January 5, 2017

Accountable Care Organization 2017 Quality Measure Narrative Specifications

Prepared for

The Next Generation ACO Model
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RTI Project Number 0215469.000.002.006.001.002

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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]. CMS implemented the Next Generation ACO Model under section 1115A of the Social Security Act, which authorizes CMS, through its Center for Medicare and Medicaid Innovation (CMMI), to test innovative payment and service delivery models that have the potential to reduce Medicare, Medicaid, or Children's Health Insurance Program expenditures while maintaining or improving the quality of beneficiaries' care.

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. This document presents the 31 quality measures used to assess ACO quality performance and the quality performance standard for the 2017 performance year for the Shared Savings Program and the Next Generation ACO Model.

1.1 ACO Quality Measures

CMS will measure quality of care using 31 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)

[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). Medicare Program; Revisions to Payment Policies under the Physician Fee Schedule, Clinical Laboratory Fee Schedule & Other Revisions to Part B for CY 2017; Final Rule, 81 Fed. Reg. 80170 (Nov. 15, 2016).

- Hypertension (1 measure)
- Ischemic Vascular Disease (1 measure)
- Depression[2] (1 measure)

4. Preventive Health (8 measures)

The 31 quality measures will be reported through a combination of CMS claims and administrative (Electronic Health Record [EHR] Incentive Program) data (8 measures), a CMS-provided web interface (i.e., the CMS Web Interface) designed for capturing ACO-reported clinical quality measure data (15 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 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 #	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 Web Interface documents, but it reflects the same quality measure.

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

ACO measure #	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-43	Acute Composite (AHRQ Prevention Quality Indicator [PQI] #91)	N/A	AHRQ	Claims
ACO-11	Use of Certified EHR Technology	N/A	CMS	Quality Payment Program Data
ACO-12 (CARE-1)	Medication Reconciliation Post Discharge	0097	NCQA	Web Interface
ACO-13 (CARE-2)	Falls: Screening for Future Fall Risk	0101	AMA/PCPI/ NCQA	Web Interface
ACO-44	Use of Imaging Studies for Low Back Pain	0052	NCQA	Claims
Domain: Preventive Health				
ACO-14 (PREV-7)	Preventive Care and Screening: Influenza Immunization	0041	AMA/PCPI	Web Interface
ACO-15 (PREV-8)	Pneumonia Vaccination Status for Older Adults	0043	NCQA	Web Interface
ACO-16 (PREV-9)	Preventive Care and Screening: Body Mass Index Screening and Follow-Up	0421	CMS	Web Interface
ACO-17 (PREV-10)	Preventive Care and Screening: Tobacco Use: Screening and Cessation Intervention	0028	AMA/PCPI	Web Interface
ACO-18 (PREV-12)	Preventive Care and Screening: Screening for Clinical Depression and Follow-up Plan	0418	CMS	Web Interface
ACO-19 (PREV-6)	Colorectal Cancer Screening	0034	NCQA	Web Interface
ACO-20 (PREV-5)	Breast Cancer Screening	N/A	NCQA	Web Interface

(continued)

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

ACO measure #	Measure title	NQF #	Measure steward	Method of data submission
ACO-42 (PREV-13)	Statin Therapy for the Prevention and Treatment of Cardiovascular Disease	N/A	CMS	Web Interface
Domain: at-risk population Depression ACO-40 (MH-1)	Depression Remission at 12 Months	0710	MNCM	Web Interface
Diabetes ACO-27 (DM-2)	Diabetes: Hemoglobin A1c Poor Control	0059	NCQA	Web Interface
ACO-41 (DM-7)	Diabetes: Eye Exam	0055	NCQA	Web Interface
Hypertension ACO-28 (HTN-2)	Controlling High Blood Pressure	0018	NCQA	Web Interface
Ischemic vascular disease ACO-30 (IVD-2)	Ischemic Vascular Disease: Use of Aspirin of Another Antithrombotic	0068	NCQA	Web Interface

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

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/.

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 EHR measure (ACO-11), the CMS ACO PAC will calculate the measure using data derived from the Quality Payment Program's (QPP's) Advancing Care Information category.

1.1.3 ACO-Reported Clinical Quality Measures

Next Generation ACOs and Shared Savings Program ACOs will use the 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, 2017, through December 31, 2017, reporting period. For purposes of the 2017 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 Web Interface, the following measure groupings are used: care coordination (CARE), 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 Web Interface as a group practice reporting mechanism for the Merit-Based Incentive Payment System (MIPS). For the purposes of program coordination and version control, narrative descriptions for each of the 15 Web Interface measures are not detailed in this document, but are available on the QPP webpage supplementary documents (https://qpp.cms.gov/resources/education, refer to the Quality Measure Specifications under "FOR REGISTRIES, QUALIFIED CLINICAL DATA REGISTRIES (QCDRS) & EHR VENDOR"), which provide additional guidance related to the ACO-reported measures reporting. Please use measure documentation indicated for CMS Web Interface reporting.

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SECTION 2
NARRATIVE MEASURE SPECIFICATIONS

2.1 Domain: Patient/Caregiver Experience

2.1.1 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 2017 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/.

Guidance

ACOs are required to contract with a CMS-approved survey vendor to administer the survey. The survey for the 2017 reporting period will be conducted from late 2017 through early 2018. CMS has developed a process to approve independent survey vendors to administer the 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/en/approved-vendor-list. 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 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 measure information form (MIF) is updated annually and is made available at https://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 Fee-for-Service (FFS).
2. Patient is age 65 or older.
3. Patient was discharged from a non-federal acute care hospital.
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 Prospective Payment System-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). 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 (Coleman et al., 2004; Conley et al., 2003; Courtney et al., 2009; Garasen, Windspoll, and Johnsen, 2007; Jack et al., 2009; Jovicic, Holroyd-Leduc, and Straus, 2006; Koehler et al., 2009; Krumholz et al., 2002; Mistiaen, Francke, and Poot, 2007; Naylor et al., 1994; Naylor et al., 1999; Phillips et al., 2004; Stauffer et al., 2011; van Walraven et al., 2002; Voss et al., 2011; Weiss, Yakusheva, and Bobay, 2010). 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.

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 https://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.

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 (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 (Li et al., 2011; Mor et al., 2010), 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 (Boockvar et al., 2004; Covinsky et al., 2003; 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 All-Cause Unplanned Admissions for Patients with Diabetes (ACO-36), Heart Failure (ACO-37), Multiple Chronic Conditions (MCCs) (ACO-38)

Description

Rate of risk-standardized, acute, unplanned hospital admissions among beneficiaries 65 years and older who are assigned or aligned to the ACO with diabetes (ACO-36), heart failure (ACO-37), or MCCs (ACO-38).

Initial Patient Population

ACO assigned or aligned beneficiaries with diabetes (ACO-36), heart failure (ACO-37), or two or more of the eight chronic disease groups (ACO-38):

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

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 https://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 (ACO-36), heart failure (ACO-37), or a combination of chronic conditions that puts them at high risk of admission and has an admission rate that could be lowered through better care (ACO-38).

- To be included in the diabetes cohort, beneficiaries must have one inpatient or two outpatient diabetes diagnosis codes in any position during the year prior to the measurement period.

- To be included in the heart failure 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 inpatient/outpatient and Part B Carrier claims) during the year prior to the measurement period.

- To be included in the MCC cohort, patients must align with ACO NQF's *Multiple Chronic Conditions Measurement Framework,* which 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" (NQF, 2012) during the year prior to the measurement period.

Denominator Exclusions

1. Beneficiaries that do not have 12 months of 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 of 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.

3. Patients with left ventricular assist devices (applies to ACO-37 only).

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 (ACO-36, ACO-37, and ACO-38)

The goal of these measures is to evaluate and improve the quality of care for ACO patients with diabetes (ACO-36), heart failure (ACO-37), or MCCs (ACO-38). These patients account for a significant proportion of Medicare beneficiaries, and they experience high morbidity and costs associated with their disease or diseases. These patients need efficient, coordinated, and patient-centered care management. They also benefit from provider support and infrastructure that facilitate effective chronic disease management. These measures are 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.

These measures are intended to incentivize providers to deliver high-quality, coordinated care that focuses on the whole patient. ACOs were created to improve care, improve population health, and lower the growth of 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.

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. Anticipate and manage the interactions between chronic conditions.

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

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

4. Partner with the government, local businesses, and community organizations to improve support for patients with chronic illness.

Clinical Recommendation Statements (ACO-36, ACO-37, and ACO-38)

Research shows that effective health care can lower the risk of admission for patients with chronic disease (Brown et al., 2012; Chen et al., 2010; CMS, 2012; Leong et al., 2013; McCarthy, Cohen, and Johnson, 2013; Sadur et al., 1999; United States Congress, 2010). 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). Additionally, 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 (Austin et al., 2008; Inglis et al., 2006; Taylor et al., 2014; United States Congress, 2010; Zhang et al., 2008). Similarly, 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 (Chan et al., 2012; Dorr et al., 2008; Levine et al., 2012; Littleford and Kralik, 2000; Sommers et al., 2000; Zhang et al., 2008). 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.

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, 2016a). These program goals are fully aligned with the objective of lowering patients' risk of admission (CMS, 2016a). 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.

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).

2.2.4 ACO-43: Prevention Quality Indicator (PQI): Ambulatory Sensitive Condition Acute Composite

Description

Risk-adjusted rate of admissions for acute Prevention Quality Indicator (PQI) conditions: dehydration, bacterial pneumonia, or urinary tract infection.

Initial Patient Population

ACO assigned or aligned beneficiaries.

Improvement Notation

Lower rate of admissions indicates better quality. The measure score is the ratio of predicted admissions over the expected admissions, multiplied by the crude national admission rate for these conditions among all ACO beneficiaries.

The predicted acute admission rate represents the ACO-level predicted number of admissions after adjustment for ACO case mix and individual ACO effect.

The expected acute admission rate represents the ACO-level expected number of admissions after adjustment for only ACO case mix.

The MIF is updated annually and is made available at https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/sharedsavingsprogram/Quality-Measures-Standards.html.

Denominator

The targeted patient population is Medicare FFS beneficiaries age 18 years and older assigned to the ACO during the measurement period. To be included in the cohort, patients must be enrolled full-time in Part A during the measurement period, and enrolled full-time in both Part A and B during the year before the measurement period.

Denominator Exclusions

1. Beneficiaries that do not have 12 months of continuous enrollment in Medicare Part A during the measurement year. Beneficiaries with continuous enrollment until death are included for the portion of the measurement period that they are alive.

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

Denominator Exceptions

Not applicable.

Numerator

Number of discharges per 100 person years from an acute care hospital or critical access hospital with a principal diagnosis of dehydration, bacterial pneumonia, or urinary tract infection for Medicare beneficiaries in the denominator population for this measure.

Numerator Exclusions

Not applicable.

Definition(s)

None.

Rationale

Hospital admissions for dehydration, bacterial pneumonia, or urinary tract infection are a PQI of interest to comprehensive health care delivery systems, including ACOs. These acute conditions can often be treated and addressed in an outpatient setting. Evidence suggests that these hospital admissions could potentially have been avoided through high-quality outpatient care. Timely receipt of outpatient treatment and follow-up monitoring of treatment effectiveness may reduce the rate of occurrence for this event, and thus of hospital admissions.

This measure is intended to incentivize ACOs to provide high-quality, coordinated outpatient care that promotes smarter spending, healthier people, and higher-quality care. 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.

Clinical Recommendation Statements

Research suggests that lower access to coordinated outpatient primary care is associated with higher rates of preventable hospital admissions (AHRQ, 2007; Bindman et al., 1995; Moy, Ho, and Barrett, 2011, Jan. 14; Rosenthal et al., 1997). High-quality outpatient care can lower the risk of hospitalizations for ambulatory care–sensitive conditions, such as dehydration, bacterial pneumonia, and urinary tract infection. We envision that these measures will shed light on variation in hospital admission rates across ACOs and incentivize ACOs to promote efficient and coordinated care management strategies that anticipate and respond to patient 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).

2.2.5 ACO-44: Use of Imaging Studies for Low Back Pain

Description

The proportion of ACO assigned beneficiaries with a primary diagnosis of low back pain who did not have an imaging study (plain X-ray, MRI, or CT scan) within 28 days of diagnosis.

Initial Patient Population

ACO assigned or aligned Medicare beneficiaries.

Improvement Notation

Higher proportions are better. The measure score reported on the ACO quality reports represents the proportion of beneficiaries with appropriate treatment of low back pain (i.e., the proportion for whom imaging studies did not occur). The measure is reported as an inverted rate (i.e., 1 - numerator/denominator) to reflect the number of people who did not receive an imaging study.

Denominator

All assigned or aligned ACO beneficiaries 18 years of age as of January 1 of the measurement year to 50 years of age as of December 31 of the measurement year with a claim/encounter for an outpatient or emergency department visit code with a principal diagnosis of low back pain during the Intake Period (January 1–December 3 of the measurement year). The date of this claim/encounter will be referred to as the Episode Date.

Denominator Exclusions

- Exclude any emergency department visit that results in an inpatient admission.
- Exclude beneficiaries who meet one or both of the following criteria:
  - Diagnosis of low back pain during the 180 days before the Episode Date.
  - History for any of the following:
    - Cancer at any time during the beneficiary's history through 28 days after the Episode Date.
    - Recent trauma any time during the 12 months (1 year) before the Episode Date through 28 days after the Episode Date.
    - Intravenous drug abuse any time during the 12 months (1 year) before the Episode Date through 28 days after the Episode Date.
    - Neurologic impairment any time during the 12 months (1 year) before the Episode Date through 28 days after the Episode Date.

Numerator

ACO assigned beneficiaries who received an imaging study (plain x-ray, MRI, CT scan) on the Episode Date or in the 28 days following the Episode Date.

Definition(s)

Episode Date: a claim/encounter for an outpatient or emergency department visit code with a principal diagnosis of low back pain during the Intake Period (January 1–December 3 of the measurement year).

Rationale

This measure assesses the overuse of imaging studies (plain x-ray, MRI, and CT scans) in beneficiaries with acute, uncomplicated low back pain. The improvement in quality envisioned by the use of this measure is reducing the frequency of inappropriate imaging in adults 18–50 years of age. Evidence shows that there is excessive imaging and surgery for low back pain in the United States, and many experts believe the problem has been overmedicalized. In 80% of this population, the pain goes away with or without treatment, and most acute low back pain sufferers improve within 2 weeks of onset (Goertz et al., 2012).

Clinical Recommendation Statements

Low back pain is a pervasive problem that affects three-quarters of adults at some time in their lives (Chou, Deyo, and Jarvik, 2012). Each year in the United States, 25 to 50 percent of adults experience low back pain, making it one of the most common reasons for seeking health care services (Haldeman and Dagenais, 2008). According to the U.S. Preventive Services Task Force (USPSTF), it is second only to upper respiratory problems as a symptom-related reason for visits to a physician (USPSTF, 2004, February), and accounts for over 4.7 million missed work days per year (Dagenais, Caro, and Haldeman, 2008).

Low back pain also results in high indirect costs from disability, lost time from work, and decreased productivity while at work, and is the number one cause for activity limitations in younger adults (Chou, Deyo, and Jarvik, 2012). Given the high prevalence of back pain, it is not surprising that its economic consequences are severe. The costs associated with health care services for spine pain (primarily low back pain) in the United States increased from $45.9 billion in 1997 to $102.6 billion in 2004 (Martin et al., 2008). Research suggests that the reasons for the increase in cost and use of diagnostic imaging can be attributed to multiple factors, including changing demographics, increased care seeking and patient expectations about low back pain, increased physician ownership of imaging facilities, and FFS payment models (Pham et al., 2009). The supply of imaging equipment may also play a role, as the number of MRI scanners in the U.S. increased from 7.6 per 1 million people to 26.6 per 1 million people between 2000 and 2005 (Baras and Baker, 2009).

The three imaging modalities included in this measure are x-ray, CT scan, and MRI, all of which have varying individual costs. Generally, the reimbursement rates and charges for lumbar spine CT run 5 to 10 times higher than low back radiography, and MRI rates and charges run 10 to 15 times higher than low back radiography. Although radiography is relatively lower in cost, it represents a financial burden because it is used much more frequently than the two other imaging mechanisms. In 2004, an estimated 66 million lumbar radiographs were performed in the United States (Chou, Deyo, and Jarvik, 2012). These imaging practices directly affect the patient and result in downstream costs associated with invasive and expensive operations and procedures.

2.2.6 ACO-11: Use of Certified EHR Technology (Shared Savings Program ACOs only)

Description

Percentage of eligible clinicians (ECs) participating in the ACO who successfully meet the Advancing Care Information (ACI) Base Score.

Improvement Notation

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

Initial Patient Population

ECs participating in Shared Savings Program ACOs.

Denominator

All ECs who are participating in the ACO in the reporting year under the Shared Savings Program, as determined by the QPP.

Denominator Exclusions

Eligible clinicians, identified by the QPP, who are exempt from reporting the MIPS ACI category.

Denominator Exceptions

None.

Numerator

ECs participating in an ACO and identified as included in the denominator for that ACO for this quality measure, who have successfully met the MIPS ACI Base Score for the current (2017) reporting period.

Numerator Exclusions

Not applicable.

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).

The Medicare Access and Children's Health Insurance Program (CHIP) Reauthorization Act of 2015 transitioned the EHR Incentive Program into the Advancing Care Information category of the MIPS under the new QPP (CMS, 2016b). To qualify for the base score under this category, an EC must report on five measures related to the abilities and usage of their EHR. Additional points will be awarded based on performance on nine other measures and two opportunities to earn bonus points.

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 QPP, eligible clinicians (ECs) 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.

2.2.7 Care Coordination and Patient Safety—ACO-Reported Measures

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

- CARE-1: Medication Reconciliation Post Discharge
- CARE-2: Falls: Screening for Future Fall Risk

For additional information regarding either of these measures, please refer to the following documents, available under the "Measure Specifications Download" link at https://qpp.cms.gov/resources/education:

- 2017 Web Interface Supporting Documents Coding Release Notes
- 2017 Web Interface Reporting Document Release Notes
- 2017 Web Interface CARE Coding Document
- 2017 Web Interface CARE-1 Measure Specifications

- 2017 Web Interface CARE-2 Measure Specifications

2.3 Domain: At-Risk Population

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

2.3.1 Diabetes Measures

- DM-2: Diabetes: Hemoglobin A1c Poor Control
- DM-7: Diabetes: Eye Exam

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

2.3.2 Hypertension Measures

- HTN-2: Controlling High Blood Pressure

2.3.3 Ischemic Vascular Disease Measures

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

2.3.4 Mental Health

- MH-1: Depression Remission at 12 Months

For additional information regarding either of these measures, please refer to the following documents, available under the "Measure Specifications Download" link at https://qpp.cms.gov/resources/education:

- 2017 Web Interface Supporting Documents Coding Release Notes
- 2017 Web Interface Reporting Document Release Notes
- 2017 Web Interface DM Coding Document
- 2017 Web Interface HTN Coding Document
- 2017 Web Interface IVD Coding Document
- 2017 Web Interface MH Coding Document
- 2017 Web Interface DM Measure Specifications
- 2017 Web Interface HTN Measure Specifications

- 2017 Web Interface IVD Measure Specifications
- 2017 Web Interface MH Measure Specifications

2.4 Domain: Preventive Care

All measures within this domain are reported through the Web Interface. As noted above, for the purposes of program coordination and version control, narrative descriptions for the Web Interface measures are not detailed in this document. These measures are most commonly referred to by their 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-12: 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 either of these measures, please refer to the Quality Measure Specifications available at https://qpp.cms.gov/resources/education under "FOR REGISTRIES, QUALIFIED CLINICAL DATA REGISTRIES (QCDRS) & EHR VENDOR":

- 2017 Web Interface Supporting Documents Coding Release Notes
- 2017 Web Interface Reporting Document Release Notes
- 2017 Web Interface PREV Coding Document
- 2017 Web Interface PREV-5 Measure Specifications
- 2017 Web Interface PREV-6 Measure Specifications
- 2017 Web Interface PREV-7 Measure Specifications

- 2017 Web Interface PREV-8 Measure Specifications
- 2017 Web Interface PREV-9 Measure Specifications
- 2017 Web Interface PREV-10 Measure Specifications
- 2017 Web Interface PREV-12 Measure Specifications
- 2017 Web Interface PREV-13 Measure Specifications

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