

GEM 2007 Measure Functional Specification Document

Performance Measure Name: Eye exam (retinal) performed for beneficiaries with diabetes (CDC-EYE)

Description: The percentage of beneficiaries 18–75 years of age with diabetes (type 1 and type 2) who had eye exam (retinal) performed

Source of Measure: Health Plan HEDIS[®] 2008¹

Denominator Statement:

Beneficiaries 18–75 years as of December 31, 2007 who had continuous enrollment during 2007.

There are two methods for identifying diabetic beneficiaries:

- Pharmacy data
- Claim/encounter data

The organization must use **both** methods to identify the eligible population; however, to be included in the measure, a beneficiary needs to be identified in only one method. Beneficiaries may be identified as having diabetes during 2007 or 2006.

(1) *Pharmacy data.* Beneficiaries who were dispensed insulin or oral hypoglycemics/antihyperglycemics during 2007 or 2006 on an ambulatory basis.

(2) *Claim/encounter data.* Beneficiaries who had **two** face-to-face encounters with different dates of service in an outpatient setting or nonacute inpatient setting or **one** face-to-face encounter in an acute inpatient or emergency department (ED) setting during 2007 or 2006 with a diagnosis of diabetes. The organization may count services that occur over both years.

Denominator Exclusion Statement:

- (1) Exclude beneficiaries with a diagnosis of polycystic ovaries who did not have any face-to-face encounters with the diagnosis of diabetes, in any setting, during 2007 or 2006. Diagnosis of polycystic ovaries can occur at any time in the beneficiary's history, but must have occurred by December 31, 2007.

¹Referred to as "HEDIS" in this document. The sources include both the original technical specifications and the subsequent technical update:

(1) National Committee for Quality Assurance (2007). *HEDIS 2008, Volume 2: Technical Specifications*. Washington, DC.

(2) National Committee for Quality Assurance (2007). *HEDIS 2008, Volume 2: Technical Update*. October 1, 2007. Retrieved October 9, 2008, from

[http://www.ncqa.org/Portals/0/http://www.ncqa.org/Portals/0/PolicyUpdates/HEDIS Technical Updates/2008_Vol2_Technical_Update.pdf](http://www.ncqa.org/Portals/0/http://www.ncqa.org/Portals/0/PolicyUpdates/HEDIS%20Technical%20Updates/2008_Vol2_Technical_Update.pdf)

- (2) Exclude beneficiaries with gestational diabetes or steroid-induced diabetes who did not have any face-to-face encounters with the diagnosis of diabetes (in any setting) during 2007 or 2006. Diagnosis of gestational diabetes or steroid-induced diabetes can occur during 2007 or 2006, but must have occurred by December 31, 2007.

Numerator Statement:

An eye screening for diabetic retinal disease as identified by administrative data.

This includes diabetics who had one of the following:

- A retinal or dilated eye exam by an eye care professional (optometrist or ophthalmologist) in 2007.
- A **negative** retinal exam (no evidence of retinopathy) by an eye care professional in 2006.

For exams performed in 2006, an automated result must be available.

Deviation(s) from HEDIS:

1. Unlike the 45-day allowable gap in enrollment in the HEDIS specifications, all beneficiaries in the GEM project must be both Part A and Part B enrolled for the full 12 months of 2007. In addition, the following criteria will be used to exclude beneficiaries:
 - 1) Beneficiaries cannot have any months of Medicare Advantage enrollment.
 - 2) Beneficiaries cannot have any months of Medicare Part A only or Part B only enrollment (must have 12 months of both Medicare Part A and Part B enrollment).
 - 3) Beneficiaries cannot have any periods of Medicare secondary payer status.
 - 4) Beneficiaries cannot reside outside of the United States.
 - 5) Beneficiaries must have a record in the Medicare enrollment files.
 - 6) Beneficiaries cannot have any months of Hospice coverage.
2. HEDIS allows the denominator exclusions to be optional. However, for the GEM project, all optional denominator exclusion criteria specified in HEDIS were made mandatory. For the exclusion based on a diagnosis of polycystic ovaries, HEDIS specified that the diagnosis can occur at any time in the beneficiary's history, as long as it occurred by December 31, 2007. Since we will only have data for 2005 to 2007, we cannot look back further than 2005, but at least we can exclude patients from the denominator if we can find a diagnosis of polycystic ovaries during 2005 to 2007.

Algorithm Flow Chart: See Flowchart Eye Exam (retinal) Performed for Beneficiaries with Diabetes

Denominator and Numerator Codes

Measure Category	Description	SubCategory	Coding Scheme	Codes	
Denominator Inclusion	Diagnosis for diabetes		ICD-9-CM Diagnosis	250, 357.2, 362.0, 366.41, 648.0	
			CMS-DRG	294, 295 (Earlier than 10/1/07)	
			MS-DRG	637, 638, 639 (10/1/07 and later)	
	Procedure (Two face-to-face encounters with different dates of service)	Outpatient	CPT	92002-92014, 99201-99205, 99211-99215, 99217-99220, 99241-99245, 99341-99345, 99347-99350, 99384-99387, 99394-99397, 99401-99404, 99411, 99412, 99420, 99429, 99455, 99456, 99499	
			UB-92 Revenue	051x, 0520-0523, 0526-0529, 057x-059x, 077x, 082x-085x, 088x, 0982, 0983	
		Nonacute inpatient	CPT	99301-99313, 99315, 99316, 99318, 99321-99328, 99331-99337	
			UB-92 Revenue	0118, 0128, 0138, 0148, 0158, 019x, 0524, 0525, 055x, 066x,	
		Procedure (One face-to-face encounter)	Acute inpatient	CPT	99221-99223, 99231-99233, 99238, 99239, 99251-99255, 99261-99263, 99291
				UB-92 Revenue	010x, 0110-0114, 0119, 0120-0124, 0129, 0130-0134, 0139, 0140-0144, 0149, 0150-0154, 0159, 016x, 020x-022x, 072x, 080x, 0987
	Emergency department		CPT	99281-99285	
			UB-92 Revenue	045x, 0981	
	Drug class for diabetes (Insulin; Oral hypoglycemic/antihyperglycemic)		NDC	Any NDC in "CDC Denominator.xls"*	
Denominator Exclusion	Diagnosis of polycystic ovaries		ICD-9-CM Diagnosis	256.4	
	Diagnosis of steroid-induced diabetes		ICD-9-CM Diagnosis	251.8, 962.0	
	Diagnosis of gestational diabetes		ICD-9-CM Diagnosis	648.8	

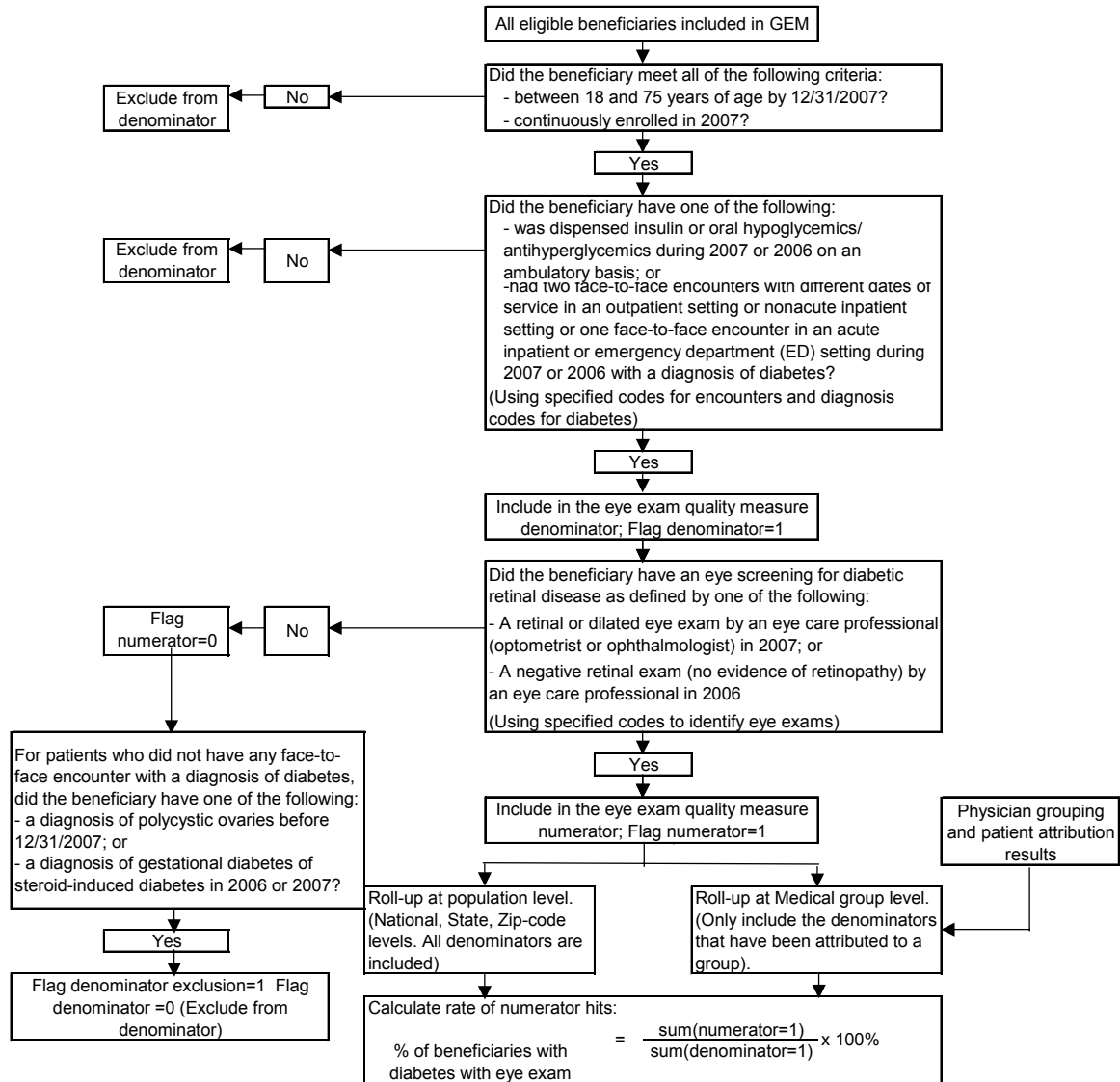
Measure Category	Description	SubCategory	Coding Scheme	Codes
Numerator Inclusion	Eye Exam**		CPT	67028, 67030, 67031, 67036, 67038-67040, 67101, 67105, 67107, 67108, 67110, 67112, 67121, 67141, 67145, 67208, 67210, 67218, 67220, 67221, 67227, 67228, 92002, 92004, 92012, 92014, 92018, 92019, 92225, 92226, 92230, 92235, 92240, 92250, 92260, 99203-99205, 99213-99215, 99242-99245
			CPT II†	2022F, 2024F, 2026F, 3072F
			HCPCS	S0620, S0621, S0625, S3000
			ICD-9-CM Diagnosis	V72.0
			ICD-9-CM Procedure	14.1-14.5, 14.9, 95.02-95.04, 95.11, 95.12, 95.16

* Source: “Comprehensive Diabetes Care (CDC) Denominator” link at <http://www.ncqa.org/tabid/598/Default.aspx>

**Eye exams provided by eye care professionals are a proxy for dilated eye examinations because there is no administrative way to determine that a dilated exam was performed.

†The organization does not need to limit CPT Category II codes to an optometrist or an ophthalmologist because the codes can be used by other provider types to document services provided by an optometrist or ophthalmologist.

Flowchart: Eye Exam (retinal) Performed for Beneficiaries with Diabetes



Performance Measure Name: Hemoglobin A1c (HbA1c) testing for beneficiaries with diabetes (CDC-HBA1C)

Description: The percentage of beneficiaries 18–75 years of age with diabetes (type 1 and type 2) who had Hemoglobin A1c (HbA1c) testing.

Source of Measure: Health Plan HEDIS[®] 2008²

Denominator Statement:

Beneficiaries 18–75 years as of December 31, 2007 who had continuous enrollment during 2007.

There are two methods for identifying diabetic beneficiaries:

- Pharmacy data
- Claim/encounter data

The organization must use **both** methods to identify the eligible population; however, to be included in the measure, a beneficiary needs to be identified in only one method. Beneficiaries may be identified as having diabetes during 2007 or 2006.

(1) *Pharmacy data.* Beneficiaries who were dispensed insulin or oral hypoglycemics/ antihyperglycemics during 2007 or 2006 on an ambulatory basis.

(2) *Claim/encounter data.* Beneficiaries who had **two** face-to-face encounters with different dates of service in an outpatient setting or nonacute inpatient setting or **one** face-to-face encounter in an acute inpatient or emergency department (ED) setting during 2007 or 2006 with a diagnosis of diabetes. The organization may count services that occur over both years.

Denominator Exclusion Statement:

- (1) Exclude beneficiaries with a diagnosis of polycystic ovaries who did not have any face-to-face encounters with the diagnosis of diabetes, in any setting, during 2007 or 2006. Diagnosis of polycystic ovaries can occur at any time in the beneficiary’s history, but must have occurred by December 31, 2007.
- (2) Exclude beneficiaries with gestational diabetes or steroid-induced diabetes who did not have any face-to-face encounters with the diagnosis of diabetes (in any setting) during 2007 or 2006. Diagnosis of gestational diabetes or steroid-induced diabetes can occur during 2007 or 2006, but must have occurred by December 31, 2007.

²Referred to as “HEDIS” in this document. The sources include both the original technical specifications and the subsequent technical update:

(1) National Committee for Quality Assurance (2007). *HEDIS 2008, Volume 2: Technical Specifications*. Washington, DC.

(2) National Committee for Quality Assurance (2007). *HEDIS 2008, Volume 2: Technical Update. October 1, 2007*. Retrieved October 9, 2008, from http://www.ncqa.org/Portals/0/PolicyUpdates/HEDIS_Technical_Updates/2008_Vol2_Technical_Update.pdf

Numerator Statement:

An HbA1c test performed during 2007 as identified by claim/encounter or automated laboratory data.

Deviation(s) from HEDIS:

1. Unlike the 45-day allowable gap in enrollment in the HEDIS specifications, all beneficiaries in the GEM project must be both Part A and Part B enrolled for the full 12 months of 2007. In addition, the following criteria will be used to exclude beneficiaries:
 - 1) Beneficiaries cannot have any months of Medicare Advantage enrollment.
 - 2) Beneficiaries cannot have any months of Medicare Part A only or Part B only enrollment (must have 12 months of both Medicare Part A and Part B enrollment).
 - 3) Beneficiaries cannot have any periods of Medicare secondary payer status.
 - 4) Beneficiaries cannot reside outside of the United States.
 - 5) Beneficiaries must have a record in the Medicare enrollment files.
 - 6) Beneficiaries cannot have any months of Hospice coverage.
2. HEDIS allows the denominator exclusions to be optional. However, for the GEM project, all optional denominator exclusion criteria specified in HEDIS were made mandatory. For the exclusion based on a diagnosis of polycystic ovaries, HEDIS specified that the diagnosis can occur at any time in the beneficiary's history, as long as it occurred by December 31, 2007. Since we will only have data for 2005 to 2007, we cannot look back further than 2005, but at least we can exclude patients from the denominator if we can find a diagnosis of polycystic ovaries during 2005 to 2007.
3. Identifying numerator compliance through the use of LOINC codes is not expected in Medicare claims data.

Algorithm Flow Chart: See Flowchart HbA1c Testing for Beneficiaries with Diabetes

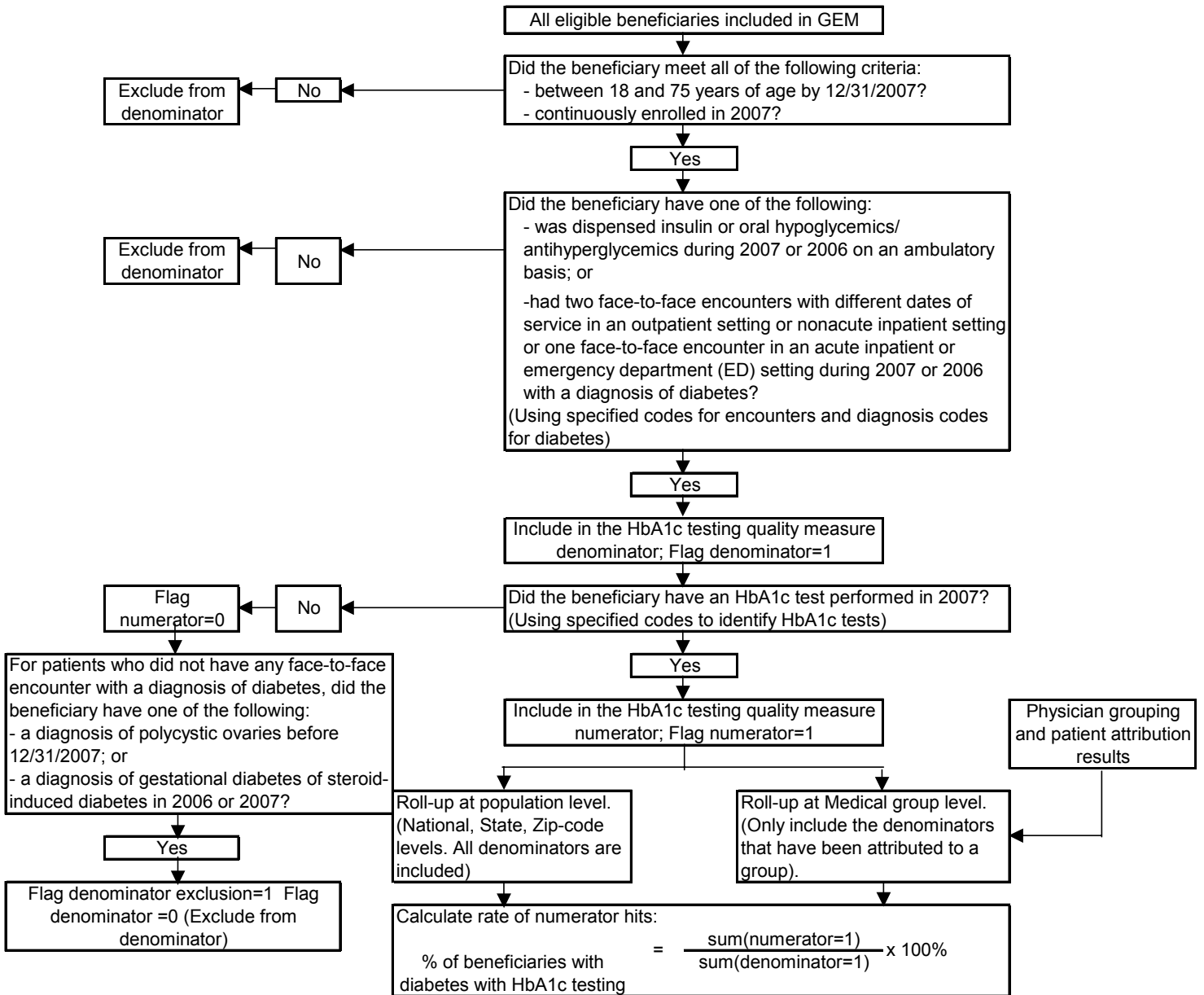
Denominator and Numerator Codes

Measure Category	Description	SubCategory	Coding Scheme	Codes
Denominator Inclusion	Diagnosis for diabetes		ICD-9-CM Diagnosis	250, 357.2, 362.0, 366.41, 648.0
			CMS-DRG	294, 295 (Earlier than 10/1/07)
			MS-DRG	637, 638, 639 (10/1/07 and later)
	Procedure (Two face-to-face encounters with different dates of service)	Outpatient	CPT	92002-92014, 99201-99205, 99211-99215, 99217-99220, 99241-99245, 99341-99345, 99347-99350, 99384-99387, 99394-99397, 99401-99404, 99411, 99412, 99420, 99429, 99455, 99456, 99499
			UB-92 Revenue	051x, 0520-0523, 0526-0529, 057x-059x, 077x, 082x-085x, 088x, 0982, 0983
		Nonacute inpatient	CPT	99301-99313, 99315, 99316, 99318, 99321-99328, 99331-99337
			UB-92 Revenue	0118, 0128, 0138, 0148, 0158, 019x, 0524, 0525, 055x, 066x
	Procedure (One face-to-face encounter)	Acute inpatient	CPT	99221-99223, 99231-99233, 99238, 99239, 99251-99255, 99261-99263, 99291
			UB-92 Revenue	010x, 0110-0114, 0119, 0120-0124, 0129, 0130-0134, 0139, 0140-0144, 0149, 0150-0154, 0159, 016x, 020x-022x, 072x, 080x, 0987
		Emergency department	CPT	99281-99285
UB-92 Revenue			045x, 0981	
Drug class for diabetes (Insulin; Oral hypoglycemic/antihyperglycemic)			NDC	Any NDC in “CDC Denominator.xls”*
Denominator Exclusion	Diagnosis of polycystic ovaries		ICD-9-CM Diagnosis	256.4
	Diagnosis of steroid-induced diabetes		ICD-9-CM Diagnosis	251.8, 962.0
	Diagnosis of gestational diabetes		ICD-9-CM Diagnosis	648.8
Numerator Inclusion	HbA1c test		CPT	83036, 83037
			CPT II	3044F, 3045F, 3046F, 3047F
			LOINC**	4548-4, 4549-2, 17856-6

* Source: “Comprehensive Diabetes Care (CDC) Denominator” link at <http://www.ncqa.org/tabid/598/Default.aspx>

**LOINC codes are not available in the Medicare claims data.

Flowchart: HbA1c Testing for Beneficiaries with Diabetes



Performance Measure Name: LDL-C screening for beneficiaries with cardiovascular conditions (CMC-LDL)

Description: The percentage of beneficiaries 18–75 years of age who were discharged alive for acute myocardial infarction (AMI), coronary artery bypass graft (CABG) or percutaneous transluminal coronary angioplasty from January 1 to November 1, 2006, **or** who had a diagnosis of ischemic vascular disease (IVD) during 2007 and 2006, who had LDL-C screening performed during 2007.

Source of Measure: Health Plan HEDIS[®] 2008³

Denominator Statement:

Beneficiaries 18–75 years of age as of December 31, 2007 who had continuous enrollment during 2007 and 2006.

Beneficiaries are identified for the denominator in one of two ways: event or diagnosis. The organization must see both criteria to identify the eligible population.

- 1) *Event:* Discharged alive for AMI, CABG or PTCA on or between January 1, 2006 and November 1, 2006. AMI and CABG cases should be from inpatient claims only. All cases of PTCA should be included, regardless of setting (e.g., inpatient, outpatient, emergency room).
- 2) *Diagnoses:* Identify members as having IVD who met at least one of the two criteria below during **both** 2007 and 2006 (criteria need not be the same across both years):
 - At least one outpatient visit with an IVD diagnosis;
 - At least one acute inpatient visit with an IVD diagnosis

Denominator Exclusion Statement:

There are no denominator exclusions.

Numerator Statement:

An LDL-C test performed any time during 2007 as identified by claim/encounter or automated laboratory data.

³Referred to as “HEDIS” in this document. The sources include both the original technical specifications and the subsequent technical update:

(1) National Committee for Quality Assurance (2007). *HEDIS 2008, Volume 2: Technical Specifications*. Washington, DC.

(2) National Committee for Quality Assurance (2007). *HEDIS 2008, Volume 2: Technical Update. October 1, 2007*. Retrieved October 9, 2008, from http://www.ncqa.org/Portals/0/PolicyUpdates/HEDIS Technical Updates/2008_Vol2_Technical_Update.pdf

Deviation(s) from HEDIS:

1. Unlike the 45-day allowable gap in enrollment in the HEDIS specifications, all beneficiaries in the GEM project must be both Part A and Part B enrolled for the full 12 months of 2007. In addition, the following criteria will be used to exclude beneficiaries:
 - 1) Beneficiaries cannot have any months of Medicare Advantage enrollment.
 - 2) Beneficiaries cannot have any months of Medicare Part A only or Part B only enrollment (must have 12 months of both Medicare Part A and Part B enrollment).
 - 3) Beneficiaries cannot have any periods of Medicare secondary payer status.
 - 4) Beneficiaries cannot reside outside of the United States.
 - 5) Beneficiaries must have a record in the Medicare enrollment files.
 - 6) Beneficiaries cannot have any months of Hospice coverage.

2. Identifying numerator compliance through the use of LOINC codes is not expected in Medicare claims data.

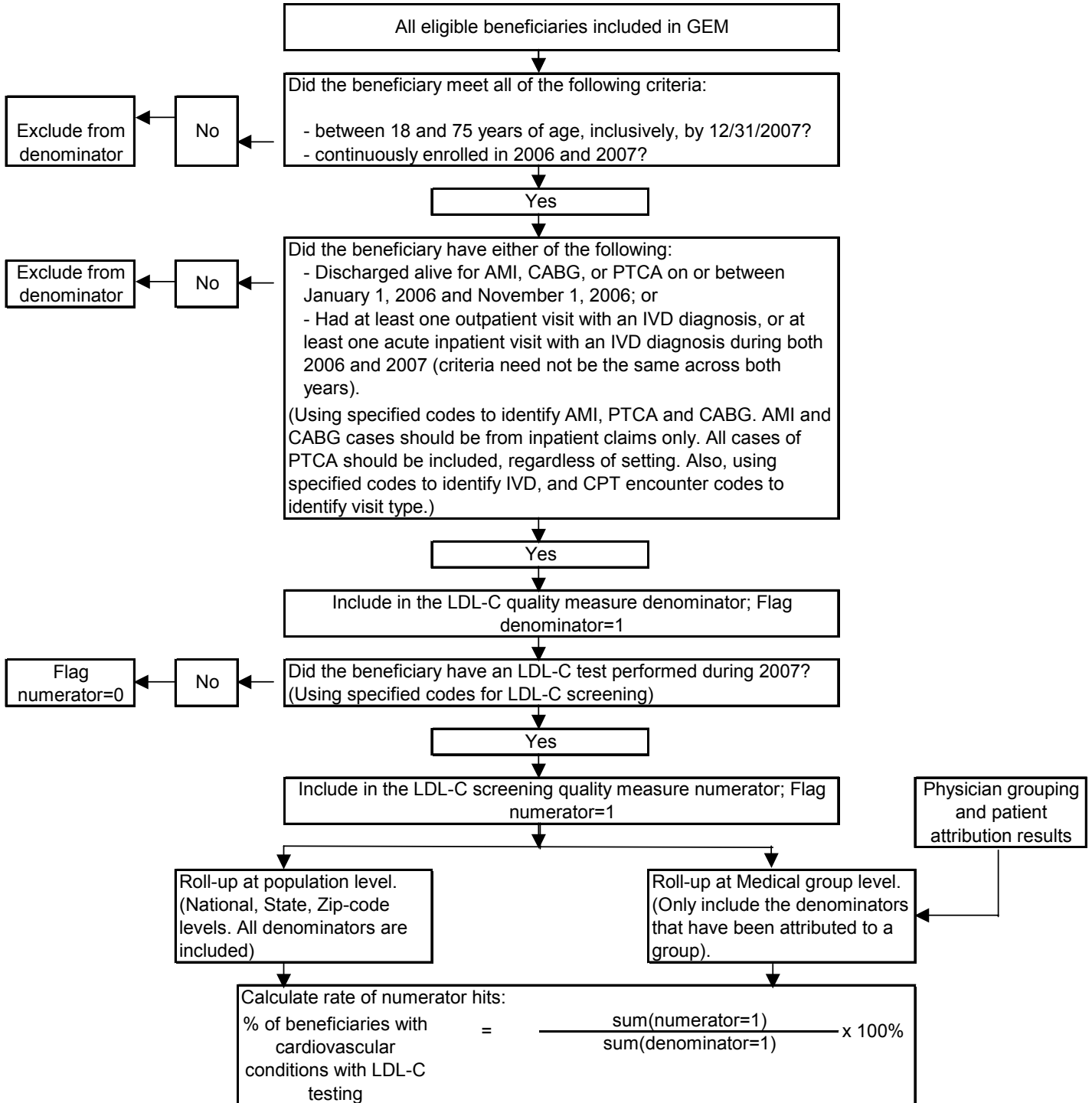
Algorithm Flow Chart: See Flowchart LDL-C Screening for Beneficiaries with Cardiovascular Conditions

Denominator and Numerator Codes

Measure Category	Category	SubCategory	Description	Coding Scheme	Codes		
Denominator Inclusion	Event	AMI (inpatient only)		ICD-9-CM Diagnosis	410.x1		
				CMS-DRG	121, 122, 516 (before 10/01/2007)		
				MS-DRG	280-282 (on or after 10/01/2007)		
		CABG (inpatient only)				CPT	33510-33514, 33516-33519, 33521-33523, 33533-33536, 35600, 33572
						HCPCS	S2205-S2209
						ICD-9 CM Procedure	36.1, 36.2
						CMS-DRG	106, 107, 109, 547-550 (before 10/01/2007)
		PTCA (all settings)				MS-DRG	231-236 (on or after 10/01/2007)
						CPT	33140, 92980-92982, 92984, 92995, 92996
						ICD-9-CM Procedure	00.66, 36.01, 36.02, 36.05, 36.06, 36.07, 36.09
						CMS-DRG	516, 517, 526, 527, 555-558 (before 10/01/2007)
						MS-DRG	246-251(on or after 10/01/2007)
	Diagnosis	Diagnosis	IVD		ICD-9 CM Diagnosis	411, 413, 414.0, 414.8, 414.9, 429.2, 433-434, 440.1, 440.2, 444, 445	
					CMS-DRG	140, 559 (before 10/01/2007)	
					MS-DRG	061-063, 311 (on or after 10/01/2007)	
		Visits	Outpatient			CPT Codes	99201-99205, 99211-99215, 99217-99220, 99241-99245, 99341-99345, 99347-99350, 99384-99387, 99394-99397, 99401-99404, 99411, 99412, 99420, 99429, 99455, 99456, 99499
						UB92 Revenue	051x, 0520-0523, 0526-0529, 057x-059x, 077x, 0982, 0983
			Acute inpatient				CPT
					UB92 Revenue	010x, 0110-0114, 0119, 0120-0124, 0129, 0130-0134, 0139, 0140-0144, 0149, 0150-0154, 0159, 016x, 020x-022x, 072x, 0987	
Numerator Inclusion			LDL Screening	CPT Codes	80061, 83700, 83701, 83704, 83715, 83716, 83721		
				CPT-II Codes	3048F, 3049F, 3050F		
				LOINC*	2089-1, 12773-8, 13457-7, 18261-8, 18262-6, 22748-8, 24331-1, 39469-2, 49132-4		

*LOINC codes are not available in the Medicare claims data.

Flowchart: LDL-C Screening for Beneficiaries with Cardiovascular Conditions



Performance Measure Name: Persistence of Beta-Blocker Treatment after a Heart Attack (PBH)

Description: The percentage of members 18 years of age and older during 2007 who were hospitalized and discharged alive from July 1, 2006 to June 30, 2007 with a diagnosis of acute myocardial infarction (AMI) and who received persistent beta-blocker treatment for six months after discharge.

Source of Measure: Health Plan HEDIS[®] 2008⁴

Denominator Statement:

Beneficiaries 18 years of age and older as of December 31, 2007 who had continuous enrollment for both medical services and pharmacy from the discharge date through 180 days after discharge. Beneficiaries are identified for the denominator by event/diagnosis. Additional rules follow as to how to count transfers and readmissions.

Event/Diagnosis: Discharged alive from an acute inpatient setting with an AMI between July 1, 2006 through June 30, 2007. If a beneficiary has more than one episode of AMI from July 1, 2006 through June 30, 2007 the organization should include only the first discharge.

Transfers to acute facilities: Include hospitalizations in which the beneficiary was transferred directly to another **acute care facility** for any diagnosis. Count the discharge from the subsequent, not the initial, acute inpatient facility. The discharge date from the facility to which the beneficiary was transferred must occur on or before June 30, 2007.

Readmissions: If the beneficiary was readmitted to an **acute** or **nonacute care facility** for any diagnosis, include the beneficiary in the denominator and use the discharge date from the original hospitalization.

Transfers to non-acute facilities. Exclude from the denominator hospitalizations in which the beneficiary was transferred directly to a non-acute care facility for any diagnosis.

⁴Referred to as “HEDIS” in this document. The sources include both the original technical specifications and the subsequent technical update:

(1) National Committee for Quality Assurance (2007). *HEDIS 2008, Volume 2: Technical Specifications*. Washington, DC.

(2) National Committee for Quality Assurance (2007). *HEDIS 2008, Volume 2: Technical Update. October 1, 2007*. Retrieved October 9, 2008, from [http://www.ncqa.org/Portals/0/PolicyUpdates/HEDIS Technical Updates/2008_Vol2_Technical_Update.pdf](http://www.ncqa.org/Portals/0/PolicyUpdates/HEDIS%20Technical%20Updates/2008_Vol2_Technical_Update.pdf)

Denominator Exclusions

The organization should exclude from the denominator beneficiaries who are identified as having a contraindication to beta-blocker therapy or previous adverse reaction (i.e., intolerance) to beta-blocker therapy. The organization should look back as far as possible in the beneficiary's history through the end of the continuous enrollment period in administrative data for evidence of a contraindication to beta-blocker therapy.

Numerator Statement:

A 180-day course of treatment with beta-blockers. Identify all beneficiaries in the denominator population whose days supply dispensed is ≥ 135 days in the 180 days following discharge. Persistence of treatment for this measure is defined as at least 75 percent of the days supply filled.

Treatment days (covered days) is defined as the actual number of calendar days covered with prescriptions within the specified 180-day measurement interval (i.e., a prescription of 90 days' supply dispensed on the 100th day will have 80 days counted in the 180-day interval). To determine continuity of treatment during the 180-day period, sum the number of allowed gap days to the number of treatment days for a maximum of 180 days (i.e., 135 treatment days + 45 gap days = 180 days); identify all prescriptions filled within 180 days of the Discharge Date.

To account for beneficiaries who are on beta-blockers prior to admission, the organization should factor those prescriptions into adherence rates if the actual treatment days fall within the 180 days following discharge.

Deviation(s) from HEDIS:

1. Unlike the 45-day allowable gap in enrollment in the HEDIS specifications, all beneficiaries in the GEM project must be both Part A and Part B enrolled for the full 12 months of 2007. In addition, the following criteria will be used to exclude beneficiaries:
 - 1) Beneficiaries cannot have any months of Medicare Advantage enrollment.
 - 2) Beneficiaries cannot have any months of Medicare Part A only or Part B only enrollment (must have 12 months of both Medicare Part A and Part B enrollment).
 - 3) Beneficiaries cannot have any periods of Medicare secondary payer status.
 - 4) Beneficiaries cannot reside outside of the United States.
 - 5) Beneficiaries must have a record in the Medicare enrollment files.
 - 6) Beneficiaries cannot have any months of Hospice coverage.
2. HEDIS allows the denominator exclusions to be optional. However, for the GEM project, all optional denominator exclusion criteria specified in HEDIS were made mandatory. For the exclusion based on contraindications to beta-blockers, HEDIS specified that the diagnosis can occur at any time in the beneficiary's history through the end of the continuous enrollment period, defined as discharge date through 180 days after discharge. GEM can exclude patients from the denominator if we can find a diagnosis of contraindications to beta-blockers during 2005 to 2007.

Algorithm Flow Chart: See Flowchart Persistence of Beta-Blocker Treatment after a Heart Attack

Denominator and Numerator Codes

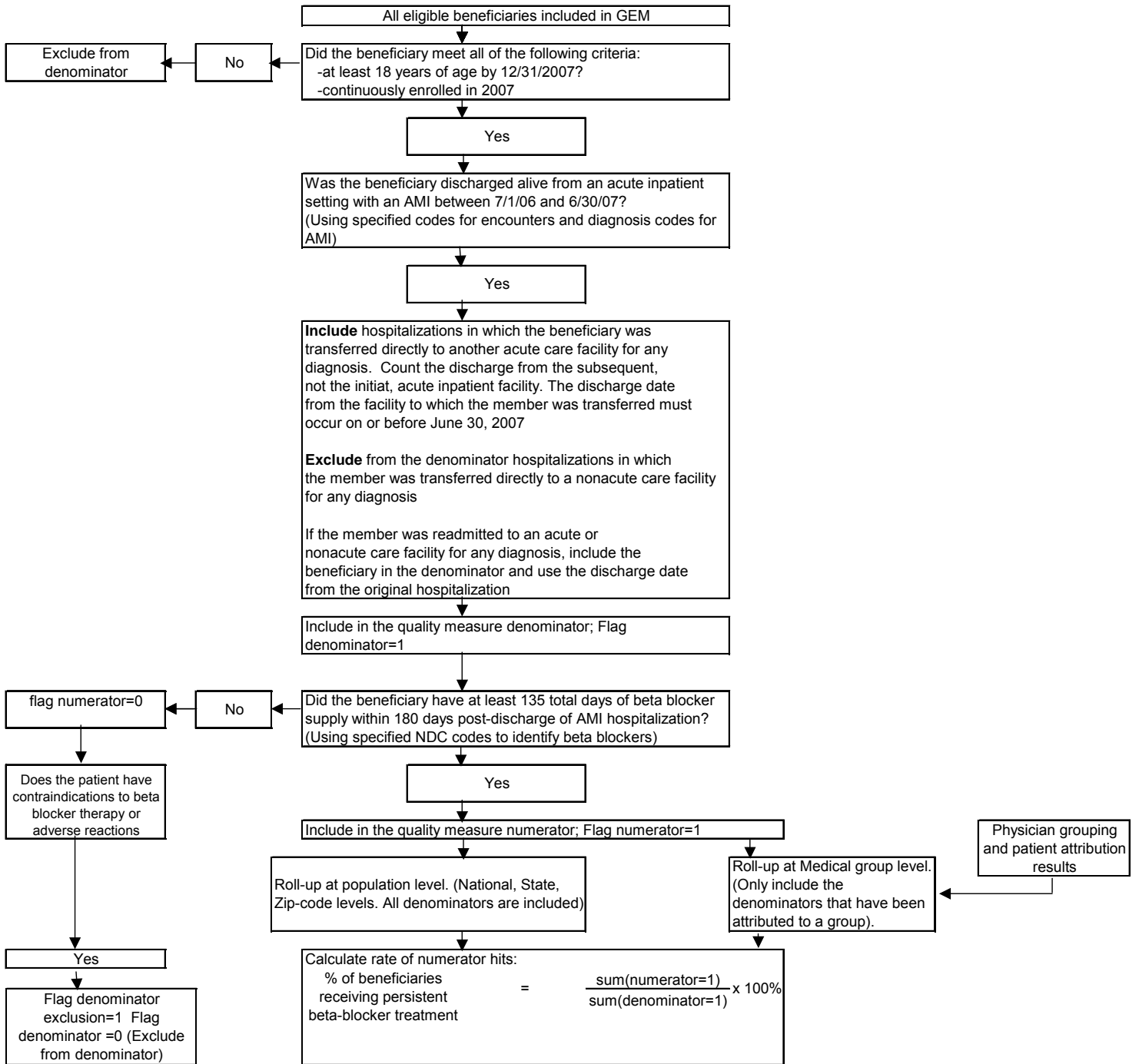
Measure Category	Description	Subcategory	Code Type	Codes
Denominator inclusions (event)	Diagnosis for AMI		ICD-9 CM Diagnosis	410.x1*
			CMS-DRG	121, 122, 516, 526 (before 10/01/2007)
			MS-DRG	280-282 (on or after 10/01/2007)
Denominator exclusion	Contraindications for beta-blocker therapy	History of asthma	NDC Codes	Any NDC in "PBH_Denominator.xls"***
			ICD-9 CM Diagnosis	493
		Hypotension	ICD-9 CM Diagnosis	458
		Heart block > 1 degree	ICD-9 CM Diagnosis	426.0, 426.12, 426.13, 426.2-426.4, 426.51-426.54, 426.7
		Sinus bradycardia	ICD-9 CM Diagnosis	427.81
	COPD	ICD-9 CM Diagnosis	491.2, 496, 506.4	
Numerator inclusion	Beta-blocker Medications <ul style="list-style-type: none"> • acebutolol • atenolol • atenolol-chlorthalidone • bendroflumethiazide-nadolol • betaxolol • bisoprolol • bisoprolol-hydrochlorothiazide • carteolol • carvedilol • hydrochlorothiazide-metoprolol • hydrochlorothiazide-propranolol • hydrochlorothiazide-timolol • labetalol • metoprolol • nadolol • penbutolol • pindolol • propranolol • sotalol • timolol 		NDC Codes	Any NDC in "PBH_Numerator.xls"†

*An organization that does not have a 5th digit specificity must develop a methodology to ensure that only the first eligible episode of an AMI is included in the measure

***Source: "Persistence of Beta-blocker Treatment after a Heart Attack (PBH) – Exclusions" link at <http://www.ncqa.org/tabid/598/Default.aspx>

†Source: "Persistence of Beta-blocker Treatment after a Heart Attack (PBH) – Numerator" link at <http://www.ncqa.org/tabid/598/Default.aspx>

Flowchart: Persistence of Beta-Blocker Treatment after a Heart Attack



Performance Measure Name: Annual Monitoring for Patients on Persistent Medications (MPM)

Description: The percentage of beneficiaries 18 years of age and older during 2007 who received at least a 180-days supply of ambulatory medication therapy for a selected therapeutic agent (ACE/ARBs, digoxin, diuretics, anticonvulsants) during 2007 and at least one therapeutic monitoring event for that therapeutic agent within 2007.

For each product line report each of the four rates separately and as a total rate.

- Annual monitoring for beneficiaries on angiotensin converting enzyme (ACE) inhibitors or angiotensin receptor blockers (ARB)
- Annual monitoring for beneficiaries on digoxin
- Annual monitoring for beneficiaries on diuretics
- Annual monitoring for beneficiaries on anticonvulsants
- Total rate (the sum of the 4 numerators divided by the sum of the four denominators)

Source of Measure: Health Plan HEDIS[®] 2008⁵

Denominator Statements:

Beneficiaries 18 years of age and older as of December 31, 2007 who had continuous enrollment in 2007.

Event/Diagnosis: Beneficiaries on persistent medications—defined as beneficiaries receiving at least a 180-days supply of ambulatory medication in 2007 for any medication listed in the medications table for each of the four rates in the measure. To determine continuity of treatment during the 365-day period, sum the number of treatment days (days supply from all the scripts filled during the year) for a total of 180 days.

Denominator Exclusion:

Exclude beneficiaries from each eligible population rate who had an inpatient stay (acute or nonacute) during 2007. Count any visit with an inpatient facility code or use DRGs or UB Type of Bill codes to identify acute and non-acute inpatient care.

⁵ Referred to as “HEDIS” in this document. The sources include both the original technical specifications and the subsequent technical update:

(1) National Committee for Quality Assurance (2007). *HEDIS 2008, Volume 2: Technical Specifications*. Washington, DC.

(2) National Committee for Quality Assurance (2007). *HEDIS 2008, Volume 2: Technical Update. October 1, 2007*. Retrieved October 9, 2008, from http://www.ncqa.org/Portals/0/PolicyUpdates/HEDIS Technical Updates/2008_Vol2_Technical_Update.pdf

Rate 1: Annual Monitoring for Beneficiaries on ACE/ARBs

Additional Denominator Statement:

The number of beneficiaries in the eligible population who received at least a 180-days supply of any ACE inhibitors or ARBs, including any combination products during 2007.

Note: Beneficiaries may switch therapy within the ACE/ARB class during 2007 and have the days supply for those medications count toward the total 180-days supply (i.e., a member who received 90 days of ACE inhibitors and 90 days of ARBs meets the denominator definition for rate 1).

Numerator Statement:

The number of beneficiaries with at least one serum potassium **and** either a serum creatinine or a blood urea nitrogen therapeutic monitoring test in 2007.

Note: The two tests do not need to occur on the same service date, only within 2007.

Rate 2: Annual Monitoring for Beneficiaries on Digoxin

Additional Denominator Statement:

The number of beneficiaries in the eligible population who received at least a 180-days supply of any drug for digoxin, including any combination products during 2007.

Note: Beneficiaries may switch therapy within digoxin medication class during 2007 and have the days supply for those medications count toward the total 180-days supply.

Numerator Statement:

The number of beneficiaries with at least one serum potassium **and** either a serum creatinine or a blood urea nitrogen therapeutic monitoring test in 2007.

Note: The two tests do not need to occur on the same service date, only within 2007.

Rate 3: Annual Monitoring for Beneficiaries on Diuretics

Additional Denominator Statement:

The number of beneficiaries in the eligible population who received at least a 180-day supply of any diuretic, including any combination products, during 2007.

Note: Members may switch therapy within any diuretics during 2007 and have the days supply for those medications count toward the total 180-days supply.

Numerator Statement:

The number of beneficiaries with at least one serum potassium and either a serum creatinine or a blood urea nitrogen therapeutic monitoring test during 2007.

Note: The two tests do not need to occur on the same service date, only within 2007.

Rate 4: Annual Monitoring for Beneficiaries on Anticonvulsants

Additional Denominator Statement:

The number of beneficiaries in the eligible population who received at least a 180-days supply for any anticonvulsant during 2007.

Note: Beneficiaries who are on multiple anticonvulsant drugs count toward the denominator multiple times if they meet the persistent medications criteria for each drug taken during 2007 (e.g., a beneficiary who received at least 180 days of phenytoin and 180 days of valproic acid will be counted twice in the denominator for Rate 4, once for each drug)

Numerator Statement:

The number of beneficiaries with at least one drug serum concentration level monitoring test for the prescribed drug in 2007. If a member received only one type of anticonvulsant, the drug serum concentration level test must be for the specific drug taken as a persistent medication (i.e., a member on phenytoin received a drug serum test for phenytoin).

If a beneficiary persistently received multiple types of anticonvulsants, each anticonvulsant medication and drug monitoring test combination is counted as a unique event (i.e., a beneficiary on both phenytoin and valproic acid with at least a 180-days supply for each drug in 2007 must separately show evidence of receiving drug serum concentration tests for each drug to be considered numerator-compliant for each drug.)

Deviation(s) from HEDIS:

1. Unlike the 45-day allowable gap in enrollment in the HEDIS specifications, all beneficiaries in the GEM project must be both Part A and Part B enrolled for the full 12 months of 2007. In addition, the following criteria will be used to exclude beneficiaries:
 - 1) Beneficiaries cannot have any months of Medicare Advantage enrollment.
 - 2) Beneficiaries cannot have any months of Medicare Part A only or Part B only enrollment (must have 12 months of both Medicare Part A and Part B enrollment).
 - 3) Beneficiaries cannot have any periods of Medicare secondary payer status.
 - 4) Beneficiaries cannot reside outside of the United States.
 - 5) Beneficiaries must have a record in the Medicare enrollment files.
 - 6) Beneficiaries cannot have any months of Hospice coverage.
2. HEDIS allows the denominator exclusions to be optional. However, for the GEM project, all optional denominator exclusion criteria specified in HEDIS were made mandatory, hence requiring excluding beneficiaries from each eligible population rate who had an inpatient stay (acute or nonacute) during 2007.

3. HEDIS specifies reporting a total rate as the sum of the 4 numerators divided by the sum of the 4 denominators. In the GEM project, the report for Cardiology groups will include only ACE/ARBs, digoxin and diuretics, hence the total rate will be based on these three medications. The report for Neurology groups will include only anticonvulsants, hence the total rate will be based on this single medication.
4. Identifying numerator compliance through the use of LOINC codes is not expected in Medicare claims data.

Algorithm Flow Chart: See Flowchart ACE/ARBs

Numerator and Denominator Codes

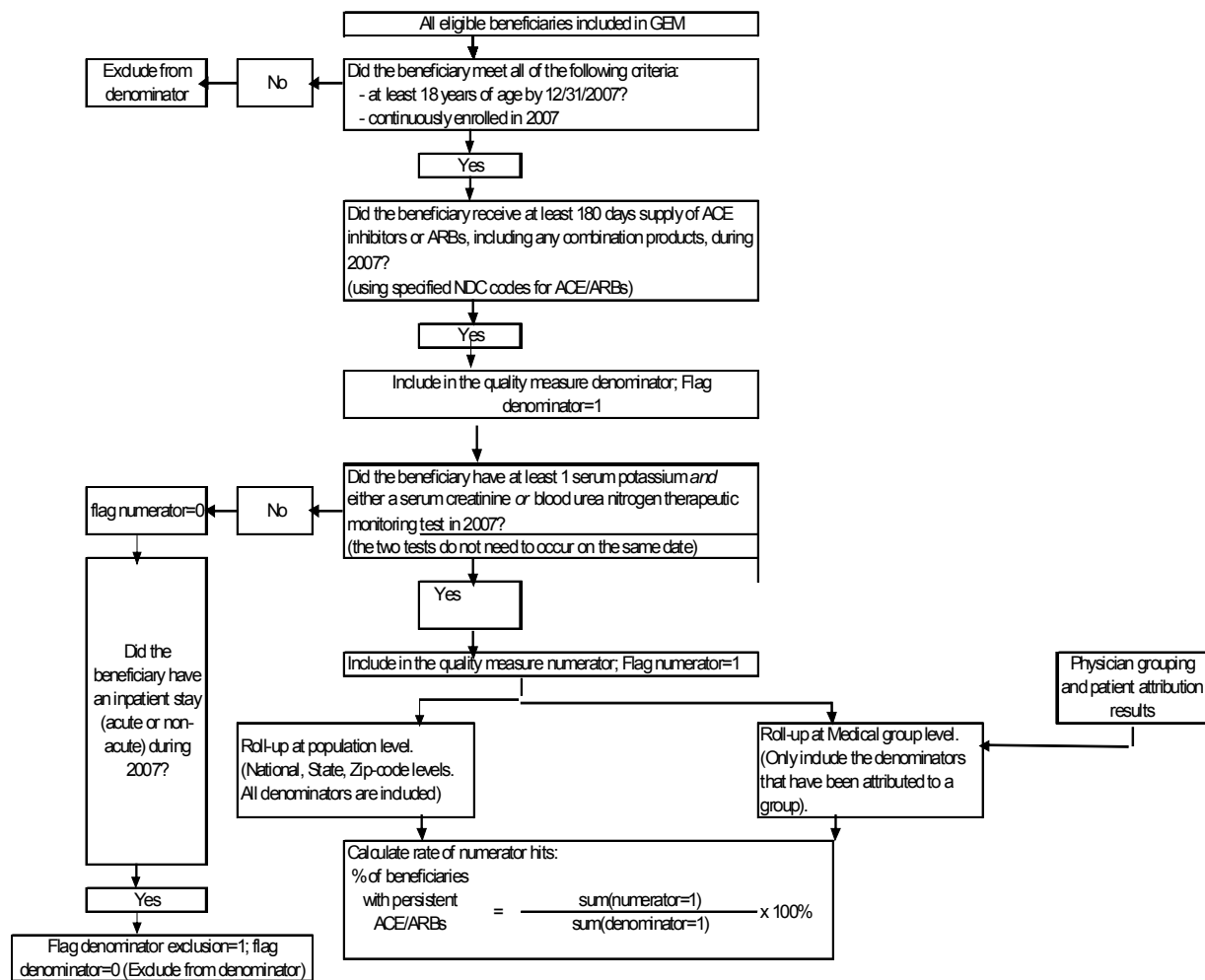
Measure Category	Description	Code Type	Codes	
Denominator inclusions	ACE Inhibitors or ARBs	NDC	Any NDC in "CDC_ACE_ARBs.xls"	
	Anticonvulsants	NDC	Any NDC in "MPM_Anticonvulsants.xls"	
	Digoxin	NDC	Any NDC in "MPM_Digoxins.xls"	
	Diuretics	NDC	Any NDC in "MPMDiuretics.xls"	
Denominator exclusions	Acute or nonacute inpatient	UB-92 Bill Type	11x, 12x, 18x, 21x, 22x, 41x, 42x, 81x, 82x, 84x	
		CMS-DRG	(Earlier than 10/1/07) 1-433, 439-455, 461-471, 473, 475 - 579	
		MS-DRG	(10/1/07 and later) 001-013, 020-042, 052-103, 113-117, 121-125, 129-139, 146-159, 163-168, 175-208, 215-264, 280-316, 326-358, 368-395, 405-425, 432-446, 453-517, 533-566, 573-585, 592-607, 614-630, 637-645, 652-675, 682-700, 707-718, 722-730, 734-750, 754-761, 765-770, 774-782, 789-795, 799-804, 808-816, 820-830, 834-849, 853-858, 862-872, 876, 880-887, 894-897, 901-909, 913-923, 927-929, 933-935, 939-941, 945-951, 955-959, 963-965, 969-970, 974-977, 981-989, 998, 999	
		ICD-9 CM Diagnosis	All principle diagnosis codes with an inpatient facility code;	
		HCPCS	T2048, H0017-H0019	
		UB-92 Revenue Codes	0115, 0125, 0135, 0145, 0155, 0650, 0656, 0658, 0659, 019x, 0118, 0128, 0138, 0148, 0158; 0655, 1002, 1001	
		POS	31, 32, 34, 54, 55, 56, 61	
		ICD-9 CM Proc	94.x in conjunction with an inpatient facility code	
Numerator inclusions (Physiologic Monitoring Tests for ACE/ARB; Digoxin; diuretics)	(1) Serum potassium (K ⁺)	CPT	80048, 80050, 80051, 80053, 80069, 84132	
		LOINC**	2824-1, 2823-3, 6298-4, 12812-4, 12813-2, 22760-3, 24320-4, 24321-2, 24322-0, 24323-8, 24326-1, 24362-6, 29349-8, 32713-0, 34548-8, 34554-6	
	WITH either (2) or (3)			
	(2) Serum creatinine (SCr)	CPT	80048, 80050, 80053, 80069, 82565, 82575	
		LOINC**	2160-0, 2163-4, 2164-2, 11041-1, 11042-9, 12195-4, 13441-1, 13442-9, 13443-7, 13446-0, 13447-8, 13449-4, 13450-2, 14682-9, 16188-5, 16189-3, 21232-4, 24321-2, 24322-0, 24323-8, 24320-4, 24362-6, 26752-6, 33558-8, 34555-3, 35591-7, 35592-5, 35593-3, 35594-1, 38483-4	
	OR			
	(3) Blood urea nitrogen (BUN)	CPT	80048, 80050, 80053, 80069, 84520, 84525	
		LOINC**	3094-0, 6299-2, 11064-3, 11065-0, 12964-3, 12965-0, 12966-8, 14937-7, 24320-4, 24321-2, 24322-0, 24323-8, 24362-6	
	<p>Note: For codes that are the same between (1) and (2) or between (1) and (3), they need occur only once to achieve numerator compliance. For example, if a CPT=80048 is found only one time in 2007, then the patient will be numerator compliant. However, if a CPT=80051 is found only one time in 2007, <i>another</i> CPT from either (2) or (3) must also be found for the patient to be numerator compliant.</p>			

Measure Category	Description	Code Type	Codes
Numerator inclusions (drug serum concentration monitoring tests for Anticonvulsants)	Drug serum concentration for phenobarbital	CPT	80184
		LOINC**	3948-7, 3951-1, 10547-8, 14874-2, 34365-7
	Drug serum concentration for phenytoin	CPT	80185, 80186
		LOINC**	3968-5, 3969-3, 14877-5, 32109-1, 34540-5
	Drug serum concentration for valproic acid (dipropylacetic acid)	CPT	80164
		LOINC**	4086-5, 4087-3, 4088-1, 14946-8, 18489-5, 21590-5, 32119-0, 32283-4
	Drug serum concentration for carbamazepine	CPT	80156, 80157
		LOINC**	3432-2, 3433-0, 9415-1, 14056-6, 14639-9, 18270-9, 29147-6, 29148-4, 32058-0, 32852-6, 34545-4

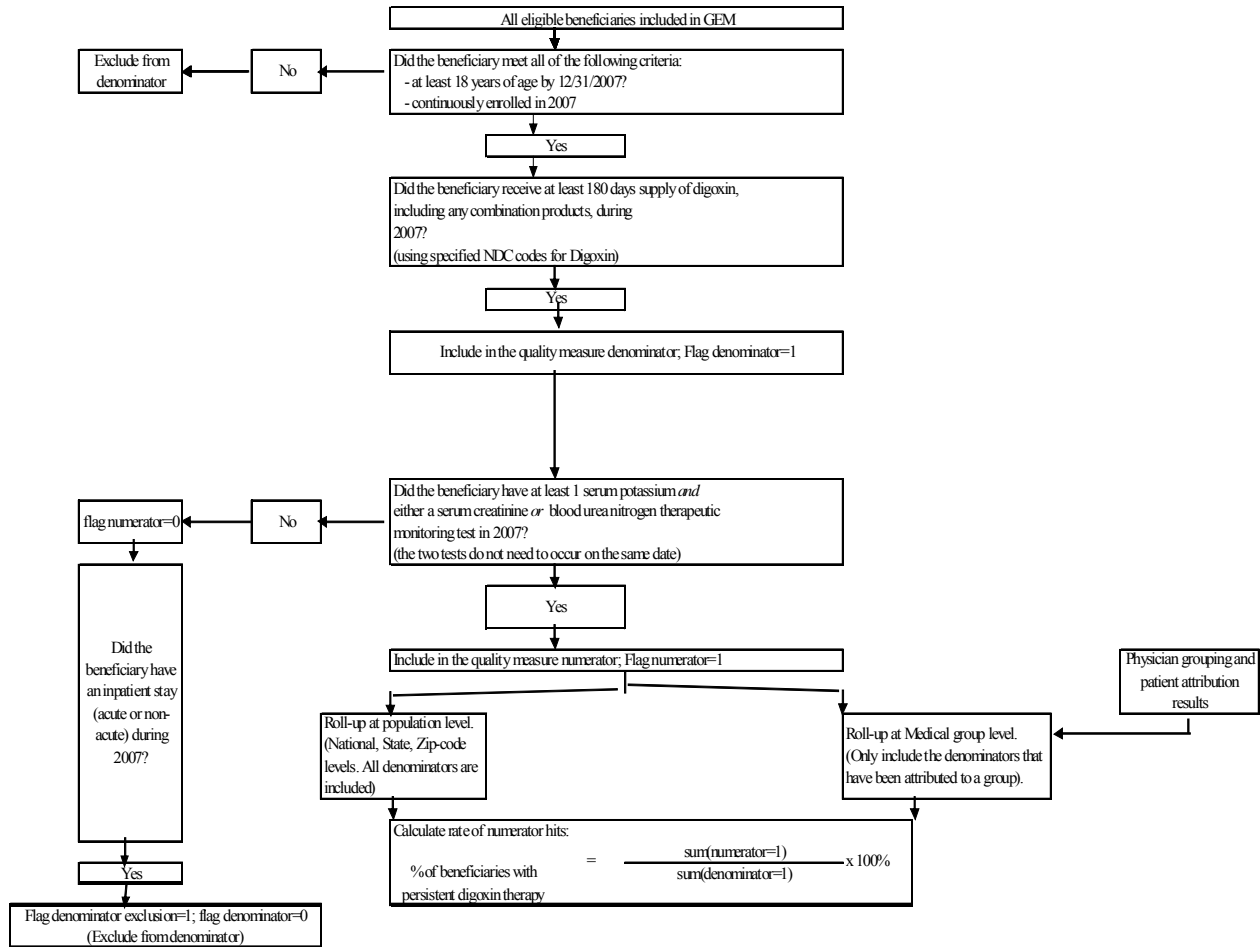
*Source: “Annual Monitoring for Patients on Persistent Medications (MPM)” link at <http://www.ncqa.org/tabid/598/Default.aspx>

**LOINC codes are not available in the Medicare claims data.

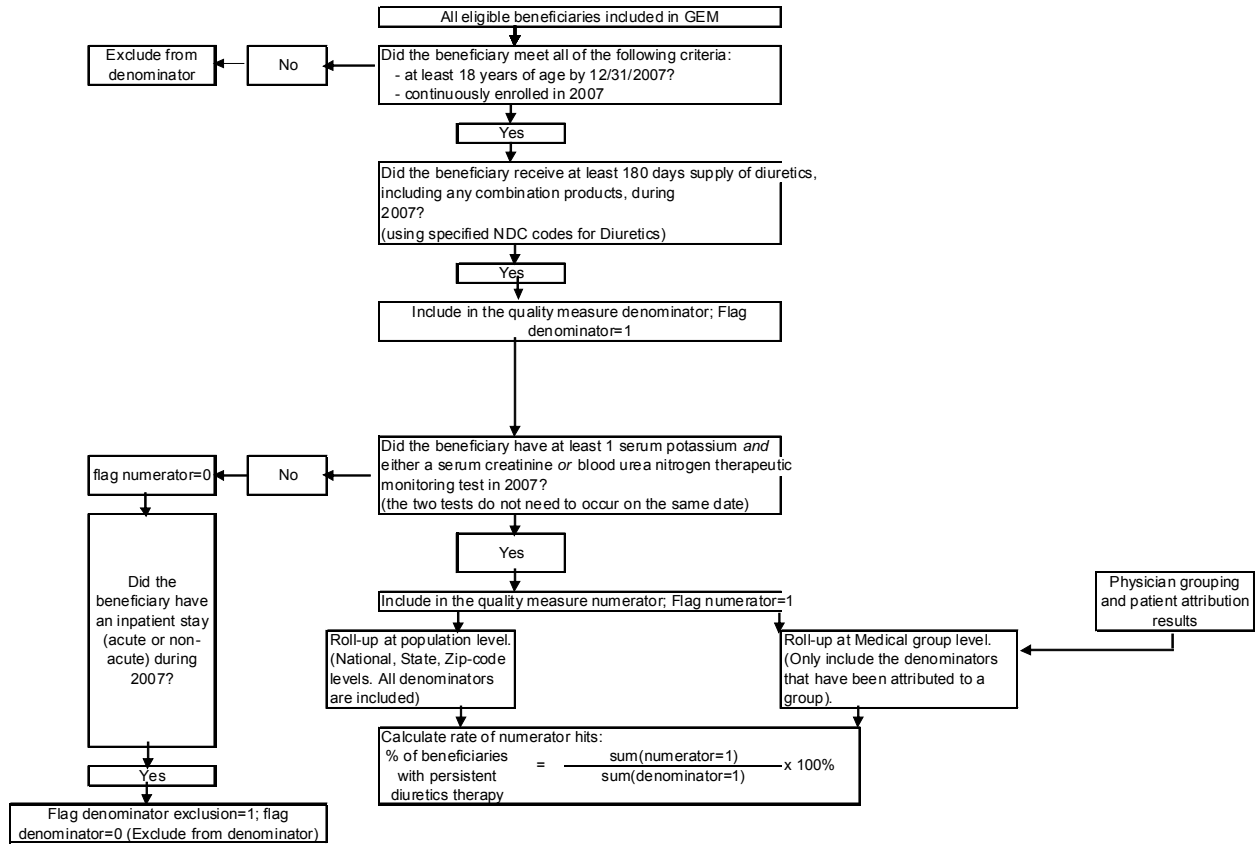
Flowchart: ACE/ARBs



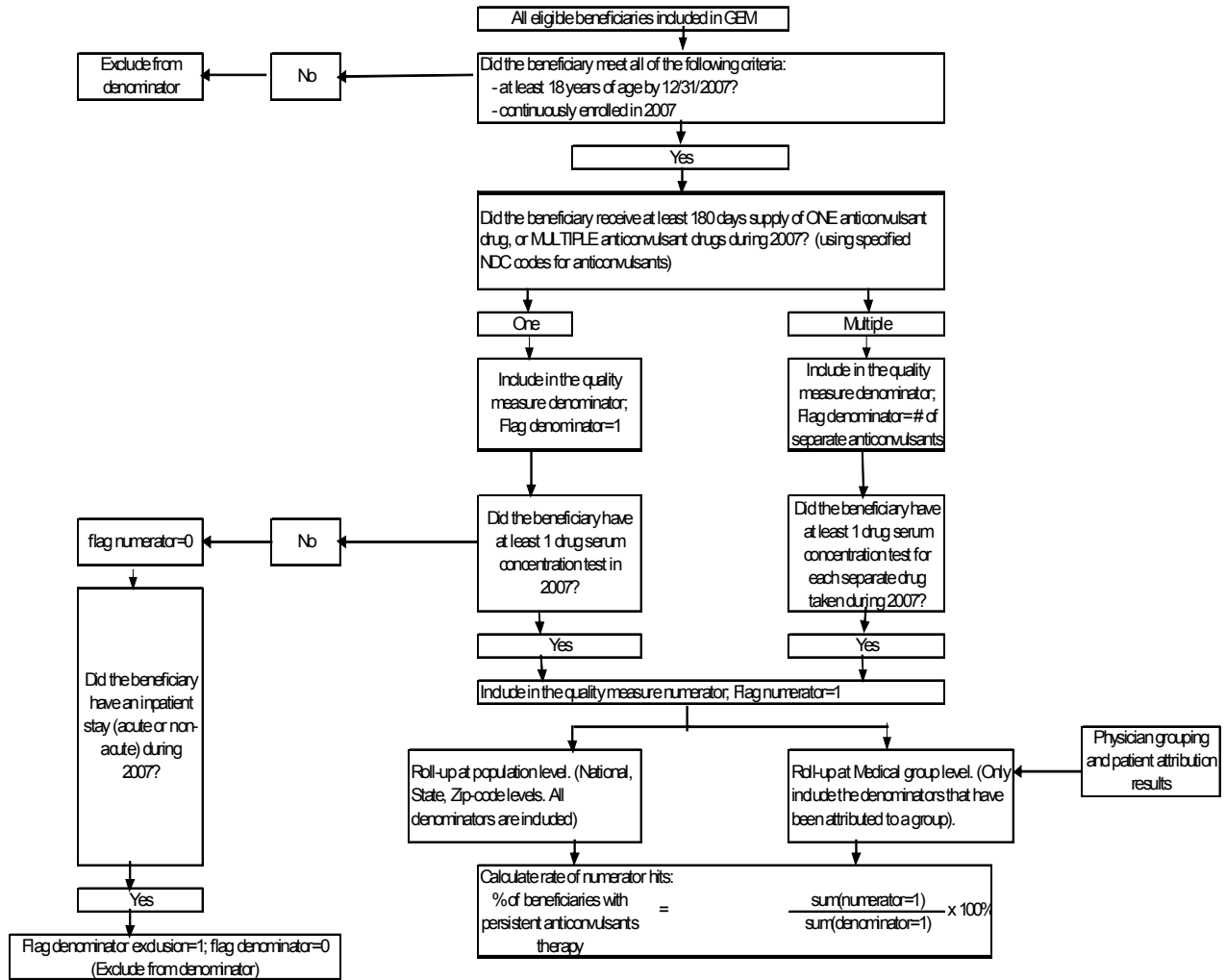
Flowchart: Digoxin



Flowchart: Diuretics



Flowchart: Anticonvulsants



Flowchart: Composite Score

$$\begin{aligned} & \text{\% of} \\ & \text{beneficiaries} \\ & \text{with} \\ & \text{persistent} \\ & \text{medication} \\ & \text{therapy} \\ & = \frac{\begin{aligned} & \sum(\text{individual ACE/ARBS numerator}=1) + \sum(\text{individual digoxin numerator}=1) \\ & + \\ & \sum(\text{individual diuretics numerator}=1) + \sum(\text{individual anticonvulsants} \\ & \text{numerator}=1) \end{aligned}}{\begin{aligned} & \sum(\text{individual ACE/ARBS denominator}=1) + \sum(\text{individual digoxin} \\ & \text{denominator}=1) + \\ & \sum(\text{individual diuretics denominator}=1) + \sum(\text{individual anticonvulsants} \\ & \text{denominator}=1) \end{aligned}} \times 100\% \end{aligned}$$

Performance Measure Name: Antidepressant Medication Management – Effective Acute Phase Treatment (AMM)

Description: The percentage of members 18 years of age and older as of April 30, 2007 who were diagnosed with a new episode of depression, were treated with antidepressant medication and remained on an antidepressant drug during an 84-day (12-week) Acute Treatment Phase.

Source of Measure: Health Plan HEDIS[®] 2008⁶

Denominator Statement:

Beneficiaries who were 18 years and older as of April 30, 2007 who were diagnosed with a “New Episode” of major depressive disorder during the Intake Period starting on May 1, 2006 and ending on April 30, 2007 (“Intake Period”) and treated with antidepressant medication.

To qualify as a “New Episode” two criteria must be met:

- A 120-day (4-month) Negative Diagnosis History prior to the Index Episode Start Date, which is the earliest encounter during the Intake Period with a qualifying diagnosis of major depression. During the negative diagnosis history period, the beneficiary must have no claims/encounters containing either a principal or secondary diagnosis of depression, using an expansive set of diagnosis codes for ruling out prior depressive episodes.
- A 90-day (3-month) Negative Medication History prior to the Index Prescription Date, which is the earliest prescription for antidepressants filled within a 45-day period, defined as 30 days prior to, through 14 days on or after the Index Episode Start Date. During the negative medication history period, the beneficiary must have no pharmacy claims for either new or refill prescriptions for a listed antidepressant drug. The period of medication history accounts for both the fill date as well as the days supplied of the prescription. That is, a prescription filled prior to the interval of 90 days prior to the Index Prescription Date, but with a number of days supplied that would overlap the 90 day interval, would violate the negative medication history requirement.

The following are the steps for identifying the denominator:

- (1) Identify all beneficiaries with a diagnosis of major depression who, during the Intake Period, had:
 - At least one principal diagnosis of major depression in any setting (e.g., outpatient visits, emergency room visits, inpatient discharges or partial hospitalizations), **or**

⁶Referred to as “HEDIS” in this document. The sources include both the original technical specifications and the subsequent technical update:

(1) National Committee for Quality Assurance (2007). *HEDIS 2008, Volume 2: Technical Specifications*. Washington, DC.

(2) National Committee for Quality Assurance (2007). *HEDIS 2008, Volume 2: Technical Update*. October 1, 2007. Retrieved October 9, 2008, from [http://www.ncqa.org/Portals/0/PolicyUpdates/HEDIS Technical Updates/2008_Vol2_Technical_Update.pdf](http://www.ncqa.org/Portals/0/PolicyUpdates/HEDIS%20Technical%20Updates/2008_Vol2_Technical_Update.pdf)

- At least two secondary diagnoses of major depression on different dates of service in any outpatient setting (e.g., outpatient or emergency room visits), *or*
- At least one secondary diagnosis of major depression associated with any inpatient discharge.

(2) Determine the Index Episode Start Date and test for Negative Diagnosis History. For each beneficiary identified in step 1, determine the Index Episode Start Date by finding the date of the beneficiary's earliest encounter during the Intake Period (i.e., outpatient or emergency room visit date, inpatient discharge date, partial hospitalization visit date) with a qualifying major depression diagnosis.

Identify beneficiaries who were diagnosed with a New Episode of depression. A new episode of depression is the earliest episode, during the intake period that meets the definition of a "New Episode." Only the earliest event during the intake period is used and tested against the criteria for each step. If the earliest event does not meet the criteria, the beneficiary is dropped. Events that occur subsequent to the earliest event should not be considered.

(3) Identify beneficiaries receiving antidepressant medication therapy. Among beneficiaries identified in step 2, find those who filled a prescription for an antidepressant medication within 30 days before the Index Episode Start Date to 14 days on or after the Index Episode Start Date. The Episode Start Date is considered day #0 of the 14 days.

(4) Calculate continuous enrollment. Beneficiaries must be continuously enrolled for 120 days prior to the Index Episode Start Date to 114 days (84 medication days plus 30 potential gap days) after the Index Prescription Start Date. For GEM beneficiaries, this specification requires that the actual start date be identified for the beneficiary and that "enrollment" includes Part D enrollment, in addition to the Part A/Part B enrollment.

(5) Identify the Index Prescription Date. Identify the earliest prescription up to 30 days before the Index Episode Start Date to 14 days on or after the Index Episode Start Date. The Episode Start Date is considered day #0 of the 14 days. Prescriptions may be up to 30 days before the Index Episode Start Date to account for beneficiaries having a recurrent episode who may be started on medication based on a phone encounter while awaiting a scheduled office visit.

Similarly, prescriptions may be 14 days on or after the Index Episode Start Date to account for either clinical discretion in recommending a 2-week trial of self-help techniques prior to starting on medication or for beneficiary delay in filling the initial prescription.

(6) From the resulting beneficiaries from step 5, confirm the New Episode by testing for a Negative Medication History.

(7) Given the potential for beneficiaries to have less than a full year of 2006 and 2007 Part D enrollment, denominator inclusion criteria requires that the beneficiary have Part D

enrollment for 3 months (i.e., 90 days) before the New Episode start date and 114 days after the Index Prescription Date.

Denominator Exclusion Statements:

- (1) Beneficiaries with any diagnosis of depression within the previous 120 days (4 months) of the Index Episode Start Date should be dropped from the denominator.
- (2) Beneficiaries who have antidepressant prescriptions filled during the Negative Medication History period violate the requirement for new treatment episodes and must be excluded.
- (3) Beneficiaries who had an acute inpatient stay with a principal diagnosis of mental health or substance abuse during the 114 days after the Index Prescription Date treatment period must be excluded.

These criteria do **not** set an exclusion flag. They merely define further denominator inclusion criteria and those beneficiaries who do not meet the denominator inclusion criteria.

Numerator Statement:

An 84-day (12-week) acute treatment with antidepressant medication.

Identify all beneficiaries in the denominator population who filled a sufficient number of separate prescriptions/refills of antidepressant medication treatment to provide continuous treatment for at least 84 days.

Continuous treatment allows gaps in medication treatment up to a total of 30 days during the 84-day period. Allowable medication changes or gaps include:

- “washout” period gaps to change medication
- “treatment” gaps to refill the same medication

Regardless of the number of gaps, the total gap days may be no more than 30 days. The organization may count any combination of gaps (e.g., two washout gaps, each 15 days, or two washout gaps of 10 days each and one treatment gap of 10 days). The total gap days may not exceed 30 days.

To determine continuity of treatment during the 114-day period, sum the number of gap days to the number of treatment days for a maximum of 114 days (i.e., 84 treatment days + 30 gap days = 114 days).

For all prescriptions filled within 114 days of the Index Prescription Date, the organization should count treatment days on the Index Prescription Date and continue to count until a total of 84 treatment days has been established. Beneficiaries whose gap days exceed 30 or who do not have 84 treatment days within 114 days after the Index Prescription Date are not counted in the numerator.

Deviation(s) from HEDIS:

1. Unlike the 45-day allowable gap in enrollment in the HEDIS specifications, all beneficiaries in the GEM project must be both Part A and Part B enrolled for the full 12 months of 2007. The following criteria will be used to exclude beneficiaries:
 - 1) Beneficiaries cannot have any months of Medicare Advantage enrollment.
 - 2) Beneficiaries cannot have any months of Medicare Part A only or Part B only enrollment (must have 12 months of both Medicare Part A and Part B enrollment).
 - 3) Beneficiaries cannot have any periods of Medicare secondary payer status.
 - 4) Beneficiaries cannot reside outside of the United States.
 - 5) Beneficiaries must have a record in the Medicare enrollment files.
 - 6) Beneficiaries cannot have any months of Hospice coverage.

2. Based on NCQA advice, DRG codes are not used for the diagnosis of depression as we cannot determine primary vs. secondary diagnoses of depression using DRG codes in the GEM data.

3. Codes for identifying visit type are not included in HEDIS 2008. Based on NCQA's advice, we used codes from HEDIS 2009 for identifying visit type.

Algorithm Flow Chart: See Flowchart Acute Phase Antidepressant Medication Management

Denominator and Numerator Codes

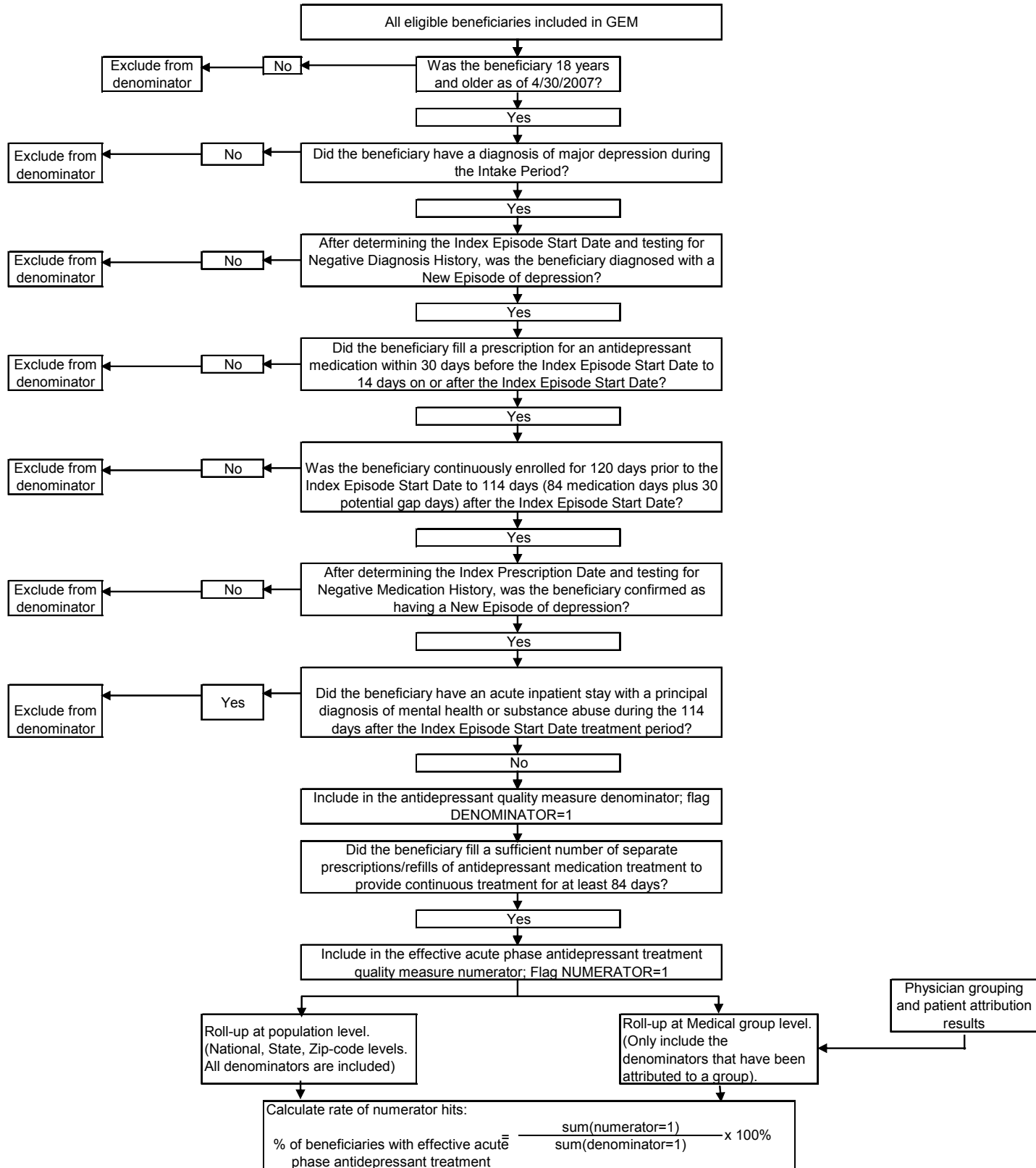
Measure Category	Description	SubCategory	Coding Scheme	Codes
Denominator Inclusion	Diagnosis	Major depression*	ICD-9-CM Diagnosis	296.20-296.25, 296.30-296.35, 298.0, 300.4, 309.1, 311
		Prior depressive episodes	ICD-9-CM Diagnosis	296.2-296.9, 298.0, 300.4, 309.0, 309.1, 309.28, 311
	Procedure	Outpatient, intensive outpatient and partial hospitalization	CPT	90804-90815, 98960-98962, 99078, 99201-99205, 99211-99215, 99217-99220, 99241-99245, 99341-99345, 99347-99350, 99384-99387, 99394-99397, 99401-99404, 99411, 99412, 99510
			CPT (used with POS)	90801, 90802, 90816-90819, 90821-90824, 90826-90829, 90845, 90847, 90849, 90853, 90857, 90862, 90870, 90871, 90875, 90876, 99221-99223, 99231-99233, 99238, 99239, 99251-99255, 99261-99263
			POS	05, 07, 11, 12, 15, 20, 22, 49, 50, 52, 53, 71, 72, 03, 09, 13, 14, 33
			HCPCS	G0155, G0176, G0177, H0002, H0004, H0031, H0034-H0037, H0039, H0040, H2000, H2001, H2010-H2020, M0064, S0201, S9480, S9484, S9485
			UB-92 Revenue	0510, 0513, 0515-0517, 0519-0523, 0526-0529, 077x, 0900, 0902-0905, 0907, 0911-0917, 0919, 0982, 0983, 0901
		Emergency department	CPT	99281-99285
			UB-92 Revenue	045x, 0981
		Acute Inpatient	CPT	99221-99223, 99231-99233, 99238, 99239, 99251-99255, 99261-99263, 99291
			UB-92 Revenue	010x, 0110-0114, 0119, 0120-0124, 0129, 0130-0134, 0139, 0140-0144, 0149, 0150-0154, 0159, 016x, 020x-022x, 072x, 080x, 0987
		Nonacute inpatient	CPT	99301-99313, 99315, 99316, 99318, 99321-99328, 99331-99337
			UB-92 Revenue	0118, 0128, 0138, 0148, 0158, 019x, 0524, 0525, 055x, 066x

Measure Category	Description	SubCategory	Coding Scheme	Codes
Denominator Exclusion	Diagnosis	Mental Health Utilization— Mental health diagnosis	ICD-9-CM Principal Diagnosis	290, 293-302, 306-316
			CMS-DRG	424-432 except discharges with ICD-9-CM principal diagnosis of 317-319 (Earlier than 10/1/07)
			MS-DRG	876, 880-887 except discharges with ICD-9-CM principal diagnosis of 317-319 (10/1/07 and later)
		Substance abuse	ICD-9-CM Principal Diagnosis	291-292, 303-305, 960-979 with a secondary diagnosis of chemical dependency (291-292, 303-305)
			CMS-DRG	433, 521-523 (Earlier than 10/1/07)
			MS-DRG	894-897 (10/1/07 and later)
Numerator Inclusion	Antidepressant Medications <ul style="list-style-type: none"> • Miscellaneous antidepressants • Monoamine oxidase inhibitors • Phenylpiperazine antidepressants • Psychotherapeutic combinations • SSNRI antidepressants • SSRI antidepressants • Tetracyclic antidepressants • Tricyclic antidepressants 		NDC	Any NDC in “AMM_Medications.xls”**

*Brief depressive reaction (309.0) is not used for diagnosis, since it includes grief reaction (believed to be the most common use of that code). Additionally, other possible codes that could indicate depression diagnosis (296.4-296.9, 309.0, 309.28) are not included in this list because these codes are less specific in identifying eligible beneficiaries.

**Source: “Antidepressant Medication Management (AMM)” link at <http://www.ncqa.org/tabid/598/Default.aspx>

Flowchart: Acute Phase Antidepressant Medication Management



Performance Measure Name: Beta-Blocker Treatment after a Heart Attack (BBH)

Description: The percentage of members 35 years of age and older during 2007 who were hospitalized and discharged alive from January 1, 2007 to December 24, 2007 with a diagnosis of acute myocardial infarction (AMI) and who received an ambulatory prescription of beta-blockers upon discharge.

Source of Measure: Health Plan HEDIS[®] 2007⁷

Denominator Statement:

Beneficiaries 35 years of age and older as of December 31, 2007 who had continuous enrollment for both medical services and pharmacy from the discharge date through seven days after discharge date. Beneficiaries are identified for the denominator by event/diagnosis. Additional rules follow as to how to count transfers and readmissions.

Event/Diagnosis: Discharged alive from an acute inpatient setting with an AMI between January 1, 2007 through December 24, 2007. If a beneficiary had more than one episode of AMI from January 1, 2007 through December 24, 2007, include only the first discharge.

Transfers to acute facilities: Include hospitalizations in which the beneficiary was transferred directly to another acute care facility for any diagnosis. The discharge date from the facility to which the beneficiary was transferred must occur on or before December 24, 2007.

Transfers to nonacute facilities: Exclude from the denominator hospitalizations in which the beneficiary was transferred directly to a nonacute care facility for any diagnosis.

Readmissions. Exclude from the denominator hospitalizations in which the beneficiary was readmitted to an acute or nonacute care facility for any diagnosis within seven days after discharge, because tracking the beneficiary between admissions is not deemed feasible. AMI hospitalizations occurring within the January 1, 2007 through the December 24, 2007 time interval that are, in fact, readmissions of hospitalizations occurring before the beginning of this time interval should also be excluded.

Denominator Exclusions:

The organization should exclude from the denominator beneficiaries who are identified as having a contraindication to beta-blocker therapy or previous adverse reaction (i.e., intolerance) to beta-blocker therapy. The organization should look back as far back as possible in the beneficiary's

⁷ Referred to as "HEDIS" in this document. The sources include both the original technical specifications and the subsequent technical update:

(1) National Committee for Quality Assurance (2007). *HEDIS 2008, Volume 2: Technical Specifications*. Washington, DC.

(2) National Committee for Quality Assurance (2007). *HEDIS 2008, Volume 2: Technical Update. October 1, 2007*. Retrieved October 9, 2008, from [http://www.ncqa.org/Portals/0/PolicyUpdates/HEDIS Technical Updates/2008_Vol2_Technical_Update.pdf](http://www.ncqa.org/Portals/0/PolicyUpdates/HEDIS%20Technical%20Updates/2008_Vol2_Technical_Update.pdf)

history through the end of the continuous enrollment period, defined as the discharge date through seven days after discharge (inclusive), for evidence of a contraindication or a previous adverse reaction to beta-blocker therapy.

Numerator Statement:

Beneficiaries who received an ambulatory prescription for beta-blockers on the date of discharge or within seven days after discharge as indicated by pharmacy or claims data. The date of discharge counts as day 0. The date after discharge counts as day 1. Prescriptions rendered on an **ambulatory basis** while a patient is hospitalized for AMI through the seventh day after discharge count toward this measure. If the organization is unable to determine whether the prescription was rendered on an inpatient or ambulatory basis, it may only count prescriptions rendered after discharge. To account for beneficiaries who are on beta-blockers prior to admission, the organization may also count beta-blocker prescriptions that are active at the time of admission.

A prescription is considered **active** if the “days supply” indicated on the date the member filled the prescription is the number of days or more between the date the prescription was filled and the relevant admission date.

Transfers. If a beneficiary was directly transferred to another acute facility, identify that the prescription is active on the date of admission for the initial inpatient stay for AMI or that the beneficiary received a beta-blocker prescription within seven days after the discharge from the facility to which the beneficiary was transferred. For claims data, a code for “beta-blocker therapy prescribed” on or between the discharge date and seven days after discharge indicates the member is numerator compliant.

Deviation(s) from HEDIS:

1. This measure was dropped by HEDIS 2008. We used *Health Plan HEDIS 2007* for the functional specifications.
2. Unlike the 45-day allowable gap in enrollment in the HEDIS specifications, all beneficiaries in the GEM project must be both Part A and Part B enrolled for the full 12 months of 2007. In addition, the following criteria will be used to exclude beneficiaries:
 - Beneficiaries cannot have any months of Medicare Advantage enrollment.
 - Beneficiaries cannot have any months of Medicare Part A only or Part B only enrollment (must have 12 months of both Medicare Part A and Part B enrollment).
 - Beneficiaries cannot have any periods of Medicare secondary payer status.
 - Beneficiaries cannot reside outside of the United States.
 - Beneficiaries must have a record in the Medicare enrollment files.
 - Beneficiaries cannot have any months of Hospice coverage.
3. HEDIS allows the denominator exclusions to be optional. However, for the GEM project, all optional denominator exclusion criteria specified in HEDIS were made mandatory. For the exclusion based on contraindications to beta-blockers, HEDIS specified that the diagnosis can occur at any time in the beneficiary’s history through the

end of the continuous enrollment period, defined as discharge date through 7 days after discharge (inclusive). GEM will exclude patients from the denominator if we can find a diagnosis of contraindications to beta-blockers during 2005 to 2007.

Algorithm Flow Chart: See Flowchart Beta Blocker Treatment after a Heart Attack (BBH)

Denominator and Numerator Codes

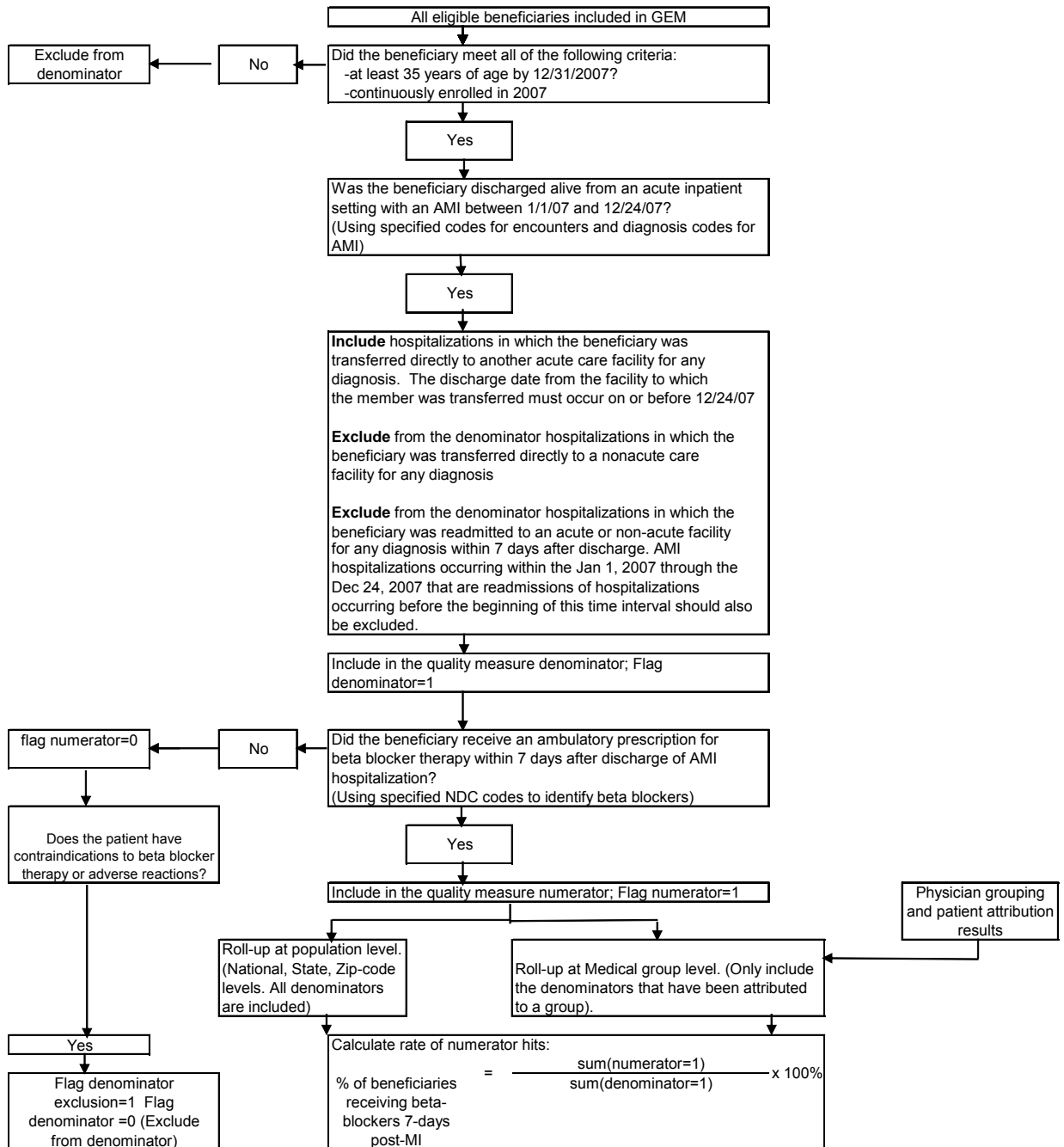
Measure Category	Description	Subcategory	Code Type	Codes
Denominator inclusions (event)	Diagnosis for AMI		ICD-9 CM Diagnosis	410.x1*
			CMS-DRG	121, 122, 516, 526 (before 10/01/2007)
			MS-DRG	280-282 (on or after 10/01/2007)
Denominator exclusion	Contraindications for beta-blocker therapy	History of asthma	NDC Codes	Any NDC in "PBH Exclusions.xls"**
			ICD-9 CM Diagnosis	493
		Hypotension	ICD-9 CM Diagnosis	458
		Heart block > 1 degree	ICD-9 CM Diagnosis	426.0, 426.12, 426.13, 426.2-426.4, 426.51-426.54, 426.7
		Sinus bradycardia	ICD-9 CM Diagnosis	427.81
	COPD	ICD-9 CM Diagnosis	491.2, 496, 506.4	
Numerator inclusion	Beta-blocker Medication		NDC Codes	Any NDC in "PBH Numerator.xls"†
	<ul style="list-style-type: none"> • Acebutolol HCL • Atentolol • Betaxolol HCL • Bisoprolol fumarate • Carteolol HCL • Carvedilol • Labetolol HCL • Metoprolol succinate • Metoprolol tartrate • Nadolol • Penbutolol sulfate • Pindolol • Propanolol HCL • Sotalol HCL • Timolol maleate 			
	Beta blocker therapy prescribed		CPT II	4006F

*An organization that does not have a 5th digit specificity must develop a methodology to ensure that only the first eligible episode of an AMI is included in the measure.

**Source: "Persistence of Beta-Blocker Treatment after a Heart Attack (PBH) - Exclusions.xls" link at <http://www.ncqa.org/tabid/598/Default.aspx>

†Source: "Persistence of Beta-Blocker Treatment after a Heart Attack (PBH) - Numerator.xls" link at <http://www.ncqa.org/tabid/598/Default.aspx>

Flowchart: Beta Blocker Treatment after a Heart Attack (BBH)



Performance Measure Name: Disease Modifying Anti-Rheumatic Drug Therapy in Rheumatoid Arthritis (ART)

Description: This measure assesses whether patients diagnosed with rheumatoid arthritis have had at least one ambulatory prescription dispensed for a disease modifying anti-rheumatic drug (DMARD).

Source of Measure: Health Plan HEDIS[®] 2008⁸

Denominator Statement:

Include beneficiaries 18 years of age and older as of December 31, 2007 who had continuous enrollment for both medical service and pharmacy during 2007. Beneficiaries are identified for the denominator by event/diagnosis.

Event/Diagnosis: Two face-to-face physician encounters with different dates of service in an outpatient or non-acute inpatient setting on or between January 1 and November 30, 2007 with any diagnosis of rheumatoid arthritis. A valid diagnosis code must be found in conjunction with a valid visit code on the same date.

Denominator Exclusions:

Exclude from the denominator beneficiaries who have a diagnosis code for pregnancy during 2007.

Exclude from the denominator beneficiaries who have been diagnosed with HIV. The organization should use administrative data to look for evidence of HIV diagnosis as far back as possible in the beneficiary's history.

Numerator Statement:

Include beneficiaries who had at least one ambulatory prescription dispensed for a disease modifying anti-rheumatic drug (DMARD) during 2007.

Deviation(s) from HEDIS:

⁸Referred to as "HEDIS" in this document. The sources include both the original technical specifications and the subsequent technical update:

(1) National Committee for Quality Assurance (2007). *HEDIS 2008, Volume 2: Technical Specifications*. Washington, DC.

(2) National Committee for Quality Assurance (2007). *HEDIS 2008, Volume 2: Technical Update. October 1, 2007*. Retrieved October 9, 2008, from http://www.ncqa.org/Portals/0/PolicyUpdates/HEDIS Technical Updates/2008_Vol2_Technical_Update.pdf

1. Unlike the 45-day allowable gap in enrollment in the HEDIS specifications, all beneficiaries in the GEM project must be both Part A and Part B enrolled for the full 12 months of 2007. In addition, the following criteria will be used to exclude beneficiaries:
 - 1) Beneficiaries cannot have any months of Medicare Advantage enrollment.
 - 2) Beneficiaries cannot have any months of Medicare Part A only or Part B only enrollment (must have 12 months of both Medicare Part A and Part B enrollment).
 - 3) Beneficiaries cannot have any periods of Medicare secondary payer status.
 - 4) Beneficiaries cannot reside outside of the United States.
 - 5) Beneficiaries must have a record in the Medicare enrollment files.
 - 6) Beneficiaries cannot have any months of Hospice coverage.

2. HEDIS allows the denominator exclusion to be optional. However, for the GEM project, the optional denominator exclusion criteria specified in HEDIS was made mandatory. For evidence of HIV, HEDIS specifies to look as far back as possible in the beneficiary's history. GEM can exclude patients from the denominator if we can find evidence of HIV during 2005 to 2007.

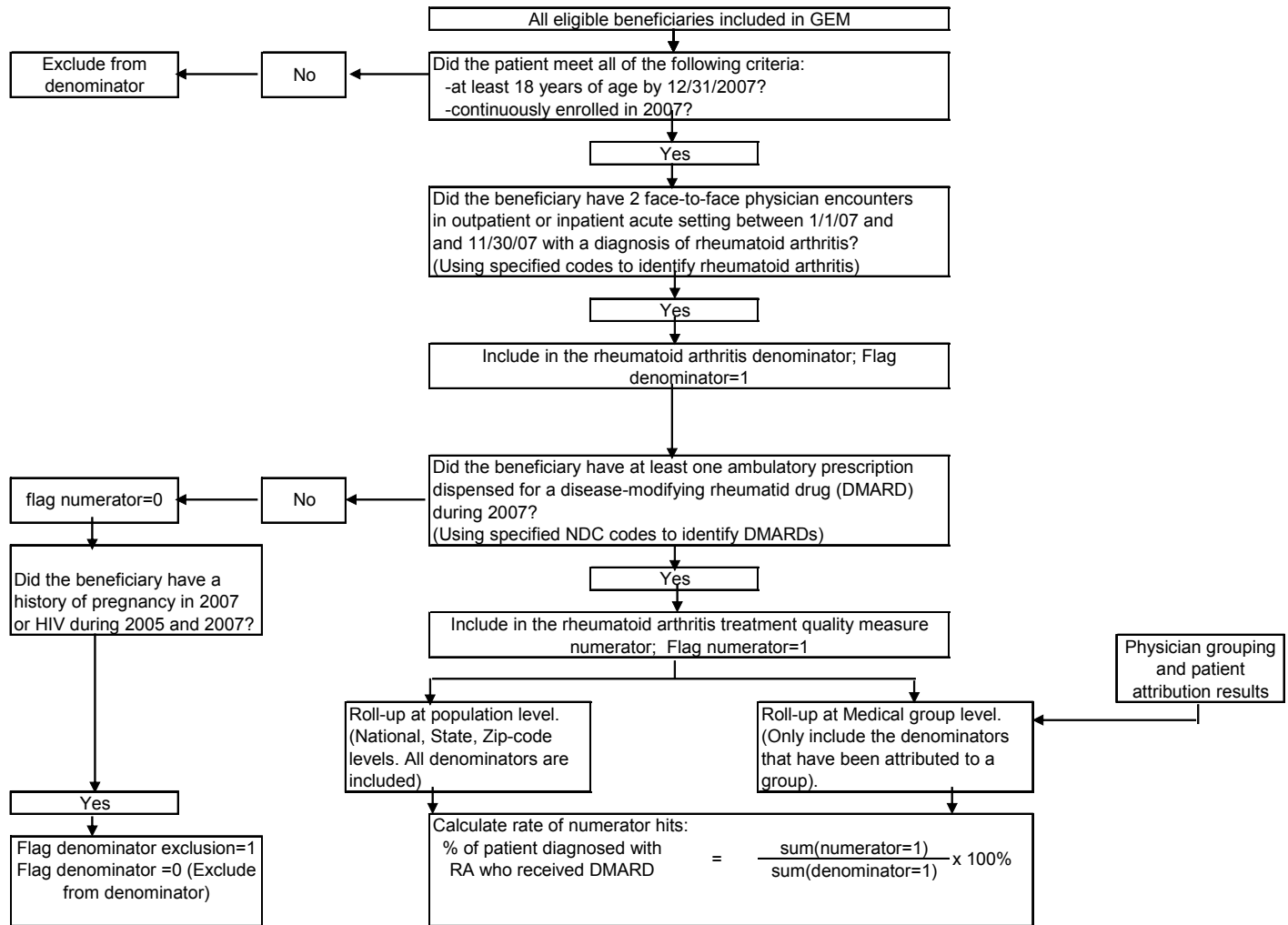
Algorithm Flow Chart: See Flowchart Disease Modifying Anti-Rheumatic Drug Therapy in Rheumatoid Arthritis

Denominator and Numerator Codes

Measure Category	Description		Code Type	Codes
Denominator inclusions	Rheumatoid Arthritis diagnosis		ICD-9 CM Diagnosis	714.0, 714.1, 714.2, 714.81
	Procedure	Outpatient visit	CPT	99201-99205, 99211-99215, 99241-99245, 99341-99345, 99347-99350, 99384-99387, 99394-99397, 99401-99404, 99411, 99412, 99420, 99429, 99455, 99456, 99499
			UB-92 Revenue	051x, 0520 – 0523, 0526 - 0529, 057x-059x, 077x, 0982, 0983
		Non-acute inpatient	CPT	99301-99313, 99315, 99316, 99318, 99321-99328, 99331-99337
			UB-92 Revenue	0118, 0128, 0138, 0148, 0158, 019x, 0524, 0525, 055x, 066x
Denominator exclusion	HIV		ICD-9 CM Diagnosis	042, V08
	Pregnancy		ICD-9 CM Diagnosis	630-677, V22, V23, V28
Numerator inclusion	DMARDs <ul style="list-style-type: none"> • Abatacept • Adalimumab • Anakinra • Azathioprine • Cyclophosphamide) • Cyclosporine • Etanercept • Gold (oral or intramuscular) • Hydroxychloroquine • Infliximab) • Leflunomide • Methotrexate • Minocycline • Penicillamine • Rituximab • Staphylococcal Protein A • Sulfasalazine 		NDC	Any NDC in “ART_Numerator.xls”*
	DMARD Infused Medications		J code	J0129, J0135, J1438, J1600, J1745, J7502, J7515, J7516, J9250, J9260

* Source: “Disease Modifying Anti-Rheumatic Drug Therapy in Rheumatoid Arthritis (ART)” link at <http://www.ncqa.org/tabid/598/Default.aspx>

Flowchart: Disease-Modifying Anti-Rheumatic Drug Therapy in Rheumatoid Arthritis



Performance Measure Name: Colorectal Cancer Screening (COL)

Description: The percentage of beneficiaries 50–80 years of age who had appropriate screening for colorectal cancer.

Source of Measure: Health Plan HEDIS⁹ 2008⁹

Denominator Statement:

Beneficiaries 51–80 years of age as of December 31, 2007 who had continuous enrollment during 2007 and 2006.

Denominator Exclusion Statements:

Beneficiaries with a diagnosis of colorectal cancer or total colectomy. The organization should look for evidence of colorectal cancer or total colectomy as far back as possible in the beneficiary’s history.

Numerator Statement:

One or more screenings for colorectal cancer. Appropriate screenings are defined by any one of the four criteria below.

- Fecal occult blood test (FOBT) during 2007.
- Flexible sigmoidoscopy during 2005 to 2007.
- Double contrast barium enema (DCBE) or air contrast barium enema during 2005 to 2007.
- Colonoscopy during 2005 to 2007.

Deviation(s) from HEDIS:

1. Unlike the 45-day allowable gap in enrollment in the HEDIS specifications, all beneficiaries in the GEM project must be both Part A and Part B enrolled for the full 12 months of 2007. In addition, the following criteria will be used to exclude beneficiaries:
 - 1) Beneficiaries cannot have any months of Medicare Advantage enrollment.
 - 2) Beneficiaries cannot have any months of Medicare Part A only or Part B only enrollment (must have 12 months of both Medicare Part A and Part B enrollment).
 - 3) Beneficiaries cannot have any periods of Medicare secondary payer status.
 - 4) Beneficiaries cannot reside outside of the United States.

⁹Referred to as “HEDIS” in this document. The sources include both the original technical specifications and the subsequent technical update:

(1) National Committee for Quality Assurance (2007). *HEDIS 2008, Volume 2: Technical Specifications*. Washington, DC.

(2) National Committee for Quality Assurance (2007). *HEDIS 2008, Volume 2: Technical Update. October 1, 2007*. Retrieved October 9, 2008, from [http://www.ncqa.org/Portals/0/PolicyUpdates/HEDIS Technical Updates/2008_Vol2_Technical_Update.pdf](http://www.ncqa.org/Portals/0/PolicyUpdates/HEDIS%20Technical%20Updates/2008_Vol2_Technical_Update.pdf)

- 5) Beneficiaries must have a record in the Medicare enrollment files.
 - 6) Beneficiaries cannot have any months of Hospice coverage.
2. HEDIS allows the denominator exclusion to be optional. However, for the GEM project, the optional denominator exclusion criteria specified in HEDIS was made mandatory. For evidence of colorectal cancer or total colectomy, HEDIS specifies to look as far back as possible in the beneficiary's history. GEM can exclude patients from the denominator if we can find evidence of either colorectal cancer or total colectomy during 2005 to 2007.
 3. HEDIS requires a look back period of five years for flexible sigmoidoscopy, five years for double contrast barium enema (DCBE), and 10 years for colonoscopy. Due to the data availability for GEM, we will look back only three years for above screenings, and therefore may underestimate the rate of numerator compliance.

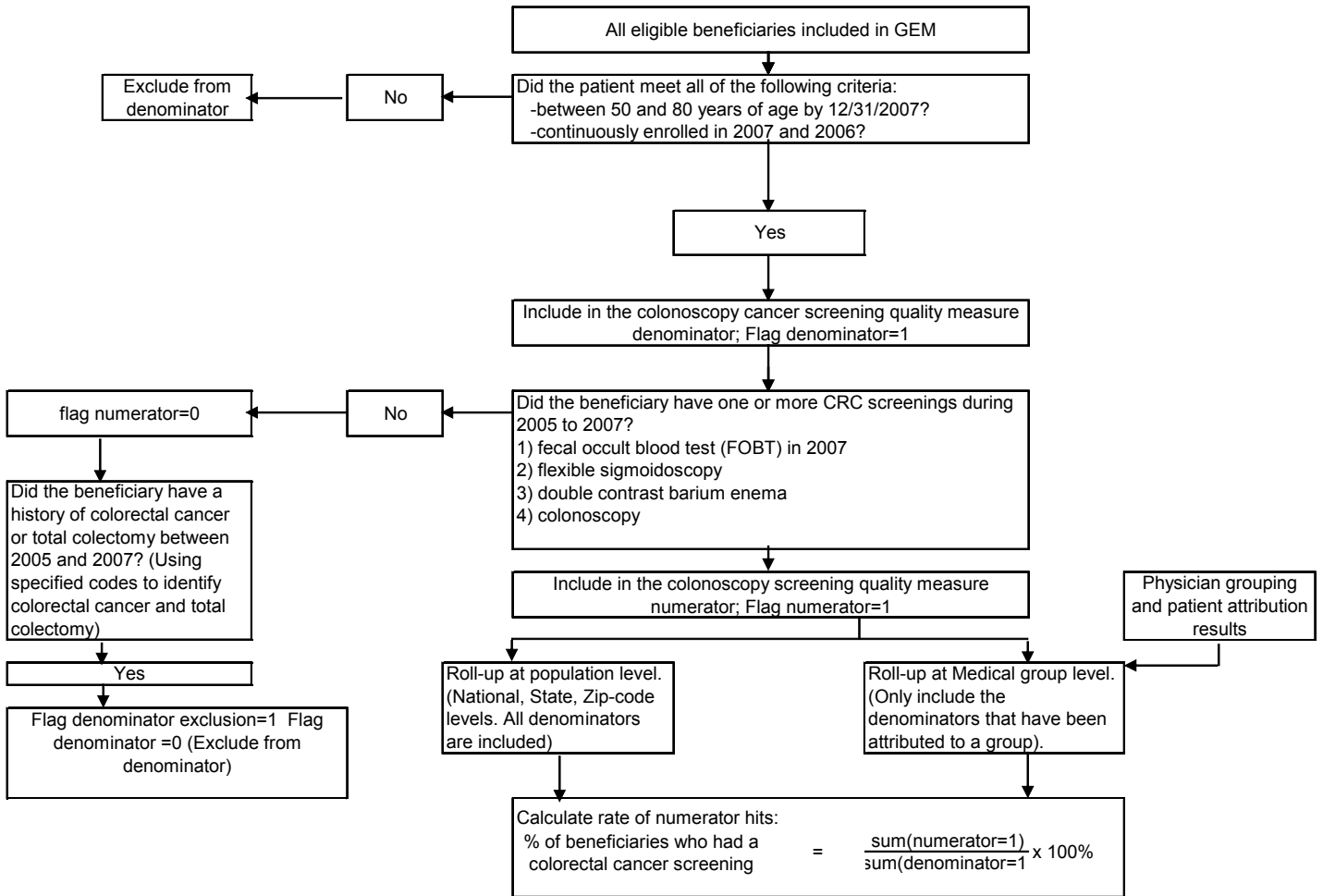
Algorithm Flow Chart: See Flowchart Colorectal Cancer Screening

Denominator and Numerator Codes

Measure Category	Description	Coding Scheme	Codes
Denominator Exclusions	Colorectal cancer	HCPCS	G0213-G0215, G0231
		ICD-9 CM diagnosis	153, 154.0, 154.1, 197.5, V10.05
	Total colectomy	CPT Codes	44150-44153, 44155-44158, 44210-44212
		ICD-9 CM procedure	45.8
Numerator Inclusion	FOBT	CPT Codes	82270, 82274
		HCPCS	G0107, G0328
		ICD-9-CM Diagnosis	V76.51
		LOINC*	2335-8, 12503-9, 12504-7, 14563-1, 14564-9, 14565-6, 27396-1, 27401-9, 27925-7, 27926-5, 29771-3
	Flexible sigmoidoscopy	CPT Codes	45330-45335, 45337-45342, 45345
		HCPCS	G0104
		ICD-9 CM Procedure	45.24
	DCBE	CPT codes	74280
	Colonoscopy	CPT codes	44388-44394, 44397, 45355, 45378-45387, 45391, 45392
		HCPCS	G0105, G0121
		ICD-9 CM Procedure	45.22, 45.23, 45.25, 45.42, 45.43

*LOINC codes are not available in the Medicare claims data.

Flowchart: Colorectal Cancer Screening



Performance Measure Name: Medical Attention for Nephropathy for beneficiaries with diabetes (CDC-NEPHRO)

Description: The percentage of beneficiaries 18–75 years of age with diabetes (type 1 and type 2) who had medical attention for nephropathy.

Source of Measure: Health Plan HEDIS[®] 2008¹⁰

Denominator Statement:

Beneficiaries 18–75 years as of December 31, 2007 who had continuous enrollment for both medical service and pharmacy during 2007.

There are two methods for identifying diabetic beneficiaries:

- Pharmacy data
- Claim/encounter data

The organization must use **both** methods to identify the eligible population; however, to be included in the measure, a beneficiary needs to be identified in only one method. Beneficiaries may be identified as having diabetes during 2007 or 2006.

(1) *Pharmacy data.* Beneficiaries who were dispensed insulin or oral hypoglycemics/antihyperglycemics during 2007 or 2006 on an ambulatory basis.

(2) *Claim/encounter data.* Beneficiaries who had **two** face-to-face encounters with different dates of service in an outpatient setting or nonacute inpatient setting or **one** face-to-face encounter in an acute inpatient or emergency department (ED) setting during 2007 or 2006 with a diagnosis of diabetes. The organization may count services that occur over both years.

Denominator Exclusion Statement:

- (1) Exclude beneficiaries with a diagnosis of polycystic ovaries who did not have any face-to-face encounters with the diagnosis of diabetes, in any setting, during 2007 or 2006. Diagnosis of polycystic ovaries can occur at any time in the beneficiary’s history, but must have occurred by December 31, 2007.
- (2) Exclude beneficiaries with gestational diabetes or steroid-induced diabetes, who did not have any face-to-face encounters with the diagnosis of diabetes (in any setting), during 2007 or

¹⁰Referred to as “HEDIS” in this document. The sources include both the original technical specifications and the subsequent technical update:

(1) National Committee for Quality Assurance (2007). *HEDIS 2008, Volume 2: Technical Specifications*. Washington, DC.

(2) National Committee for Quality Assurance (2007). *HEDIS 2008, Volume 2: Technical Update. October 1, 2007*. Retrieved October 9, 2008, from [http://www.ncqa.org/Portals/0/PolicyUpdates/HEDIS Technical Updates/2008_Vol2_Technical_Update.pdf](http://www.ncqa.org/Portals/0/PolicyUpdates/HEDIS%20Technical%20Updates/2008_Vol2_Technical_Update.pdf)

2006. Diagnosis of gestational diabetes or steroid-induced diabetes can occur during 2007 or 2006, but must have occurred by December 31, 2007.

Numerator Statement:

A nephropathy screening test *or* evidence of nephropathy as documented through administrative data:

- (1) A nephropathy screening test during 2007.
- (2) Any of the following meet criteria for evidence of nephropathy.
 - A claim/encounter with a code to indicate evidence of nephropathy during 2007.
 - A nephrologist visit during 2007, as identified by the organization’s specialty-provider codes (no restriction on the diagnosis or procedure code submitted).
 - A **positive** urine macroalbumin test in 2007, as documented by claim/encounter or automated laboratory data. “Trace” urine macroalbumin test results are not considered numerator-compliant.
 - Evidence of ACE inhibitor/ARB therapy during 2007. Beneficiaries who had a claim indicating therapy, or who received an ambulatory prescription or were dispensed an ambulatory prescription for ACE inhibitors or ARBs during 2007 are compliant.

Deviation(s) from HEDIS:

1. Unlike the 45-day allowable gap in enrollment in the HEDIS specifications, all beneficiaries in the GEM project must be both Part A and Part B enrolled for the full 12 months of 2007. In addition, the following criteria will be used to exclude beneficiaries:
 - 1) Beneficiaries cannot have any months of Medicare Advantage enrollment.
 - 2) Beneficiaries cannot have any months of Medicare Part A only or Part B only enrollment (must have 12 months of both Medicare Part A and Part B enrollment).
 - 3) Beneficiaries cannot have any periods of Medicare secondary payer status.
 - 4) Beneficiaries cannot reside outside of the United States.
 - 5) Beneficiaries must have a record in the Medicare enrollment files.
 - 6) Beneficiaries cannot have any months of Hospice coverage.
2. HEDIS allows the denominator exclusions to be optional. However, for the GEM project, all optional denominator exclusion criteria specified in HEDIS were made mandatory. For the exclusion based on a diagnosis of polycystic ovaries, HEDIS specifies that the diagnosis can occur at any time in the beneficiary’s history, as long as it occurred by December 31, 2007. Since we will only have data for 2005 to 2007, we cannot look back further than 2005, but at least we can exclude patients from the denominator if we can find a diagnosis of polycystic ovaries during 2005 to 2007.
3. As one of the numerator compliance criteria requires pharmacy data, this measure must be restricted to those beneficiaries that have Part D coverage in 2007; note that the denominator counts in this measure will differ from all other diabetes related measures.

4. Identifying numerator compliance through the use of LOINC codes is not expected in Medicare claims data.

Algorithm Flow Chart: See Flowchart Medical Attention for Nephropathy

Denominator and Numerator Codes

Measure Category	Description	SubCategory	Coding Scheme	Codes
Denominator Inclusion	Diagnosis for diabetes		ICD-9-CM Diagnosis	250, 357.2, 362.0, 366.41, 648.0
			CMS-DRG	294, 295 (Earlier than 10/1/07)
			MS-DRG	637, 638, 639 (10/1/07 and later)
	Procedure (Two face-to-face encounters with different dates of service)	Outpatient	CPT	92002-92014, 99201-99205, 99211-99215, 99217-99220, 99241-99245, 99341-99345, 99347-99350, 99384-99387, 99394-99397, 99401-99404, 99411, 99412, 99420, 99429, 99455, 99456, 99499
			UB-92 Revenue	051x, 0520-0523, 0526-0529, 057x-059x, 077x, 082x-085x, 088x, 0982, 0983
		Nonacute inpatient	CPT	99301-99313, 99315, 99316, 99318, 99321-99328, 99331-99337
			UB-92 Revenue	0118, 0128, 0138, 0148, 0158, 019x 0524, 0525, 055x, 066x
	Procedure (One face-to-face encounter)	Acute inpatient	CPT	99221-99223, 99231-99233, 99238, 99239, 99251-99255, 99261-99263, 99291
			UB-92 Revenue	010x, 0110-0114, 0119, 0120-0124, 0129, 0130-0134, 0139, 0140-0144, 0149, 0150-0154, 0159, 016x, 020x-022x, 072x, 080x, 0987
		Emergency department	CPT	99281-99285
UB-92 Revenue			045x, 0981	
	Drug class for diabetes (Insulin; Oral hypoglycemic/antihyperglycemic)		NDC	Any NDC in "CDC Denominator.xls" ²⁷
Denominator Exclusion	Diagnosis of polycystic ovaries		ICD-9-CM Diagnosis	256.4
	Diagnosis of steroid-induced diabetes		ICD-9-CM Diagnosis	251.8, 962.0
	Diagnosis of gestational diabetes		ICD-9-CM Diagnosis	648.8

Measure Category	Description	SubCategory	Coding Scheme	Codes
Numerator Inclusion	Nephropathy screening test	CPT		82042, 82043, 82044, 84156
		CPT II		3060F, 3061F
		LOINC*		11218-5, 14956-7, 14957-5, 14958-3, 14959-1, 30000-4, 30001-2, 30003-8, 1753-3, 1754-1, 1755-8, 9318-7, 13705-9, 14585-4, 20621-9, 21059-1, 32294-1, 2887-8, 2888-6, 2889-4, 2890-2, 12842-1, 13801-6, 18373-1, 21482-5, 26801-1, 27298-9, 32209-9, 32551-4, 34366-5, 35663-4, 1757-4, 34535-5, 40486-3, 40662-9, 40663-7, 43605-5, 43606-3, 43607-1, 44292-1
	Urine macro-albumin test**	CPT		81000-81003, 81005
		CPT II		3062F
		LOINC†		5804-0, 20454-5, 24356-8, 24357-6
	Evidence of treatment for nephropathy	CPT		36145, 36800, 36810, 36815, 36818, 36819-36821, 36831-36833, 50300, 50320, 50340, 50360, 50365, 50370, 50380, 90920, 90921, 90924, 90925, 90935, 90937, 90939, 90940, 90945, 90947, 90989, 90993, 90997, 90999, 99512
		CPT II		3066F
		HCPCS		G0257, G0314-G0319, G0322, G0323, G0326, G0327, G0392, G0393, S9339
		ICD-9-CM Diagnosis		250.4, 403, 404, 405.01, 405.11, 405.91, 580-588, 753.0, 753.1, 791.0, V42.0, V45.1, V56
		ICD-9-CM Procedure		38.95, 39.27, 39.42, 39.43, 39.53, 39.93-39.95, 54.98, 55.4-55.6
		UB-92 Revenue		0367, 080x, 082x-085x, 088x
		CMS-DRG		316, 317
		MS-DRG		682-685
	ACE inhibitor/ARB therapy	CPT II		4009F
		NDC		Any NDC in "CDC_ACE_ARBs.xls"††
	Nephrologist visit as identified by the MCO's specialty-provider codes (no restriction on the diagnosis or procedure code submitted)	Specialty Code		39

* Source: "Comprehensive Diabetes Care (CDC) Denominator" link at <http://www.ncqa.org/tabid/598/Default.aspx>

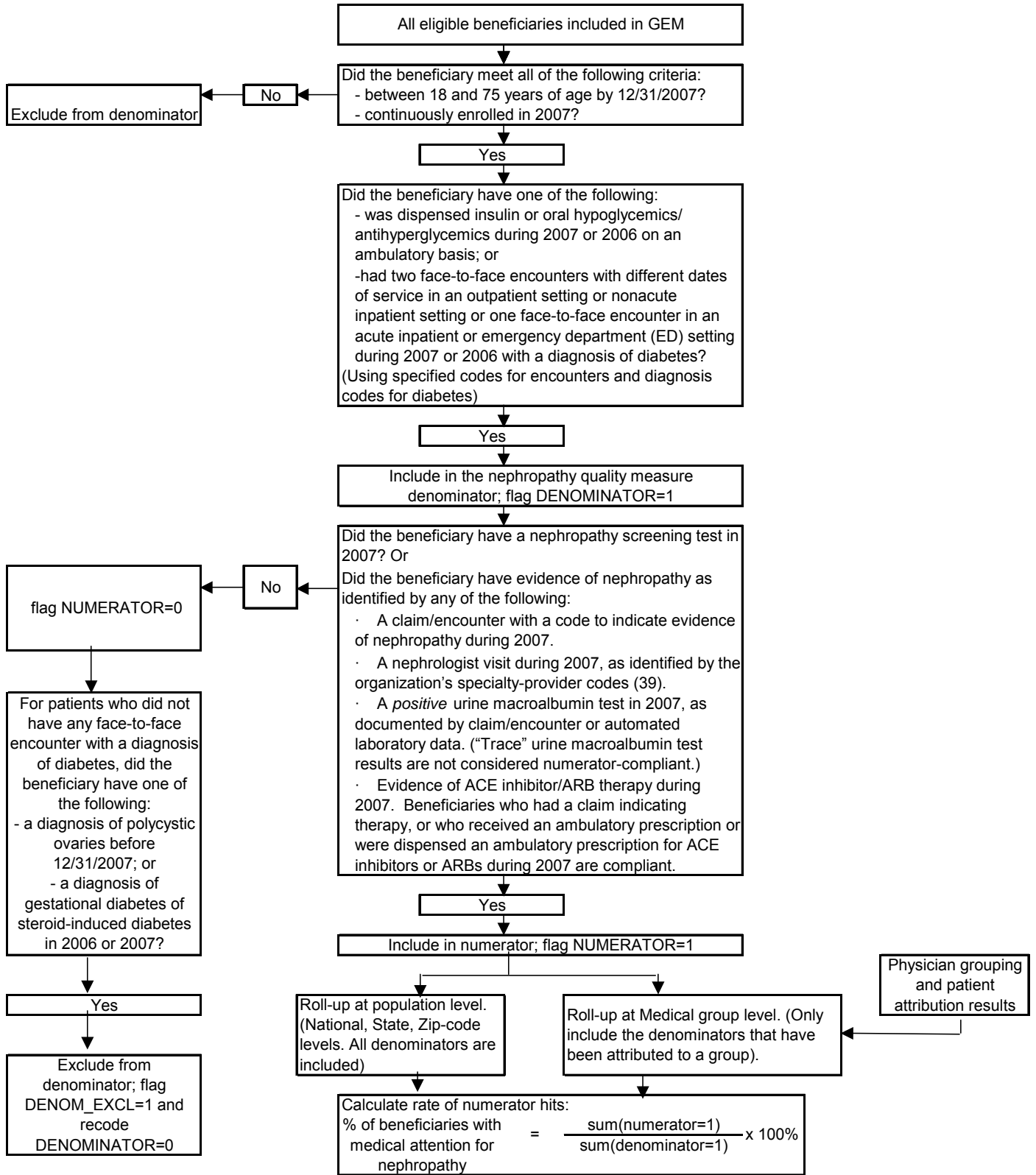
** A CPT Category II code indicates a positive result for urine macro-albumin; the organization must use automated laboratory data to confirm a positive result for tests identified by CPT or LOINC codes.

† LOINC codes are not available in the Medicare claims data.

†† Source: "Comprehensive Diabetes Care (CDC) ACE/ARB" link at <http://www.ncqa.org/tabid/598/Default.aspx>

Flowchart: Medical Attention for Nephropathy

Measure: Medical Attention for Nephropathy



Performance Measure Name: Breast Cancer Screening (BCS)

Description: The percentage of women 40–69 years of age who had a mammogram to screen for breast cancer.

Source of Measure: Health Plan HEDIS® 2008¹¹

Denominator Statement:

Women 42–69 years as of December 31, 2007 who were continuously enrolled during 2007 and 2006.

Denominator Exclusion Statement:

Exclude women who had a bilateral mastectomy and for whom administrative data do not indicate that a mammogram was performed. The organization should look for evidence of a bilateral mastectomy as far back as possible in the member’s history. If the organization finds evidence of two separate mastectomies, it must exclude the member from the measure. The bilateral mastectomy must have occurred by December 31, 2007.

Numerator Statement:

One or more mammograms during 2007 or 2006. A woman had a mammogram if a submitted claim/encounter contains any one of the codes in the table below.

Do not count biopsies, breast ultrasounds, or other diagnostic mammograms because they are not appropriate methods for primary breast cancer screening.

Deviation(s) from HEDIS:

1. Unlike the 45-day allowable gap in enrollment in the HEDIS specifications, all beneficiaries in the GEM project must be both Part A and Part B enrolled for the full 12 months of 2007. In addition, the following criteria will be used to exclude beneficiaries:
 - 1) Beneficiaries cannot have any months of Medicare Advantage enrollment.
 - 2) Beneficiaries cannot have any months of Medicare Part A only or Part B only enrollment (must have 12 months of both Medicare Part A and Part B enrollment).
 - 3) Beneficiaries cannot have any periods of Medicare secondary payer status.
 - 4) Beneficiaries cannot reside outside of the United States.
 - 5) Beneficiaries must have a record in the Medicare enrollment files.
 - 6) Beneficiaries cannot have any months of Hospice coverage.

¹¹ Referred to as “HEDIS” in this document. The sources include both the original technical specifications and the subsequent technical update:

(1) National Committee for Quality Assurance (2007). *HEDIS 2008, Volume 2: Technical Specifications*. Washington, DC.

(2) National Committee for Quality Assurance (2007). *HEDIS 2008, Volume 2: Technical Update. October 1, 2007*. Retrieved October 9, 2008, from http://www.ncqa.org/Portals/0/PolicyUpdates/HEDIS_Technical_Updates/2008_Vol2_Technical_Update.pdf

2. HEDIS allows the denominator exclusion to be optional. However, for the GEM project, the optional denominator exclusion criteria specified in HEDIS was made mandatory. For evidence of a bilateral mastectomy, HEDIS specifies to look as far back as possible in the member's history. GEM will exclude patients from the denominator if we can find evidence of a bilateral mastectomy or two unilateral mastectomies during 2005 to 2007.
3. HEDIS specifies reporting two age stratifications (42–51 years, and 52–69 years) in addition to the overall rate. For the GEM project, we will report only the overall rate.

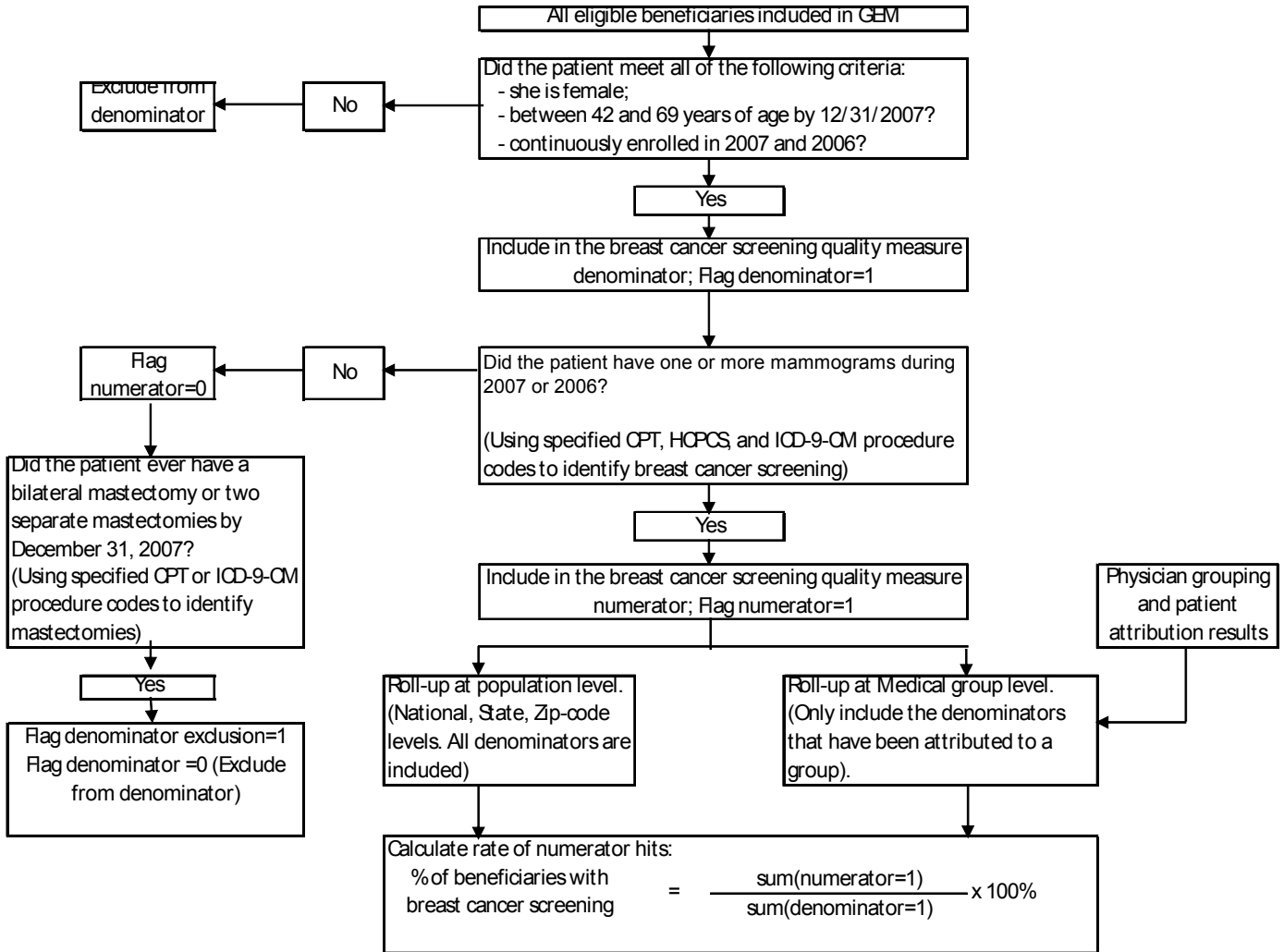
Algorithm Flow Chart: See Flowchart Breast Cancer Screening

Denominator and Numerator Codes

Measure Category	Description	Coding Scheme	Codes
Denominator Exclusion	Bilateral mastectomy	ICD-9-CM Procedure	85.42, 85.44, 85.46, 85.48
		CPT	19180,19200,19220,19240,19303-19307 with modifier .50 or modifier code 09950*
	Unilateral mastectomy (beneficiaries must have 2 separate occurrences on 2 different dates of service)	ICD-9-CM Procedures	85.41, 85.43, 85.45, 85.47
		CPT	19180, 19200, 19220, 19240, 19303-19307
Numerator Inclusion	Mammogram	CPT	76083, 76090-76092, 77055-77057
		HCPCS	G0202
		ICD-9 CM Diagnosis	V76.11, V76.12
		ICD-9 CM Procedure	87.36, 87.37
		UB-92 Revenue codes	0403

*.50 and 09950 modifier codes indicate the procedure was bilateral and performed during the same operative session.

Flowchart: Breast Cancer Screening



Performance Measure Name: LDL-C screening performed for beneficiaries with diabetes (CDC-LDL)

Description: The percentage of beneficiaries 18–75 years of age with diabetes (type 1 and type 2) who had LDL-C screening performed.

Source of Measure: Health Plan HEDIS[®] 2008¹²

Denominator Statement:

Beneficiaries 18–75 years as of December 31, 2007 who had continuous enrollment during 2007.

There are two methods for identifying diabetic beneficiaries:

- Pharmacy data
- Claim/encounter data

The organization must use **both** methods to identify the eligible population; however, to be included in the measure, a beneficiary needs to be identified in only one method. Beneficiaries may be identified as having diabetes during 2007 or 2006.

(1) *Pharmacy data.* Beneficiaries who were dispensed insulin or oral hypoglycemics/ antihyperglycemics during 2007 or 2006 on an ambulatory basis.

(2) *Claim/encounter data.* Beneficiaries who had **two** face-to-face encounters with different dates of service in an outpatient setting or nonacute inpatient setting or **one** face-to-face encounter in an acute inpatient or emergency department (ED) setting during 2007 or 2006 with a diagnosis of diabetes. The organization may count services that occur over both years.

Denominator Exclusion Statement:

- (1) Exclude beneficiaries with a diagnosis of polycystic ovaries who did not have any face-to-face encounters with the diagnosis of diabetes, in any setting, during 2007 or 2006. Diagnosis of polycystic ovaries can occur at any time in the beneficiary’s history, but must have occurred by December 31, 2007.
- (2) Exclude beneficiaries with gestational diabetes or steroid-induced diabetes, who did not have any face-to-face encounters with the diagnosis of diabetes (in any setting), during 2007 or

¹²Referred to as “HEDIS” in this document. The sources include both the original technical specifications and the subsequent technical update:

(1) National Committee for Quality Assurance (2007). *HEDIS 2008, Volume 2: Technical Specifications*. Washington, DC.

(2) National Committee for Quality Assurance (2007). *HEDIS 2008, Volume 2: Technical Update. October 1, 2007*. Retrieved October 9, 2008, from http://www.ncqa.org/Portals/0/PolicyUpdates/HEDIS_Technical_Updates/2008_Vol2_Technical_Update.pdf

2006. Diagnosis of gestational diabetes or steroid-induced diabetes can occur during 2007 or 2006, but must have occurred by December 31, 2007.

Numerator Statement:

An LDL-C test performed during 2007 as identified by claim/encounter or automated laboratory data.

Deviation(s) from HEDIS:

1. Unlike the 45-day allowable gap in enrollment in the HEDIS specifications, all beneficiaries in the GEM project must be both Part A and Part B enrolled for the full 12 months of 2007. In addition, the following criteria will be used to exclude beneficiaries:
 - 1) Beneficiaries cannot have any months of Medicare Advantage enrollment.
 - 2) Beneficiaries cannot have any months of Medicare Part A only or Part B only enrollment (must have 12 months of both Medicare Part A and Part B enrollment).
 - 3) Beneficiaries cannot have any periods of Medicare secondary payer status.
 - 4) Beneficiaries cannot reside outside of the United States.
 - 5) Beneficiaries must have a record in the Medicare enrollment files.
 - 6) Beneficiaries cannot have any months of Hospice coverage.
2. HEDIS allows the denominator exclusions to be optional. However, for the GEM project, all optional denominator exclusion criteria specified in HEDIS were made mandatory. For the exclusion based on a diagnosis of polycystic ovaries, HEDIS specified that the diagnosis can occur at any time in the beneficiary's history, as long as it occurred by December 31, 2007. Since we will only have data for 2005 to 2007, we cannot look back further than 2005, but at least we can exclude patients from the denominator if we can find a diagnosis of polycystic ovaries during 2005 to 2007.
3. Identifying numerator compliance through the use of LOINC codes is not expected in Medicare claims data.

Algorithm Flow Chart: See Flowchart LDL-C Screening Performed for Beneficiaries with Diabetes

Denominator and Numerator Codes

Measure Category	Description	SubCategory	Coding Scheme	Codes
Denominator Inclusion	Diagnosis for diabetes		ICD-9-CM Diagnosis	250, 357.2, 362.0, 366.41, 648.0
			CMS-DRG	294, 295
			MS-DRG	637, 638, 639
	Procedure (Two face-to-face encounters with different dates of service)	Outpatient	CPT	92002-92014, 99201-99205, 99211-99215, 99217-99220, 99241-99245, 99341-99345, 99347-99350, 99384-99387, 99394-99397, 99401-99404, 99411, 99412, 99420, 99429, 99455, 99456, 99499
			UB-92 Revenue	051x, 0520-0523, 0526-0529, 057x-059x, 077x, 082x-085x, 088x, 0982, 0983
		Nonacute inpatient	CPT	99301-99313, 99315, 99316, 99318, 99321-99328, 99331-99337
			UB-92 Revenue	0118, 0128, 0138, 0148, 0158, 019x, 0524, 0525, 055x, 066x
	Procedure (One face-to-face encounter)	Acute inpatient	CPT	99221-99223, 99231-99233, 99238, 99239, 99251-99255, 99261-99263, 99291
			UB-92 Revenue	010x, 0110-0114, 0119, 0120-0124, 0129, 0130-0134, 0139, 0140-0144, 0149, 0150-0154, 0159, 016x, 020x-022x, 072x, 080x, 0987
		Emergency department	CPT	99281-99285
UB-92 Revenue			045x, 0981	
Drug class for diabetes (Insulin; Oral hypoglycemic/antihyperglycemic)			NDC	Any NDC in "CDC Denominator.xls"*
Denominator Exclusion	Diagnosis of polycystic ovaries		ICD-9-CM Diagnosis	256.4
	Diagnosis of steroid-induced diabetes		ICD-9-CM Diagnosis	251.8, 962.0
	Diagnosis of gestational diabetes		ICD-9-CM Diagnosis	648.8
Numerator Inclusion	LDL-C test		CPT	80061, 83700, 83701, 83704, 83715, 83716, 83721
			CPT II	3048F, 3049F, 3050F
			LOINC ³⁵	2089-1, 12773-8, 13457-7, 18261-8, 18262-6, 22748-8, 24331-1, 39469-2, 49132-4

* Source: "Comprehensive Diabetes Care (CDC) Denominator" link at <http://www.ncqa.org/tabid/598/Default.aspx>

**LOINC codes are not available in the Medicare claims data.

Flowchart: LDL-C Screening Performed for Beneficiaries with Diabetes

