough indicates deleted material.

2.1 Diabetes Group

2.1.1 Diabetes Comprehensive Care

Changes from Version 11.0, as noted.

Owner/Contact

Diabetes Program/Dr. Marie Russell

Denominator

- 1. Active Diabetic patients, defined as all Active Clinical patients diagnosed with diabetes (POV 250.00–250.93) prior to the Report Period, *and* at least 2 visits in the past year, *and* 2 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 foot amputation or two separate unilateral foot amputations.

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 <130/80.

Note: This measure is *not* included in the comprehensive measure (numerator 8 below).

- 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 and/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.

Definitions

Diabetes

First Purpose of Visit (POV) 250.00–250.93 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-3046F, 3047F (old code)
 - LOINC taxonomy (added codes 59261-8, 55454-3, 59261-8, 62388-4)
 - Site-populated taxonomy DM AUDIT HGB A1C TAX

Blood Pressure Documented

- Having a minimum of two Blood Pressures (BP) documented on non-Emergency Room (ER) visits during the report period.
- CRS uses mean of last three Blood Pressures documented on non-ER visits during the report period. If three BPs are not available, uses mean of last two non-ER 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) BPs and dividing by three (or two).
- If CRS is not able to calculate a mean BP, it will search for CPT *0001F*, *2000F*, 3074F-3080F documented on a non-ER visit during the report period.

Controlled BP

Clinical Reporting System (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 CPT codes documented on non-ER visits during the report period:

- BP Documented: 0001F or 2000F; OR
- **Systolic**: 3074F, 3075F, or 3077F *with* **Diastolic**: 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 combination represents BP <130/80 and will be included in the Controlled BP numerator: Current Procedural Terminology (CPT) 3074F *and* 3078F. 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 (added code 43396-1)
- 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 (added codes 62238-1, 50110-4)
- Quantitative Urinary Protein Assessment during the report period, defined as any of the following:
 - CPT 82042, 82043, or 84156
 - LOINC taxonomy (added codes 56553-1, 57369-1, 58448-2, 58992-9, 59159-4)
 - 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.

- ESRD diagnosis/treatment defined as any of the following ever:
 - CPT 36145, 36147, 36800, 36810, 36815, 36818, 36819, 36820, 36821, 36831-36833, 50300, 50320, 50340, 50360, 50365, 50370, 50380, 90951-90970 or old codes 90918-90925, 90935, 90937, 90939 (old code), 90940, 90945, 90947, 90989, 90993, 90997, 90999, 99512, G0257, G0308-G0327 (old codes), G0392 (old code), G0393 (old code), or S9339
 - POV 585.5, 585.6, V42.0, V45.1 (old code), V45.11, V45.12, or V56.*
 - Procedure 38.95, 39.27, 39.42, 39.43, 39.53, 39.93-39.95, 54.98, or 55.6*

Qualified Retinal Evaluation

- Diabetic retinal exam
- Other eye exam

The following methods are qualifying for this measure:

• Dilated retinal evaluation by an optometrist or ophthalmologist.

- Seven standard fields stereoscopic photos (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 validated photographic equivalent).
- CPT 2022F Dilated retinal eye exam; 2024F Seven standard field stereoscopic photos with interpretation by an ophthalmologist or optometrist; 2026F Eye imaging validated 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 validated 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, 17, 18, 64
 - Provider Code 24, 79, 08
 - CPT 67028, 67038 (old code), 67039, 67040, 92002, 92004, 92012, 92014
 - POV V72.0
 - Procedure 95.02.

Diabetic Foot Exam

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

Bilateral foot amputation

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

Unilateral foot amputation

- Must have 2 separate occurrences for either CPT or Procedure codes on 2 different dates of service:
 - CPT: 27290-27295, 27590-27592, 27598, 27880-27882
 - ICD Procedure codes: 84.10, 84.13-84.19

Patient List Options

- 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 <130/80.
- List of diabetic patients with uncontrolled BP, defined as >130/80.
- 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 ACEI/ARB Use in Diabetic Patients

New topic for Version 11.1

Owner/Contact

Chris Lamer, PharmD

Denominator

Active Diabetic patients with HTN, defined as all Active Clinical patients diagnosed with diabetes and hypertension prior to the Report Period, AND at least 2 visits during the Report Period, AND 2 DM-related visits ever.

Numerators

- 1. Patients not receiving an ACEI or ARB medication during the Report Period.
 - Patients with contraindication/previous adverse reaction to ACEI/ARB therapy.

Definitions

Diabetes

First DM Purpose of Visit 250.00-250.93 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

ACEI/ARB Numerator Logic

Ace Inhibitor (ACEI) and Angiotensin Receptor Blocker (ARB) medication codes defined with medication taxonomy BGP PQA ACEI ARB 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, Trandolapril-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).

Contraindications to ACEI/ARB

- Pregnancy, defined as at least two visits during the Report Period with POV or Problem diagnosis (V22.0-V23.9, V72.42, 640.*-649.*, 651.*-676.*). 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: (1) POV: 630, 631, 632, 633*, 634*, (2) CPT 59812, 59820, 59821, 59830.
 - Abortion definition: (1) POV: 635*, 636* 637*, (2) CPT: 59100, 59120, 59130, 59136, 59150, 59151, 59840, 59841, 59850, 59851, 59852, 59855, 59856, 59857, S2260-S2267, (3) 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) or
- NMI (not medically indicated) refusal for any ACEI or ARB at least once during the Report Period.

Adverse drug reaction/documented ACEI/ARB allergy

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

Patient List Options

• List of diabetic patients with hypertension, with no ACEI/ARB medication, or with ACEI/ARB contraindication or ADR.

2.2 Dental Group

2.2.1 Topical Fluoride

No changes from Version 11.0

Owner/Contact

Dental Program/Dr. Patrick Blahut

Denominator

None

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. For patients meeting the User Population definition, the total number of patients with a documented topical fluoride application refusal in the past year.

Definitions

Topical Fluoride Application

- Dental ADA Codes 1201 (old code), 1203, 1204, 1205 (old code), 1206 or 5986
- CPT Codes D1203, D1204, D1206, or 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

Refusal of Topical Fluoride Application

 Refusal of ADA Code 1201 (old code), 1203, 1204, 1205 (old code), 1206 or 5986

- Refusal of CPT Code D1203, D1204, D1206, or D5986
- Refusals are only counted if a patient did not have a topical fluoride application during the report period. If a patient had both an application and a refusal, only the application will be counted. If a patient has multiple refusals, only one refusal will be counted.

Patient List Options

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

2.3 Immunization Group

2.3.1 **Adult Immunizations:** Influenza

Changes from Version 11.0, as noted.

Owner/Contact

Epidemiology Program/Amy Groom, MPH

Denominator

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

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.

- Patients with a contraindication or a documented NMI refusal.
- 2. Patients with documented influenza refusal during the report period.

Definitions

Diabetes

First DM Purpose of Visit 250.00–250.93 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 Inf Virus Vac SV; 16 Inf Virus Vac WV; 111 Inf Virus Vac Intranasal; 135 Inf High Dose Seasonal; 140 Inf Virus Vac SV Preservative Free; 141 Inf Virus Vac SV
- POV V04.8 (old code), V04.81 not documented with 90663, 90664, 90666-90668, 90470, G9141 or G9142, or V06.6 not documented with 90663, 90664, 90666-90668, 90470, G9141 or G9142
- CPT 90654-90662, 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

Refusal of Influenza Vaccine

Any of the following documented during the report period:

- Refusal of Immunization Codes 88, 111, 135, 140, 141, 15, or 16, as documented in PCC Refusal File (i.e., REF) or
- In the Immunization Package as contraindication of "Patient Refusal."

Persons Considered High Risk for Influenza:

Those who have 2 or more visits in the past 3 years with a POV or Problem diagnosis of any of the following:

- HIV Infection: 042, 042.0-044.9 (old codes)
- Diabetes: 250.00-250.93
- Rheumatic Heart Disease: 393.-398.99

- Hypertensive Heart Disease: 402.00-402.91
- Hypertensive Heart/Renal Disease: 404.00-404.93
- Ischemic Heart Disease: 410.00-414.9
- Pulmonary Heart Disease: 415.0-416.9
- Other Endocardial Heart Disease: 424.0-424.9
- *Cardiomyopathy: 425.0-425.9*
- Congestive Heart Failure: 428.0-428.9, 429.2
- Chronic Bronchitis: 491.0-491.9
- Emphysema: 492.0-492.8
- Asthma: 493.00-493.91
- Bronchiectasis, CLD, COPD: 494.0-496.
- Pneumoconioses: 500-505
- Chronic Liver Disease: 571.0-571.9
- Nephrotic Syndrome: 581.0-581.9
- Renal Failure: 585.6, 585.9
- Transplant: 996.80-996.89
- Kidney Transplant: V42.0-V42.89
- Chemotherapy: V58.1
- Chemotherapy follow-up: V67.2

Patient List Options

- 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: *Pneumovax*

Changes from Version 11.0, as noted.

Owner/Contact

Epidemiology Program/Amy Groom, MPH

Denominator

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

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 5 years.

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

- Patients with contraindication or a documented NMI refusal.
- 2. Patients with documented Pneumococcal refusal during the report period.
- 3. Patients who have received 1 dose of Tdap ever, including contraindications and evidence of disease.

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

4. Patients who have received 1 dose of Tdap/Td in the past 10 years, including contraindications and evidence of disease.

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

Definitions

Diabetes

First DM Purpose of Visit 250.00–250.93 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 Polysaccaride; 100 Pneumo Conjugate; 109 Pneumo NOS; 133 Pneumo Conjugate
- POV V06.6 or 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.

Pneumococcal Refusal

Any of the following documented during the report period:

- Immunization Codes 33, 100, 109 or 133, as documented in PCC Refusal File (i.e., REF)
- Immunization Package contraindication of Patient Refusal

Persons Considered High Risk for Pneumococcal

Those who have 2 or more visits in the past 3 years with a POV or Problem diagnosis of any of the following:

- HIV Infection: 042, 042.0-043.9 (old codes), 044.9 (old code)
- Diabetes: 250.00-250.93
- Chronic alcoholism: 303.90, 303.91
- Congestive Heart Failure: 428.0-428.9, 429.2
- Emphysema: 492.0-492.8
- Asthma: 493.00-493.91
- Bronchiectasis, CLD, COPD: 494.-496.
- Pneumoconioses: 501.-505.
- Chronic Liver Disease: 571.0-571.9
- Nephrotic Syndrome: 581.0-581.9
- Renal Failure: 585.6, 585.9
- Injury to spleen: 865.00-865.19
- Transplant: 996.80-996.89
- Kidney Transplant: V42.0-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 10 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

Patient List Options

- List of patients 18-64 considered high risk for pneumococcal with pneumovax vaccination, contraindication, or NMI refusal.
- List of patients 18-64 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 18-64 with Tdap vaccination, contraindication, evidence of disease or NMI refusal.
- List of patients 18-64 without Tdap vaccination, contraindication, evidence of disease or NMI refusal.
- List of patients 18-64 with Tdap or Td vaccination or NMI refusal in the past 10 years, or contraindication or evidence of disease ever.
- List of patients 18-64 without Tdap or Td vaccination or NMI refusal in the past 10 years, or contraindication or evidence of disease ever.

2.3.3 Adolescent immunizations

No changes from Version 11.0

Owner/Contact

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

Denominators

- 1. Active Clinical patients ages 13–17.
- 2. Female Active Clinical patients ages 13–17.

Numerators

1. Patient who have received the 1:3:2:1 combination (i.e., 1 Td/Tdap, 3 Hepatitis B, 2 MMR, 1 Varicella), including *refusals*, contraindications and evidence of disease.

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

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

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

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

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

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

Note: Included for Female Active Clinical ages 13–17 only.

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

Definitions

Timing of Doses

Because IZ data comes from multiple sources, any IZ codes documented on dates within 10 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 2 Mumps
 - Two R/M and 2 Measles or
 - Two each of Measles, Mumps, and Rubella
- Three doses of Hep B OR 2 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 below. Refusals will count toward meeting the definition for refusal numerators only. 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 *refused 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 >1, 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 >1, only one contraindication is necessary to be counted in the numerator. For example, if there is a single contraindication for HiB, 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 a refusal, a patient must have a REF refusal in PCC or a Parent or Patient Refusal in the IZ program for any of the immunizations in the numerator. For example, if a patient refused Rubella only but had immunizations for Measles and Mumps, the patient would be counted as having a refusal for MMR.
- To be counted as evidence of disease/contraindication/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

Parent/Patient Refusal in Immunization package or PCC Refusal type REF or NMI for IZ codes:

- MMR: 3, 94
- M/R: 4
- R/M: 38
- Measles: 5
- Mumps: 7
- Rubella: 6
- Hepatitis B: 8, 42-45, 51, 102, 104, 110, 132
- Varicella: 21, 94
- Tdap: 115
- Td: 9, 113
- Meningococcal: 32, 108, 114, 136
- HPV: 62, 118, 137

Immunization Definitions:

- MMR
 - Immunization (CVX) Codes 3, 94
 - POV V06.4
 - CPT 90707, 90710

- Procedure 99.48

MMR Contraindication

 POV 279, V08, 042, 200-202, 203.0, 203.1, 203.8, 204-208; or Immunization Package contraindication of Anaphylaxis, Immune Deficiency, Immune Deficient, 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, 42-45, 51, 102, 104, 110, 132
- CPT 90636, 90723, 90731 (old code), 90740, 90743-90748, 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* or 2)
 Immunization Package contraindication of Hx of Chicken Pox or Immune

• Varicella Contraindication

 POV 279, V08, 042, 200–202, 203.0, 203.1, 203.8, 204–208; or Immunization Package contraindication of Anaphylaxis, Immune Deficiency, Immune Deficient, 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
- 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

Patient List Options

- List of Active Clinical patients 13–17 with 1:3:2:1 combination (i.e., 1 Td/Tdap, 3 Hepatitis B, 2 MMR, 1 Varicella).
- List of Active Clinical patients 13–17 without 1:3:2:1 combination (i.e., 1 Td/Tdap, 3 Hepatitis B, 2 MMR, 1 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 2 Hep B, no IZ will be listed for Hep B.
- List of Active Clinical patients 13–17 with 1 Tdap ever.
- List of Active Clinical patients 13–17 without 1 Tdap ever.
- List of Active Clinical patients 13–17 with 1 Meningococcal ever.
- List of Active Clinical patients 13–17 without 1 Meningococcal ever.
- List of female Active Clinical patients 13–17 with 3 doses of HPV ever.
- List of female Active Clinical patients 13–17 without 3 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

Changes from Version 11.0, as noted.

Owner/Contact

Drs. David Boyd and Peter Stuart

Denominators

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

Numerators

- 1. Number of visits where patients were screened in the ER for hazardous alcohol use.
 - Number of visits where patients were screened positive.
- 1. Number of visits where patients were provided a brief negotiated interview (BNI) at or within 7 days of the ER visit (used with denominators #2 and #4).
 - Number of visits where patients were provided a BNI at the ER visit.
 - Number of visits where patients were provided a BNI not at the ER visit but within 7 days of the ER visit.

Definitions

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 7 days of the ER visit will be counted.

An example of this logic is shown in the following table.

	Denom Count	Num	Post Scm Num Count	BNI Num Count
John Doe, 07/17/08, Screened Positive at ER, BNI at ER	1	1	1	1
John Doe, 09/01/08, Screened Positive at ER, No BNI	1	1	1	0
John Doe, 11/15/08, No Screen	1	0	0	0
Counts:	3	2	2	1

ER Visit:

• Clinic Code 30.

Injury

• Primary or secondary POV 800.0–999.9 or E800.0–E989.

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, or 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, or 99409
- AUDT result of =>8, AUDC result of =>4 for men and =>3 for women, CRFT results of 2–6

Brief Negotiated Interview (BNI)

Any of the following documented at the ER visit or within 7 days of the ER visit at a face-to-face visit, which excludes chart reviews and telecommunication visits:

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

Patient List Options

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

2.4.2 Intimate Partner (Domestic) Violence Screening

No changes from Version 11.0

Owner/Contact

Denise Grenier, LCSW and Dr. Peter Stuart

Denominators

1. **GPRA Denominator:** Female Active Clinical patients ages 15–40.

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.

- Patients with documented IPV/DV exam.
- Patients with IPV/DV related diagnosis.
- Patients provided with education or counseling about IPV/DV.
- 2. Patients with documented refusal in past year of an IPV/DV exam or IPV/DV-related education.

Definitions

Age

Age is calculated at beginning of the report period.

IPV/DV Screening

PCC Exam Code 34 or BHS IPV/DV exam

IPV/DV Related Diagnosis

- POV, Current PCC or BHS Problem List 995.80–83, 995.85, V15.41, V15.42, V15.49; BHS POV 43.*, 44.*
- IPV/DV Patient Education: Patient Education codes containing "DV-" or "-DV", 995.80–83, 995.85, V15.41, V15.42, or V15.49
- IPV/DV Counseling: POV V61.11

Refusal

- Any PCC refusal in past year with Exam Code 34, BHS refusal in past year of IPV/DV exam
- Any refusal in past year with Patient Education codes containing "DV-" or "-DV"

Patient List Options

- List of female patients 15–40 with documented IPV/DV screening.
- List of female patients 15–40 without documented IPV/DV screening.

2.4.3 Depression Screening

Changes from Version 11.0, as noted.

Owner/Contact

Denise Grenier, LCSW and Drs. David Sprenger and Peter Stuart

Denominator

Active Diabetes 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. Broken out by gender.

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.

- Patients screened for depression during the Report Period.
- Patients with a diagnosis of a mood disorder during the Report Period.
- 2. Patients with documented depression screening refusal in past year.
- 3. Patients with depression-related education or refusal of education in past year.

Definitions

Diabetes

• First DM Purpose of Visit 250.00–250.93 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, or 311 or BHS POV 14 or 15.

Screening Refusal

Any PCC refusal in past year with Exam Code 36.

Depression-related patient education or refusal

Any of the following during the report period:

- Patient education codes containing "DEP-" (depression), 296.2* or 296.3*, "BH-" (behavioral and social health), 290-319, 995.5*, or 995.80-995.85, "SB-" (suicidal behavior) or 300.9, or "PDEP-" (postpartum depression) or 648.44 or
- Refusal of patient education codes containing "DEP-", "BH-", "SB-" or "PDEP-"

Patient List Options

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

2.4.4 Antidepressant Medication Management

No changes from Version 11.0

Owner/Contact

Denise Grenier, LCSW and Dr. David Sprenger

Denominator

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

Numerators

- 1. Optimal Practitioner Contacts: Patients with at least three mental health visits with a non-mental-health or mental health provider within 12 weeks (84 days) after diagnosis, two of which must be face-to-face visits and one of which must be with a prescribing provider.
- 2. Effective Acute Phase Treatment: Patients who filled a sufficient number of separate prescriptions/refills of antidepressant medication for continuous treatment of at least 84 days (12 weeks).
- 3. Effective Continuation Phase Treatment: Patients who filled a sufficient number of separate prescriptions/refills of antidepressant medication treatment to provide continuous treatment for at least 180 days (6 months).

Definitions

Age

Age is calculated at the beginning of the report period.

Major Depression

POV 296.2*, 296.3*, 298.0, 300.4, 309.1, 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-norepinepherine 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 DX (see list of codes) as primary POV
 - Two outpatients visits occurring on different dates of service with secondary POV of major depression, or
 - An inpatient visit with secondary POV of major depression

For example, if report period is July 1, 2010–June 30, 2011, patient must have one of the three scenarios above during November 01, 2009–October 29, 2010.

 Filled a prescription for an antidepressant medication (see list of medications below) 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 have had any diagnosis of depression within the previous 120 days (4 months) of the Index Episode Start Date. The POVs to be checked for prior depressive episodes are more comprehensive and include the following:
 - POV 296.2*-296.9*, 298.0, 300.4, 309.0, 309.1, 309.28, 311, or
- Patients who had a new or refill prescription for antidepressant medication (see list of medications below) within 90 days (3 months) prior to the Index Prescription Date are excluded as they do not represent new treatment episodes, or
- Patients who had an acute mental health or substance abuse inpatient stay during the 245 days after the Index Episode Start Date treatment period. Acute mental health stays are defined as Service Category of H and primary POV 290*, 293*-302*, 306*-316*. Substance abuse inpatient stays are defined as Service Category of H and primary POV 291*-292*, 303*-305* or primary POV 960*-979* and secondary POV of 291*-292*, 303*-305*.

Optimal Practitioner Contacts Numerator

Patient must have one of the following:

• Three face-to-face follow-up outpatient, non-ER visits (clinic code not equal to 30) or intermediate treatment with either a non-mental health or mental health provider within 84 days after the Index Episode Start Date, or

• Two face-to-face outpatient, non-ER visits (clinic code not equal to 30) and one telephone visit (Service Category T) with either a non-mental health or mental health provider within 84 days after the Index Episode Start Date. For either option, one of the visits must be to a prescribing provider, defined as provider codes 00, 08, 11, 16–18, 21, 24-25, 30, 33, 41, 44–45, 47, 49, 64, 67–68, 70–83, 85-86, A1, A9, or B1–B6.

Note: If patient was diagnosed with two secondary diagnoses of depression, the second visit may be counted toward the numerator.

Outpatient Mental Health Provider Visits

- BHS or PCC visit with primary provider code of 06, 12, 19, 48, 49, 50, 62, 63, 81, or 92–96, and
- Service Category A, S, or O, and
 - CPT 90801, 90802, 90804-90819, 90821-90824, 90826-90829, 90845, 90847, 90849, 90853, 90857, 90862, 90870, 90871 (old code), 90875, 90876, 99384-99387, 99394-99397, 99401-99404, G0155, G0176, G0177, H0002, H0004, H0331, H0034, H0036, H0037, H0039, H0040, H2000, H2010, H2011, H2013-H2020, M0064, S9484, S9485 or
 - POV 290*, 293*-302*, 306*-316*, or
- Service category of A, S, or O and
 - Location of Encounter = Home (as designated in Site Parameters) or
 - Clinic code = 11, or
- Service category of T

Outpatient Non-Mental-Health Provider Visits

Defined as BHS or PCC visits with:

- Service Category A, S, or O, and
 - CPT 90801, 90802, 90804-90819, 90821-90824, 90826-90829, 90845, 90847, 90849, 90853, 90857, 90862, 90870, 90871 (old code), 90875, 90876, G0155, G0176, G0177, H0002, H0004, H0331, H0034, H0036, H0037, H0039, H0040, H2000, H2010, H2011, H2013-H2020, M0064, S9484, S9485, or
- Service Category A, S, O, or T or
 - Location of Encounter = Home (as designated in Site Parameters) or
 - Clinic Code 11 and
 - POV 290*, 293*-302*, 306*-316*, or

- Service Category A, S, or O, and
 - CPT 99384–99387, 99394–99397, 99401–99404 and
 - POV 290*, 293*-302*, 306*-316*

Effective Acute Phase Treatment Numerator

For all antidepressant medication prescriptions filled (see list of medications below) 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 the medication was started and then discontinued, CRS will recalculate the # Days Prescribed by subtracting the prescription date, (i.e., visit date) from the V Medication Discontinued Date. For example: Rx Date=11/15/2011, Discontinued Date=11/19/2011, Recalculated # Days Prescribed=4.

Example of Patient Included in Numerator:

- 1st RX is Index Rx Date: 11/1/2010, # Days Prescribed=30
 - Rx covers patient through 12/1/2010
- 2nd RX: 12/15/2010, # Days Prescribed=30
 - Gap #1 = (12/15/2010-12/1/2010) = 14 days
 - Rx covers patient through 1/14/2011
- 3rd RX: 1/10/2011, # Days Prescribed=30
 - No gap days.
 - Rx covers patient through 2/13/2011
 - Index Rx Date 11/1/2010 + 114 days = 2/23/2011
- Patient's 84th treatment day occurs on 2/7/2011, which is <= 2/23/2011 and # gap days of 14 is less than 30.

Example of Patient Not Included in Numerator:

- 1st Rx is Index Rx Date: 11/1/2010, # Days Prescribed=30
 - Rx covers patient through 12/1/2010
- 2nd Rx: 12/15/2010, # Days Prescribed=30
 - Gap #1 = (12/15/2010-12/1/2010) = 14 days

- Rx covers patient through 1/14/2011
- 3rd Rx: 2/01/2011, # Days Prescribed=30
 - Gap #2 = (2/01/2011-1/14/2011) = 18, total # gap days = 32, so patient is not included in the numerator.

Effective Continuation Phase Treatment Numerator

For all antidepressant medication prescriptions (see list of medications above) filled within 231 days of the Index Prescription Date, CRS counts the days prescribed (i.e., treatment days) (from V Medication) from the Index Prescription 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 the medication was started and then discontinued, CRS will recalculate the # Days Prescribed by subtracting the prescription date (i.e., visit date) from the V Medication Discontinued Date. For example: Rx Date=11/15/2011, Discontinued Date=11/19/2011, Recalculated # Days Prescribed=4.

Patient List Options

- List of Active Clinical patients with new depression DX and *no* optimal practitioner contact (OPC).
- List of Active Clinical patients with new depression DX and *no* acute phase treatment (APT).
- List of Active Clinical patients with new depression DX and *no* continuation phase treatment (CONPT).

2.5 Cardiovascular Disease Related Group

2.5.1 Physical Activity Assessment

No changes from Version 11.0

Owner/Contact

Patient Education Program/Mary Wachacha and Chris Lamer, PharmD Nutrition Program/Jean Charles-Azure

Denominators

- 1. Active Clinical patients ages 5 and older.
- 2. Numerator 1 (Active Clinical Patients assessed for physical activity during the Report Period).
- 3. User Population patients ages 5 and older.
- 4. Numerator 1 (User Population Patients assessed for physical activity during the Report Period).

Numerators

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

Definitions

Age

Age is calculated at the beginning of the report period.

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

Patient List Options

- List of Active Clinical patients 5 and older who had a physical activity assessment.
- List of Active Clinical patients 5 and older who did not have a physical activity assessment.
- List of Active Clinical patients 5 and older who had a physical activity assessment and received exercise education.
- List of Active Clinical patients 5 and older who had a physical activity assessment and did not receive exercise education.

2.5.2 Cardiovascular Disease and Cholesterol Screening

No changes from Version 11.0

Owner/Contact

Dr. Dena Wilson and Chris Lamer, PharmD

Denominator

Active Clinical patients ages 23 and older.

Numerator

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

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 and/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 (added code 43396-1)
- Site-populated taxonomy DM AUDIT CHOLESTEROL TAX

Patient List Options

- List of Active Clinical patients 23+ screened for total cholesterol in past 5 years.
- List of Active Clinical patients 23+ not screened for total cholesterol in past 5 years.

2.5.3 Cardiovascular Disease and Blood Pressure Control

Changes from Version 11.0, as noted.

Owner/Contact

Dr. Dena Wilson and Chris Lamer, PharmD

Denominators

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

Numerators

- 1. Patients with BP values documented.
 - A. Patients with normal BP, <120/80.
 - B. Prehypertension I, => 120/80 and < 130/80.
 - C. Prehypertension II, =>130/80 and < 140/90.
 - D. Stage 1 hypertension, => 140/90 and <160/100.
 - E. Stage 2 hypertension, => 160/100.

Definitions

BP Values (all numerators)

CRS uses mean of last three BPs documented on non-ER visits in the past two years. If three BPs are not available, uses the mean of last two non-ER 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-3080F documented on a non-ER visit during the Report Period.

IHD

• POV 410.0-412.*, 414.0-414.9, **428.***, or 429.2

Patient List Options

• List of Active Clinical patients =>20 or who have IHD who had their BP assessed twice in past two years.

- List of Active Clinical patients =>20 or who have IHD who have not had their BP assessed twice in past two years.
- List of Active Clinical patients =>20 or who have IHD who have normal BP (<120/80).
- List of Active Clinical patients =>20 or who have IHD who have uncontrolled BP (=>120/80).

2.5.4 Appropriate Medication Therapy after a Heart Attack

Changes from Version 11.0, as noted.

Owner/Contact

Dr. Dena Wilson & Chris Lamer, PharmD

Denominator

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.

Numerators

1. Patients with active prescription for, *refusal of*, or who have a contraindication/previous adverse reaction to beta-blockers.

Note: This numerator does NOT include refusals.

2. Patients with active prescription for, *refusal of*, or who have a contraindication/previous adverse reaction to ASA (aspirin) or other anti-platelet agent.

Note: This numerator does NOT include refusals.

3. Patients with active prescription for, *refusal of*, or who have a contraindication/ previous adverse reaction to ACEIs/ARBs.

Note: This numerator does NOT include refusals.

4. Patients with active prescription for, *refusal of*, or who have a contraindication/previous adverse reaction to statins.

Note: This numerator does NOT include refusals.

5. Patients with active prescriptions for all post-AMI medications (i.e. beta-blocker, ASA/anti-platelet, ACEI/ARB, AND statin), *with refusal*, and/or who have a contraindication/previous adverse reaction.

Note: This numerator does NOT include refusals.

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), 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 below:

- An active prescription (not discontinued as of [discharge date + 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: Days Prescribed > ((Discharge Date + 7 days) Order Date)
- A refusal of the medication at least once during hospital stay through 7 days after discharge date
- Have a contraindication/previous adverse reaction to the indicated medication. *Refusals and eC* ontraindications/previous adverse drug reactions
 (ADR)/allergies are only counted if a patient did not have a prescription for the indicated medication. Patients without a prescription who have a *refusal and/or*-contraindication/ADR/allergy will be counted toward meeting the numerator.

Note: If the medication was started and then discontinued, CRS will recalculate the # Days Prescribed by subtracting the prescription date (i.e., visit date) from the V Medication Discontinued Date. For example: Rx Date=11/15/2011, Discontinued Date=11/19/2011, Recalculated # Days Prescribed=4.

Numerator Logic

In the logic below, "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.

• Refusal of beta-blocker

- REF refusal of any beta-blocker medication in site-populated medication taxonomy BGP HEDIS BETA BLOCKER MEDS at least once during hospital stay through 7 days after discharge date.

Contraindications to beta-blockers

Defined as any of the following occurring ever unless otherwise noted:

- Asthma–2 diagnoses (POV) of 493* on different visit dates
- Hypotension–1 diagnosis of 458*
- Heart block >1 degree-1 diagnosis of 426.0, 426.12, 426.13, 426.2, 426.3, 426.4, 426.51, 426.52, 426.53, 426.54, or 426.7
- Sinus bradycardia–1 diagnosis of 427.81

- COPD 2 diagnoses on different visit dates of 491.2*, 496, or 506.4, or a combination of any of these codes, such as 1 visit with 491.20 and 1 with 496
- NMI refusal for any beta-blocker at least once during hospital stay through
 7 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 7 days after discharge date

Adverse drug reaction/documented beta blocker allergy

Defined as any of the following occurring ever:

- POV 995.0–995.3 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 995.0–995.3 or V14.8

ASA (aspirin)/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
- Refusal of ASA/other anti-platelet:
 - REF refusal of any ASA or antiplatelet medication in site-populated medication taxonomies DM AUDIT ASPIRIN DRUGS or BGP ANTI-PLATELET DRUGS at least once during hospital stay through 7 days after discharge date.

• Contraindications to ASA/other antiplatelet

Defined as any of the following occurring ever unless otherwise noted:

- Patients with active prescription for Warfarin/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 7 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 7 days after discharge date

• Adverse drug reaction/documented ASA/other antiplatelet allergy

Defined as any of the following occurring ever:

- POV 995.0-995.3 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 995.0–995.3 or 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).

• Refusal of ACEI:

- REF refusal of any ACE Inhibitor medication in site-populated medication taxonomy BGP HEDIS ACEI MEDS at least once during hospital stay through 7 days after discharge date.
- Contraindications to ACEI defined as any of the following:
 - Pregnancy: defined as at least two visits during the Report Period with POV or Problem diagnosis (V22.0–V23.9, V72.42, 640.*-649.*, 651.* 676.*). 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-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, 747.22
- NMI refusal for any ACEI at least once during hospital stay through 7 days after discharge date.

• Adverse drug reaction/documented ACEI allergy

Defined as any of the following occurring ever:

- POV 995.0–995.3 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 995.0-995.3 or V14.8.

• ARB (Angiotensin Receptor Blocker) medication codes

Defined with medication taxonomy BGP HEDIS ARB MEDS

 ARB medications are: Angiotensin II Inhibitors (Candesartan, Eprosartan, Irbesartan, Losartan, Olmesartan, Telmisartan, Valsartan.)

• Antihypertensive Combinations

Aliskiren-valsartan, Amlodipine-hydrochlorothiazide-valsartan,
 Amlodipine-olmesartan, Candesartan-hydrochlorothiazide, Eprosartan-hydrochlorothiazide, Hydrochlorothiazide-Irbesartan,
 Hydrochlorothiazide-Losartan, Hydrochlorothiazide-olmesartan,
 Hydrochlorothiazide-Telmisartan, Hydrochlorothiazide-Valsartan

Refusal of ARB

- REF refusal of any ARB medication in site-populated medication taxonomy BGP HEDIS ARB MEDS at least once during hospital stay through 7 days after discharge date.
- Contraindications to ARB defined as any of the following:
 - Pregnancy: defined as at least two visits during the Report Period with POV or Problem diagnosis (V22.0-V23.9, V72.42, 640.*-649.*, 651.*-676.*). 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-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, 747.22
- NMI refusal for any ARB at least once during hospital stay through 7 days after discharge date.

Adverse drug reaction/documented ARB allergy

Defined as any of the following occurring ever:

- POV 995.0–995.3 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 995.0-995.3 or V14.8.

Statins Numerator Logic:

- Statin medication codes
 - Defined with medication taxonomy BGP HEDIS STATIN MEDS.
 - Statin medications are: Atorvostatin (Lipitor), Fluvastatin (Lescol),
 Lovastatin (Altocor), Mevacor, Pravastatin (Pravachol), Simvastatin (Zocor), Rosuvastatin (Crestor).

• Statin Combination Products

- Advicor, Caduet, PraviGard Pac, Vytorin.
- Refusal of Statin
 - REF refusal of any statin medication in site-populated medication taxonomy BGP HEDIS STATIN MEDS at least once during hospital stay through 7 days after discharge date.
- Contraindications to Statins: defined as any of the following:

Pregnancy: defined as at least two visits during the Report Period with POV or Problem diagnosis (V22.0–V23.9, V72.42, 640.* –649.*, 651.* –676.*). 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-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
- Acute Alcoholic Hepatitis: defined as POV 571.1 during the Report Period
- NMI refusal for any statin at least once during hospital stay through 7 days after discharge date.

• Adverse drug reaction/documented statin allergy

Defined as any of the following:

- ALT and/or AST > 3x the Upper Limit of Normal (ULN) (i.e., Reference High) on 2 or more consecutive visits during the Report Period
- Creatine Kinase (CK) levels > 10x ULN or CK > 10,000 IU/L during the Report Period
- Myopathy/Myalgia, defined as any of the following during the Report Period:
 - POV 359.0–359.9, 729.1, 710.5, or 074.1
- Any of the following occurring ever:
 - POV 995.0–995.3 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 995.0–995.3 or V14.8

All Medications Numerator Logic

To be included in this numerator, a patient must have a prescription, *refusal*, or a contraindication for *all* of the four medication classes (i.e., beta-blocker, ASA/other anti-platelet, ACEI/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 (added codes 16325-3,48136-6,54500-4)

• Creatine Kinase

- Site-populated taxonomy BGP CREATINE KINASE TAX
- LOINC taxonomy

Patient List Options

- List of Active Clinical patients =>35 discharged for AMI with beta-blocker therapy.
- List of Active Clinical patients =>35 discharged for AMI without beta-blocker therapy.
- List of Active Clinical patients =>35 discharged for AMI with ASA therapy.
- List of Active Clinical patients =>35 discharged for AMI without ASA therapy.
- List of Active Clinical patients =>35 discharged for AMI with ACEI/ARB therapy.
- List of Active Clinical patients =>35 discharged for AMI without ACEI/ARB therapy.
- List of Active Clinical patients =>35 discharged for AMI with statin therapy.
- List of Active Clinical patients =>35 discharged for AMI without statin therapy.
- List of Active Clinical patients =>35 discharged for AMI with all appropriate medications.
- List of Active Clinical patients =>35 discharged for AMI without all appropriate medications.

2.5.5 Persistence of Appropriate Medication Therapy after a Heart Attack

Changes from Version 11.0, as noted.

Owner/Contact

Dr. Dena Wilson & Chris Lamer, PharmD

Denominator

Active Clinical patients 35 and older diagnosed with an AMI 6 months prior to the Report period through the first 6 months of the Report period.

Numerators

1. Patients with a 135-day course of treatment with beta-blockers, who refused beta-blockers in the 180 days after AMI, or who have a contraindication/previous adverse reaction to beta-blocker therapy.

Note: This numerator does NOT include refusals.

2. Patients with a 135-day course of treatment with ASA (aspirin) or other antiplatelet agent, *who refused ASA/antiplatelet in the 180 days after AMI*, or who have a contraindication/previous adverse reaction to ASA/antiplatelet therapy.

Note: This numerator does NOT include refusals.

3. Patients with a 135-day course of treatment with ACEIs/ARBs, *who refused***ACEIs/ARBs in the 180 days after AMI, or who have a contraindication/previous adverse reaction to ACEI/ARB therapy.

Note: This numerator does NOT include refusals.

4. Patients with a 135-day course of treatment with statins, who refused statins in the 180 days after AMI, or who have a contraindication/previous adverse reaction to statin therapy.

Note: This numerator does NOT include refusals.

5. Patients with a 135-day course of treatment for all post-AMI medications, (i.e. beta-blocker, ASA/anti-platelet, ACEI/ARB, AND statin) following first discharge date or visit date, including previous active prescriptions; *with refusal*, and/or who have a contraindication/ previous adverse reaction.

Note: This numerator does NOT include refusals.

Definitions

AM)

POV or Problem List 410.0*—410.9* or 412. AMI diagnosis may be made at an inpatient or outpatient visit but must occur between 6 months prior to beginning of Report period through first 6 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 below:

- A total days' supply >= 135 days 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/visit date. Prior active prescription defined as most recent prescription (see codes below) prior to admission/visit date with the number of days supply equal to or greater than the discharge/visit date minus the prescription date; *or*
- A refusal of the medication at least once at time of diagnosis through the 180 days after AMI; or

Have a contraindication/previous adverse reaction to the indicated medication.
 Refusals and eC ontraindications/previous adverse drug reactions
 (ADR)/allergies are only counted if a patient did not have a prescription for the indicated medication. Patients without a prescription who have a *refusal and/or*-contraindication/ADR/allergy will be counted toward meeting the numerator.

Note: If the medication was started and then discontinued, CRS will recalculate the # Days Prescribed by subtracting the prescription date (i.e., visit date) from the V Medication Discontinued Date. For example: Rx Date=11/15/2011, Discontinued Date=11/19/2011, Recalculated # Days Prescribed=4.

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

- Admission Date: 2/1/2011, Discharge Date: 2/15/2011
- Must have 135 days prescribed by 8/13/2011 (Discharge Date+180)
- Prior Beta-Blocker Rx Date: 1/15/2011
- # Days Prescribed: 60 (treats patient through 3/15/2011)
- Discharge Date minus Rx Date: 2/15/2011-1/15/2011 = 31, 60 is >= 31, prescription is considered Prior Active Rx
- 3/15/2011 is between 2/15 and 8/13/2011, thus remainder of Prior Active Rx can be counted toward 180-day treatment period
- # Remaining Days Prescribed from Prior Active Rx:
 (60-(Discharge Date-Prior Rx Date) = 60-(2/15/2011-1/15/2011) = 60-31 = 29
- Rx #2: 4/1/2011, # Days Prescribed: 90
- Rx #3: 7/10/2011, #Days Prescribed: 90
- Total Days Supply Prescribed between 2/15 and 8/13/2011: 29+90+90=209

Numerator Logic

In the logic below, "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.

• Refusal of beta-blocker

REF refusal of any beta-blocker medication in site-populated medication taxonomy BGP HEDIS BETA BLOCKER MEDS at least once during the period admission/visit date through the 180 days after discharge/visit date.

• Contraindications to beta-blockers

Defined as any of the following occurring ever unless otherwise noted:

- Asthma–2 diagnoses (POV) of 493* on different visit dates
- Hypotension–1 diagnosis of 458*
- Heart block >1 degree-1 diagnosis of 426.0, 426.12, 426.13, 426.2, 426.3, 426.4, 426.51, 426.52, 426.53, 426.54, or 426.7
- Sinus bradycardia–1 diagnosis of 427.81
- COPD 2 diagnoses on different visit dates of 491.2*, 496, or 506.4, or a combination of any of these codes, such as 1 visit with 491.20 and 1 with 496
- NMI refusal for any beta-blocker at least once during the period admission/visit date through the 180 days after discharge/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/visit date through the 180 days after discharge/visit date

Adverse drug reaction/documented beta blocker allergy

Defined as any of the following occurring anytime up to the 180 days after discharge/visit date:

- POV 995.0–995.3 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 995.0–995.3 or V14.8

ASA (aspirin) 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

• Refusal of ASA/other anti-platelet

- REF refusal of any ASA or antiplatelet medication in site-populated medication taxonomies DM AUDIT ASPIRIN DRUGS or BGP ANTI-PLATELET DRUGS at least once during the period admission/visit date through the 180 days after discharge/visit date.

Contraindications to ASA/other antiplatelet

Defined as any of the following occurring ever unless otherwise noted:

- Patients with prescription for Warfarin/Coumadin using site-populated BGP CMS WARFARIN MEDS taxonomy during the period admission/visit date through the 180 days after discharge/visit date
- Hemorrhage diagnosis (POV 459.0)
- NMI refusal for any aspirin at least once during the period admission/visit date through the 180 days after discharge/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/visit date through the 180 days after discharge/visit date

Adverse drug reaction/documented ASA/other antiplatelet allergy

Defined as any of the following occurring anytime up to the 180 days after discharge/visit date:

- POV 995.0–995.3 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 995.0–995.3 or 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).

Refusal of ACEI

- REF refusal of any ACE Inhibitor medication in site-populated medication taxonomy BGP HEDIS ACEI MEDS at least once during the period admission/visit date through the 180 days after discharge/visit date.
- **Contraindications to ACEI** defined as any of the following:
 - Pregnancy: defined as at least two visits during the period admission/visit date through the 180 days after discharge/visit date with POV or Problem diagnosis (V22.0–V23.9, V72.42, 640.*-649.*, 651.*-676.*). 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 period, CRS will use the first two visits in the 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-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 period admission/visit date through the 180 days after discharge/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/visit date through the 180 days after discharge/visit date.

Adverse drug reaction/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 995.0–995.3 or V14.8.

• ARB (Angiotensin Receptor Blocker) medication codes

Defined with medication taxonomy BGP HEDIS ARB MEDS

 ARB medications are: Angiotensin II Inhibitors (Candesartan, Eprosartan, Irbesartan, Losartan, Olmesartan, Telmisartan, Valsartan)

• Antihypertensive Combinations

Aliskiren-valsartan, Amlodipine-hydrochlorothiazide-valsartan,
 Amlodipine-olmesartan, Candesartan-hydrochlorothiazide, Eprosartan-hydrochlorothiazide, Hydrochlorothiazide-Irbesartan,
 Hydrochlorothiazide-Losartan, Hydrochlorothiazide-olmesartan,
 Hydrochlorothiazide-Telmisartan, Hydrochlorothiazide-Valsartan

• Refusal of ARB

- REF refusal of any ARB medication in site-populated medication taxonomy BGP HEDIS ARB MEDS at least once during the period admission/visit date through the 180 days after discharge/visit date.
- Contraindications to ARB defined as any of the following:
 - Pregnancy: defined as at least two visits during the period admission/visit date through the 180 days after discharge/visit date with POV or Problem diagnosis (V22.0–V23.9, V72.42, 640.*-649.*, 651.*-676.*). 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 period, CRS will use the first two visits in the 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, \$2260-\$2267
- 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 period admission/visit date through the 180 days after discharge/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/visit date through the 180 days after discharge/visit date.

Adverse drug reaction/documented ARB allergy

Defined as any of the following occurring anytime up to the 180 days after discharge/visit date:

- POV 995.0-995.3 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 995.0–995.3 or V14.8

Statins Numerator Logic

- Statin medication codes
 - Defined with medication taxonomy BGP HEDIS STATIN MEDS
 - Statin medications are: Atorvostatin (Lipitor), Fluvastatin (Lescol),
 Lovastatin (Altocor), Mevacor, Pravastatin (Pravachol), Simvastatin (Zocor), Rosuvastatin (Crestor)
- Statin Combination Products
 - Advicor, Caduet, PraviGard Pac, Vytorin
- Refusal of Statin
 - REF refusal of any statin medication in site-populated medication taxonomy BGP HEDIS STATIN MEDS at least once during admission/visit date through the 180 days after discharge/visit date.
- Contraindications to Statins: Defined as any of the following:

Pregnancy: Defined as at least two visits during the period admission/visit date through the 180 days after discharge/visit date with POV or Problem diagnosis (V22.0-V23.9, V72.42, 640.*-649.*, 651.*-676.*). 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 period, CRS will use the first two visits in the period. The patient must not have and with no 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-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, BF-N during the period admission/visit date through the 180 days after discharge/visit date
- Acute Alcoholic Hepatitis: Defined as POV 571.1 during the period admission/visit date through the 180 days after discharge/visit date
- NMI refusal for any statin at least once during the period admission/visit date through the 180 days after discharge/visit date.

Adverse drug reaction/documented statin allergy

Defined as any of the following:

- ALT and/or AST > 3x the Upper Limit of Normal (ULN) (i.e., Reference High) on 2 or more consecutive visits during the period admission/visit date through the 180 days after discharge/visit date
- Creatine Kinase (CK) levels > 10x ULN or CK > 10,000 IU/L during the period admission/visit date through the 180 days after discharge/visit date
- Myopathy/Myalgia, defined as any of the following during the period admission/visit date through the 180 days after discharge/visit date:
 - POV 359.0–359.9, 729.1, 710.5, or 074.1
- Any of the following occurring anytime up to the 180 days after discharge/visit date:
 - POV 995.0–995.3 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 995.0–995.3 or V14.8

All Medications Numerator Logic

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

Test Definitions

- ALT
 - Site-populated taxonomy DM AUDIT ALT TAX or
 - LOINC taxonomy
- AST
 - Site-populated taxonomy DM AUDIT AST TAX or
 - LOINC taxonomy (added codes 16325-3,48136-6,54500-4)

• Creatine Kinase

- Site-populated taxonomy BGP CREATINE KINASE TAX or
- LOINC taxonomy

Patient List Options

- List of Active Clinical patients =>35 with AMI Dx with 135-day beta-blocker therapy.
- List of Active Clinical patients =>35 with AMI Dx without 135-day beta-blocker therapy.
- List of Active Clinical patients =>35 with AMI Dx with 135-day ASA therapy.
- List of Active Clinical patients =>35 with AMI Dx without ASA therapy.
- List of Active Clinical patients =>35 with AMI Dx with 135-day ACEI/ARB therapy.
- List of Active Clinical patients =>35 with AMI Dx without 135-day ACEI/ARB therapy.
- List of Active Clinical patients =>35 with AMI Dx with 135-day statin therapy.
- List of Active Clinical patients =>35 with AMI Dx without 135-day statin therapy.

- List of Active Clinical patients =>35 with AMI Dx with 135-day therapy for all appropriate meds.
- List of Active Clinical patients =>35 with AMI Dx without 135-day therapy for all appropriate meds.

2.5.6 Appropriate Medication Therapy in High Risk Patients

Changes from Version 11.0, as noted.

Owner/Contact

Dr. Dena Wilson and Chris Lamer, PharmD

Denominator

Active IHD patients ages 22 and older, defined as all Active Clinical patients diagnosed with IHD prior to the Report Period, *and* at least 2 visits during the Report Period, *and* 2 IHD-related visits ever.

Numerators

1. Patients with a 180-day course of treatment with *or refusal of* beta-blockers during the report period, or who have a contraindication/previous adverse reaction to beta-blocker therapy.

Note: This numerator does NOT include refusals.

2. Patients with a 180-day course of treatment with *or refusal of* ASA (aspirin) or other antiplatelet agent during the report period, or who have a contraindication/previous adverse reaction to ASA/antiplatelet therapy.

Note: This numerator does NOT include refusals.

3. Patients with a 180-day course of treatment with *or refusal of* ACEIs/ARBs during the report period, or who have a contraindication/previous adverse reaction to ACEI/ARB therapy.

Note: This numerator does NOT include refusals.

4. Patients with a 180-day course of treatment with *or refusal of* statins during the report period, or who have a contraindication/previous adverse reaction to statin therapy.

Note: This numerator does NOT include refusals.

5. Patients with a 180-day course of treatment for all medications (i.e. beta-blocker, aspirin/antiplatelet, ACEI/ARB, *and* statin) during the report period, *with refusal*, and/or who have a contraindication/previous adverse reaction.

Note: This numerator does NOT include refusals.

Definitions

IHD

• POV 410.0–412.*, 414.0-414.9, **428.*** or 429.2

To Be Included in the Numerators

A patient must meet one of the *two* conditions below:

- Prescription(s) 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.
- A refusal of the medication during the Report Period
- Have a contraindication/previous adverse reaction to the indicated medication.

Refusals and eC ontraindications/previous ADR/allergies are only counted if a patient did not have a prescription for the indicated medication. Patients without a prescription who have a **refusal and/or** contraindication/ADR/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 below) 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 prescription for a medication was started and then discontinued, CRS will recalculate the # Days Prescribed by subtracting the prescription date (i.e., visit date) from the V Medication Discontinued Date. For example: Rx Date=11/15/2011, Discontinued Date=11/19/2011, Recalculated # Days Prescribed=4.

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

- Report Period: 07/01/2010–06/30/2011
- Must have 180 days supply of indicated medication 6/30/2011 (end of Report Period)
- Prior Beta-Blocker Rx Date: 06/01/2010
- # Days Prescribed: 60 (treats patient through 07/31/2010)
- Report Period Start Date minus Rx Date: 07/01/2010-06/01/2010 = 30; 60 (#Days Prescribed) is >= 30, prescription is considered Prior Active Rx
- 07/31/2010 is between the Report Period of 07/01/2010 and 06/30/2011, thus remainder of Prior Active Rx can be counted toward 180-days supply
- # Remaining Days Prescribed from Prior Active Rx:
 (# Days Prescribed-(Report Period Start Date-Prior Rx Date) = 60-(07/01/201006/01/2010) = 60-30 = 30
- Rx #2: 08/05/2010, # Days Prescribed: 90
- Rx #3: 11/10/2010, #Days Prescribed: 90
- Total Days Supply Prescribed between 07/01/2010 and 06/30/2011, including prior active prescription: 30+90+90=210

Numerator Logic

In the logic below, "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
- Refusal of beta-blocker

— REF refusal of any beta-blocker medication in site-populated medication taxonomy BGP HEDIS BETA BLOCKER MEDS at least once during the Report Period.

• Contraindications to beta-blockers

Defined as any of the following occurring ever unless otherwise noted:

- Asthma–2 diagnoses (POV) of 493* on different visit dates
- Hypotension–1 diagnosis of 458*
- Heart block >1 degree-1 diagnosis of 426.0, 426.12, 426.13, 426.2, 426.3, 426.4, 426.51, 426.52, 426.53, 426.54, or 426.7
- Sinus bradycardia–1 diagnosis of 427.81
- COPD-2 diagnoses on different visit dates of 491.2*, 496, or 506.4, or a combination of any of these codes, such as 1 visit with 491.20 and 1 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/documented beta blocker allergy

Defined as any of the following occurring ever:

- POV 995.0–995.3 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 995.0–995.3 or V14.8.

ASA (aspirin)/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.

• Refusal of ASA/other antiplatelet

REF refusal of any ASA or anti-platelet medication in site-populated medication taxonomies DM AUDIT ASPIRIN DRUGS or BGP ANTI-PLATELET DRUGS at least once during the Report Period.

Contraindications to ASA/other antiplatelet

Defined as any of the following occurring ever unless otherwise noted:

- Patients with a 180-day course of treatment for Warfarin/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/documented ASA/other antiplatelet allergy

Defined as any of the following occurring ever:

- POV 995.0–995.3 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 995.0–995.3 or 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, Benazeprilhydrochlorothiazide, Captopril-hydrochlorothiazide, Enalaprilhydrochlorothiazide, Fosinopril-hydrochlorothiazide, Hydrochlorothiazidelisinopril, Hydrochlorothiazide-moexipril, Hydrochlorothiazide-quinapril, Trandolapril-verapamil.

• Refusal of ACEI

REF refusal of any ACE Inhibitor medication in site-populated medication taxonomy BGP HEDIS ACEI MEDS at least during the Report Period.

• Contraindications to ACEI defined as any of the following:

Pregnancy: defined as at least two visits during the Report Period with POV or Problem diagnosis (V22.0–V23.9, V72.42, 640.*-649.*, 651.* – 676.*). 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-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, 747.22
- NMI refusal for any ACEI at least once during the Report Period.

Adverse drug reaction/documented ACEI allergy

Defined as any of the following occurring anytime through the end of the report period:

- POV 995.0–995.3 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 995.0-995.3 or V14.8.

• ARB (Angiotensin Receptor Blocker) medication codes

Defined with medication taxonomy BGP HEDIS ARB MEDS

 ARB medications are: Angiotensin II Inhibitors (Candesartan, Eprosartan, Irbesartan, Losartan, Olmesartan, Telmisartan, Valsartan)

• Antihypertensive Combinations

Aliskiren-valsartan, Amlodipine-hydrochlorothiazide-valsartan,
 Amlodipine-olmesartan, Candesartan-hydrochlorothiazide, Eprosartan-hydrochlorothiazide, Hydrochlorothiazide-Irbesartan,
 Hydrochlorothiazide-Losartan, Hydrochlorothiazide-olmesartan,
 Hydrochlorothiazide-Telmisartan, Hydrochlorothiazide-Valsartan

• Refusal of ARB

- REF refusal of any ARB medication in site-populated medication taxonomy BGP HEDIS ARB MEDS at least once during the Report Period.
- Contraindications to ARB defined as any of the following:
 - Pregnancy: defined as at least two visits during the Report Period with POV or Problem diagnosis (V22.0–V23.9, V72.42, 640.*-649.*, 651.*-676.*). 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-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, 747.22
- NMI refusal for any ARB at least once during the Report Period.

Adverse drug reaction/documented ARB allergy

Defined as any of the following occurring anytime through the end of the Report Period:

POV 995.0–995.3 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 995.0-995.3 or V14.8

Statins Numerator Logic

- Statin medication codes
 - Defined with medication taxonomy BGP HEDIS STATIN MEDS
 - Statin medications are: Atorvostatin (Lipitor), Fluvastatin (Lescol),
 Lovastatin (Altocor), Mevacor, Pravastatin (Pravachol), Simvastatin (Zocor), Rosuvastatin (Crestor).
- Statin Combination Products
 - Advicor, Caduet, PraviGard Pac, Vytorin
- Refusal of Statin
 - REF refusal of any statin medication in site-populated medication taxonomy BGP HEDIS STATIN MEDS at least once during the Report Period
- Contraindications to Statins: defined as any of the following:
 - Pregnancy: defined as at least two visits during the Report Period with POV or Problem diagnosis (V22.0–V23.9, V72.42, 640.* –649.*, 651.* –676.*). 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-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

- 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/documented statin allergy

Defined as any of the following:

- ALT and/or AST > 3x the Upper Limit of Normal (ULN) (i.e., Reference High) on 2 or more consecutive visits during the Report Period
- Creatine Kinase (CK) levels > 10x ULN or CK > 10,000 IU/L during the Report Period
- Myopathy/Myalgia, defined as any of the following during the Report Period:
 - POV 359.0–359.9, 729.1, 710.5, or 074.1
- Any of the following occurring anytime through the end of the Report Period:
 - POV 995.0–995.3 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 995.0–995.3 or V14.8.

All Medications Numerator Logic

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

Test Definitions

- ALT
 - Site-populated taxonomy DM AUDIT ALT TAX or
 - LOINC taxonomy
- AST
 - Site-populated taxonomy DM AUDIT AST TAX or
 - LOINC taxonomy (added codes 16325-3,48136-6,54500-4)
- Creatine Kinase
 - Site-populated taxonomy BGP CREATINE KINASE TAX or
 - LOINC taxonomy

Patient List Options

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

2.5.7 Cholesterol Management for Patients with Cardiovascular Conditions

Changes from Version 11.0, as noted.

Owner/Contact

Dr. Dena Wilson & Chris Lamer, PharmD

Denominator

Active Clinical patients ages 18 to 75 who, during the first 10 months of the year prior to the beginning of the Report period, were diagnosed with AMI, coronary artery bypass graft (CABG), or *percutaneous transluminal coronary angioplasty (PTCA)*, *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.

Numerators

- 1. Patients with LDL completed during the report period, regardless of result.
- Patients with LDL <=100, completed during the report period.
- Patients with LDL 101-130, completed during the report period.
- Patients with LDL >130, completed during the report period.

Definitions

AMI

• POV 410.*0 or 410.*1

PTCA PCI

- Procedure 00.66, 36.01 (old code), 36.02 (old code), 36.05, (old code), 36.06-36.07, or 36.09
- CPT 33140, 92980, 92982, 92995, *G0290*

CABG

- Procedure 36.1*, 36.2
- CPT 33510-33514, 33516-33519, 33521-33523, 33533-33536, S2205-S2209

IVD

• POV 411.*, 413.*, 414.0*, 414.2, 414.8, 414.9, 429.2, 433.*-434.*, 440.1, 440.2*, 440.4, 444.*, or 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 and/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 (added code 43396-1)
- Site-populated taxonomy DM AUDIT LDL CHOLESTEROL TAX
- For numerator LDL =<100, CPT 3048F will count as meeting the measure

Patient List Options

- List of Active Clinical patients 18–75 with DX of AMI, CABG, *PTCA PCI*, or IVD with LDL completed, regardless of result.
- List of Active Clinical patients 18–75 with DX of AMI, CABG, *PTCA PCI*, or IVD without LDL completed.
- List of Active Clinical patients 18–75 with DX of AMI, CABG, *PTCA PCI*, or IVD with LDL <=100.

- List of Active Clinical patients 18–75 with DX of AMI, CABG, *PTCA PCI*, or IVD with LDL 101-130.
- List of Active Clinical patients 18–75 with DX of AMI, CABG, *PTCA PCI*, or IVD with LDL >130.

2.5.8 Heart Failure and Evaluation of LVS Function

No changes from Version 11.0

Owner/Contact

Dr. Dena Wilson & Chris Lamer, PharmD

Denominator

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

Numerator

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

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, or 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, 37.51-37.54, 37.61-37.66, 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, 93314-93318, 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

Patient List Options

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

2.6 STD-Related Group

2.6.1 HIV Quality of Care

No changes from Version 11.0

Owner/Contact

Drs. Scott Giberson, Marie Russell, and Jonathan Iralu

Denominator

User Population patients 13 and older with at least 2 direct care visits, (i.e., not contract/CHS) during the report period with HIV diagnosis *and* 1 HIV visit in last 6 months.

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.

Definitions

Age

Age is calculated at beginning of the report period

HIV

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

Patient List Options

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

2.6.2 Chlamydia Testing

Changes from Version 11.0, as noted.

Owner/Contact

Epidemiology Program/Dr. Jim Cheek, Lori DeRavello, MPH

Denominator

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

Numerator

Patients tested for Chlamydia trachomatis during the report period.

Definitions

Age:

Age is calculated at beginning of the report period

Chlamydia

- V73.88, V73.98
- CPT: 86631, 86632, 87110, 87270, 87320, 87490-87492, 87810, 3511F
- Site-populated taxonomy BGP GPRA CHLAMYDIA TESTS
- LOINC taxonomy (added codes 57680-1 57679-3 57288-3 57287-5 56911-1 56910-3 56909-5 53926-2)

Patient List Options

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

2.6.3 Sexually Transmitted Infection (STI) Screening

Changes from Version 11.0, as noted.

Owner/Contact

Dr. Scott Giberson

Denominators

Screenings needed for incidents of key sexually transmitted infections (STIs) 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.

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: Total number of needed screenings performed or refused from one month prior to the date of relevant STI incident through two months after.

Definitions

Key STIs

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

• Chlamydia: 078.8*, 079.88, 079.98, 099.41, 099.50-099.59

• Gonorrhea: 098.0-098.89

• HIV/AIDS: 042, 042.0-044.9, 079.53, 795.71, V08

• Syphilis: 090.0-093.9, 094.1-097.9

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. 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 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.

Example of Patient with Multiple Incidents of Single STI:

Date	Visit	Total Incidents
08/01/10	Patient screened for Chlamydia	0
08/08/10	Patient diagnosed with Chlamydia	1
10/15/10	Patient diagnosed with Chlamydia	2
10/25/10	Follow-up for Chlamydia	2
11/15/10	Patient diagnosed with Chlamydia	2
03/01/11	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 type(s) of screenings recommended for each incident. The recommended screenings for each key STI are listed in the following table.

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 86631–86632, 87110, 87270, 87320, 87490–87492, 87810

- Site-populated taxonomy BGP CHLAMYDIA TESTS TAX
- LOINC taxonomy (added codes 57680-1 57679-3 57288-3 57287-5 56911-1 56910-3 56909-5 53926-2)

Gonorrhea Screening

Any of the following during the specified time period:

- CPT 87590–87592, 87850
- Site-populated taxonomy BKM GONORRHEA TEST TAX
- LOINC taxonomy

HIV/AIDS Screening

Any of the following during the specified time period:

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

Syphilis Screening

Any of the following during the specified time period:

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

Refusal of Any Screening

Any refusal type (REF, NMI, etc.) for any of the four screening tests as defined above during the specified time period.

Logic Examples

- Example of Patient with Single Diagnosis of Single STI
 - 08/01/10: Patient screened for Chlamydia
 - 08/08/10: Patient diagnosed with Chlamydia—three screens needed: Gonorrhea, HIV/AIDS, Syphilis
 - 08/13/10: Patient screened for Gonorrhea, HIV/AIDS, Syphilis
 - Result: Denominator: 3 screens needed, Numerator: three screens performed

• Example of Patient with Multiple Diagnoses of Single STI

- 08/01/10: Patient screened for Chlamydia
- 08/08/10: Patient diagnosed with Chlamydia (Incident #1)—three screens needed: Gonorrhea, HIV/AIDS, Syphilis
- 08/13/10: Patient screened for Gonorrhea, HIV/AIDS, Syphilis
- 12/01/10: Patient screened for Chlamydia
- 12/08/10: Patient diagnosed with Chlamydia (Incident #2)
 – three screens needed: Gonorrhea, HIV/AIDS, Syphilis
- Result: Denominator: Six screens needed (two each of three types),
 Numerator: three screens performed (one each of three types)

• Example of Patient with Single Diagnosis of Multiple STIs

- 10/15/10: Patient screened for Chlamydia, Gonorrhea, HIV/AIDS, Syphilis
- 10/18/10: Patient diagnosed with Chlamydia—three screens needed: Gonorrhea, HIV/AIDS, Syphilis
- 10/20/10: Patient diagnosed with Syphilis—removes needed screen for Syphilis (see above)
- Result: Denominator: two screens needed, Numerator: two screens performed prior to triggering diagnoses but within timeframe)

• Example of Patient with Multiple Diagnoses of Multiple STIs

- 06/15/05: Patient diagnosed with HIV/AIDS
- 08/01/10: Patient screened for Chlamydia and Gonorrhea
- 08/08/10: Patient diagnosed with Chlamydia and Gonorrhea (Incident #1– one screen needed: Syphilis (HIV/AIDS not needed since prior diagnosis)
- 08/08/10: Patient screened for HIV/AIDS and Syphilis since only the Syphilis screen is needed, the HIV/AIDS screen is not counted at all
- 12/01/10: Patient screened for Chlamydia
- 12/08/10: Patient diagnosed with Chlamydia (Incident #2)

 two screens needed: Gonorrhea and Syphilis
- 12/10/10: Patient screened for Syphilis
- Result: Denominator: three screens needed (two Syphilis and one Gonorrhea), Numerator: two screens performed (two Syphilis)

Patient List Options

 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 Medication Therapy for Persons with Asthma

New topic for Version 11.1

Owner/Contact

Chris Lamer, PharmD

Denominator

Active Clinical patients ages 5-50 with persistent asthma or who have had two asthma-related visits during the Report Period.

Numerator

- 1. Suboptimal Control: Patients who were dispensed more than 3 canisters of a short-acting beta2 agonist inhaler during the same 90-day period during the Report Period.
- 2. Absence of Controller Therapy: Patients who were dispensed more than 3 canisters of short acting beta2 agonist inhalers over a 90-day period and who did not receive controller therapy during the same 90-day period.

Definitions

Age

Age of the patient is calculated at the beginning of the report period.

Denominator Exclusion

Patients with intermittent asthma defined as any of the following:

- An Active entry in PCC Problem List for 493.* with a Severity of 1 at ANY time before the end of the report period, or
- Most recent visit-related asthma entry (i.e. V Asthma) with Severity of 1 documented ANY time before the end of the report period.

Asthma

- CRS will first search to see if the patient has persistent asthma, which is defined as any of the following:
 - An Active entry in PCC Problem List for 493.* with a Severity of 2, 3, or 4 at ANY time before the end of the report period or
 - 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.
- If the patient does not meet any of the above criteria, then CRS will search for two asthma-related visits during the report period. Asthma-related visit defined as any primary or secondary POV of asthma 493.*.

Note: For facilities not using asthma staging (severity assessment) in the PCC Problem List, CRS will rely on visit criteria for this assessment. This will result in patients with intermittent asthma being included in the denominator. The Expert Guideline driven method for managing patients with asthma is by staging them in the PCC Problem List. Doing so will improve the accuracy of the information reported by CRS.

Numerator Inclusion

To be included in the numerator, patient must have one or more non-discontinued prescriptions for short acting Beta2 Agonist inhalers totalling at least four canisters in one 90 day period. Short acting Beta2 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 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.

Patient List Options

- List of Active Clinical patients ages 5-50 with asthma who were dispensed more than 3 canisters of a short-acting beta2 agonist inhaler during the same 90-day period.
- List of Active Clinical patients ages 5-50 with asthma who were not dispensed more than 3 canisters of a short-acting beta2 agonist inhaler during the same 90-day period.
- List of Active Clinical patients ages 5-50 with asthma who did not receive controller therapy.

2.7.2 Prediabetes/Metabolic Syndrome

Changes from Version 11.0, as noted.

Owner/Contact

Drs. Stephen J. Rith Najarian and Kelly Moore

Denominator

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

Numerators

- 1. Patients with all screenings (BP, LDL, fasting glucose, nephropathy assessment, tobacco screening, BMI, lifestyle counseling, and depression screening).
- 2. Patients with Blood Pressure documented at least twice during the report period.
- 3. Patients with LDL completed during the report period, regardless of result.
- 4. Patients with fasting glucose test, regardless of result, during the report period.
- 5. Patients with nephropathy assessment, defined as an estimated GFR and a quantitative urinary protein assessment during the report period *or* with evidence of diagnosis and/or treatment of ESRD at any time before the end of the report period.
- 6. Patients who have been screened for tobacco use during the report period.
- 7. Patients for whom a BMI could be calculated, *including refusals in the past year*.

Note: This numerator does not include refusals.

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

Definitions

Age

Age is calculated at beginning of the report period.

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 listed below, occurring during the Report Period except as otherwise noted:
 - BMI => 30 or Waist Circumference >40 inches for men or >35 inches for women,
 - Triglyceride value >=150,
 - HDL value <40 for men or <50 for women,
 - Patient diagnosed with hypertension or mean Blood Pressure value => 130/85 where systolic is =>130 or diastolic is =>85,
 - Fasting Glucose value =>100 and <126.

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

Patients without Diabetes

No diabetes diagnosis ever (POV 250.00–250.93).

Tests/Other Definitions

BMI

CRS calculates BMI at the time the report is run, using NHANES II. For 18 and under, a height and weight must be taken on the same day any time during the Report Period. For 19 through 50, height and weight must be recorded within last 5 years, not required to be on the same day. For over 50, height and weight within last 2 years not required to be recorded on same day. Refusals include REF (refused), NMI and UAS (unable to screen) and must be documented during the past year. For ages 18 and under, both the height and weight must be refused on the same visit at any time during the past year. For ages 19 and older, the height and the weight must be refused during the past year and are not required to be on the same visit.

Triglyceride

- LOINC taxonomy or
- Site-populated taxonomy DM AUDIT TRIGLYCERIDE TAX with a nonnull, numeric result

HDL

- CPT 83718
- LOINC taxonomy (added codes 57937-5, 57936-7, 56133-2, 56132-4, 54471-8, 54470-0, 54469-2, 54468-4, 54467-6) or
- Site-populated taxonomy DM AUDIT HDL TAX with a non-null, numeric result

Fasting Glucose

- Denominator definition
 - LOINC taxonomy or
 - 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

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 (added code 43396-1)
- Site-populated taxonomy DM AUDIT LDL CHOLESTEROL TAX

BP

CRS uses mean of last three BPs documented on non-ER visits during the Report Period. If three BPs are not available, use mean of the last two non-ER 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–3080F documented on a non-ER visit 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.

Nephropathy Assessment

Estimated GFR

Any of the following:

- Site-populated taxonomy BGP GPRA ESTIMATED GFR TAX or
- LOINC taxonomy (added codes 62238-1, 50110-4).

Quantitative Urine Protein Assessment

Any of the following:

- CPT 82042, 82043, or 84156
- LOINC taxonomy (added codes 56553-1, 57369-1, 58448-2, 58992-9, 59159-4)
- Site-populated taxonomy BGP QUANT URINE PROTEIN

Note: Be sure to check with your laboratory supervisor that the names you add to your taxonomy reflect quantitative test values).

End Stage Renal Disease Diagnosis/Treatment

Any of the following ever:

- CPT 36145, 36147, 36800, 36810, 36815, 36818, 36819, 36820, 36821, 36831-36833, 50300, 50320, 50340, 50360, 50365, 50370, 50380, 90951-90970 or (old codes) 90918-90925, 90935, 90937, 90939 (old code), 90945, 90947, 90989, 90993, 90997, 90999, 99512, G0257, G0308-G0327 (old codes), G0392 (old code), G0393 (old code), or S9339
- POV 585.5, 585.6, V42.0, V45.1 (old code), V45.11, V45.12, or V56.*
- Procedure 38.95, 39.27, 39.42, 39.43, 39.53, 39.93-39.95, 54.98, or 55.6*

Tobacco Screening

At least one of the following during the report period:

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

Lifestyle Counseling

Any of the following during the report period:

- Medical nutrition therapy defined as:
 - CPT 97802-97804, 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, 97802-97804, G0270, or 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 or 278.01

Depression Screening/Mood Disorder DX

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, or
 - Refusal, defined as any PCC refusal in past year with Exam Code 36

Mood Disorder DX

- 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, or 311 or BHS POV 14 or 15.

Patient List Options

- List of Active Clinical patients =>18 w/Prediabetes/Metabolic Syndrome with all assessments.
- List of Active Clinical patients =>18 w/Prediabetes/Metabolic Syndrome without all assessments.

2.7.3 Proportion of Days Covered by Medication Therapy

New topic for Version 11.1

Owner/Contact

Chris Lamer, PharmD

Denominator

- 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 ACEI/ARBs 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 sulfonylureas 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.

Numerator

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

Definitions

Age

Age of the patient is calculated at the beginning of the report period.

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 ACEI ARB 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

Proportion of days covered = # of days the patient was covered by at least one drug in the class / # 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 the medication was started and then discontinued, CRS will recalculate the # Days Prescribed by subtracting the prescription date (i.e. visit date) from the V Medication Discontinued Date. Example: Rx Date=11/15/2011, Discontinued Date=11/19/2011, Recalculated # Days Prescribed=4.

Example of Proportion of Days Covered

Report Period: Jan 1 - Dec 31, 2011

- 1st Rx is Index Rx Start Date: 3/1/11, Days Supply=90
 - Rx covers patient through 5/29/11
- 2nd Rx: 5/26/11, Days Supply=90

- Rx covers patient through 8/27/11
- 3rd Rx: 9/11/11, Days Supply=180; Gap = (9/11/11 8/27/11) = 15 days
 - Rx covers patient through 3/8/12

Patient's measurement period: 3/1/11 through 12/31/11 = 306 Days

Days patient was covered: 3/1/11 through 8/27/11 + 9/11/11 through 12/31/11 = 292 Days

PDC = 292 / 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:

Report Period: Jan 1 - Dec 31, 2011

- 1st Rx: 4/1/11, Days Supply=30
 - Rx covers patient through 4/30/11
- 2nd Rx: 7/1/11, Days Supply=90
 - Gap #1 = (7/1/11 4/30/11) = 61 days
 - Rx covers patient through 9/28/11
- 3rd Rx: 10/1/11, Days Supply=90
 - Gap #2 = (10/1/11 9/28/11) = 2 days
 - Rx covers patient through 12/29/11

Gap #1 >=30 days, therefore patient will be included in the numerator for that medication.

Patient List

- List of Active Clinical patients >=18 whose proportion of days covered for betablockers is >=80%.
- List of Active Clinical patients >=18 whose proportion of days covered for betablockers is <80%.

- List of Active Clinical patients >=18 who had a gap >=30 days in their betablocker medication therapy.
- List of Active Clinical patients >=18 whose proportion of days covered for ACEI/ARBs is >=80%.
- List of Active Clinical patients >=18 whose proportion of days covered for ACEI/ARBs is <80%.
- List of Active Clinical patients >=18 who had a gap >=30 days in their ACEI/ARB medication therapy.
- List of Active Clinical patients >=18 whose proportion of days covered for calcium channel blockers is >=80%.
- List of Active Clinical patients >=18 whose proportion of days covered for calcium channel blockers is <80%.
- List of Active Clinical patients >=18 who had a gap >=30 days in their calcium channel blocker medication therapy.
- List of Active Clinical patients >=18 whose proportion of days covered for biguanides is >=80%.
- List of Active Clinical patients >=18 whose proportion of days covered for biguanides is <80%.
- List of Active Clinical patients >=18 who had a gap >=30 days in their biguanide medication therapy.
- List of Active Clinical patients >=18 whose proportion of days covered for sulfonylureas is >=80%.
- List of Active Clinical patients >=18 whose proportion of days covered for sulfonylureas is <80%.
- List of Active Clinical patients >=18 who had a gap >=30 days in their sulfonylurea medication therapy.
- List of Active Clinical patients >=18 whose proportion of days covered for thiazolidinediones is >=80%.
- List of Active Clinical patients >=18 whose proportion of days covered for thiazolidinediones is <80%.
- List of Active Clinical patients >=18 who had a gap >=30 days in their thiazolidinedione medication therapy.
- List of Active Clinical patients >=18 whose proportion of days covered for statins is >=80%.

- List of Active Clinical patients >=18 whose proportion of days covered for statins is <80%.
- List of Active Clinical patients >=18 who had a gap >=30 days in their statin medication therapy.
- List of Active Clinical patients >=18 whose proportion of days covered for antiretroviral agents is >=90%.
- List of Active Clinical patients >=18 whose proportion of days covered for antiretroviral agents is <90%.

2.7.4 Public Health Nursing

No changes from Version 11.0

Owner/Contact

Cheryl Peterson, RN

Denominators

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

Numerator

None

Definitions

PHN Visit-Any Setting

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

PHN Visit-Home

Any visit with:

- 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

Patient List Options

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

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