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Accountable Care Organization 2016 Program Quality Measure Narrative Specifications

Prepared for

(The Pioneer ACO Model)
Division of Accountable Care Organization Populations
Seamless Care Models Group
Center for Medicare and Medicaid Innovation
&
(The Medicare Shared Savings Program)
Division of Shared Savings Program
Performance-Based Payment Policy Group
Center for Medicare
Centers for Medicare & Medicaid Services
7500 Security Boulevard
Baltimore, MD 21244-1850

Prepared by

RTI International
1440 Main Street, Suite 310
Waltham, MA 02451-1623

RTI Project Number 0213195.001.004

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SECTION 1
INTRODUCTION

On November 2, 2011, the Centers for Medicare & Medicaid Services (CMS) established the Medicare Shared Savings Program (Shared Savings Program), as authorized by the Patient Protection and Affordable Care Act (Affordable Care Act), to help doctors, hospitals, and other health care providers better coordinate care for Medicare patients through Accountable Care Organizations (ACOs). Participation in ACOs creates incentives for health care providers to work together voluntarily to coordinate care and improve quality for their patient population. Since the 2011 Shared Savings Program final rule, updates have been made to the Shared Savings Program quality measures, scoring, and quality performance standard have been made in subsequent Shared Savings Program and Physician Fee Schedule rules.[1]

ACOs are required to completely and accurately report quality data that are used to calculate and assess their quality performance. In addition, in order to be eligible to share in any savings generated, an ACO must meet the established quality performance standard that corresponds to its performance year. CMS most recently updated the quality measure set in the 2016 Physician Fee Schedule Final Rule by adding a Statin Therapy for the Prevention and Treatment of Cardiovascular Disease measure in the Preventive Health Domain to address National Quality Strategy and CMS Strategy goals and to align with PQRS and the Million Hearts Initiative. This document presents the 34 quality measures used to assess ACO quality performance for the 2016 quality reporting year ACOs participating in the Shared Savings Program.

1.1 ACO Quality Measures

CMS will measure quality of care using 34 nationally recognized quality measures in four key domains:

1. Patient/Caregiver Experience (8 measures)
2. Care Coordination/Patient Safety (10 measures)
3. Clinical Care for At-Risk Population
   - Diabetes (2 measures scored as 1 composite measure)
   - Hypertension (1 measure)

[1] Medicare Program; Medicare Shared Savings Program: Accountable Care Organizations; Final Rule, 76 Fed. Reg. 67802 (Nov. 2, 2011). Medicare Program; Revisions to Payment Policies under the Physician Fee Schedule, Clinical Laboratory Fee Schedule & Other Revisions to Part B for CY 2014; Final Rule, 78 Fed. Reg. 74230 (Dec. 10, 2013). Medicare Program; Revisions to Payment Policies under the Physician Fee Schedule, Clinical Laboratory Fee Schedule & Other Revisions to Part B for CY 2015; Final Rule, 79 Fed. Reg. 67907 (Nov. 13, 2014). Medicare Program; Revisions to Payment Policies under the Physician Fee Schedule, Clinical Laboratory Fee Schedule & Other Revisions to Part B for CY 2016; Final Rule, 80 Fed. Reg. 71263 (Nov. 16, 2015).

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- Ischemic Vascular Disease (1 measure)
- Heart Failure (1 measure)
- Coronary Artery Disease (1 measure)
- Depression[2] (1 measure)

4. Preventive Health (9 measures)

The 34 quality measures will be reported through a combination of CMS claims and administrative (EHR Incentive Program) data (8 measures), a CMS-provided web portal (i.e., the Group Practice Reporting Option [GPRO] Web Interface) designed for capturing ACO-reported clinical quality measure data (18 measures), and a patient experience of care survey (8 measures).

Measures are provided at-a-glance in Table 1. For each measure, the table arranges measures by domain and provides (1) the ACO measure number and GPRO Web Interface measure number (if applicable), (2) the title of the measure, (3) the measure's National Quality Forum (NQF) number (if available), (4) the measure steward, and (5) the method of data submission. Note that the two diabetes measures within the At Risk Population domain are scored as one "all-or-nothing" composite performance rate.

Table 1
Measures for use in establishing quality performance standards that ACOs must meet for shared savings

ACO #	Measure title	NQF #	Measure steward	Method of data submission
Domain: patient/ caregiver experience				
ACO-1	CAHPS: Getting Timely care, Appointments, and Information	0005	AHRQ	Survey
ACO-2	CAHPS: How Well Your Providers Communicate	0005	AHRQ	Survey
ACO-3	CAHPS: Patients' Rating of Provider	0005	AHRQ	Survey
ACO-4	CAHPS: Access to Specialists	N/A	CMS/AHRQ	Survey
ACO-5	CAHPS: Health Promotion and Education	N/A	CMS/AHRQ	Survey
ACO-6	CAHPS: Shared Decision Making	N/A	CMS/AHRQ	Survey
ACO-7	CAHPS: Health Status/Functional status	N/A	CMS/AHRQ	Survey
ACO-34	CAHPS: Stewardship of Patient Resources	N/A	CMS/AHRQ	Survey

(continued)

[2] This is referred to as the Mental Health module in the Physician Quality Reporting System (PQRS) Group Practice Reporting Option (GPRO) Web Interface documents, but it reflects the same quality measure.

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Table 1
Measures for use in establishing quality performance standards that ACOs must meet for shared savings (continued)

ACO #	Measure title	NQF #	Measure steward	Method of data submission
Domain: care coordination/ patient safety				
ACO-8	Risk Standardized, All Condition Readmission	1789 (adapted)	CMS	Claims
ACO-35	Skilled Nursing Facility 30-Day All-Cause Readmission Measures (SNFRM)	2510 (adapted)	CMS	Claims
ACO-36	All-Cause Unplanned Admissions for Patients with Diabetes	N/A	CMS	Claims
ACO-37	All-Cause Unplanned Admissions for Patients with Heart Failure	N/A	CMS	Claims
ACO-38	All-Cause Unplanned Admissions for Patients with Multiple Chronic Conditions	N/A	CMS	Claims
ACO-9	Ambulatory Sensitive Conditions Admissions: Chronic Obstructive Pulmonary Disease (COPD) or Asthma in Older Adults	0275	AHRQ	Claims
ACO-10	Ambulatory Sensitive Conditions Admissions: Heart Failure	0277	AHRQ	Claims
ACO-11	Percent of Primary Care Physicians who Successfully Meet Meaningful Use Requirements	N/A	CMS	EHR Incentive Program Data
ACO-39 (CARE-3)	Documentation of Current Medications in the Medical Record	0419	CMS	GPRO WI
ACO-13 (CARE-2)	Falls: Screening for Future Fall Risk	0101	AMA/PCPI/ NCQA	GPRO WI
Domain: Preventive Health				
ACO-14 (PREV-7)	Preventive Care and Screening: Influenza Immunization	0041	AMA/PCPI	GPRO WI
ACO-15 (PREV-8)	Pneumonia Vaccination Status for Older Adults	0043	NCQA	GPRO WI
ACO-16 (PREV-9)	Preventive Care and Screening: Body Mass Index Screening and Follow-Up	0421	CMS	GPRO WI
ACO-17 (PREV-10)	Preventive Care and Screening: Tobacco Use: Screening and Cessation Intervention	0028	AMA/PCPI	GPRO WI
ACO-18 (PREV-12)	Preventive Care and Screening: Screening for Clinical Depression and Follow-up Plan	0418	CMS	GPRO WI
ACO-19 (PREV-6)	Colorectal Cancer Screening	0034	NCQA	GPRO WI
ACO-20 (PREV-5)	Breast Cancer Screening	N/A	NCQA	GPRO WI

(continued)

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Table 1
Measures for use in establishing quality performance standards that ACOs must meet for shared savings (continued)

ACO #	Measure title	NQF #	Measure steward	Method of data submission
ACO-21 (PREV-11)	Preventive Care and Screening: Screening for High Blood Pressure and Follow-Up Documented	N/A	CMS	GPRO WI
ACO-42 (PREV-13)	Statin Therapy for the Prevention and Treatment of Cardiovascular Disease	N/A	CMS	GPRO WI
Domain: at-risk population Depression ACO-40 (MH-1)	Depression Remission at 12 Months	0710	MNCM	GPRO WI
Diabetes ACO-27 (DM-2)	Diabetes: Hemoglobin A1c Poor Control	0059	NCQA	GPRO WI
ACO-41 (DM-7)	Diabetes: Eye Exam	0055	NCQA	GPRO WI
Hypertension ACO-28 (HTN-2)	Controlling High Blood Pressure	0018	NCQA	GPRO WI
Ischemic vascular disease ACO-30 (IVD-2)	Ischemic Vascular Disease: Use of Aspirin of Another Antithrombotic	0068	NCQA	GPRO WI
Heart failure ACO-31 (HF-6)	Heart Failure: Beta-Blocker Therapy For Left Ventricular Systolic Dysfunction	0083	AMA/PCPI/ ACC/AHA	GPRO WI
Coronary artery disease ACO-33 (CAD-7)	Coronary Artery disease: Angiotensin-Converting Enzyme Inhibitor or Angiotensin Receptor Blocker Therapy—Diabetes or Left Ventricular Systolic Dysfunction (LVEF < 40%)	0066	AMA/PCPI/ ACC/ AHA	GPRO WI

NOTE: AHRQ = Agency for Healthcare Research and Quality, ACC = American College of Cardiology, AHA = American Heart Association, AMA = American Medical Association, MNCM = Minnesota Community Measurement, N/A = not available, NCQA = National Committee on Quality Assurance, PCPI = Physician Consortium for Performance Improvement

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1.1.1 Patient Experience of Care Measures/Consumer Assessment of Healthcare Providers and Systems (CAHPS) for ACOs Survey

ACOs are responsible for selecting and paying for a CMS-approved vendor to administer the CAHPS for ACOs survey. The CAHPS for ACOs is based on the Clinician and Group (CG) CAHPS. Additional information about the CAHPS for ACOs survey and the list of CMS-approved vendors can be found at http://acocahps.cms.gov/Content/Default.aspx

1.1.2 Claims-Based/Administrative Data Measures

For the claims-based measures, ACOs do not need to collect or submit additional data aside from normal billing activities. The CMS ACO Program Analysis Contractor (ACO PAC) will coordinate with CMS to obtain the necessary Medicare claims files and calculate the rates for these measures for each ACO.

For the electronic health record (EHR) measure, the CMS ACO PAC will calculate the measure using CMS claims and administrative data extracted from the National Level Repository. The National Level Repository contains administrative data for the Medicare & Medicaid EHR Incentive Program. Given the different timelines for updating the National Level Repository data (especially from the state Medicaid incentive programs), CMS encourages all eligible providers within the ACOs to successfully attest[3] to the 2016 EHR Incentive program as early as feasible.

1.1.3 ACO-Reported Clinical Quality Measures

Pioneer ACOs and Shared Savings Program ACOs will use the GPRO Web Interface, pre-populated with a sample of the ACO's beneficiaries, as the tool for collecting and submitting data to CMS. The data collected will be based on services furnished during the January 1, 2016, through December 31, 2016, reporting period. For purposes of the 2016 performance year reporting, patient age is determined during the sampling process, and patients must meet each age criteria for measure by January 1 of the measurement period.

For quality reporting through the GPRO Web Interface, the following measure groupings are used: care coordination (CARE), coronary artery disease (CAD), heart failure (HF), hypertension (HTN), ischemic vascular disease (IVD), diabetes (DM), mental health (MH), and preventive care (PREV). Note that the two diabetes measures from the At Risk Population domain are scored as one "all-or-nothing" composite performance rate.

Note that ACO-reported measures are aligned with the measure requirements for those practices who select the GPRO Web Interface as a group practice reporting mechanism for the Physician Quality Reporting System (PQRS). For the purposes of program coordination and version control, narrative descriptions for each of the 18 GPRO Web Interface measures are not detailed in this document, but are available on the GPRO Web Interface website. Supplementary documents, which provide additional guidance related to the ACO-reported measures reporting, can also be found on the CMS GPRO Web Interface website under the "2016 GPRO Web

[3] https://ehrincentives.cms.gov/hitech/

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Interface Measures Documentation" link at http://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/PQRS/GPRO_Web_Interface.html.

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SECTION 2
NARRATIVE MEASURE SPECIFICATIONS

2.1 Domain: Patient/Caregiver Experience

2.1.1 CAHPS for ACOs

Care Organizations (CAHPS for ACOs)

Description

CMS finalized the use of the CG CAHPS to develop a survey to measure patient experience of care received from ACOs. CMS has made no changes to the survey content for the 2016 reporting period. The CAHPS for ACOs survey includes core questions from version 2.0 of the CG CAHPS survey and supplemental items from sources including the CAHPS Patient-Centered Medical Home Survey, Core CAHPS Health Plan Survey Version 5.0, existing CAHPS supplemental items, and new content written for the CAHPS for ACOs survey. In addition, the survey includes questions that collect information on English proficiency, disability, and self-reported race and ethnicity categories required by section 4302 of the Affordable Care Act.

Eight measures are included in the CAHPS for ACOs survey:

- ACO-1: CAHPS: Getting Timely Care, Appointments, and Information
- ACO-2: CAHPS: How Well Your Providers Communicate
- ACO-3: CAHPS: Patients' Rating of Provider
- ACO-4: CAHPS: Access to Specialists
- ACO-5: CAHPS: Health Promotion and Education
- ACO-6: CAHPS: Shared Decision Making
- ACO-7: CAHPS: Health Status / Functional Status
- ACO-34: CAHPS: Stewardship of Patient Resources

Measure Information

For additional information regarding any of the above CAHPS measures and their use in the ACO program, please refer to the *CAHPS® Survey for Accountable Care Organizations Participating in Medicare Initiatives* website: http://acocahps.cms.gov/Content/Default.aspx

Guidance

ACOs are required to contract with a CMS-approved survey vendor to administer the survey. The survey for the 2016 reporting period will be conducted from late 2016 through early 2017. CMS has developed a process to approve independent survey vendors to administer the

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patient experience of care survey in accordance with the standardized sampling and survey administration procedures. A list of CMS-approved vendors is available on the *CAHPS Survey for Accountable Care Organizations Participating in Medicare Initiatives* website at http://acocahps.cms.gov/Content/ApprovedVendor.aspx. New vendors may be added to the list annually after vendor training. This website also includes application instructions for survey vendors interested in applying for approval to administer the CAHPS for ACOs survey.

2.2 Domain: Care Coordination/Patient Safety

2.2.1 ACO-8: Risk Standardized All Condition Readmission

Description

Risk-adjusted percentage of ACO assigned beneficiaries who were hospitalized and who were hospitalized and readmitted to a hospital within 30 days following discharge from the hospital for the index admission.

Initial Patient Population

ACO-assigned or ACO-aligned beneficiaries

Improvement Notation

Lower risk-standardized readmission rate (RSRR) scores are better. The measure score reported on the ACO quality reports represents the predicted readmission rate divided by the expected readmission rate; this result is multiplied by an average readmission rate (across all ACOs), resulting in the RSRR.

The predicted readmission rate represents the predicted ACO readmission rate after adjustment for ACO case mix and individual ACO effect.

The expected readmission rate represents the expected ACO readmission rate after adjustment for only ACO case mix.

The measures information form (MIF) is updated annually and is made available at http://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/sharedsavingsprogram/Quality_Measures_Standards.html.

Denominator

All relevant hospitalizations for ACO-assigned beneficiaries age 65 or older at non-federal, short-stay acute care or critical access hospitals.

Admissions are eligible for inclusion in the denominator if the following criteria are met:

1. Patient is enrolled in Medicare FFS.
2. Patient is age 65 or older.
3. Patient was discharged from a non-federal acute care hospital.

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4. Patient did not die in the hospital.

5. Patient is not transferred to another acute care facility upon discharge.

6. Patient is enrolled in Part A for the 12 months before and including the date of the index admission.

Note that a readmission within 30 days will also be eligible as an index admission if the patient meets all other eligibility criteria. This allows the measure to capture repeated readmissions for the same patient, whether at the same hospital or another.

Denominator Exclusions

1. Admissions for patients without 30 days of post-discharge data.

2. Admissions for patients lacking a complete enrollment history for the 12 months before admission.

3. Admissions for patients to a PPS-exempt cancer hospital.

4. Admissions for patients with medical treatment of cancer.

5. Admissions for primary psychiatric disease.

6. Admissions for rehabilitation care.

7. Admissions for patients discharged against medical advice.

Denominator Exceptions

Not applicable.

Numerator

Risk-adjusted readmissions at a non-federal, short-stay, acute care, or critical access hospital within 30 days of discharge from the index admission included in the denominator, excluding planned readmissions.

Numerator Exclusions

Not applicable.

Definition(s)

None.

Rationale

Readmission following an acute care hospitalization is a costly and often preventable event. During 2003 and 2004, almost one-fifth of Medicare beneficiaries—more than 2.3 million patients—were readmitted within 30 days of discharge (Jencks, Williams, and Coleman, 2009).

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A Commonwealth Fund report estimated that if national readmission rates were lowered to the levels achieved by the top-performing regions, Medicare would save $1.9 billion annually.

Hospital readmission is also disruptive to patients and caregivers, and puts patients at additional risk of hospital-acquired infections and complications (Horwitz et al., 2011). Some readmissions are unavoidable, but studies have shown that readmissions may also result from poor quality of care, inadequate coordination of care, or lack of effective discharge planning and transitional care. High readmission rates and institutional variations in readmission rates indicate an opportunity for improvement. Given that interventions have been able to reduce 30-day readmission rates for a variety of medical conditions, it is important to consider an all-condition 30-day readmission rate as a quality measure (Horwitz et al., 2011).

This ACO quality measure is adapted from a hospital risk-standardized, all-condition readmission quality measure developed for CMS by Yale (Horwitz et al., 2011).

Clinical Recommendation Statements

Randomized controlled trials have shown that improvement in health care can directly reduce readmission rates, including interventions in the following areas: quality of care during the initial admission; improvement in communication with patients, caregivers, and clinicians; patient education; predischarge assessment; and coordination of care after discharge (Naylor et al., 1994; Naylor et al., 1999; Krumholz et al., 2002; van Walraven et al., 2002; Conley et al., 2003; Coleman et al., 2004; Phillips et al., 2004; Jovicic, Holroyd-Leduc, and Straus, 2006; Garasen, Windspoll, and Johnsen, 2007; Mistiaen, Francke, and Poot, 2007; Courtney et al., 2009; Jack et al., 2009; Koehler et al., 2009; Weiss, Yakusheva, and Bobay, 2010; Stauffer et al., 2011; Voss et al., 2011). Successful randomized trials have reduced 30-day readmission rates by as much as 20–40 percent(Horwitz et al., 2011).

ACOs incentivize providers to manage the range of medical care, coordination of care, and other factors affecting readmission rates for their assigned beneficiaries. By taking responsibility for all aspects of the medical care of their assigned beneficiaries, ACOs and their participating providers will be able to assess the range of possible interventions affecting readmissions and then select the interventions appropriate for each population of patients included among their assigned beneficiaries.

2.2.2 ACO-35: Skilled Nursing Facility 30-Day All-Cause Readmission Measures (SNFRM)

Description

Risk-adjusted rate of all-cause, unplanned hospital readmissions within 30 days for ACO-assigned beneficiaries who had been admitted to a skilled nursing facility (SNF) after discharge from their prior proximal hospitalization.

Initial Patient Population

ACO assigned or aligned beneficiaries.

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Improvement Notation

Lower RSRR scores are better. The measure score reported on the ACO quality reports represents the predicted readmission rate divided by the expected readmission rate; this result is multiplied by an average readmission rate (across all ACOs), resulting in the RSRR.

The predicted readmission rate represents the predicted ACO readmission rate after adjustment for ACO case mix and individual ACO effect.

The expected readmission rate represents the expected ACO readmission rate after adjustment for only ACO case mix.

The MIF, updated annually, is made available at http://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/sharedsavingsprogram/Quality_Measures_Standards.html.

Denominator

All beneficiaries who have been admitted to a SNF (including SNF stays in swing-bed facilities) within 1 day of discharge from a prior proximal hospitalization (Inpatient Prospective Payment System acute care hospital, Critical Access Hospital, or psychiatric hospital).

Admissions are eligible for inclusion in the denominator if the following criteria are met:

1. Beneficiary is age 65 or older.

2. Beneficiary is continuously enrolled in FFS Medicare Part A for at least one month after discharge.

3. Beneficiary was not discharged to another acute care hospital or against medical advice.

4. Beneficiary was alive upon discharge and for 30 days post-discharge.

Denominator Exclusions

1. SNF stays where the beneficiary had one or more intervening post-acute care admissions (inpatient rehabilitation facility [IRF] or long-term care hospital [LTCH]), which occurred either between the prior proximal hospital discharge and SNF admission or after the SNF discharge, within the 30-day risk window.

2. SNF admissions where the beneficiary had multiple SNF admissions (> 1 SNF admit and discharge date in the 30-day risk window) after the prior proximal hospitalization, within the 30-day risk window.

3. SNF stays with a gap of greater than 1 day between discharge from the prior proximal hospitalization and the SNF admission.

4. SNF stays where the beneficiary did not have at least 12 months of FFS Medicare enrollment prior to the proximal hospital discharge.

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5. SNF stays in which the beneficiary did not have FFS Medicare enrollment for the entire risk period.

6. SNF stays in which the principal diagnosis for the prior proximal hospitalization was for the medical treatment of cancer. Beneficiaries with cancer whose principal diagnosis from the prior proximal hospitalization was for other diagnoses or for surgical treatment of their cancer remain in the measure.

7. SNF stays where the beneficiary was discharged from the SNF against medical advice.

8. SNF stays in which the principal primary diagnosis for the prior proximal hospitalization was for "rehabilitation care; fitting of prostheses and for the adjustment of devices."

Denominator Exceptions

Not applicable.

Numerator

Risk-adjusted, unplanned, all-cause readmissions at a non-federal, short-stay, acute care, or critical access hospital within 30 days of discharge from a prior proximal hospitalization and admission to a SNF.

Numerator Exclusions

Not applicable.

Definition(s)

None.

Rationale

The SNFRM is intended to promote shared accountability for improving care transitions across all settings. The measure was developed using FFS claims to harmonize with CMS' current Hospital-Wide Readmission measure and other readmission measures developed for other post-acute care settings (i.e., IRFs, LTCHs, home health agencies, and end-stage renal disease [ESRD] facilities). The measure can also be used by providers for tracking results of their internal quality improvement initiatives.

Hospital readmissions of Medicare beneficiaries discharged from a hospital to a SNF are prevalent and expensive, and prior studies suggest that a large proportion of readmissions from SNFs are preventable; according to an analysis of SNF data from 2006 Medicare claims merged with the Minimum Data Set, 23.5 percent of SNF stays resulted in a rehospitalization within 30 days of the initial hospital discharge (Mor et al., 2010). The average Medicare payment for each readmission was $10,352 per hospitalization, for a total of $4.34 billion. Of these rehospitalizations, 78 percent were deemed potentially avoidable, and applying this figure to the aggregate cost indicates that avoidable hospitalizations resulted in an excess cost of $3.39 billion

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(78 percent of $4.34 billion) to Medicare (Mor et al., 2010). Several analyses of hospital readmissions of SNF beneficiaries suggest there is opportunity for reducing hospital readmissions among SNF beneficiaries (Mor et al., 2010; Li et al., 2011), and multiple studies suggest that SNF structural and process characteristics can impact readmission rates (Coleman et al., 2004; Medicare Payment Advisory Commission (U.S.), 2011).

In addition to being costly, readmission to the hospital interrupts the SNF beneficiary's therapy and care plan, causes anxiety and discomfort, and exposes the beneficiary to hospital-acquired adverse events such as decline in functional status, health care–associated infections, and medication errors (Covinsky et al., 2003; Boockvar et al., 2004; Ouslander et al., 2011).

Clinical Recommendation Statements

ACOs incentivize providers to manage the range of medical care, coordination of care, and other factors affecting readmission rates for their assigned beneficiaries. By taking responsibility for all aspects of the medical care of their assigned beneficiaries, ACOs and their providers may be able to assess the range of possible interventions affecting readmissions and then select the interventions appropriate for their beneficiaries.

2.2.3 ACO-9: Ambulatory Sensitive Conditions Admissions: COPD or Asthma in Older Adults

Description

All discharges with an ICD-10-CM principal diagnosis code for COPD or asthma in adults ages 40 years and older, for ACO assigned or aligned beneficiaries with COPD or asthma, with risk-adjusted comparison of observed discharges to expected discharges for each ACO.[4] This is a ratio of observed to expected discharges.

Improvement Notation

Lower prevention quality indicator (PQI) scores are better. The first score reported on the ACO quality reports represents a ratio of observed discharges divided by expected discharges. A score greater than 1.00 indicates that the rate of discharges was higher than expected, and a score below 1.00 indicates that the rate of discharges was lower than expected. The second score reported reflects the risk adjusted percentage. The risk adjusted percentage is the observed to expected ratio multiplied by the overall admission percentage [(total admissions/total person years)*100] across all ACOs. The risk adjusted percentage can be compared to the 2016 and 2017 benchmark guidance document. The MIF is updated annually

[4] For the purposes of the Medicare ACO initiatives, the following modifications were made to the original AHRQ Prevention Quality Indicator (PQI) version 6.0 technical specifications: (1) denominator changed from general population in a geographic area to beneficiaries assigned or aligned to a Medicare ACO, including part-year beneficiaries; (2) denominator changed from patients of any disease status to beneficiaries with a diagnosis of COPD or asthma; and (3) denominator exclusion added for beneficiaries with ESRD. To verify that these modifications were valid, the following analyses were completed: (1) dry run testing; (2) validity testing; (3) reliability testing; (4) variability testing; and (5) exclusion testing.

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and is made available at http://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/sharedsavingsprogram/Quality_Measures_Standards.html.

Initial Patient Population

ACO assigned or aligned Medicare beneficiaries.

Denominator

Expected discharges from an acute care hospital with a principal diagnosis of COPD or asthma, for beneficiaries assigned or aligned to an ACO, age 40 years and older, with COPD or asthma.

Denominator Exclusions

1. Beneficiaries with a diagnosis of ESRD.
2. Beneficiaries not eligible for both Medicare Part A and Part B.
3. Beneficiaries with missing data for gender, age, or principal diagnosis.

Denominator Exceptions

Not applicable.

Numerator

Observed discharges from an acute care hospital with a principal diagnosis of COPD or asthma, for Medicare FFS beneficiaries in the denominator population for this measure.

Numerator Exclusions

1. Discharges that are transfers from a hospital, SNF, intermediate care facility (ICF), or another health care facility.
2. Discharges are excluded from the numerator if they are associated with a diagnosis of cystic fibrosis or anomalies of the respiratory system.

Definition(s)

None.

Rationale

Hospital admissions for COPD or asthma are a PQI of interest to comprehensive health care delivery systems, including ACOs. COPD or asthma can often be controlled in an outpatient setting. Evidence suggests that these hospital admissions could have been avoided through high-quality outpatient care, or the condition would have been less severe if treated early and appropriately. Proper outpatient treatment and adherence to care may reduce the rate of occurrence for this event, and thus of hospital admissions.

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Clinical Recommendation Statements

Bindman et al. (1995) reported that self-reported access to care explained 27 percent of the variation in COPD hospitalization rates at the ZIP code cluster level. Physician adherence to practice guidelines and patient compliance also influence the effectiveness of therapy. Practice guidelines for COPD have been developed and published over the last decade (Hackner et al., 1999). With appropriate outpatient treatment and compliance, hospitalizations for the exacerbations of COPD and decline in lung function should be minimized.

According to empirical results, areas with high rates of COPD admissions also tend to have high rates of other ambulatory sensitive conditions admissions. The signal ratio (i.e., the proportion of the total variation across areas that is truly related to systematic differences in area performance rather than random variation) is 93.4 percent, indicating that the differences in age-sex adjusted rates likely represent true differences across areas (Agency for Healthcare Research and Quality, 2007). Risk adjustment for age and sex appears to most affect the areas with the highest rates. As a PQI, admissions for COPD or asthma are not a measure of hospital quality, but rather one measure of outpatient and other health care.

2.2.4 ACO-10: Ambulatory Sensitive Conditions Admissions: Heart Failure (HF)

Description

All discharges with an ICD-10-CM principal diagnosis code for HF in adults ages 18 years and older, for ACO assigned or aligned beneficiaries with HF, with risk-adjusted comparison of observed discharges to expected discharges for each ACO.[5] This is a ratio of observed to expected discharges.

Improvement Notation

Lower PQI scores are better. The first score reported on the ACO quality reports represents a ratio of observed discharges divided by expected discharges. A score greater than 1.00 indicates that the rate of discharges was higher than expected, and a score below 1.00 indicates that the rate of discharges was lower than expected. The second score reported reflects the risk adjusted percentage. The risk adjusted percentage is the observed to expected ratio multiplied by the overall admission percentage [(total admissions/total person years)*100] across all ACOs. The risk adjusted percentage can be compared to the 2016 and 2017 benchmark guidance document. The MIF is updated annually and is made available at http://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/sharedsavingsprogram/Quality_Measures_Standards.html

[5] For the purposes of the Medicare ACO initiatives, the following modifications were made to the original AHRQ Prevention Quality Indicator (PQI) version 6.0 technical specifications: (1) denominator changed from general population in a geographic area to beneficiaries assigned or aligned to a Medicare ACO, including part-year beneficiaries; (2) denominator changed from patients of any disease status to beneficiaries with a diagnosis of HF; and (3) denominator exclusion added for beneficiaries with ESRD. To verify that these modifications were valid, the following analyses were completed: (1) dry run testing, (2) validity testing, (3) reliability testing, (4) variability testing, and (5) exclusion testing.

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Initial Patient Population

ACO assigned or aligned beneficiaries.

Denominator

Expected discharges from an acute care hospital with a principal diagnosis of HF, for beneficiaries assigned or aligned to an ACO, age 18 years and older, with HF.

Denominator Exclusions

1. Beneficiaries with a diagnosis of ESRD.
2. Beneficiaries not eligible for both Medicare Part A and Part B.
3. Beneficiaries with missing data for gender, age, or principal diagnosis.

Denominator Exceptions

Not applicable.

Numerator

Observed discharges from an acute care hospital with a principal diagnosis of HF, for Medicare FFS beneficiaries in the denominator population for this measure.

Numerator Exclusions

1. Discharges that are transfers from a hospital, SNF or ICF, or another health care facility.
2. Discharges are excluded from the numerator if a cardiac procedure was performed during the admission.

Definition(s)

None.

Rationale

Hospital admissions for HF are a PQI of interest to comprehensive health care delivery systems, including ACOs. HF can often be controlled in an outpatient setting. Evidence suggests that these hospital admissions could have been avoided through high-quality outpatient care, or that the condition would have been less severe if treated early and appropriately. Proper outpatient treatment and adherence to care may reduce the rate of occurrence for this event, and thus of hospital admissions.

Outpatient interventions such as the use of protocols for ambulatory management of low-severity patients and improvement of access to outpatient care would most likely decrease inpatient admissions for HF. In addition, physician management of patients with HF differs significantly by physician specialty (Edep et al., 1997; Reis et al., 1997). Such differences in practice may be reflected in differences in HF admission rates.

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Clinical Recommendation Statements

According to empirical results, areas with high rates of HF admissions also tend to have high rates of other ambulatory sensitive conditions admissions. The signal ratio (i.e., the proportion of the total variation across areas that is truly related to systematic differences in area performance rather than random variation) is very high, at 93.0 percent, indicating that the observed differences in age-sex adjusted rates very likely represent true differences across areas (AHRQ, 2007). Risk adjustment for age and sex appears to most affect the areas with the highest rates. As a PQI, admissions for HF are not a measure of hospital quality, but rather one measure of outpatient and other health care.

This indicator was originally developed by Billings et al. in conjunction with the United Hospital Fund of New York. It was subsequently adopted by the Institute of Medicine and has been widely used in a variety of studies of avoidable hospitalizations (Bindman et al., 1995; Rosenthal et al., 1997).

2.2.5 ACO-36: All-Cause Unplanned Admissions for Patients with Diabetes

Description

Rate of risk-standardized, acute, unplanned hospital admissions among beneficiaries 65 years and older with diabetes who are assigned or aligned to the ACO.

Initial Patient Population

ACO assigned or aligned beneficiaries with diabetes.

Improvement Notation

Lower risk standardized acute admission rate (RSAAR) scores are better. The measure score reported on the ACO quality reports represents the predicted acute admission rate divided by the expected acute admission rate. This result is multiplied by an average acute admission rate (across all ACOs), resulting in the RSAAR.

The predicted acute admission rate represents the predicted ACO acute admission rate after adjustment for ACO case mix and individual ACO effect.

The expected acute admission rate represents the expected ACO acute admission rate after adjustment for only ACO case mix.

The MIF is updated annually and is made available at http://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/sharedsavingsprogram/Quality_Measures_Standards.html.

Denominator

The targeted patient population is beneficiaries age 65 years and older assigned or aligned to the ACO during the measurement period with a diagnosis of diabetes. To be included in the cohort, beneficiaries must have one inpatient or two outpatient diabetes diagnosis codes in any position within 1 year prior to the measurement period.

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Denominator Exclusions

1. Beneficiaries that do not have 12 months continuous enrollment in Medicare Part A and Part B during the year prior to the measurement year.

2. Beneficiaries that do not have 12 months continuous enrollment in Medicare Part A during the measurement year. Beneficiaries who become deceased during the measurement period are excluded if they do not have continuous enrollment in Medicare Part A until death (i.e., the 12-month requirement is relaxed for these beneficiaries). Beneficiaries with continuous enrollment until death are excluded after the time of death.

Denominator Exceptions

Not applicable.

Numerator

Number of acute unplanned admissions for people at risk for admission. Persons are considered at risk for admission if they are included in the denominator (as described above), alive, enrolled in FFS Medicare, and not currently admitted to an acute care hospital.

Numerator Exclusions

Not applicable.

Definition(s)

None.

Rationale

The goal of this measure is to evaluate and improve the quality of care for patients with diabetes cared for by ACOs. These patients account for a significant proportion of Medicare beneficiaries, and they experience high morbidity and costs associated with their disease. These patients need efficient, coordinated, and patient-centered care management. They also benefit from provider support and infrastructure that facilitate effective chronic disease management. This measure is focused on hospital admissions for acute illness as the outcome because these admissions are often sentinel events associated with high morbidity as well as physical and emotional stress; they also result in high costs for both the patient and the ACO. Research shows that effective health care can lower the risk of admission for these vulnerable groups of patients.

This measure is intended to incentivize providers to deliver high-quality, coordinated care that focuses on the whole patient. ACOs were created to achieve the goals of improved care, improved population health, and lower cost. Consistent with this mission, we envision that the measure will incentivize providers participating in ACOs to collaborate to provide the best system of clinical care and to partner with health and non-health-related organizations in their communities, as appropriate, to improve the health of their patient population.

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Clinical Recommendation Statements

Research shows that effective health care can lower the risk of admission for patients with diabetes (Sadur et al., 1999; Chen et al., 2010; United States Congress, 2010; Brown et al., 2012; CMS, 2012b; Leong et al., 2013; McCarthy, Cohen, and Johnson, 2013). For example, specific system-based interventions such as seeing a physician involved in a pay-for-performance program for diabetes care or participation in group outpatient visits with a diabetes nurse educator have been associated with lower all-cause hospitalization rates among these patients (Levine et al., 2012). This measure may identify variation in hospital admission rates and incentivize ACOs and their providers to develop efficient and coordinated chronic disease management strategies that anticipate and respond to patients' needs and preferences. Measuring admissions is consistent with ACOs' commitment to deliver patient-centered care that fulfills the goals of the Department of Health and Human Services' National Quality Strategy—improving population health, providing better care, and lowering health care costs (U.S. Department of Health and Human Services, 2010).

2.2.6 ACO-37: All-Cause Unplanned Admissions for Patients with Heart Failure

Description

Rate of risk-standardized, acute, unplanned hospital admissions among beneficiaries 65 years and older with heart failure who are assigned or aligned to the ACO.

Initial Patient Population

ACO assigned or aligned beneficiaries with heart failure.

Improvement Notation

Lower RSAAR scores are better. The measure score reported on the ACO quality reports represents the predicted acute admission rate divided by the expected acute admission rate. This result is multiplied by an average acute admission rate (across all ACOs), resulting in the RSAAR.

The predicted acute admission rate represents the predicted ACO acute admission rate after adjustment for ACO case mix and individual ACO effect.

The expected acute admission rate represents the expected ACO acute admission rate after adjustment for only ACO case mix.

The MIF is updated annually and is made available at http://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/sharedsavingsprogram/Quality_Measures_Standards.html.

Denominator

The targeted patient population is beneficiaries age 65 years and older assigned or aligned to the ACO during the measurement period with a diagnosis of heart failure. To be included in the cohort, patients must have one inpatient principal discharge diagnosis code of heart failure or two heart failure diagnosis codes in any position (Medicare Part A

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inpatient/outpatient and Part B Carrier claims) within 1 or 2 years prior to the measurement period.

Denominator Exclusions

1. Patients with left ventricular assist devices.

2. Beneficiaries that do not have 12 months continuous enrollment in Medicare Part A and Part B during the year prior to the measurement year.

3. Beneficiaries that do not have 12 months continuous enrollment in Medicare Part A during the measurement year. Beneficiaries who become deceased during the measurement period are excluded if they do not have continuous enrollment in Medicare Part A until death (i.e., the 12-month requirement is relaxed for these beneficiaries). Beneficiaries with continuous enrollment until death are excluded after the time of death.

Denominator Exceptions

Not applicable.

Numerator

Number of acute unplanned admissions for patients at risk for admission. Persons are considered at risk for admission if they are alive, enrolled in FFS Medicare, and not currently admitted.

Numerator Exclusions

Not applicable.

Definition(s)

None.

Rationale

The goal of this measure is to evaluate and improve the quality of care for patients with heart failure cared for by ACOs. These patients account for a significant proportion of Medicare beneficiaries, and they experience high morbidity and costs associated with their disease. These patients need efficient, coordinated, and patient-centered care management. They also benefit from provider support and infrastructure that facilitate effective chronic disease management. This measure is focused on hospital admissions for acute illness as the outcome because these admissions are often sentinel events associated with high morbidity as well as physical and emotional stress; they also result in high costs for both the patient and the ACO. Research shows that effective health care can lower the risk of admission for these vulnerable groups of patients.

This measure is intended to incentivize providers to deliver high-quality, coordinated care that focuses on the whole patient. ACOs were conceptualized and created to achieve the goals of improved care, improved population health, and lower cost. Consistent with this mission, we envision that the measure will incentivize providers participating in ACOs to collaborate to

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provide the best system of clinical care and to partner with health and non-health related organizations in their communities, as appropriate, to improve the health of their patient population.

Clinical Recommendation Statements

Research shows that effective health care can lower the risk of admission for patients with heart failure (United States Congress, 2010; Brown et al., 2012; CMS, 2012b; McCarthy, Cohen, and Johnson, 2013). For example, efforts to improve coordination and navigation of the health care system, along with home-based interventions and exercise-based rehabilitation therapy among patients with heart failure, may reduce the risk of hospitalization (Inglis et al., 2006; Austin et al., 2008; Zhang et al., 2008; United States Congress, 2010; Taylor et al., 2014).

It is our vision that these measures will illuminate variation among ACOs in hospital admission rates and incentivize providers participating in ACOs to develop efficient and coordinated chronic disease management strategies that anticipate and respond to patients' needs and preferences. This vision is consistent with ACOs' commitment to deliver patient-centered care that fulfills the goals of the Department of Health and Human Services' National Quality Strategy—improving population health, providing better care, and lowering health care costs (U.S. Department of Health and Human Services, 2010).

2.2.7 ACO-38: All-Cause Unplanned Admissions for Patients with Multiple Chronic Conditions (MCCs)

Description

Rate of risk-standardized acute, unplanned hospital admissions among beneficiaries 65 years and older with MCCs who are assigned or aligned to the ACO.

Initial Patient Population

ACO assigned or aligned beneficiaries with two or more of the eight chronic disease groups:

1. Acute myocardial infarction
2. Alzheimer's disease and related disorders or senile dementia
3. Atrial fibrillation
4. Chronic kidney disease
5. COPD and asthma
6. Depression
7. Heart failure
8. Stroke and transient ischemic attack

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Improvement Notation

Lower RSAAR scores are better. The measure score reported on the ACO quality reports represents the predicted acute admission rate divided by the expected acute admission rate. This result is multiplied by an average acute admission rate (across all ACOs), resulting in the RSRR.

The predicted acute admission rate represents the predicted ACO acute admission rate after adjustment for ACO case mix and individual ACO effect.

The expected acute admission rate represents the expected ACO acute admission rate after adjustment for only ACO case mix.

The MIF is updated annually and is made available at http://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/sharedsavingsprogram/Quality_Measures_Standards.html.

Denominator

Our target population is beneficiaries age 65 years and older assigned or aligned to the ACO whose combinations of chronic conditions put them at high risk of admission and whose admission rates could be lowered through better care. NQF's "Multiple Chronic Conditions Measurement Framework" defines patients with MCCs as people "having two or more concurrent chronic conditions that…. Act together to significantly increase the complexity of management, and affect functional roles and health outcomes, compromise life expectancy, or hinder self-management" (National Quality Forum (NQF), 2012).

Denominator Exclusions

1. Beneficiaries that do not have 12 months continuous enrollment in Medicare Part A and Part B during the year prior to the measurement year.

2. Beneficiaries that do not have 12 months continuous enrollment in Medicare Part A during the measurement year. Beneficiaries who become deceased during the measurement period are excluded if they do not have continuous enrollment in Medicare Part A until death (i.e., the 12-month requirement is relaxed for these beneficiaries). Beneficiaries with continuous enrollment until death are excluded after the time of death.

Denominator Exceptions

Not applicable.

Numerator

Number of acute unplanned admissions for patients at risk for admission. Persons are considered at risk for admission if they are alive, enrolled in FFS Medicare, and not currently admitted to an acute care hospital.

Numerator Exclusions

Not applicable.

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Definition(s)

None.

Rationale

As of 2010, more than two-thirds of Medicare beneficiaries had been diagnosed with or treated for two or more chronic conditions (CMS, 2012a). People with MCCs are more likely to be admitted to the hospital than those without chronic conditions or with a single chronic condition. Additionally, they are more likely to visit the emergency department, use post-acute care (such as SNFs), and require home health assistance (CMS, 2012a). No quality measures specifically designed for this population exist to assess quality of care or to enable the evaluation of whether current efforts to improve care are successful; this measure is designed to help fill that gap as called for in NQF's "Multiple Chronic Conditions Measurement Framework" (National Quality Forum (NQF), 2012).

The measure is focused on ACOs because providers in ACOs share responsibility for patients' ambulatory care, and better coordinated care should lower the risk of hospitalization for this vulnerable population. The measure is designed to illuminate variation in hospital admission rates and incentivize providers that are participating in ACOs to develop efficient and coordinated chronic disease management strategies that anticipate and respond to patients' needs and preferences. The measure is also consistent with ACOs' commitment to deliver patient-centered care that fulfills the goals of the Department of Health and Human Services' National Quality Strategy—improving population health, providing better care, and lowering health care costs (U.S. Department of Health and Human Services, 2010).

Measuring all-cause acute admissions is important in efforts to assess the quality of care as experienced by the patient and to drive overall improvements in care quality, coordination, and efficiency that are not specific to certain diseases. Ambulatory care providers can act together to lower patients' risk for a wide range of acute illness requiring admission in several ways:

1. Provide optimal and accessible chronic disease management to reduce catastrophic sequelae of chronic disease. For example:

    a. Support healthy lifestyle behaviors and optimize medical management to minimize the risk for cardiovascular events such as stroke and heart attacks.

    b. Carefully monitor and act early to address chronic problems that require major interventions if allowed to progress (e.g., assessment and treatment of peripheral artery disease in persistent infections in order to prevent amputation).

2. Anticipate and manage the interactions between chronic conditions. For example:

    a. Closely monitor renal function in patients on diuretic therapy for heart failure and chronic kidney disease.

    b. Minimize polypharmacy to reduce drug-drug and drug-disease interactions.

    c. Assess and treat depression to improve self-efficacy and self-management of chronic disease.

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3. Provide optimal primary prevention of acute illnesses, such as recommended immunizations and screening.

4. Facilitate rapid, effective ambulatory intervention when acute illness does occur, whether related or unrelated to the chronic conditions. For example:

    a. Promptly prescribe antibiotics for presumed bacterial pneumonia and diuretic treatment for fluid overload in heart failure.

    b. Empower patients to recognize symptoms and to seek timely care.

    c. Create accessible care options for patients (for example, weekend or evening hours; capacity to deliver intravenous medications).

5. Partner with the government, local businesses, and community organizations to improve support for patients with chronic illness. For example:

    a. Collaborate with home nursing programs.

    b. Partner with local businesses to increase opportunities to engage in healthy lifestyle behaviors.

    c. Provide outreach and services at senior centers.

Clinical Recommendation Statements

Measuring acute, unplanned admissions for ACO assigned beneficiaries with chronic disease incentivizes providers participating in ACOs to improve patient-centered care and outcomes for these patients. Providers within an ACO share responsibility for delivering primary preventive services, chronic disease management, and acute care to patients with MCCs. Further, providers accept accountability for patient outcomes; providers form ACOs voluntarily and commit to the goals of the ACO program, which include providing better coordinated care and chronic disease management while lowering costs (CMS). These program goals are fully aligned with the objective of lowering patients' risk of admission (CMS). ACOs and providers should be better able to lower the risk of acute, unplanned admissions than less integrated Medicare FFS providers through strengthening preventive care, delivering better-coordinated and more-effective chronic disease management, and providing timely ambulatory care for acute exacerbations of chronic disease. ACOs may also need to engage with community organizations and health-related community services to facilitate effective chronic disease management.

Finally, a number of studies have shown that improvements in the delivery of health care services for ambulatory patients with MCCs can lower the risk of admission (Littleford and Kralik, 2000; Sommers et al., 2000; Dorr et al., 2008; Zhang et al., 2008; Chan et al., 2012; Levine et al., 2012). Demonstrated strategies include improving access to care; supporting self-care in the home; better coordinating care across providers; and integrating social work, nursing, and medical services. This measure may identify variation among ACOs in hospital admission rates for people with MCCs and incentivize providers participating in ACOs to expand efforts to develop and implement efficient and coordinated chronic disease management strategies that anticipate and respond to patients' needs and preferences.

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2.2.8 ACO-11: Percent of Primary Care Physicians Who Successfully Meet Meaningful Use Requirements

Description

Percentage of ACO primary care physicians (PCPs) who successfully attest to either the Medicare or Medicaid EHR Incentive Program.

Improvement Notation

Higher percentages indicate better performance. The MIF is updated annually and is made available at http://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/sharedsavingsprogram/Quality_Measures_Standards.html.

Initial Patient Population

PCPs in Shared Savings Program and Pioneer Model ACOs.

Denominator

All PCPs who are participating in an ACO in the reporting year under the Shared Savings Program or under the Medicare Pioneer ACO Model.

Denominator Exclusions

1. Entities (i.e., identified by Taxpayer Identification Number or CMS Certification Number) that are not used for beneficiary assignment.

2. Providers who did not bill any Medicare Part B primary care services during the reporting year.

3. Hospital-based physicians, as identified by CMS through Medicare claims, who are participating in a Shared Savings Program or Pioneer ACO model during the reporting year.

4. Physicians who are deceased.

5. Physicians who have been approved for a hardship exemption, to the extent this data is available.

Denominator Exceptions

None.

Numerator

PCPs participating in an ACO and identified as included in the denominator for that ACO for this quality measure, who have successfully attested to either the Medicare or Medicaid EHR Incentive Program for the current (2016) or prior (2015) reporting period.

Numerator Exclusions

Not applicable.

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Rationale

Health information technology (IT) has been shown to improve quality of care by increasing adherence to guidelines, supporting disease surveillance and monitoring, and decreasing medication errors through decision support and data aggregation capabilities (Chaudhry et al., 2006). According to a 2008 Congressional Budget Office (CBO) study, in addition to enabling providers to deliver care more efficiently, there is a potential to gain both internal and external savings from widespread adoption of health IT (CBO, 2008).

The American Recovery and Reinvestment Act of 2009 (ARRA) provides incentive payments for Medicare and Medicaid providers who "adopt, implement, upgrade, or meaningfully use certified electronic health records (EHR) technology." These incentives are intended to significantly improve health care processes and outcomes, and are part of the larger Health Information Technology for Economic and Clinical Health (HITECH) Act (Blumenthal and Tavenner, 2010). The goal of the HITECH act is to accelerate the adoption of health IT and utilization of qualified EHRs. The final rule for the EHR incentive program serves to establish guidelines and implement the HITECH incentive payments for meaningful use (CMS, 2010).

Under the final rule for the EHR incentive program, eligibility criteria for the successful attestation differ somewhat between the Medicare and Medicaid programs. To successfully attest to the Medicare EHR Incentive Program, PCPs must successfully demonstrate meaningful use for each year of participation in the program. To successfully attest to the Medicaid incentive payments, PCPs must adopt, implement, upgrade, or demonstrate meaningful use of certified EHR technology in the first year of participation and successfully demonstrate meaningful use in subsequent participation years (CMS, 2010).

Clinical Recommendation Statements

Electronic data capture and information sharing is critical to good care coordination and high-quality patient care. For the purposes of the Medicare and Medicaid EHR Incentive Programs, eligible professionals, eligible hospitals, and critical access hospitals (CAHs) must use certified EHR technology. Certified EHR technology gives assurance to purchasers and other users that an EHR system or module offers the necessary technological capability, functionality, and security to help them meet the meaningful use criteria. Certification also helps providers and patients be confident that the health IT products and systems they use are secure, can maintain data confidentially, and can work with other systems to share information.

The ARRA specifies three main components of meaningful use (CMS, 2010):

1. The use of a certified EHR in a meaningful manner, such as e-prescribing.

2. The use of certified EHR technology for electronic exchange of health information to improve the quality of health care.

3. The use of certified EHR technology to submit clinical quality and other measures.

4. The CMS criteria for meaningful use is currently at Modified Stage 2 criteria for all attesters. Stage 3 will be optional for providers in 2017 and required for all providers in 2018.

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2.2.9 Care Coordination and Patient Safety—ACO-Reported Measures

The remaining measures within this domain are GPRO Web Interface measures. As noted above, for the purposes of program coordination and version control, narrative descriptions for the GPRO Web Interface measures are not detailed in this document. These measures are most commonly referred to by their GPRO Web Interface number, which is how they are listed here. Two measures fall under this domain:

- CARE-2: Falls: Screening for Future Fall Risk
- CARE-3: Documentation of Current Medications in the Medical Record

For additional information regarding either of these measures, please refer to the following documents, available under the "2016 GPRO Web Interface Measures Documentation" link at http://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/PQRS/GPRO_Web_Interface.html:

- 2016 GPRO Web Interface Narrative Specifications, Measures List and Release Notes
- 2016 GPRO Web Interface Supporting Documents and Release Notes
- 2016 GPRO Web Interface Performance Calculation Measure Flows

2.3 Domain: At-Risk Population

All measures within this domain are reported through the GPRO Web Interface. As noted above, for the purposes of program coordination and version control, narrative descriptions for the GPRO Web Interface measures are not detailed in this document. These measures are most commonly referred to by their GPRO Web Interface number, which is how they are listed here.

2.3.1 Coronary Artery Disease Measures

- CAD-7: Coronary Artery Disease: Angiotensin-Converting Enzyme Inhibitor or Angiotensin Receptor Blocker Therapy—Diabetes or Left Ventricular Systolic Dysfunction (LVEF < 40%)

2.3.2 Diabetes Measures

- DM-2 (NQF 0059): Diabetes: Hemoglobin A1c Poor Control
- DM-7 (NQF 0055): Diabetes: Eye Exam

These two diabetes measures are scored together as a composite measure.

2.3.3 Heart Failure Measures

- HF-6: Heart Failure: Beta-Blocker Therapy for Left Ventricular Systolic Dysfunction

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2.3.4 Hypertension Measures

- HTN-2: Controlling High Blood Pressure

2.3.5 Ischemic Vascular Disease Measures

- IVD-2: Ischemic Vascular Disease: Use of Aspirin or Another Antithrombotic

2.3.6 Mental Health

- MH-1: Depression Remission at 12 Months

For additional information regarding any of these measures, please refer to the following documents, available under the "2016 GPRO Web Interface Measures Documentation" link at http://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/PQRS/GPRO_Web_Interface.html:

- 2016 GPRO Web Interface Narrative Specifications, Measures List and Release Notes
- 2016 GPRO Web Interface Supporting Documents and Release Notes
- 2016 GPRO Web Interface Performance Calculation Measure Flows

2.4 Domain: Preventive Care

All measures within this domain are reported through the GPRO Web Interface. As noted above, for the purposes of program coordination and version control, narrative descriptions for the GPRO Web Interface measures are not detailed in this document. These measures are most commonly referred to by their GPRO Web Interface number, which is how they are listed here. The following measures are under this domain:

- PREV-5: Breast Cancer Screening
- PREV-6: Colorectal Cancer Screening
- PREV-7: Preventive Care and Screening: Influenza Immunization
- PREV-8: Pneumonia Vaccination Status for Older Adults
- PREV-9: Preventive Care and Screening: Body Mass Index Screening and Follow-Up
- PREV-10: Preventive Care and Screening: Tobacco Use: Screening and Cessation Intervention
- PREV-11: Preventive Care and Screening: Screening for High Blood Pressure and Follow-Up Documented

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- PREV-12 (NQF 0418): Preventive Care and Screening: Screening for Clinical Depression and Follow-Up Plan

- PREV-13: Statin Therapy for the Prevention and Treatment of Cardiovascular Disease

For additional information regarding any of these preventive care measures, please refer to the following documents, available under the "2016 GPRO Web Interface Measures Documentation" link at http://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/PQRS/GPRO_Web_Interface.html:

- 2016 GPRO Web Interface Narrative Specifications, Measures List and Release Notes

- 2016 GPRO Web Interface Supporting Documents and Release Notes

- 2016 GPRO Web Interface Performance Calculation Measure Flows

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