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Web Interface Sampling Methodology for the Physician Quality Reporting System, the Medicare Shared Savings Program, the Pioneer ACO Model, and the Next Generation ACO Model

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SECTION 1 INTRODUCTION

The purpose of this document is to explain the sampling methodology for the 18 clinical quality measures reported via the Web Interface. This guidance applies to all Accountable Care Organizations (ACOs) in the Medicare Shared Savings Program, the Pioneer ACO Model, and the Next Generation ACO Model, and to all group practices participating in the Physician Quality Reporting System (PQRS) program who registered for PQRS as a group practice and elected the Web Interface reporting mechanism (referred to throughout as group practices). ACOs and group practices are collectively referred to as organizations. Each organization will be required to report on the same 18 nationally recognized measures, using services rendered in 2016.

This document provides background information on the number of beneficiaries each organization is expected to report on for Web Interface purposes and how those beneficiaries are selected.

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SECTION 2 WEB INTERFACE QUALITY MEASURES

For the 2016 reporting period, ACOs and group practices will use the Web Interface to collect and submit clinical data on the following 18 measures (16 individual measures, and 1 composite measure comprised of 2 component measures).¹⁻² These measures span eight categories.³

- **Care Coordination and Patient Safety (CARE) Category** (two measures):
 - CARE-2 (National Quality Forum [NQF] 0101): Falls: Screening for Future Fall Risk.
 - CARE-3 (NQF 0419): Documentation of Current Medications in the Medical Record.
- **Preventive Health (PREV) Category** (eight measures):
 - PREV-5 (NQF N/A): Breast Cancer Screening.
 - PREV-6 (NQF 0034): Colorectal Cancer Screening.
 - PREV-7 (NQF 0041): Preventive Care and Screening: Influenza Immunization.
 - PREV-8 (NQF 0043): Pneumonia Vaccination Status for Older Adults.
 - PREV-9 (NQF 0421): Preventive Care and Screening: Body Mass Index (BMI) Screening and Follow-Up.
 - PREV-10 (NQF 0028): Preventive Care and Screening: Tobacco Use: Screening and Cessation Intervention.
 - PREV-11 (NQF N/A): Preventive Care and Screening: Screening for High Blood Pressure and Follow-Up Documented.
 - PREV-12 (NQF 0418): Preventive Care and Screening: Screening for Clinical Depression and Follow-Up Plan.
 - PREV-13 (NQF N/A): Statin Therapy for the Prevention and Treatment of Cardiovascular Disease.

¹ Composite performance measures combine information on multiple individual performance measures into one single measure. National Quality Forum. (2013). Composite performance measure evaluation guidance. Washington, DC: Author. Retrieved from http://www.qualityforum.org/Publications/2013/04/Composite_Performance_Measure_Evaluation_Guidance.aspx.

² Note that the Shared Savings Program, the Pioneer ACO Model, and the Next Generation ACO Model have additional quality reporting requirements beyond the measures included in the Web Interface.

³ Categories may be referred to as modules in the Web Interface and in some supporting documents. Note that the concept of “category” in the Web Interface is distinct from the concept of “domain” that is used in the ACO program.

- **Mental Health (MH) Category** (one measure):
 - MH-1 (NQF 0710): Depression Remission at 12 Months.
- **Diabetes (DM) Category** (one composite measure comprised of two component measures):
 - DM-2 (NQF 0059): DM: Hemoglobin A1c Poor Control.
 - DM-7 (NQF 0055): DM: Eye Exam.
- **Hypertension (HTN) Category** (one measure):
 - HTN-2 (NQF 0018): HTN: Controlling High Blood Pressure.
- **Ischemic Vascular Disease (IVD) Category** (one measure):
 - IVD-2 (0068): IVD: Use of Aspirin or Another Antithrombotic.
- **Heart Failure (HF) Category** (one measure):
 - HF-6 (NQF 0083): HF: Beta-Blocker Therapy for Left Ventricular Systolic Dysfunction (LVSD).
- **Coronary Artery Disease (CAD) Category** (one measure):
 - CAD-7 (NQF 0066): CAD: Angiotensin-Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy—DM or LVSD (Left Ventricular Ejection Fraction [LVEF] < 40%).

Appendix A provides a summary table of the measure information presented here.

For further information on any of these measures, please refer to the following:

- The *2016 Group Practice Reporting Option (GPRO) Web Interface Measure List, Narrative Measure Specifications, and Release Notes* file, available at https://www.cms.gov/medicare/quality-initiatives-patient-assessment-instruments/pqrs/gpro_web_interface.html. As noted on the webpage, the file contains the following documents:
 - “The ‘2016 GPRO Web Interface Disease Modules, Care Coordination/Patient Safety and Preventive Care Measures List’ document which consists of the (18) 2016 GPRO Web Interface reporting mechanism measures.
 - “The ‘2016 GPRO Web Interface Narrative Measure Specifications’ which provides a description of each of the 18 measures.
 - “The ‘2016 GPRO Web Interface Narrative Specification Release Notes’ which provides a list of changes to existing measures made since the release of the ‘2015 GPRO Narrative Measure Specifications, Version 6’.”

- The *2016 GPRO Web Interface Supporting Documents*, which contain the following for each measure in Excel format: patient confirmation; data guidance; and downloadable resource tables, which include coding for each measure.
- The 2016 measure flow diagrams for Web Interface users, containing performance rate calculation algorithms for each of the 18 Web Interface measures.
- The *2016 GPRO Web Interface Reporting Made Simple* document, a beginner-level document explaining Web Interface reporting.

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SECTION 3 WEB INTERFACE QUALITY MEASURE REPORTING AND SAMPLE SIZE REQUIREMENTS

Each ACO and group practice will report each of the 18 clinical quality measures via the Web Interface. Each measure has its own specific denominator requirements, and thus its own specific beneficiary sample. The Web Interface will be pre-populated with a sample of beneficiaries specifically assigned to each organization and will include demographic information for those beneficiaries. Each beneficiary in the Web Interface must be sampled into at least one measure but may be sampled for more than one measure, and beneficiaries will be assigned a rank based on the order in which they were sampled into a measure. Each measure will be partially prepopulated with beneficiary and clinical information, as applicable.

All ACOs and group practices, regardless of size, are required to report a minimum of 248 consecutive beneficiaries for each measure or, if less than 248 are qualified for a measure, all sampled beneficiaries. Each organization will be required to complete data fields in the Web Interface that capture quality data for each beneficiary with respect to services rendered during the 2016 reporting period (January 1, 2016, through December 31, 2016), unless otherwise specified by the measure.⁴ These data must be completely and accurately reported for 248 consecutively ranked and confirmed Medicare beneficiaries. Denominator inclusion and exclusion criteria for some measures may mean that reaching the target sample size is not possible for an organization. If fewer than the target number of eligible beneficiaries are available for a given measure, the organization must report on 100 percent of the eligible beneficiaries provided for that measure.

Whenever possible, each measure-specific sample will include more beneficiaries than are needed to meet the reporting requirement of 248 (i.e., an oversample will be provided). For the 2016 reporting year, each measure will have a sample of 616 beneficiaries (or as many beneficiaries as meet the quality and measure eligibility criteria if the total is less than 616) to achieve this oversample, with the exception of PREV-13, Statin Therapy for the Prevention and Treatment of Cardiovascular Disease.⁵ PREV-13 will have a sample of 750 beneficiaries (or as many beneficiaries as meet the quality and eligibility criteria if the total is less than 750).⁶ Note that the reporting requirement for consecutively confirmed and completed beneficiaries remains at 248 for PREV-13 despite the larger sample size.

⁴ For example, PREV-7, Preventive Care and Screening: Influenza Immunization, specifies that quality data is with respect to the influenza season, which includes some dates in 2015.

⁵ This is equivalent to a 148 percent oversample.

⁶ This is equivalent to a 201 percent oversample.

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SECTION 4

WEB INTERFACE QUALITY MEASURE SAMPLING METHODOLOGY

ACOs and group practices will use the Web Interface to submit data on samples of the organization's fee-for-service (FFS) Medicare beneficiaries. Each organization's samples will be determined using the following process:

4.1 Step 1: Identify Beneficiaries Eligible for Quality Measurement

The Centers for Medicare & Medicaid Services (CMS) will assign a Medicare beneficiary to an ACO or group practice based on current program rules. For ACOs, CMS will use beneficiaries assigned using the ACO assignment algorithm.^{7, 8} For group practices, CMS will use beneficiaries assigned using the PQRS assignment algorithm⁹ for the third quarter of 2016.

Using Medicare administrative claims from January 1, 2016, through October 31, 2016, CMS will exclude the following beneficiaries from the above:

- Beneficiaries with fewer than two primary care services¹⁰ within the ACO or group practice, as applicable, during the reporting period.
- Beneficiaries with part-year eligibility in Medicare FFS Part A and Part B.
- Beneficiaries who entered hospice.
- Beneficiaries who died.
- Beneficiaries who did not reside in the United States.

The remaining beneficiaries will be considered eligible for quality measurement.

⁷ The Shared Savings Program uses beneficiaries assigned in the third quarter of 2016. The Shared Savings Program beneficiary assignment methodology can be found here: <http://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/sharedsavingsprogram/Downloads/Shared-Savings-Losses-Assignment-Spec-v2.pdf>.

⁸ For Pioneer and Next Generation ACOs, the most recent exclusions are applied to aligned beneficiaries. The Pioneer ACO Model methodology can be found at <https://innovation.cms.gov/Files/x/PioneerACOBmarkMeghodology4to5.pdf>, and the Next Generation ACO Model methodology can be found at <https://innovation.cms.gov/Files/x/nextgenaco-methodology.pdf>.

⁹ The PQRS assignment methodology document and training presentation can be found on this page: http://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/PQRS/GPRO_Web_Interface.html.

¹⁰ As defined by the Healthcare Common Procedure Coding System (HCPCS) codes in *Appendices B* and *C* for ACOs and *Appendix B* for PQRS group practices.

4.2 Step 2: Identify Beneficiaries Eligible for Sampling into Each Measure

For beneficiaries identified as eligible for quality measurement, we further determine if they are eligible for any of the specific quality measures on the basis of the denominator criteria for each measure. Denominator criteria use is outlined below.

- Colorectal Cancer Screening (PREV-6); Pneumonia Vaccination Status for Older Adults (PREV-8); Preventive Care and Screening: BMI Screening and Follow-Up (PREV-9); Preventive Care and Screening: Tobacco Use: Screening and Cessation Intervention (PREV-10); and Falls: Screening for Future Fall Risk (CARE-2) denominator criteria:
 - Meet age criteria.¹¹
 - Have at least one face-to-face encounter during the measurement period.¹²
- Breast Cancer Screening (PREV-5) denominator criteria:
 - Meet gender criteria.
 - Meet age criteria.
 - Have at least one face-to-face encounter during the measurement period.
- Preventive Care and Screening: Influenza Immunization (PREV-7) denominator criteria:
 - Meet age criteria.
 - Have at least one face-to-face encounter both within the ACO or group practice and during the influenza season. The influenza season is defined at October 1, 2015, through March 31, 2016, for the 2016 measurement period.
- Preventive Care and Screening: Screening for High Blood Pressure and Follow-Up Documented (PREV-11) denominator criteria:
 - Meet age criteria.
 - Have at least one face-to-face encounter during the measurement period.
 - Not have a diagnosis of HTN during the measurement period.

¹¹ Age criteria for this and all measures are provided in the Narrative Measure Specifications and the Measure Flows available at http://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/PQRS/GPRO_Web_Interface.html.

¹² Detailed specifications on the qualifying HCPCS or Current Procedural Terminology codes for this and all measures are provided in the 2016 Supporting Documents (available at http://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/PQRS/GPRO_Web_Interface.html).

- Preventive Care and Screening: Screening for Clinical Depression and Follow-Up Plan (PREV-12) denominator criteria:
 - Meet age criteria.
 - Have at least one face-to-face encounter during the measurement period.
 - Not have a diagnosis of depression or bipolar disorder during the measurement period.

- DM: Hemoglobin A1c Poor Control or Eye Exam (DM-2 or DM-7) denominator criteria:
 - Meet age criteria.
 - Have at least one face-to-face encounter with a documented diagnosis of DM (type 1 or type 2) in an office or outpatient setting.

- IVD: Use of Aspirin or Another Antithrombotic (IVD-2) denominator criteria:
 - Meet age criteria.
 - Have one of the following:
 - At least one face-to-face encounter during the measurement period with a documented diagnosis of IVD in an office or outpatient setting.
 - One inpatient procedure for IVD during the year before the measurement year (i.e., January 1 through December 31, 2015).
 - One inpatient discharge for an acute myocardial infarction during the year before the measurement year (i.e., January 1 through December 31, 2015).

- CAD: ACE Inhibitor or ARB Therapy—DM or LVSD (LVEF < 40%) (CAD-7) denominator criteria:
 - Meet age criteria.
 - Have at least two face-to-face encounters during the measurement period with a documented diagnosis of or procedure related to CAD.

- HTN: Controlling High Blood Pressure (HTN-2) denominator criteria:
 - Meet age criteria.
 - Have two face-to-face encounters with a documented diagnosis of HTN during the first 6 months of the measurement period or the year before the measurement period (i.e., January 1, 2015, through June 30, 2016).

- HF: Beta-Blocker Therapy for LVSD (HF-6) denominator criteria:
 - Meet age criteria.
 - Have at least two face-to-face encounters occurring during the measurement period with a documented diagnosis of HF.
- Depression Remission at 12 Months (MH-1) denominator criteria:
 - Meet age criteria.
 - Have at least one face-to-face encounter during the measurement period.
 - Have a diagnosis of major depression or dysthymia.
 - Not have a diagnosis of bipolar disorder or personality disorder during the measurement period or the year before the measurement period (i.e., January 1, 2015, through December 31, 2016).
- Documentation of Current Medications in the Medical Record (CARE-3) denominator criteria:
 - Meet age criteria.
 - Have at least one face-to-face encounter within the ACO or group practice during the measurement period.
- Statin Therapy for the Prevention and Treatment of Cardiovascular Disease (PREV-13) denominator criteria:
 - Meet age criteria.¹³
 - Have at least one face-to-face encounter during the measurement period.
 - Have a diagnosis of atherosclerotic cardiovascular disease or a diagnosis of diabetes.¹⁴

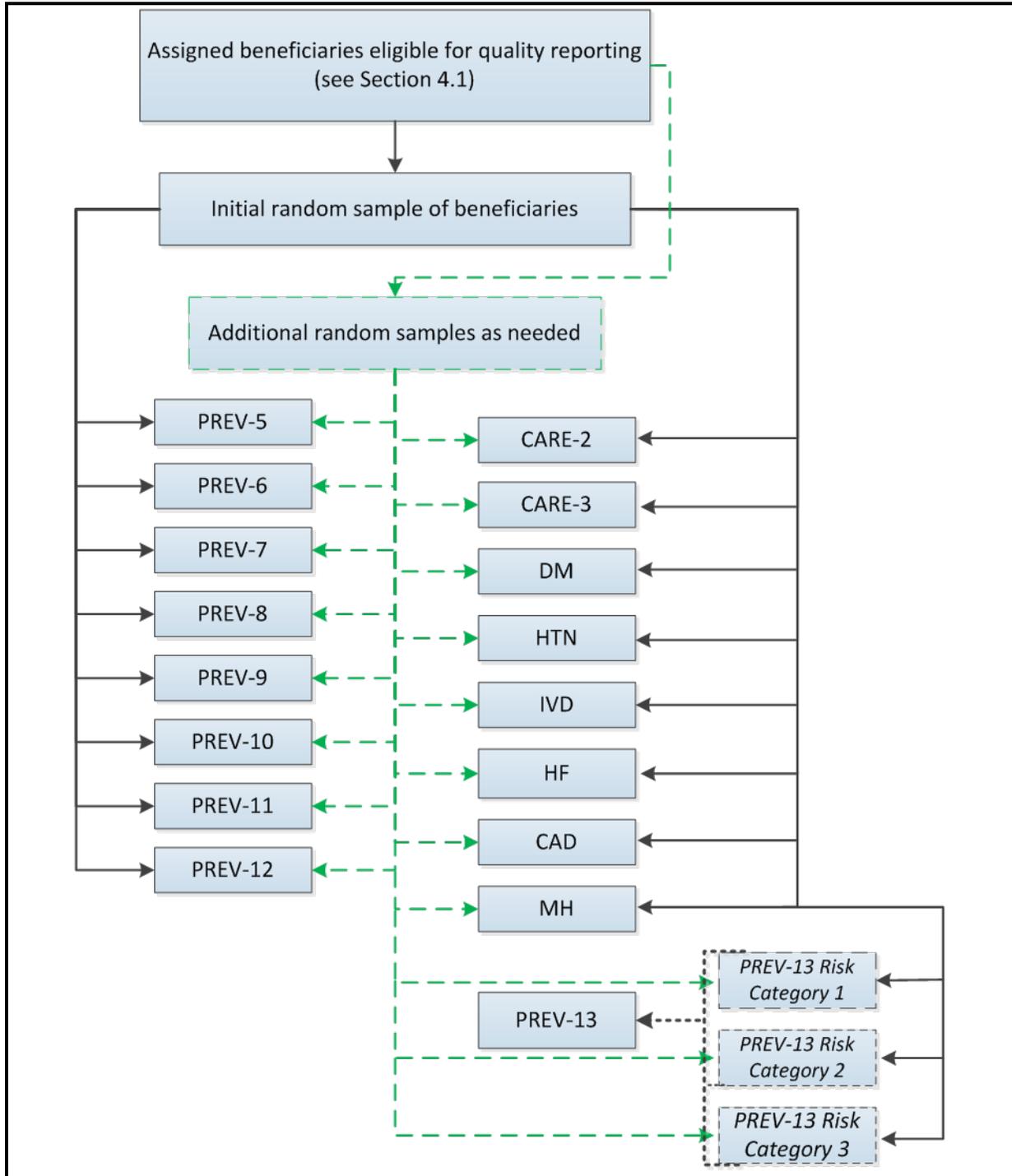
4.3 Step 3: Randomly Sample Beneficiaries into Each Measure

CMS will select an initial random sample of 900 quality eligible beneficiaries (as defined in section 4.1) and populate them into the measures for which they are eligible until a sample size of 616 is reached (750 for PREV-13) (illustrated in *Figure 1*).

¹³ Note that the PREV-13 denominator is a single denominator that represents three risk categories. Age criteria will vary depending on the specific risk category for which the beneficiary qualifies

¹⁴ Diagnosis of atherosclerotic cardiovascular disease represents risk category 1 and diagnosis of diabetes represents risk category 3.

Figure 1
Sampling process



If, after this step, a measure has fewer than 616 beneficiaries (750 for PREV-13), CMS will randomly sample additional eligible beneficiaries until the measure has the required 616 (or 750, for PREV 13) or until there are no additional eligible beneficiaries available. Note that CMS uses the same beneficiary across measures, where possible. This reduces the administrative burden for ACOs and group practices by minimizing the total number of beneficiaries on which data need to be collected. In other words, to the extent possible, the beneficiaries in each measure sample will not be unique.

For all measures except PREV-13, beneficiaries will be assigned a rank between 1 and 616 based on the order in which they are populated into each measure-specific sample. Because PREV-13 has three distinct risk categories, sampling for that measure requires additional steps. In the first stage of sampling, each risk category will be represented separately, and beneficiaries will be assigned a rank between 1 and 250 for each PREV-13 risk category in the same manner as the other measures. After each sample has been completed, the three PREV-13 risk categories will be combined into a single sample of 750. This allows each risk category to have equal representation in the sample to the extent possible. We will also distribute each risk category throughout the sample to the extent possible.

ACOs and group practices will be required to consecutively complete a minimum of 248 beneficiaries (or all beneficiaries in the sample if there are fewer than 248). If the organization is unable to provide data on a particular beneficiary, the organization must indicate a reason the data cannot be provided. The organization cannot skip a beneficiary without providing a valid reason. The valid reasons will be available as drop-down options in the Web Interface. For each beneficiary that is skipped, the organization must completely report on the next consecutively ranked beneficiary until the target sample of 248 is reached or until the sample has been exhausted.

Although this sampling methodology does not guarantee that beneficiaries will have the same rank across measures, it does increase the likelihood that a beneficiary will have a similar rank across measures. Therefore, a low-ranked beneficiary in one measure will probably have a low rank in the other measures for which he or she qualifies.

APPENDIX A.
2016 WEB INTERFACE QUALITY MEASURES

Measure #	Measure title	NQF #	ACO domain
CARE-2	Falls: Screening for Future Fall Risk	0101	Care coordination & patient safety
CARE-3	Documentation of Current Medications in the Medical Record	0419	Care coordination & patient safety
PREV-5	Breast Cancer Screening	N/A	Preventive health
PREV-6	Colorectal Cancer Screening	0034	Preventive health
PREV-7	Preventive Care and Screening: Influenza Immunization	0041	Preventive health
PREV-8	Pneumonia Vaccination Status for Older Adults	0043	Preventive health
PREV-9	Preventive Care and Screening: Body Mass Index Screening and Follow-Up	0421	Preventive health
PREV-10	Preventive Care and Screening: Tobacco Use: Screening and Cessation Intervention	0028	Preventive health
PREV-11	Preventive Care and Screening: Screening for High Blood Pressure and Follow-Up Documented	N/A	Preventive health
PREV-12	Preventive Care and Screening: Screening for Clinical Depression and Follow-Up Plan	0418	Preventive health
PREV-13	Statin Therapy for the Prevention and Treatment of Cardiovascular Disease	N/A	Preventive health
DM-2*	Diabetes (DM): Hemoglobin A1c Poor Control	0059	At-risk population
DM-7*	DM: Eye Exam	0055	At-risk population
HTN-2	Controlling High Blood Pressure	0018	At-risk population
IVD-2	Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antithrombotic	0068	At-risk population
HF-6	Heart Failure (HF): Beta-Blocker Therapy for Left Ventricular Systolic Dysfunction (LVSD)	0083	At-risk population
CAD-7	Coronary Artery Disease (CAD): Angiotensin-Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy—DM or LVSD (Left Ventricular Ejection Fraction [LVEF] < 40%)	0066	At-risk population
MH-1	Depression Remission at 12 Months	0710	At-risk population

* DM-2 and DM-7 are the components of the DM composite measure

Note: N/A = Not Applicable

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APPENDIX B.
PRIMARY CARE CODES USED FOR DETERMINING QUALITY ELIGIBILITY

Office or other outpatient services

- 99201—New patient, brief
- 99202—New patient, limited
- 99203—New patient, moderate
- 99204—New patient, comprehensive
- 99205—New patient, extensive
- 99211—Established patient, brief
- 99212—Established patient, limited
- 99213—Established patient, moderate
- 99214—Established patient, comprehensive
- 99215—Established patient, extensive

Initial nursing facility care

- 99304—New or established patient, brief
- 99305—New or established patient, moderate
- 99306—New or established patient, comprehensive

Subsequent nursing facility care

- 99307—New or established patient, brief
- 99308—New or established patient, limited
- 99309—New or established patient, comprehensive
- 99310—New or established patient, extensive

Nursing facility discharge services

- 99315—New or established patient, brief
- 99316—New or established patient, comprehensive

Other nursing facility services

- 99318—New or established patient

Domiciliary, rest home, or custodial care services

- 99324—New patient, brief
 - 99325—New patient, limited
 - 99326—New patient, moderate
 - 99327—New patient, comprehensive
 - 99328—New patient, extensive
 - 99334—Established patient, brief
 - 99335—Established patient, moderate
 - 99336—Established patient, comprehensive
 - 99337—Established patient, extensive
-

Domiciliary, rest home, or home care plan oversight services

99339—Brief

99340—Comprehensive

Home services

99341—New patient, brief

99342—New patient, limited

99343—New patient, moderate

99344—New patient, comprehensive

99345—New patient, extensive

99347—Established patient, brief

99348—Established patient, moderate

99349—Established patient, comprehensive

99350—Established patient, extensive

Care management services

99490—Chronic care management service

99495—Transitional care management services within 14 days of discharge

99496—Transitional care management services within 7 days of discharge

Wellness visits

G0402—Welcome to Medicare visit

G0438—Annual wellness visit

G0439—Annual wellness visit

**APPENDIX C.
ADDITIONAL PRIMARY CARE CODES¹ USED FOR DETERMINING QUALITY
ELIGIBILITY (ACO ONLY)**

For federally qualified health center (FQHC) or rural health clinic (RHC) services

0521	Clinic visit by member to RHC/FQHC
0522	Home visit by RHC/FQHC practitioner
0524	Visit by RHC/FQHC practitioner to a member, in a covered Part A stay at the skilled nursing facility (SNF)
0525	Visit by RHC/FQHC practitioner to a member in a SNF (not in a covered Part A stay), nursing facility, intermediate care facility for individuals with mental retardation, or other residential facility

¹ 42 Code of Federal Regulations (CFR) Part 425 defines primary care services as the set of services identified by the following revenue center codes: 0521, 0522, 0524, and 0525. Appendix C contains all codes in that range that are currently in use.

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