Performance Measurement

Preventive Care: Review of the Performance Measures by the Performance Measurement Committee of the American College of Physicians

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Introduction

The United States healthcare system has shifted its efforts to focus on priority areas of value-based care and to deliver integrated preventive care services at lower costs. In spite of these efforts, intricacies of the current system impede physician's abilities to seamlessly embed screening protocols and preventive care interventions (1). Lack of awareness and appropriate knowledge, adherence issues beyond the physicians control, and unintended consequences of the pressures to comply with a value-based system pose barriers to quality outcomes among primary care physicians and the populations they serve (2-4).

While the impact of screening interventions on lifestyle changes is questionable, stakeholders agree that preventive care measures play a significant role in achieving measureable improvements of clinical outcomes (5). Failure to acknowledge the importance of this role needlessly endangers the health of current and future populations (6).

The American College of Physicians (ACP) Performance Measurement Committee (PMC) reviewed performance measures related to Preventive Care to assess whether the measures are evidence-based, methodologically sound, and clinically meaningful.

Methods

Between November 8, 2017 and April 13, 2018 we searched to identify relevant performance measures from the National Quality Forum (NQF), the Centers for Medicare and Medicaid Services Quality Payment Program (QPP) and the National Quality Measures Clearinghouse (NQMC) websites. The inclusion criteria were performance measures endorsed by the National Quality Forum, currently used in the Centers for Medicare and Medicaid Services' (CMS) Value-Based Payment programs (VBP) or currently used in federal reporting programs. The PMC identified and reviewed 28 performance measures.

To determine the validity of the selected performance measures as indicators of the quality of health care provided by internal medicine physicians, reviewers used a modification of the RAND-UCLA appropriateness method. The committee chair (NF) and immediate past chair (CM) served as moderators for the panel process and did not rate the measures.

Results

Among the 28 measures in preventive care measures list, 6 (21%) were rated as valid, 10 (36%) were rated as not valid, and 12 (43%) were rated as uncertain validity. While the measures rated as invalid represent important clinical concepts, lack of support is mainly based on methodological flaws.

Inpatient Measures

Recommendation

ACP does not support NQF #1654: "TOB-2 Tobacco use Treatment provided or Offered and the subset measure TOB-2a: Tobacco Use Treatment" because of uncertain validity.

Rationale

ACP does not support NQF measure #1654: "TOB-2 Tobacco use Treatment provided or Offered and the subset measure TOB-2a: Tobacco Use Treatment." This measure represents an important clinical concept; however, the specifications are flawed, developers do not cite high-quality evidence to form the basis of the measure and facilities and individual clinicians could face challenges with implementation. Developers should consider revising the specifications to align with the clinical recommendations of the United States Preventive Services Task Force (USPSTF). The Task Force recommends that clinicians screen for tobacco use, and prescribe behavioral interventions AND U.S. FDA-approved pharmacotherapy for adults who use tobacco. The benefits of counseling without pharmacotherapy are unclear. Furthermore, specifications should include exclusion criteria for patients who expire during hospitalization and patients who have contraindications to pharmacotherapy. Additionally, measure specifications should clearly define what constitutes "cognitively impaired" in the exclusion criteria and "practical counseling" in the numerator specifications. Moreover, the denominator specifications should clearly define what constitutes "inpatient" status. For example, implementation may penalize clinicians treating patients who are classified as observational- or ambulatory-admission status. Otherwise, implementation could pressure clinicians to spend a disproportionate amount of time on tobacco use treatment, when other conditions should take precedence.

Measure Specifications

NQF 1654: TOB-2 Tobacco use Treatment provided or Offered and the subset measure TOB-2a: Tobacco Use Treatment	
Measure Steward:	The Joint Commission
NQF Status:	NQF Endorsed, Last Updated Mar 05, 2018
Use in Federal Program:	Hospital Compare, Inpatient Psychiatric Facility Reporting
Description:	The measure is reported as an overall rate which includes all hospitalized patients 18 years of age and older to whom tobacco use treatment was provided during the hospital stay, or offered and refused, and a second rate, a subset of the first, which includes only those patients who received tobacco use treatment during the hospital stay.
Numerator Statement:	TOB-2: The number of patients who received or refused practical counseling to quit AND received or refused FDA-approved cessation medications during the hospital stay. TOB-2a: The number of patients who received practical counseling to quit

	AND received FDA-approved cessation medications during the hospital stay.
Denominator Statement:	The number of hospitalized inpatients 18 years of age and older identified as current tobacco users
Exclusions:	The denominator has six exclusions: • Patients less than 18 years of age • Patients who are cognitively impaired • Patients who are not current tobacco users • Patients who refused or were not screened for tobacco use during the hospital stay. • Patients who have a duration of stay less than or equal to day or greater than 120 days • Patients with Comfort Measures Only documented
Type of Measure:	Process
Intended Level of Attribution:	Facility
Care Setting:	Hospital, Inpatient/Hospital
Data Source:	Electronic Health Records, Paper Medical Records

Recommendation
ACP supports NQF #1661: "Sub-1 Alcohol Use Screening."

Rationale
ACP supports NQF measure #1661: "Sub-1 Alcohol Use Screening" because it is appropriately specified to assess performance at the facility-level of analysis, it is easy to implement a validated screening questionnaire; several members of the clinical support staff are capable of administering the screening test, and implementation can inform the care of patients who are at risk of alcohol withdrawal during hospitalization.

Measure Specifications

NQF 1661: Sub-1 Alcohol Use Screening	
Measure Steward:	The Joint Commission
NQF Status:	NQF Endorsed, Last Updated Mar 05, 2018
Use in Federal Program:	Hospital Compare, Inpatient Psychiatric Facility Quality Reporting Program
Description:	Hospitalized patients 18 years of age and older who are screened within

	the first day of admission using a validated screening questionnaire for unhealthy alcohol use.
Numerator Statement:	The number of patients who were screened for alcohol use using a validated screening questionnaire for unhealthy drinking within the first three days of admission.
Denominator Statement:	The number of hospitalized inpatients 18 years of age and older.
Exclusions:	The denominator has four exclusions: • Patients less than 18 years of age • Patients who are cognitively impaired • Patients who a have a duration of stay less than or equal to one day or greater than 120 days • Patients with Comfort Measures Only documented
Type of measure:	Process
Intended Level of Attribution:	Facility
Care Setting:	Hospital, Inpatient/Hospital
Data Source:	Electronic Health Records, Paper Medical Records

Recommendation

ACP does not support NQF #1663: "SUB-2 Alcohol Use Brief Intervention Provided or Offered and SUB 2a Alcohol Use Brief Intervention" because of uncertain validity.

Rationale

ACP does not support NQF measure #1663: "SUB-2 Alcohol Use Brief Intervention Provided or Offered and SUB 2a Alcohol Use Brief Intervention." While this measure represents an important clinical concept, it is unclear whether delivering the intervention will improve alcohol consumption rates. Developers present evidence to support the benefit of performing this intervention in the outpatient setting on improvements in consumption rates, but they do not present any evidence to support the benefit of performing this intervention in the inpatient setting on improvements in alcohol consumption rates. Also, implementation has the potential to detract from care directed towards the primary indication for admission. Furthermore, "referral to Alcoholics Anonymous" should satisfy the measure requirements for providing a brief intervention. Otherwise, implementation could unfairly penalize clinicians who practice in rural areas where patients have limited access to counseling services.

Measure Specifications

NQF 1663: SUB-2 Alcohol Use Brief Intervention Provided or Offered and SUB-2a Alcohol Use Brief Intervention

Measure Steward:	The Joint Commission
NQF Status:	NQF Endorsed, Last Updated Mar 05, 2018
Use in Federal Program:	Hospital Compare, Inpatient Psychiatric Facility Quality Reporting
Description:	The measure is reported as an overall rate which includes all hospitalized patients 18 years of age and older to whom a brief intervention was provided, or offered and refused, and a second rate, a subset of the first, which includes only those patients who received a brief intervention. The Provided or Offered rate (SUB-2), describes patients who screened positive for unhealthy alcohol use who received or refused a brief intervention during the hospital stay. The Alcohol Use Brief Intervention (SUB-2a) rate describes only those who received the brief intervention during the hospital stay. Those who refused are not included.
Numerator Statement:	SUB-2 The number of patients who received or refused a brief intervention. SUB-2a The number of patients who received a brief intervention.
Denominator Statement:	The number of hospitalized inpatients 18 years of age and older who screen positive for unhealthy alcohol use or an alcohol use disorder (alcohol abuse or alcohol dependence).
Exclusions:	The denominator has five exclusions as follows: • Patients less than 18 years of age • Patient who are cognitively impaired • Patients who refused or were not screened for alcohol use during the hospital stay • Patients who have a length of stay less than or equal to one day and greater than 120 days • Patients receiving Comfort Measures Only documented
Type of Measure:	Process
Intended Level of Attribution:	Facility
Care Setting:	Hospital, Inpatient/Hospital
Data Source:	Electronic Health Records, Paper Medical Records

Recommendation
ACP does not support NQF #1664: "SUB-3a Alcohol & Other Drug Use Disorder Treatment Provided or Offered at Discharge and SUB-3a Alcohol & Other Drug Use Disorder" because of uncertain validity.

Rationale
ACP does not support NQF measure #1664: "SUB-3a Alcohol & Other Drug Use Disorder Treatment Provided or Offered at Discharge and SUB-3a Alcohol & Other Drug Use Disorder." This measure represents an important clinical concept; however, we note several suggestions for developers to consider when submitting the measure to NQF for re-endorsement. First, implementation may encourage overuse of medically assisted therapies while the best evidence for treating drug- and alcohol-use disorders includes pharmacotherapy coupled to counseling. Second, there is insufficient evidence to support the benefit of referring patients to counseling upon discharge from the inpatient setting on improvements in drug and alcohol consumption rates. Third, referrals to Alcoholics Anonymous or to the primary care clinician should fulfill the numerator requirements. Otherwise, implementation could unfairly penalize clinicians who practice in rural areas where patients have limited access to counseling services. Fourth, the numerator specifies FDA-approved medications as appropriate options for pharmacotherapy. There is limited evidence to support the benefit of all FDA-approved medications (e.g., disulfiram) on drug and alcohol consumption rates. Better data exists to support the benefit of off-label prescribing on improvements in drug and alcohol consumption rates (e.g., Topiramate).

Measure Specifications

NQF 1664: SUB-3a Alcohol & Other Drug Use Disorder Treatment Provided or Offered at Discharge and SUB-3a Alcohol & Other Drug Use Disorder	
Measure Steward:	The Joint Commission
NQF Status:	NQF Endorsed, Last Updated Mar 10, 2016
Use in Federal Program:	Regulatory and accreditation programs, public reporting
Description:	The measure is reported as an overall rate which includes all hospitalized patients 18 years of age and older to whom alcohol or drug use disorder treatment was provided, or offered and refused, at the time of hospital discharge, and a second rate, a subset of the first, which includes only those patients who received alcohol or drug use disorder treatment at discharge. The Provided or Offered rate (SUB-3) describes patients who are identified with alcohol or drug use disorder who receive or refuse at discharge a prescription for FDA-approved medications for alcohol or drug use disorder, OR who receive or refuse a referral for addictions treatment. The Alcohol and Other Drug Disorder Treatment at Discharge (SUB-3a) rate describes only those who receive a prescription for FDA-approved

	medications for alcohol or drug use disorder OR a referral for addictions treatment. Those who refused are not included. These measures are intended to be used as part of a set of 4 linked measures addressing Substance Use (SUB-1 Alcohol Use Screening ; SUB-2 Alcohol Use Brief Intervention Provided or Offered; SUB-3 Alcohol and Other Drug Use Disorder Treatment Provided or Offered at Discharge; SUB-4 Alcohol and Drug Use: Assessing Status after Discharge [temporarily suspended]).
Numerator Statement:	SUB-3: The number of patients who received or refused at discharge a prescription for medication for treatment of alcohol or drug use disorder OR received or refused a referral for addictions treatment. SUB-3a: The number of patients who received a prescription at discharge for medication for treatment of alcohol or drug use disorder OR a referral for addictions treatment.
Denominator Statement:	The number of hospitalized inpatients 18 years of age and older identified with an alcohol or drug use disorder.
Exclusions:	There are 11 exclusions to the denominator as follows: • Patients less than 18 years of age • Patient drinking at unhealthy levels who do not meet criteria for an alcohol use disorder • Patients who are cognitively impaired • Patients who expire • Patients discharged to another hospital • Patients who left against medical advice • Patients discharged to another healthcare facility • Patients discharged to home or another healthcare facility for hospice care • Patients who have a length of stay less than or equal to three days or greater than 120 days • Patients who do not reside in the United States • Patients receiving Comfort Measures Only documented
Type of Measure:	Process
Intended Level of Attribution:	Facility
Care Setting:	Inpatient/Hospital
Data Source:	Electronic Health Records, Paper Medical Records

Recommendation
ACP does not support MIPS 305 (NQF #0004): "Initiation and Engagement of Alcohol and Other Drug Dependence Treatment."

Rationale
ACP does not support MIPS measure #305 (NQF measure #0004): "Initiation and Engagement of Alcohol and Other Drug Dependence Treatment" because the specifications are flawed and the measure is not appropriately specified to evaluate performance at the level of the individual clinician.

Developers should consider dividing the numerator statement to form two discrete measures: 1) initiation of alcohol and other drug dependence treatment; and 2) engagement of alcohol and other drug dependence treatment. Also, it is unclear what constitutes a "new episode of drug or alcohol dependency."

While it is appropriate for accreditors and regulators to use this measure in programs designed to assess quality at the level of the health system, regulators should not include this measure in accountability programs designed to assess performance of individual clinicians. It is unclear whether individual clinicians will be able to control the outcomes of this measure. Individual clinicians will likely face interoperability challenges to data collection.

Measure Specifications

MIPS 305 (NQF 0004): Initiation and Engagement of Alcohol and Other Drug Dependence Treatment	
Measure Steward:	National Committee for Quality Assurance
NQF Status:	NQF Endorsed, Last Updated Feb 08, 2016
Use in Federal Program:	CMS Quality Payment Program (QPP)/Merit-Based Incentive Payment System (MIPS)
Description:	The percentage of adolescent and adult patients with a new episode of alcohol or other drug (AOD) dependence who received the following. - Initiation of AOD Treatment. The percentage of patients who initiate treatment through an inpatient AOD admission, outpatient visit, intensive outpatient encounter or partial hospitalization within 14 days of the diagnosis. - Engagement of AOD Treatment. The percentage of patients who initiated treatment and who had two or more additional services with a diagnosis of AOD within 30 days of the initiation visit.
Numerator Statement:	Initiation of AOD Dependence Treatment: Initiation of AOD treatment through an inpatient admission, outpatient

	visit, intensive outpatient encounter or partial hospitalization within 14 days of the index episode start date. Engagement of AOD Treatment: Initiation of AOD treatment and two or more inpatient admissions, outpatient visits, intensive outpatient encounters or partial hospitalizations with any AOD diagnosis within 30 days after the date of the Initiation encounter (inclusive).
Denominator Statement:	Patients age 13 years of age and older who were diagnosed with a new episode of alcohol or other drug dependency (AOD) during the first 10 and ½ months of the measurement year (e.g., January 1-November 15).
Exclusions:	Exclude patients who had a claim/encounter with a diagnosis of AOD during the 60 days (2 months) before the Index Episode Start Date. (See corresponding Excel document for the AOD Dependence Value Set) Exclude from the denominator for both indicators (Initiation of AOD Treatment and Engagement of AOD Treatment) patients whose initiation of treatment event is an inpatient stay with a discharge date after December 1 of the measurement year.
Type of Measure:	Process
Intended Level of Attribution:	Health plan, Integrated delivery system
Proposed Level of Attribution:	Individual Clinician
Care Setting:	Emergency Department and Services, Inpatient/Hospital, Outpatient Services
Data Source:	Claims, Electronic Health Records

Recommendation
ACP supports NQF #2455: "Post-Discharge Appointment for Heart Failure Patients."

Rationale
ACP supports NQF measure #2455: "Post-Discharge Appointment for Heart Failure Patients." Patients with a principle diagnosis of heart failure should schedule a follow-up appointment post-hospitalization. This measure is appropriately specified to assess performance at the level of the facility and implementation will counteract the unintended consequences of the re-admission measures. Unlike the re-admission measures, this measure will likely decrease length of stay for patients who are appropriately readmitted for acute exacerbations of heart disease. Also, this measure will likely encourage facilities to participate with their referral base. In contrast to other care coordination measures that only require documentation of the referral

to fulfill the measure requirements; this measure is appropriately specified to encourage facilities to close the referral loop. We support implementation of this measure over NQF measure #2439: "Post-Discharge Appointment for Heart Failure Patients" because this measure allows for more flexibility with scheduling the follow-up appointment. Clinicians other than physicians are permitted to manage the follow-up care and the numerator does not specify a 7-day time-frame for scheduling the follow-up appointment. While this measure is a step in the right direction towards reducing preventable readmissions, it may be ineffective as a quality measure. Programs directed at shared savings from lower utilization of hospital services might be more successful in reducing admissions than programs initiated to date (7). Also, we suggest the developers revise the specifications to include an evidence-based time-frame for scheduling follow-up appointments. Furthermore, developers should consider revising the numerator specifications to define what constitutes a "home health visit." For example, it is unclear whether a telemedicine visit meets the requirements of the numerator specifications. In addition to revising the specifications to include telemedicine as an appropriate form of home health visit, developers should also define criteria for what constitutes an appropriate visit (e.g., staffed by APP, MD, or DO; includes assessment of weight or telemonitoring, etc.).

Measure Specifications

NQF 2455: Post-Discharge Appointment for Heart Failure Patients	
Measure Steward:	American Heart Association/American Stroke Association
NQF Status:	NQF Endorsed, Last Updated Dec 11, 2015
Use in Federal Program:	Professional Certification or Recognition program, Get With the Guidelines—Heart Failure Recognition program
Description:	Percentage of patients, regardless of age, discharged from an inpatient facility to ambulatory care or home health care with a principal discharge diagnosis of heart failure for whom a follow up appointment was scheduled and documented prior to discharge (as specified).
Numerator Statement:	Patients for whom a follow up appointment was scheduled and documented prior to discharge including either: - an office visit for management for heart failure with a physician OR advanced practice nurse OR physician assistant OR - a home health visit for management of heart failure
Denominator Statement:	All patients, regardless of age, discharged from an inpatient facility (i.e., hospital inpatient or observation) to ambulatory care (home/self-care) of home health care with a principle discharge diagnosis of heart failure.
Exclusions:	Denominator exclusions include: Patient was discharged to a health care facility for hospice care, to home for hospice care, or to a rehabilitation facility. Patient left against medical advice. Patient expired.

Type of Measure:	Process
Intended Level of Attribution:	Facility
Care Setting:	Inpatient/Hospital
Data Source:	Registry Data

Recommendation
ACP does not support NQF #2439: "Post-Discharge Appointment for Heart Failure Patients" because of uncertain validity.

Rationale
ACP does not support NQF measure #2439: "Post-Discharge Appointment for Heart Failure Patients." This measure is appropriately specified to assess performance at the level of the facility and implementation will counteract the unintended consequences of the re-admission measures. Unlike the re-admission measures, this measure will likely decrease length of stay for patients who are appropriately readmitted for acute exacerbations of heart disease. Also, this measure will likely encourage facilities to participate with their referral base. In contrast to other care coordination measures that only require documentation of the referral to fulfill the measure requirements; this measure is appropriately specified to encourage facilities to close the referral loop. While this measure is a step in the right direction towards reducing preventable readmissions, it may be ineffective as a quality measure. Programs directed at shared savings from lower utilization of hospital services might be more successful in reducing admissions than programs initiated to date (7). Furthermore, we note several suggestions for developers to consider when they submit the measure to NQF for re-endorsement. First, we encourage facilities to distribute referrals equally so as to avoid placing undue burden on a select number of clinicians who manage patients during the recovery period. Second, there is insufficient evidence to identify the most appropriate follow-up location (e.g., PCP office vs. HF clinics). While developers cite clinical guideline recommendations to form the basis of the measure, the evidence on which the recommendations are based includes flawed studies that identify differences in impact depending on where the patient was seen. Without identification of an appropriate follow-up setting, implementation could promote overuse without clear benefit. Third, there is insufficient evidence to support the benefit of follow-up referrals without further intervention on improvements in clinical outcomes. Fourth, the numerator does not specify any scheduling requirements. It is unclear whether scheduling an appointment post-hospitalization satisfies the numerator requirements. If the patient schedules the follow-up appointment post-hospitalization, facilities may face challenges with obtaining detailed appointment information. Reliability results for data abstraction were fair, substantiating this concern. Fifth, successful follow-up relies on the availability of the ambulatory network. It is unfair to penalize facilities for failures in the ambulatory care network. A quality measure may

be more effective if aimed at criteria for hospital admission or availability of outpatient clinics for treatment of heart failure prior to hospitalization.

Measure Specifications

NQF 2439: Post-Discharge Appointment for Heart Failure Patients	
Measure Steward:	The Joint Commission
NQF Status:	NQF Endorsed, Last Updated Oct 03, 2017
Use in Federal Program:	Public reporting, Professional certification or recognition program
Description:	Patients for whom a follow-up appointment for an office or home health visit for management of heart failure was scheduled within 7 days post-discharge and documented including location, date, and time.
Numerator Statement:	Patients for whom a follow-up appointment for an office or home health visit for management of heart failure was scheduled within 7 days post-discharge and documented including location, date, and time.
Denominator Statement:	All heart failure patients discharged from a hospital inpatient setting to home or home care.
Exclusions:	Excluded Populations: • Patients who had a left ventricular assistive device (LVAD) or heart transplant procedure during hospital stay (ICD-10-PCS procedure code for LVAD and heart transplant as defined in Appendix A, Table 2.2) • Patients less than 18 years of age • Patient who have a Length of Stay greater than 120 days • Patients with Comfort Measures Only documented • Patients enrolled in a Clinical Trial • Patients discharged to locations other than home, home care, or law enforcement • Patients with a documented Reason for No Post-Discharge Appointment Within 7 Days • Patients who left against medical advice (AMA)
Type of Measure:	Process
Intended Level of Attribution:	Facility
Care Setting:	Inpatient/Hospital
Data Source:	Electronic Health Records, Paper Medical Records

Recommendation
ACP supports NQF #1716: "National Healthcare Safety Network Facility-Wide Inpatient Hospital Onset MRSA Bacteremia Outcome."

Rationale
ACP supports NQF measure #1716: "National Healthcare Safety Network Facility-Wide Inpatient Hospital Onset MRSA Bacteremia Outcome." Implementation will lead to meaningful improvements in clinical outcomes in areas where hospital-onset MRSA rates are high. While there is insufficient evidence to support the benefit of reporting MRSA rates on bacteremia outcomes, this measure aims to assess performance at the level of the facility and the region (state). We note that the opportunity for improvement will vary by facility and region. While this measure is appropriately specified for implementation at the facility- and population-levels of analysis, it is not appropriately specified to evaluate the performance of individual clinicians. Also, while we support inclusion of a risk-adjustment model to produce stable estimates, it is unclear why "medical school affiliation" is included as a component of the risk-adjustment model. Poorly performing hospitals should aim to improve performance rates, regardless of medical school affiliation. Instead, abstractors should stratify results by medical school affiliation to demonstrate meaningful differences in clinical outcomes across institutions. This may encourage low-performers to implement quality improvement efforts that will improve MRSA rates and lead to meaningful improvements in clinical outcomes.

Measure Specifications

NQF 1716: National Healthcare Safety Network Facility-Wide Inpatient Hospital Onset MRSA Bacteremia Outcome	
Measure Steward:	Centers for Disease Control and Prevention
NQF Status:	NQF Endorsed, Last Updated Jul 18, 2017
Use in Federal Program:	Hospital Compare, Hospital Inpatient Quality Reporting, Hospital Value-Based Purchasing, Hospital-Acquired Condition Reduction Program, Inpatient Rehabilitation Facility Quality Reporting, Long-Term Care Hospital Quality Reporting, Prospective Payment System (PPS)-Exempt Cancer Hospital Quality Reporting
Description:	Standardized infection ratio (SIR) and Adjusted Ranking Metric (ARM) of hospital-onset unique blood source MRSA Laboratory-identified events (LabID events) among all inpatients in the facility.
Numerator Statement:	Total number of observed hospital-onset unique blood source MRSA LabID events among all inpatients in the facility per NHSN protocols.
Denominator Statement:	Total number of predicted hospital-onset unique blood source MRSA LabID events, calculated from a negative binomial regression model and risk adjusted for inpatient community-onset MRSA prevalence rate, average length of patient stay in the hospital, medical school affiliation, facility

	type, number of critical care beds in the hospital, and outpatient community-onset MRSA prevalence rate from emergency departments and observation units.
Exclusions:	Data from patients who are not assigned to an inpatient bed in an applicable location are excluded from the denominator counts. Denominator counts exclude data from inpatient rehabilitation units and inpatient psychiatric units with unique CMS Certification Numbers (CCN) than the acute care facility.
Type of Measure:	Outcome
Intended Level of Attribution:	Facility, Population: Regional and State
Care Setting:	Emergency Department and Services, Inpatient/Hospital, Post-Acute Care
Data Source:	Electronic Health Data, Electronic Health Records, Other, Paper Medical Records

Recommendation

ACP does not support NQF #1717: "National Healthcare Safety Network Facility-Wide Inpatient Hospital-Onset Clostridium Difficile (CDI) Outcome Measure" because of uncertain validity.

Rationale

ACP does not support NQF measure #1717: "National Healthcare Safety Network Facility-Wide Inpatient Hospital-Onset CDI Outcome Measure." This measure represents an important clinical concept; however, implementation could promote inappropriate screening for CDI. Developers should consider revising the specifications to include appropriate screening criteria for CDI. The Infectious Diseases Society of America (IDSA) recommends against randomly screening for CDI unless patients have at least 3 or more unformed stools in the timespan of 24 hours. Furthermore, it is unclear why the risk-adjustment model includes facility-level characteristics. Poorly performing hospitals should aim to improve performance rates, regardless of medical school affiliation or ICU size. Instead, abstractors should stratify results by these characteristics to demonstrate meaningful differences in clinical outcomes across institutions. Also, measure specifications should include exclusion criteria for patients who are colonized for CDI on admission. Lastly, developers should revise the numerator specifications to include evidence-based testing modalities.

Measure Specifications

NQF 1717: National Healthcare Safety Network Facility-Wide Inpatient Hospital-Onset CDI Outcome Measure	
Measure Steward:	Centers for Disease Control and Prevention

NQF Status:	NQF Endorsed, Last Updated Jul 18, 2017
Use in Federal Program:	Hospital Compare, Hospital Inpatient Quality Reporting, Hospital Value-Based Purchasing, Hospital-Acquired Condition Reduction Program, Inpatient Rehabilitation Facility Quality Reporting, Long-Term Care Hospital Quality Reporting, Prospective Payment System (PPS)-Exempt Cancer Hospital Quality Reporting
Description:	Standardized infection ratio (SIR) and Adjusted Ranking Metric (ARM) of hospital-onset CDI Laboratory-identified events (LabID events) among all inpatients in the facility, excluding well-baby nurseries and neonatal intensive care units (NICUs).
Numerator Statement:	Total number of observed hospital-onset CDI LabID events among all inpatients in the facility, excluding well baby-nurseries and NICUs.
Denominator Statement:	Total number of predicted hospital-onset CDI LabID events, calculated using the facility´s number of inpatient days, facility type, CDI event reporting from Emergency Department and 24 hour observation units, bed size, ICU bed size, affiliation with medical school, microbiological test method used to identify C. difficile, and community-onset CDI admission prevalence rate.
Exclusions:	Data from patients who are not assigned to an inpatient bed are excluded from the denominator counts, including outpatient clinics, 24-hour observation units, and emergency department visits. Inpatient rehab locations and inpatient psychiatric locations that have their own Centers for Medicare and Medicaid Services (CMS) Certification Number (CCN) are excluded. Additionally, data from well-baby nurseries and NICUs are excluded from the denominator count.
Type of Measure:	Outcome
Intended Level of Attribution:	Facility, Population: Regional and State
Care Setting:	Emergency Department and Services, Inpatient/Hospital, Post-Acute Care
Data Source:	Electronic Health Data, Electronic Health Records, Other, Paper Medical Records

Recommendation
ACP does not support NQF #2720: "National Healthcare Safety Network Antimicrobial Use Measure."

Rationale
ACP does not support NQF measure #2720: "National Healthcare Safety Network Antimicrobial Use Measure." This measure represents an important clinical concept; however, the specifications are flawed and the benefit of measuring antibiotic use on improvements in clinical outcomes is unclear. Developers note that the measure is not ready for accountability purposes in the NQF-submission materials. Furthermore, it is unclear why the risk-adjustment model includes facility-level characteristics. Poorly performing hospitals should aim to improve performance rates, regardless of medical school affiliation or ICU size. Instead, abstractors should stratify results by these characteristics to demonstrate meaningful differences in clinical outcomes across institutions. Also, it is unclear whether the benefits of measuring antibiotic days outweigh the potential harms. Measuring antibiotic use without regard to indication could promote premature discontinuation of antibiotic therapy or encourage clinicians to withhold treatment all together. Coupling this information to specific diagnosis related groups (DRGs) may be more beneficial. A stronger measure may target specific diagnoses for focused interventions to curb overuse.

Measure Specifications

NQF 2720: National Healthcare Safety Network Antimicrobial Use Measure	
Measure Steward:	Centers for Disease Control and Prevention
NQF Status:	NQF Endorsed, Last Updated Dec 10, 2015
Use in Federal Program:	Public Health/Disease Surveillance, Quality Improvement (external benchmarking to organizations), Quality Improvement (Internal to the specific organization)
Description:	This measure assesses antimicrobial use in hospitals based on medication administration data that hospitals collect electronically at the point of care and report via electronic file submissions to CDC's National Healthcare Safety Network (NHSN). The antimicrobial use data that are in scope for this measure are antibacterial agents administered to adult and pediatric patients in a specified set of ward and intensive care unit locations: medical, medical/surgical, and surgical wards and units. The measure compares antimicrobial use that the hospitals report with antimicrobial use that is predicted on the basis of nationally aggregated data. The measure is comprised of a discrete set of ratios, Standardized Antimicrobial Administration Ratios (SAARs), each of which summarizes observed-to-predicted antibacterial use for one of 16 antibacterial agent-patient care location combinations. The SAARs are designed to serve as high value targets or high level indicators for antimicrobial stewardship programs

	(ASPs). SAAR values that are outliers are intended to prompt analysis of possible overuse, underuse, or inappropriate use of antimicrobials, subsequent actions aimed at improving the quality of antimicrobial prescribing, and impact evaluations of ASP interventions.
Numerator Statement:	Days of antimicrobial therapy for antibacterial agents administered to adult and pediatric patients in medical, medical/surgical, and surgical wards and medical, medical/surgical, and surgical intensive care units.
Denominator Statement:	Days present for each patient care location—adult and pediatric medical, medical/surgical, and surgical wards and adult and pediatric medical, medical/surgical, and surgical intensive care units—is defined as the number of patients who were present for any portion of each day of a calendar month for each location. The day of admission, discharge, and transfer to and from locations are included in days present. All days present are summed for each location and month, and the aggregate sums for each location-month combination comprise the denominator data for the measure.
Exclusions:	Hospital patient care locations other than adult and pediatric medical, medical/surgical, and surgical wards and adult and pediatric medical, medical/surgical, and surgical intensive care units are excluded from this measure.
Type of Measure:	Process
Intended Level of Attribution:	Facility
Care Setting:	Inpatient/Hospital, Post-Acute Care
Data Source:	Management Data

Recommendation

ACP does not support NQF #0138: "National Healthcare Safety Network Catheter Associated Urinary Tract Infection (CAUTI)" because of uncertain validity.

Rationale

ACP does not support NQF measure #0138: "National Healthcare Safety Network Catheter Associated Urinary Tract Infection." This measure represents an important clinical concept; however, national CAUTI rates are already low and it may be difficult for facilities to score 100% on this measure. Also, while the specifications include appropriate exclusion criteria, criteria should also include patients who screen positive for bacteriuria immediately after catheterization. Furthermore, implementation could drive perverse clinician behavior because reimbursement programs emphasize the importance of CAUTI reduction at the facility level. Finally, while this measure is appropriately specified to assess performance at the level of the

facility, we note that it is difficult to extrapolate the measure down to the individual clinician level of analysis.

Measure Specifications

NQF 0138: National Healthcare Safety Network Catheter Associated Urinary Tract Infection (CAUTI)	
Measure Steward:	Centers for Disease Control and Prevention
NQF Status:	NQF Endorsed, Last Updated Jul 18, 2017
Use in Federal Program:	Hospital Compare, Hospital Inpatient Quality Reporting, Hospital Value-Based Purchasing, Hospital-Acquired Condition Reduction Program, Inpatient Rehabilitation Facility Quality Reporting, Long-Term Care Hospital Quality Reporting, Prospective Payment System (PPS)-Exempt Cancer Hospital Quality Reporting
Description:	Standardized Infection Ratio (SIR) of healthcare-associated, catheter-associated urinary tract infections (UTI) will be calculated among patients in bedded inpatient care locations, except level II or level III neonatal intensive care units (NICU). This includes acute care general hospitals, long-term acute care hospitals, rehabilitation hospitals, oncology hospitals, and behavior health hospitals.
Numerator Statement:	Total number of observed healthcare-associated CAUTI among patients in bedded inpatient care locations (excluding patients in Level II or III neonatal ICUs).
Denominator Statement:	Total number of predicted healthcare-associated CAUTI among inpatient care locations under surveillance for CAUTI during the data period, based on the national CAUTI baseline.
Exclusions:	The following are not considered indwelling catheters by NHSN definitions: 1.Suprapubic catheters 2.Condom catheters 3.“In and out” catheterizations 4. Nephrostomy tubes Note, that if a patient has either a nephrostomy tube or a suprapubic catheter and also has an indwelling urinary catheter, the indwelling urinary catheter will be included in the CAUTI surveillance.
Type of Measure:	Outcome
Intended Level of Attribution:	Facility, Population: Regional and State
Care Setting:	Home Care, Inpatient/Hospital, Other, Post-Acute Care
Data Source:	Electronic Health Data, Electronic Health Records, Other, Paper Medical

	Records

Recommendation

ACP supports NQF #0139: "National Healthcare Safety Network Central Line-Associated Blood Stream Infection (CLABSI) Outcome Measure."

Rationale

ACP supports NQF measure #0139: "National Healthcare Safety Network Central Line-Associated Blood Stream Infection (CLABSI) Outcome Measure." This measure represents an important clinical concept and implementation will likely lead to meaningful improvements in clinical outcomes. While we support this measure, we note two suggestions for developers to consider when submitting the measure to NQF for re-endorsement. First, national CLABSI rates are already low and it may be difficult for facilities to score 100% on this measure. Rather than using this measure to compare performance across facilities, accreditors and regulators should set a national standard for acceptable CLABSI rates and require all facilities to meet this standard. Otherwise, if accreditors and regulators push facilities to achieve an unreasonable rate, implementation could result in harm by discouraging clinicians from obtaining cultures and encouraging overuse of antibiotic therapy. On the other hand, if accreditors and regulators stratify performance results by facility, and low performers implement quality improvement efforts to improve CLABSI rates, implementation will lead to meaningful improvements in clinical outcomes. Second, the reporting burden associated with this measure is high and could result in under- or over-estimation of CLABSIs rates. We encourage developers to work towards minimizing this burden when they submit the measure to NQF for re-endorsement.

Measure Specifications

NQF 0139: National Healthcare Safety Network: Central Line Associated Blood Stream Infection (CLABSI) Outcome Measure	
Measure Steward:	Centers for Disease Control and Prevention
NQF Status:	NQF Endorsed, Last Updated Jul 18, 2017
Use in Federal Program:	Hospital Compare, Hospital Inpatient Quality Reporting, Hospital Value-Based Purchasing, Hospital-Acquired Condition Reduction Program, Long-Term Care Hospital Quality Reporting, Medicaid, Prospective Payment System (PPS)-Exempt Cancer Hospital Quality Reporting
Description:	Standardized Infection Ratio (SIR) and Adjusted Ranking Metric (ARM) of healthcare-associated, central line-associated bloodstream infections (CLABSI) will be calculated among patients in bedded inpatient care locations. This includes acute care general hospitals, long-term acute care hospitals, rehabilitation hospitals, oncology hospitals, and behavioral health hospitals.

Numerator Statement:	Total number of observed healthcare-associated CLABSI among patients in bedded inpatient care locations.
Denominator Statement:	Total number of predicted healthcare-associated CLABSI among patients in bedded inpatient care locations, calculated using the facility's number of central line days and the following significant risk factors: • Acute Care Hospitals: CDC location, facility bedsize, medical school affiliation, facility type, birthweight category (NICU locations only) • Critical Access Hospitals: no significant risk factors, calculation based on pooled mean rate • Inpatient Rehabilitation Facilities: no significant risk factors, calculation based on pooled mean rate • Long Term Acute Care Hospitals: CDC location, facility bedsize, average length of stay
Exclusions:	The following devices are excluded as central lines: Pacemaker wires and other non-lumened devices inserted into central blood vessels or the heart Arterial catheters Arteriovenous fistula Arteriovenous graft Extracorporeal membrane oxygenation (ECMO) Hemodialysis reliable outflow (HERO) dialysis catheters Intra-aortic balloon pump (IABP) devices Non-accessed central line (not accessed nor inserted during the hospitalization) Peripheral IV or Midlines Ventricular Assist Device (VAD)
Type of Measure:	Outcome
Intended Level of Attribution:	Facility, Population: Regional and State
Care Setting:	Home Care, Inpatient/Hospital, Other, Post-Acute Care
Data Source:	Electronic Health Data, Electronic Health Records, Other, Paper Medical Records

Recommendation
ACP does not support NQF #0500: "Severe Sepsis and Septic Shock: Management Bundle."

Rationale
ACP does not support NQF measure #0500: "Severe Sepsis and Septic Shock: Management Bundle." This measure emphasizes the importance of early recognition and the need to treat septic patients expeditiously; however, implementation includes mixed benefits and detriments. As currently specified, the measure excludes clinical judgement. The benefits of treating patients who are infected need to be balanced against the harms of treating patients who at first appear as if they might have infections but in fact do not (8). For patients with less severe disease and in whom the presence of infection is uncertain, there is often more time to gather additional diagnostic data to generate a more informed and precise therapeutic plan. Stipulating a fixed-time period for drawing lactate levels could lead to unintended consequences, namely an increased likelihood that broad-spectrum antibiotics will be given more frequently to uninfected patients with syndromes that look like infections. Additionally, implementation has the potential to lead to indiscriminate use of central venous pressure (CVP) monitoring, which is invasive and has adverse effects. The evidence for standard infusion therapy for all patients diagnosed with sepsis is mixed; there are likely populations that benefit from standard therapy while others may require individualized infusion parameters (e.g., HF patients). While implementation of the Surviving Sepsis Campaign has been associated with improved clinical outcomes, there is no literature on the unintended consequences of this measure. We advocate for research on post-marketing surveillance (similar to that of the CAP antibiotics measure: http://annals.org/aim/fullarticle/741439/public-reporting-antibiotic-timing-patientspneumonia-lessons-from-flawed-performance) to weigh the benefits of early diagnosis against the potential harms of treating patients who appear to be infected, but in fact are not.

Measure Specifications

NQF 0500: Severe Sepsis and Septic Shock: Management Bundle	
Measure Steward:	Henry Ford Hospital
NQF Status:	NQF Endorsed, Last Updated Jul 13, 2017
Use in Federal Program:	Payment Program, Professional Certification or Recognition Program, Public Reporting, Quality Improvement (external benchmarking to organizations), Regulatory and Accreditation Programs
Description:	This measure focuses on adults 18 years and older with a diagnosis of severe sepsis or septic shock. Consistent with Surviving Sepsis Campaign guidelines, the measure contains several elements, including measurement of lactate, obtaining blood cultures, administering broad spectrum antibiotics, fluid resuscitation, vasopressor administration, reassessment of volume status and tissue perfusion, and repeat lactate measurement. As reflected in the data elements and their definitions, these elements should

	be performed in the early management of severe sepsis and septic shock.
Numerator Statement:	The number of patients in the denominator who received ALL of the following components (if applicable) for the early management of severe sepsis and septic shock: initial lactate levels, blood cultures, antibiotics, fluid resuscitation, repeat lactate level, vasopressors, and volume status and tissue perfusion reassessment.
Denominator Statement:	Inpatients age 18 and over with an ICD-10-CM Principal or Other Diagnosis Code of Sepsis, Severe Sepsis, or Septic Shock.
Exclusions:	The following patients are excluded from the denominator: • Severe sepsis is not present • Patients Transferred in from another acute care facility • Patients receiving IV antibiotics for more than 24 hours prior to presentation of severe sepsis. • Patients with a Directive for Comfort Care or Palliative Care within 3 hours of presentation of severe sepsis • Patients with an Administrative Contraindication to Care within 6 hours of presentation of severe sepsis • Patients with an Administrative Contraindication to Care within 6 hours of presentation of septic shock • Patients with a Directive for Comfort Care or Palliative Care within 6 hours of presentation of septic shock • Patients with septic shock who are discharged within 6 hours of presentation • Patients with severe sepsis who are discharged within 6 hours of presentation • Patients with a Length of Stay >120 days • Patients included in a Clinical Trial
Type of Measure:	Composite
Intended Level of Attribution:	Facility
Care Setting:	Inpatient/Hospital
Data Source:	Electronic Health Data, Paper Medical Records

Recommendation
ACP does not support NQF #0371: "Venous Thromboembolism Prophylaxis" because of uncertain validity.

Rationale
ACP does not support NQF measure #0371: "Venous Thromboembolism Prophylaxis." This measure represents an important clinical concept; however, the latest performance data from 2010 approaches a 90% performance rate and by now, this measure is likely topped out. Additionally, the specifications are flawed. The specifications should include exclusion criteria for patients who already receive full-dose anticoagulation therapy. Furthermore, it is unclear why exclusion criteria include patients with mental disorders. Lastly, developers should revise the exclusion criteria to include "hemorrhagic" stroke.

Measure Specifications

NQF 0371: Venous Thromboembolism Prophylaxis	
Measure Steward:	The Joint Commission
NQF Status:	NQF Endorsed, Last Updated Dec 23, 2014
Use in Federal Program:	Public Reporting, Regulatory and Accreditation Programs, Quality Improvement
Description:	This measure assesses the number of patients who received venous thromboembolism (VTE) prophylaxis or have documentation why no VTE prophylaxis was given the day of or the day after hospital admission or surgery end date for surgeries that start the day of or the day after hospital admission. This measure is part of a set of six nationally implemented prevention and treatment measures that address VTE (VTE-2: ICU VTE Prophylaxis, VTE-3: VTE Patients with Anticoagulation Overlap Therapy, VTE-4: VTE Patients Receiving UFH with Dosages/Platelet Count Monitoring, VTE-5: VTE Warfarin Therapy Discharge Instructions and VTE-6: Hospital Acquired Potentially-Preventable VTE) that are used in The Joint Commission's accreditation process.
Numerator Statement:	Patients who received VTE prophylaxis or have documentation why no VTE prophylaxis was given: • the day of or the day after hospital admission • the day of or the day after surgery end date for surgeries that start the day of or the day after hospital admission
Denominator Statement:	All discharged hospital inpatients
Exclusions:	• Patients less than 18 years of age • Patients who have a length of stay (LOS) less than two days and greater than 120 days

	• Patients with Comfort Measures Only documented on day of or day after hospital arrival • Patients enrolled in clinical trials related to VTE • Patients who are direct admits to intensive care unit (ICU), or transferred to ICU the day of or the day after hospital admission with ICU LOS greater than or equal to one day • Patients with ICD-9-CM Principal Diagnosis Code of Mental Disorders or Stroke as defined in Appendix A • Patients with ICD-9-CM Principal or Other Diagnosis Codes of Obstetrics or VTE as defined in Appendix A • Patients with ICD-9-CM Principal Procedure Code of Surgical Care Improvement Project (SCIP) VTE selected surgeries as defined in Appendix A
Type of Measure:	Process
Intended Level of Attribution:	Facility
Care Setting:	Inpatient/Hospital
Data Source:	Electronic Health Data, Paper Medical Records

Recommendation
ACP supports NQF #1659: "Influenza Immunization."

Rationale
ACP supports NQF measure #1659: "Influenza Immunization." This measure aligns with the clinical recommendations on influenza vaccination from the Centers for Disease Control and Preventions (CDC) Advisory Committee. While we support this measure we suggest developers consider revising the specifications to include exclusion criteria for patient, medical, and system reasons for vaccination not given. Additionally, we note that the measure is nearly topped out with a narrow opportunity for improvement. Developers should include updated performance data in the NQF submission materials for re-endorsement. Lastly, we note that electronic health record (EHR) information blocking could prevent the transmission of immunization information between competing electronic systems.

Measure Specifications

NQF 1659: Influenza Immunization	
Measure Steward:	Centers for Medicare and Medicaid Services
NQF Status:	NQF Endorsed, Last Updated Jan 23, 2017

Use in Federal Programs:	Hospital Compare, Hospital Inpatient Quality Reporting, Hospital Value-Based Purchasing, Impatient Psychiatric Facility Quality Reporting
Description:	Inpatients age 6 months and older discharged during October, November, December, January, February or March who are screened for influenza vaccine status and vaccinated prior to discharge if indicated.
Numerator Statement:	Inpatient discharges who were screened for influenza vaccine status and were vaccinated prior to discharge if indicated.
Denominator Statement:	Acute care hospitalized inpatients age 6 months and older discharged during the months of October, November, December, January, February or March.
Exclusions:	The following patients are excluded from the denominator: • Patients less than 6 months of age • Patients who expire prior to hospital discharge • Patients with an organ transplant during the current hospitalization • Patients for whom vaccination was indicated, but supply had not been received by the hospital due to problems with vaccine production or distribution • Patients who have a Length of Stay greater than 120 days • Patients who are transferred or discharged to another acute care hospital • Patients who leave Against Medical Advice (AMA)
Type of Measure:	Process
Intended Level of Attribution:	Facility
Care Setting:	Inpatient/Hospital
Data Source:	Claims, Paper Medical Records

Outpatient Measures

Recommendation
ACP supports NQF #0039: "Flu Vaccinations for Adults Ages 18 and Older."

Rationale
ACP supports NQF measure #0039: "Flu Vaccinations for Adults Ages 18 and Older." This measure represents an important clinical concept and implementation will lead to meaningful improvements in clinical outcomes. While we support this measure, we note several suggestions for the developers to consider when they submit the measure to NQF for re-endorsement. First, developers should evaluate the most current performance data. The clinical impact will vary annually depending on how the vaccination matches the circulating virus. Second, developers should consider revising the specifications to include a more appropriate age-range. The highest benefit of annual vaccination is seen in patients aged ≥50 years. Third, while the data for self-reported influenza vaccination status has been validated as being extremely accurate, this does not appear to be the case in actual practice. A stronger measure may specify electronic data sources such as Electronic Health Records (EHRs) and state-based ISSs to confirm vaccination status and prevent overuse. Fourth, while we support implementation for health plan level analysis, it is unclear how this measure will improve care in real time at the individual clinician level of analysis. Implementation at the level of the individual clinician could penalize clinicians who treat patient who do not schedule appointments during the regular influenza season. Furthermore, primary care clinicians should not be exclusively responsible for ensuring that patients are vaccinated. Lastly, specifications should include exclusion criteria for patient refusal and patients with contraindications to therapy.

Measure Specifications

NQF 0039: Flu Vaccinations for Adults Ages 18 and Older	
Measure Steward:	National Committee for Quality Assurance
NQF Status:	NQF Endorsed, Last Updated Jan 17, 2017
Use in Federal Programs:	Medicaid, Qualified Health Plan, Quality Rating System
Description:	The percentage of adults 18 years of age and older who self-report receiving an influenza vaccine within the measurement period. This measure is collected via the CAHPS 5.0H adults survey for Medicare, Medicaid, and commercial populations. It is reported as two separate rates stratified by age: 18-64 and 65 years of age and older.
Numerator Statement:	This measure is reported as two rates: Flu Vaccination for Adults age 18-64 – Respondents to the Medicaid or commercial CAHPS survey who report having received an influenza

	vaccination since July of the previous year. Flu Vaccination for Adults age 65+ - Respondents to the Medicare CAHPS survey who report having received an influenza vaccination since July of the previous year.
Denominator Statement:	Flu Vaccinations for Adults Ages 18-64 – Medicaid and Commercial CAHPS respondents age 18-64 Flu Vaccination for Adults Age 65 and Older – Medicare CAHPS respondents age 65 and older.
Exclusions:	None
Type of Measure:	Process
Intended Level of Attribution:	Health Plan, Integrated Delivery System
Care Setting:	Home Care, Inpatient/Hospital, Outpatient Services, Post-Acute Care
Data Source:	Instrument-Based Data

Recommendation
ACP does not support MIPS #154, 155, and 318 (NQF #0101): "Falls: Screening, Risk-Assessment, and Plan of care to Prevent Future Falls."

Rationale
ACP does not support MIPS measures #154, 155, and 318 (NQF measure #0101): "Falls: Screening, Risk-Assessment, and Plan of care to Prevent Future Falls." This measure represents an important clinical concept and clinicians should screen for falls in patients who are at risk of falling; however, it is unclear whether implementation will lead to meaningful improvements in clinical outcomes. Developers should consider revising the denominator specifications to include only those patients who are at high-risk of falling. As currently specified, implementation could promote overuse of low-value services in low-risk adults aged 65 years and older. Clinicians should individualize the plan of care and the care plan should be less prescriptive to account for individual patient requirements. Furthermore, the data collection burden associated with the multiple measure components is high and data elements seem unlikely to capture how well the service was performed. The measure relies heavily on CPT-II codes which are not widely used. Commercial electronic health records (EHRs) are not designed to capture these codes in routine work flow. Also, developers should consider updating the specifications to reflect the most current clinical recommendations of the United States Preventive Task Force (USPSTF). The USPSTF does not support inclusion of vitamin D supplementation in falls prevention management programs. Additionally, the evidence-base for what clearly defines best practice is complex. Lastly, while the numerator is clearly defined,

it is complicated with variable validity and the components of the risk assessment model are not clearly defined.

Measure Specifications

MIPS 154, 155, and 318 (NQF 0101): Falls: Screening, Risk-Assessment, and Plan of Care to Prevent Future Falls	
Measure Steward:	National Committee for Quality Assurance
NQF Status:	NQF Endorsed, Last Updated Dec 10, 2015
Use in Federal Programs:	CMS Quality Payment Program (QPP)/Merit-Based Incentive Payment System (MIPS)
Description:	This is a clinical process measure that assesses falls prevention in older adults. The measure has three rates: A) Screening for Future Fall Risk: Percentage of patients aged 65 years and older who were screened for future fall risk at least once within 12 months B) Falls Risk Assessment: Percentage of patients aged 65 years and older with a history of falls who had a risk assessment for falls completed within 12 months C) Plan of Care for Falls: Percentage of patients aged 65 years and older with a history of falls who had a plan of care for falls documented within 12 months
Numerator Statement:	This measure has three rates. The numerators for the three rates are as follows: A) Screening for Future Fall Risk: Patients who were screened for future fall* risk** at last once within 12 months B) Falls Risk Assessment: Patients who had a risk assessment*** for falls completed within 12 months C) Plan of Care for Falls: Patients with a plan of care**** for falls documented within 12 months. *A fall is defined as a sudden, unintentional change in position causing an individual to land at a lower level, on an object, the floor, or the ground, other than as a consequence of a sudden onset of paralysis, epileptic seizure, or overwhelming external force. **Risk of future falls is defined as having had had 2 or more falls in the past year or any fall with injury in the past year. ***Risk assessment is comprised of balance/gait assessment AND one or more of the following assessments: postural blood pressure, vision, home fall hazards, and documentation on whether medications are a contributing factor or not to falls within the past 12 months. ****Plan of care must include consideration of vitamin D supplementation

	AND balance, strength and gait training.
Denominator Statement:	A) Screening for Future Fall Risk: All patients aged 65 years and older seen by an eligible provider in the past year. B & C) Falls Risk Assessment & Plan of Care for Falls: All patients aged 65 years and older seen by an eligible provider in the past year with a history of falls (history of falls is defined as 2 or more falls in the past year or any fall with injury in the past year).
Exclusions:	Patients who have documentation of medical reason(s) for not screening for future fall risk, undergoing a risk-assessment or having a plan of care (e.g., patient is not ambulatory) are excluded from this measure.
Type of Measure:	Process
Intended Level of Attribution:	Clinician: Group/Practice, Clinician: Individual
Care Setting:	Inpatient/Hospital, Outpatient Services, Post-Acute Care
Data Source:	Claims, Electronic Health Records, Paper Medical Records

Recommendation
ACP does not support NQF #0280: "Dehydration Admission Rate (PQI 10)."

Rationale
ACP does not support NQF measure #0280: "Dehydration Admission Rate (PQI 10)" for several reasons. First, it is unclear whether implementation will lead to meaningful improvements in clinical outcomes. Second, implementation could result in a decrease in false positive rates and a concomitant increase in false negative rates. Third, developers do not cite high-quality evidence to form the basis of the measure. Evidence documents how difficult it is for clinicians to accurately diagnose dehydration. Fourth, the specifications are flawed. Developers should consider revising the numerator specifications to sufficiently define "dehydration." Also, developers did not test the measure for validity and attribution in programs that are directly applicable to the programs in which this measure is used. Furthermore, developers dismiss legitimate concerns about use of observation status over admission status. Additionally, it is unclear why obstetric patients and patients with missing gender identification are excluded from the denominator. And finally, measure specifications should include some element of risk-adjustment. Fifth, this measure poses significant burden on healthcare systems. This is a regional measure, but it's included in individual hospital/system-level programs. The measure requires all-payer/all-provider data to merge with census data. Feasibility depends on the availability of a contemporary data set with similar features. It is not clear how individual institutions or clinical populations would use this measure and developers do not provide

attribution rules for this area. Finally, primary care clinicians are not exclusively responsible for preventing dehydration.

Measure Specifications

NQF 0280: Dehydration Admission Rate (PQI 10)	
Measure Steward:	Agency for Healthcare Research and Quality
NQF Status:	NQF Endorsed, Last Updated Mar 28, 2017
Use in Federal Programs:	Quality Improvement, Public Reporting
Description:	Admissions with a principal diagnosis of dehydration per 100,000 population, ages 18 years and older. Excludes obstetric admissions and transfers from other institutions. [NOTE: The software provides the rate per population. However, common practice reports the measure as per 100,000 population. The user must multiply the rate obtained from the software by 100,000 to report admissions per 100,000 population.]
Numerator Statement:	Discharges, for patients ages 18 years and older, with either • a principal ICD-10-CM diagnosis code for dehydration; or • any secondary ICD-10-CM diagnosis codes for dehydration and a principal ICD-10-CM diagnosis code for hyperosmolality and/or hypernatremia, gastroenteritis, or acute kidney injury [NOTE: By definition, discharges with a principal diagnosis of dehydration, hyperosmolality and/or hypernatremia, gastroenteritis, or acute kidney injury are precluded from an assignment of MDC 14 by grouper software. Thus, obstetric discharges should not be considered in the PQI rate, though the AHRQ QI™ software does not explicitly exclude obstetric cases.]
Denominator Statement:	Population ages 18 years and older in metropolitan area or county. Discharges in the numerator are assigned to the denominator based on the metropolitan area or county of the patient residence, not the metropolitan area or county of the hospital where the discharge occurred. † The term “metropolitan area” (MA) was adopted by the U.S. Census in 1990 and referred collectively to metropolitan statistical areas (MSAs), consolidated metropolitan statistical areas (CMSAs), and primary metropolitan statistical areas (PMSAs). In addition, “area” could refer to either 1) FIPS county, 2) modified FIPS county, 3) 1999 OMB Metropolitan Statistical Area, or 4) 2003 OMB Metropolitan Statistical Area. Micropolitan Statistical Areas are not used in the QI software

Exclusions:	None
Type of Measure:	Outcome
Intended Level of Attribution:	Population: Community, County or City, Population: Regional or State
Care Setting:	Inpatient/Hospital
Data Source:	Claims

Recommendation

ACP does not support NQF #0575: "Comprehensive Diabetes Care: Hemoglobin A1c Control (<8%)" because of uncertain validity.

Rationale

ACP does not support NQF measure #0575: "Comprehensive Diabetes Care: Hemoglobin A1c Control (<8%)." This is a high impact measure that addresses an important performance gap; however, the specifications do not align with the ACP guidance statement on HbA1c targets for glycemic control. ACP recommends clinicians personalize goals for glycemic control in patients with type 2 diabetes on the basis of a discussion of benefits and harms of pharmacotherapy, patients' preferences, patients' general health and life expectancy, treatment burden, and costs of care. Additionally, implementation could promote overuse of treatment and concurrent hypoglycemia. Furthermore, the threshold of reaching a specific HbA1c does not take into account the individual starting points for each patient. While 8% is an appropriate HbA1c target for some patients, the performance threshold for this measure should not be 100%. Also, implementation could discourage clinicians from treating lower socioeconomic status (SES) patients. Developers should consider adding some element of risk adjustment, which would increase the utility of the measure for individual clinicians. While we support implementation of this measure to address population health concerns where large sample sizes will generate accurate results, this measure will not perform well at the individual clinician-level. The outcome relies heavily on patient adherence and while clinicians influence adherence to an extent, other factors beyond the clinicians control could unfairly penalize clinicians who treat lower SES patient populations. A more meaningful measure for individual clinicians may address appropriate management of diabetic patients with poor glycemic control.

Measure Specifications

NQF 0575: Comprehensive Diabetes Care: Hemoglobin A1c Control (<8%)	
Measure Steward:	National Committee for Quality Assurance
NQF Status:	NQF Endorsed, Last Updated Jun 10, 2016
Use in Federal	Qualified Health Plan, Quality Rating System

Program:	
Description:	The percentage of patients 18-75 years of age with diabetes (type 1 and type 2) whose most recent HbA1c level is <8.0% during the measurement year.
Numerator Statement:	Patients whose most recent HbA1c level is less than 8.0% during the measurement year.
Denominator Statement:	Patients 18-75 years of age by the end of the measurement year who had a diagnosis of diabetes (type 1 or type 2) during the measurement year or the year prior to the measurement year.
Exclusions:	Exclude patients who did not have a diagnosis of diabetes, in any setting, during the measurement year or the year prior to the measurement year and who had a diagnosis of gestational diabetes or steroid-induced diabetes in any setting, during the measurement year or the year prior to the measurement year.
Type of Measure:	Outcome
Level of Analysis:	Health Plan, Integrated Delivery System
Care Setting:	Outpatient Services
Data Source:	Claims, Electronic Clinical Data, Electronic Health Records, Paper Medical Records

Recommendation
ACP does not support NQF #0709: "Proportion of Patients with a Chronic Condition that have a Potentially Avoidable Complication during a Calendar Year."

Rationale
ACP does not support NQF measure #0709: "Proportion of Patients with a Chronic Condition that have a Potentially Avoidable Complication during a Calendar Year." This measure represents an important clinical concept; however, the specifications are flawed and we note some potential issues with feasibility. The specifications are not clearly defined and the outcome is subject to individual patient factors; specifications should include some element of risk-adjustment; and developers cite limited evidence to form the basis of the measure. Additionally, the denominator population is too broad. As written, the denominator population includes all hospitalized patients with any complication of every chronic condition. Furthermore, developers limited testing samples to patients who were treated in Vermont healthcare systems; therefore, reliability may be low in other areas of the country. Finally, it is unclear how well this measure will work at smaller levels of attribution. As currently specified, the measure pulls from large plan data to generate results and developers admit that coding may be an inaccurate method for data collection. A more meaningful measure for inclusion in

quality improvement programs may focus on preventing potentially avoidable complications of particular conditions.

Measure Specifications

NQF 0709: Proportion of Patients with a Chronic Condition that have a Potentially Avoidable Complication during a Calendar Year	
Measure Steward:	Altarum Institute
NQF Status:	NQF Endorsement Removed, Last Updated Jan 25, 2017
Use in Federal Program:	Public Reporting, Quality Improvement
Description:	Percent of adult population aged 18+ years who were identified as having at least one of the following six chronic conditions: Asthma, Chronic Obstructive Pulmonary Disease (COPD), Coronary Artery Disease (CAD), Heart Failure (HF), Hypertension (HTN), or Diabetes Mellitus (DM), were followed for at least one-year, and had one or more potentially avoidable complications (PACs) during the most recent 12 months. Please reference attached document labeled NQF_Chronic_Care_PACs_01_24_17.xls, in the tabs labeled PACs I-9 & I-10 for a list of code definitions of PACs relevant to each of the above chronic conditions. We define PACs as one of two types: (1) Type 1 PACs - PACs related to the index condition: Patients are considered to have a PAC, if they receive services during the episode time window for any of the complications directly related to the chronic condition, such as for acute exacerbation of the index condition, respiratory insufficiency in patients with Asthma or COPD, hypotension or fluid and electrolyte disturbances in patients with CAD, HF or diabetes etc. (2) Type 2 PACs - PACs related to Patient Safety or broader System Failures: Patients are also considered to have a PAC, if they receive services during the episode time window for any of the complications related to patient safety or health system failures such as for sepsis, infections, phlebitis, deep vein thrombosis, pressure sores etc. All relevant hospitalizations for patients with chronic conditions are considered potentially avoidable and flagged as PACs. This particularly applies to hospitalizations due to acute exacerbations of the index condition. For example, a hospitalization for diabetic emergency in a diabetic patient, or a hospitalization for acute pulmonary edema in a heart failure patient is considered a PAC. PACs are counted as a dichotomous (yes/no) outcome. If a patient had one

	or more PACs, they get counted as a "yes" or a 1. The summary tab in the enclosed workbook labeled NQF_Chronic_Care_PACs_01_24_17.xls gives the overview of the frequency and costs associated with each of these types of PACs for each of the six chronic conditions. Detailed drill-down tabs with graphs are also provided in the same workbook for each of the six chronic conditions to highlight high-frequency PACs. The Decision Tree tabs in the same workbook highlight the flow diagrams for the selection of patients into each chronic condition episode. The information is based on a two-year claims database from a commercial insurer with 3,258,706 covered lives and $25.9 billion in "allowed amounts" for claims costs. The database is an administrative claims database with medical as well as pharmacy claims. It is important to note that while the overall frequency of PAC hospitalizations is low (for all chronic care conditions summed together, PAC frequency was 1.6% for all PAC occurrences), they amount to over 52% of the PAC medical costs.
Numerator Statement:	Outcome: Number of patients with at least one of the following six chronic conditions: Asthma, Chronic Obstructive Pulmonary Disease (COPD), Coronary Artery Disease (CAD), Heart Failure (HF), Hypertension (HTN), or Diabetes Mellitus (DM), and had one or more potentially avoidable complications (PACs), during the most recent 12 months.
Denominator Statement:	Adult patients aged 18+ years who were identified as having at least one of the following six chronic conditions: Asthma, Chronic Obstructive Pulmonary Disease (COPD), Coronary Artery Disease (CAD), Heart Failure (HF), Hypertension (HTN), or Diabetes Mellitus (DM), and were followed for at least 12 months.
Exclusions:	Patients are excluded from the measure if they are less than 18 years of age, have an incomplete episode of care (less than 18 months of claims), have an enrollment gap of more than 30 days, or have outlier costs for the most recent 12 months of claim costs.
Type of Measure:	Outcome
Intended Level of Attribution:	Clinician: Group/Practice, Health Plan, Other, Population: Community, County or City, Population: Regional and State
Care Setting:	Outpatient Services
Data Source:	Claims

Recommendation
ACP does not support MIPS #374: "Closing the Referral Loop: Receipt of the Specialist Report."

Rationale
ACP does not support MIPS measure #374: "Closing the Referral Loop: Receipt of the Specialist Report." This measure represents an important clinical concept; however, implementation may lead to an unintended consequence of encouraging unnecessary care. Also, we note several suggestions for the developers to consider when they submit the measure to NQF for re-endorsement. The specifications are not well defined and should include an evidence-based time interval and some element of risk-adjustment. Additionally, developers do not cite any evidence to form the basis of the measure. Furthermore, the outcome is based on the level of integration of the participating information system rather than on how well the individual clinician tracks the referral. Information can appear to be 100% transmitted in a well-integrated system, whereas an independent practice network does not generate this data trail as a byproduct of its work. Additionally, it is not necessary for clinicians to close all referral loops. For instance, clinicians may refer a patient to a disease specialist for a condition that resolves prior to their appointment date. Also, depending on the urgency to complete the referral within a given time frame, the patient may not see the specialist within the measurement period. In this case, the referring clinician would fail the measure. Lastly, the burgeoning use of electronic health records (EHRs) will make this measure become far less relevant in the next several years. This is an important health-IT measure for improving care coordination; however, there is less evidence that this measure will improve care if it is implemented at the individual clinician level.

Measure Specifications

MIPS 374: Closing the Referral Loop: Receipt of the Specialist Report	
Measure Steward:	Centers for Medicare & Medicaid Services
NQF Status:	Not NQF Endorsed
Description:	Percentage of patients with referrals, regardless of age, for which the referring provider receives a report from the provider to whom the patient was referred
Numerator Statement:	Number of patients with a referral, for which the referring provider received a report from the provider to whom the patient was referred.
Denominator Statement:	Number of patients, regardless of age, who were referred by one provider to another provider, and who had a visit during the measurement period.
Exclusions:	None
Type of Measure:	Process
Intended Level of Attribution:	Individual Clinician

Care Setting:	Outpatient
Data Source:	Electronic Health Records

Recommendation
ACP does not support NQF #0027: "Medical Assistance with Smoking and Tobacco Cessation" because of uncertain validity.

Rationale
ACP does not support NQF measure #0027: "Medical Assistance with Smoking and Tobacco Cessation." This measure represents an important clinical concept and it is appropriately specified to assess performance at the health-plan-level of analysis; however, the numerator specifications are outdated and should include electronic cigarettes in the tobacco use definition. Furthermore, while this measure is appropriately specified to assess performance at the health-plan level of analysis, it is not appropriately specified to assess performance of individual clinicians. Smoking rates vary by state and the denominator population may be too low in some individual/group practices to produce a stable performance estimate.

Measure Specifications

NQF 0027: Medical Assistance with Smoking and Tobacco Cessation	
Measure Steward:	National Committee for Quality Assurance
NQF Status:	NQF Endorsed, Last Updated Jun 28, 2017
Use in Federal Program:	Medicaid, Qualified Health Plan, Qualified Rating System
Description:	The three components of this measure assess different facets of providing medical assistance with smoking and tobacco use cessation: Advising Smokers and Tobacco Users to Quit: A rolling average represents the percentage of patients 18 years of age and older who are current smokers or tobacco users and who received advice to quit during the measurement year. Discussing Cessation Medications: A rolling average represents the percentage of patients 18 years of age and older who are current smokers or tobacco users and who discussed or were recommended cessation medications during the measurement year. Discussing Cessation Strategies: A rolling average represents the percentage of patients 18 years of age and older who are current smokers or tobacco users and who discussed or were provided cessation methods

	or strategies during the measurement year.
Numerator Statement:	Advising Smokers and Tobacco Users to Quit: Patients who indicated that they received advice to quit smoking or using tobacco from their doctor or health provider Discussing Cessation Medications: Patients who indicated that their doctor or health provider recommended or discussed smoking or tobacco cessation medications Discussing Cessation Strategies: Patients who indicated their doctor or health provider discussed or provided smoking or tobacco cessation methods and strategies other than medication
Denominator Statement:	Patients 18 years and older who responded to the CAHPS survey and indicated that they were current smokers or tobacco users during the measurement year or in the last 6 months for Medicaid and Medicare.
Exclusions:	None
Type of Measure:	Process
Level of Analysis:	Health Plan, Integrated Delivery System
Care Setting:	Outpatient Services
Data Source:	Instrument-Based Data

Behavioral Health Measures

Recommendation

ACP does not support NQF #1932: "Diabetes Screening for People with Schizophrenia or Bipolar Disorder who are Using Antipsychotic Medications (SSD)" because of uncertain validity.

Rationale

ACP does not support NQF measure #1932: Diabetes Screening for People with Schizophrenia or Bipolar Disorder who are Using Antipsychotic Medications (SSD)." This measure represents an important clinical concept and clinicians should screen for diabetes in patients who are diagnosed with schizophrenia or bipolar disorder AND obesity and who are also prescribed antipsychotic medication therapy. However, developers do not cite a performance gap, the specifications are significantly flawed, and developers cite evidence on patients who are overweight to form the basis of the measure while this measure applies to all patients. Furthermore, the numerator should specify an evidence-based time-interval. In patients with normal results, the American Diabetes Association (ADA) recommends a minimum of 3-year intervals, with consideration of more frequent testing depending on initial results and risk status. While implementation poses low provider-burden, usability is low without evidence for when next to screen. Also, the numerator and denominator should specify an evidence-based age range and the age cut-off seems arbitrary. The ADA recommends testing begin at age 45 years in patients who are not overweight and who do not have any risk factors for developing diabetes. Testing for prediabetes should only be considered in adolescents who are overweight. Additionally, the specifications should include exclusion criteria for patients with limited life expectancy and increased fragility. Moreover, not all antipsychotic medications are likely to cause adverse metabolic effects. Developers should consider revising the specifications to exclude medications that do not increase the risk for diabetes in patients with serious mental illness. Furthermore, the measure has not been rigorously tested. Of note, while this measure is appropriately specified to assess performance at the health plan-/integrated delivery-level analysis, developers do not cite any data to support analysis at the individual clinician-level and therefore, measure feasibility is unknown. While health-plan data may include a sufficient denominator population to generate reliable results, the denominator population may be too low in some individual/group practices to produce a stable performance estimate. Furthermore, while health plans can easily obtain detailed clinical management data form various information systems (e.g., claims, EHRs, pharmacy), clinicians are not privy to the same information.

Measure Specifications

NQF 1932: Diabetes Screening for People with Schizophrenia or Bipolar disorder who are Using Antipsychotic Medications (SSD)	
Measure Steward:	National Committee for Quality Assurance
NQF Status:	NQF Endorsed, Last Updated Mar 09, 2017

Use in Federal Program:	Medicaid
Description:	The percentage of patients 18 – 64 years of age with schizophrenia or bipolar disorder, who were dispensed an antipsychotic medication and had a diabetes screening test during the measurement year.
Numerator Statement:	Among patients 18-64 years old with schizophrenia or bipolar disorder, those who were dispensed an antipsychotic medication and had a diabetes screening testing during the measurement year.
Denominator Statement:	Patients ages 18 to 64 years of age as of the end of the measurement year (e.g., December 31) with a schizophrenia or bipolar disorder diagnosis and who were prescribed an antipsychotic medication.
Exclusions:	Exclude members who use hospice services or elect to use a hospice benefit any time during the measurement year, regardless of when the services began. Exclude patients with diabetes during the measurement year or the year prior to the measurement year. Exclude patients who had no antipsychotic medications dispensed during the measurement year.
Type of Measure:	Process
Intended Level of Attribution:	Health Plan, Integrated Delivery System, Population: Regional and State
Care Setting:	Outpatient Services
Data Source:	Claims, Electronic Health Data, Electronic Health Records

Recommendation
ACP does not support NQF #1934: "Diabetes Monitoring for People with Diabetes and Schizophrenia."

Rationale
ACP does not support NQF measure #1934: "Diabetes Monitoring for People with Diabetes and Schizophrenia." This measure targets a vulnerable population and data exist to support the benefit of screening for diabetes in patients who are diagnosed with schizophrenia AND obesity and who are also prescribed antipsychotic pharmacotherapy on improvements in clinical outcomes. However, the measure is significantly flawed. Developers should consider separating the numerator into two discrete measures: testing for HbA1c and testing for LDL. Also, the specifications should include exclusion criteria for patients who are currently prescribed statin therapy and patient refusal. Furthermore, the one-year time-frame for LDL

assessment is not based on clinical evidence and therefore, implementation may promote overuse of direct LDL testing in patients without calculable LDL due to hypertriglyceridemia or in patients who are not fasting. Additionally developers cite clinical guideline recommendations based on expert from the American Heart Association/American College of Cardiology (AHA/ACC) to form the basis of the measure. AHA/ACC recommend monitoring adherence to drug therapy every 3-12 months. Furthermore, the denominator specifications should include an evidence-based age range. The United States Preventive Services Task Force (USPSTF) recommends LDL testing in men aged 35 years and older and men aged 20-35 years if they are at increased risk for coronary heart disease. The USPSTF recommends screening women aged 45 years and older if they are at increased risk of coronary heart disease and women aged 20-45 yeas if they are at risk for coronary heart disease. Additionally, guideline recommendations on LDL testing in patients who are prescribed statin therapy disagree. LDL testing is not indicated if the patient is currently receiving statin therapy. Some guidelines argue that clinicians need not measure LDL in patients with type II diabetes; rather, they should prescribe statins regardless of LDL results. This controversy in measurement versus treatment makes this a relatively unfair measure. It is burdensome for clinicians to re-check LDL in patients who already receive statin therapy unless the clinician is assessing for adherence to therapy. Of note, the measure is not feasible for implementation at the individual clinician level. While health plans can easily obtain detailed clinical management data from various information systems (e.g., claims, EHRs, pharmacy), clinicians are not privy to the same information. This measure is appropriately specified to assess performance of health plans covering a significant proportion of patients who are diagnosed with mental illness.

Measure Specifications

NQF 1934: Diabetes Monitoring for People with Diabetes and Schizophrenia	
Measure Steward:	National Committee for Quality Assurance
NQF Status:	NQF Endorsed, Last Updated Jun 10, 2016
Use in Federal Program:	Not in use
Description:	The percentage of patients 18 – 64 years of age with schizophrenia and diabetes who had both an LDL-C test and an HbA1c test during the measurement year.
Numerator Statement:	One or more HbA1c tests and one or more LDL-C tests performed during the measurement year.
Denominator Statement:	Patients age 18-64 years of age as of the end of the measurement year (e.g. December 31) with a schizophrenia and diabetes diagnosis.
Exclusions:	Exclude patients who do not have a diagnosis of diabetes (Diabetes Value Set), in any setting, during the measurement year or year prior to the measurement year and who had a diagnosis of gestational diabetes or steroid-induced diabetes (Diabetes Exclusions Value Set), in any setting,

	during the measurement year or the year prior to the measurement year.
Type of Measure:	Process
Intended Level of Attribution:	Health Plan, Integrated Delivery System
Care Setting:	Outpatient Services
Data Source:	Claims, Electronic Health Data, Electronic Health Records, Paper Medical Records

Recommendation

ACP does not support NQF #2599: "Alcohol Screening and Follow-up for People with Serious Mental Illness" because of uncertain validity.

Rationale

ACP does not support NQF measure #2599: "Alcohol Screening and Follow-up for People with Serious Mental Illness." Implementation will lead to meaningful improvements in clinical outcomes because comorbid alcohol use incredibly complicates the care of patients with serious mental illness; however, we note several suggestions for the developers to consider when they submit the measure to NQF for re-endorsement. First, the benefit of implementing a measure to specifically target patients who are diagnosed with serious mental illness is unclear. Sample sizes from studies of individuals with serious mental illness are small (n= <100). The United States Preventive Services Task Force (USPSTF) recommends screening in ALL patients. Second, the requirement for two counseling episodes is not based on high-quality evidence. Third, to limit confusion associated with data collection, developers should separate the numerator into two discrete measures: 1) patients who are screened for unhealthy alcohol use, 2) patients who screened positive and received counseling. Fourth, specifications should include pharmacotherapy as an alternative treatment option. Finally, while this measure is appropriately specified to assess performance at the health-plan-level of analysis, burden associated with data collection may be high for individual clinicians. While health plans can easily obtain detailed clinical management data form various information systems (e.g., claims, EHRs, pharmacy), clinicians are not privy to the same information. Additionally, the denominator population for individual clinicians may be too small to produce stable estimates.

Measure Specifications

NQF 2599: Alcohol Screening and Follow-up for People with Serious Mental Illness	
Measure Steward:	National Committee for Quality Assurance
NQF Status:	NQF Endorsed, Last Updated May 17, 2017
Use in Federal	Not in use

Program:	
Description:	The percentage of patients 18 years and older with a serious mental illness, who were screened for unhealthy alcohol use and received brief counseling or other follow-up care if identified as an unhealthy alcohol user. Note: The proposed health plan measure is adapted from an existing provider-level measure for the general population (NQF #2152: Preventive Care & Screening: Unhealthy Alcohol Use: Screening & Brief Counseling). It was originally endorsed in 2014 and is currently stewarded by the American Medical Association (AMA-PCPI).
Numerator Statement:	Patients 18 years and older who are screened for unhealthy alcohol use during the last 3 months of the year prior to the measurement year through the first 9 months of the measurement year and received two events of counseling if identified as an unhealthy alcohol user.
Denominator Statement:	All patients 18 years of age or older as of December 31 of the measurement year with at least one inpatient visit or two outpatient visits for schizophrenia or bipolar I disorder, or at least one inpatient visit for major depression during the measurement year.
Exclusions:	Active diagnosis of alcohol abuse or dependence during the first nine months of the year prior to the measurement year (see Alcohol Disorders Value Set).
Type of Measure:	Process
Intended Level of Attribution:	Health Plan
Care Setting:	Outpatient Services
Data Source:	Claims, Electronic Health Records, Paper Medical Records

Recommendation

ACP does not support NQF #2601: "BMI Screening and Follow-up for People with Serious Mental Illness."

Rationale

ACP does not support NQF measure #2601: "BMI Screening and Follow-up for People with Serious Mental Illness." The urgency posed by the obesity epidemic underscores the need for evidence-based and clinically meaningful performance measures. However, this is a "check the box measure" and the numerator specifies interventions that do not necessarily lead to meaningful improvements in clinical outcomes. For example, documenting a referral to a nutritionist may not be an effective intervention for weight loss management. Furthermore, it is unclear why the specifications limit pharmacotherapy options to Orlistat. Developers should

consider revising the specifications to include additional medications that are equally as effective in treating patients who are diagnosed with obesity. Additionally, developers should update the measure specifications to align with current United States Preventive Services Task Force (USPSTF) recommendations on obesity screening and include waist circumference as a screening tool. Furthermore, as currently specified, implementation may pressure clinicians to spend a disproportionate amount of time focusing on the patient's weight, when other conditions should take precedence. Finally, there is no evidence on appropriate screening intervals. We advocate for annual versus biennial screening.

Measure Specifications

NQF 2601: BMI Screening and Follow-up for People with Serious Mental Illness	
Measure Steward:	National Committee for Quality Assurance
NQF Status:	NQF Endorsed, Last Updated Mar 06, 2015
Use in Federal Program:	Public Reporting, Quality Improvement (external benchmarking to organizations), Quality Improvement (Internal to the specific organization), Regulatory and Accreditation Programs
Description:	The percentage of patients 18 years and older with a serious mental illness who received a screening for body mass index and follow-up for those people who were identified as obese (a body mass index greater than or equal to 30 kg/m2). Note: The proposed health plan measure is adapted from an existing provider-level measure for the general population (Preventive Care & Screening: Body Mass Index: Screening and Follow-Up NQF #0421). It is currently stewarded by CMS and used in the Physician Quality Reporting System.
Numerator Statement:	Patients 18 years and older with calculated body mass index documented during the measurement year or year prior to the measurement year and follow-up care is provided if a person's body mass index is greater than or equal to 30 kg/m2.
Denominator Statement:	All patients 18 years of age or older as of December 31 of the measurement year with at least one inpatient visit or two outpatient visits for schizophrenia or bipolar I disorder, or at least one inpatient visit for major depression during the measurement year.
Exclusions:	Active diagnosis of pregnancy during the measurement year or the year prior to the measurement year.
Type of Measure:	Process
Intended Level	Health Plan

of Attribution:	
Care Setting:	Outpatient Services
Data Source:	Claims, Electronic Health Records, Paper Medical Records

Recommendation
ACP does not support NQF #2602: "Controlling High Blood Pressure for People with Serious Mental Illness."

Rationale
ACP does not support NQF measure #2602: "Controlling High Blood Pressure for People with Serious Mental Illness" because the specifications are flawed and the measure is not based on the most current recommendations of the United States Preventive Services Task Force (USPSTF) and the American Heart Association (AHA) on blood pressure monitoring. Developers do not cite any information to validate the importance of implementing a "blood pressure control" measure to specifically target patients who are diagnosed with serious mental illness. Furthermore, the numerator specifies office screening as the preferred monitoring method, while the USPSTF recommends obtaining measurements outside of the clinical setting for diagnostic confirmation before starting treatment. Therefore, implementation could promote overuse of pharmacotherapy in patients whose blood pressure is adequately controlled in the ambulatory setting. We suggest developers update the numerator specifications to include an average of several measurements. Doing so will likely increase the accuracy of the measurement results and reduce the potential for overtreatment. Furthermore, this measure will not reward clinicians who help patients reduce blood pressure measurements outside of the parameters specified in the numerator. For example, clinicians who help patients reduce systolic blood pressure measurements from 180 mmHg to 145 mmHg will not receive credit for this measure. Also, the specifications should include some element of risk-adjustment. Treatment success will likely be confounded by the mental illness. This measure is specified to evaluate performance at the system-level of analysis and variations in assessment skills according to specialty and clinical expertise may produce unstable estimates. Finally, implementation at the individual clinical level of analysis poses significant provider burden because blood pressure data and mental health data may exist in separate medical records.

Measure Specifications

NQF 2602: Controlling High Blood Pressure for People with Serious Mental Illness	
Measure Steward:	National Committee for Quality Assurance
NQF Status:	NQF Endorsed, Last Updated May 09, 2018
Use in Federal Program:	Public Reporting, Quality Improvement (external benchmarking to organizations), Quality Improvement (Internal to the specific organization), Regulatory and Accreditation Programs

Description:	The percentage of patients 18-85 years of age with serious mental illness who had a diagnosis of hypertension (HTN) and whose blood pressure (BP) was adequately controlled during the measurement year. Note: This measure is adapted from an existing health plan measure used in a variety of reporting programs for the general population (NQF #0018: Controlling High Blood Pressure). It was originally endorsed in 2009 and is owned and stewarded by NCQA. The specifications for the existing measure (Controlling High Blood Pressure NQF #0018) have been updated based on 2013 JNC-8 guideline. NCQA will submit the revised specification for Controlling High Blood Pressure NQF #0018 in the 4th quarter 2014 during NQF's scheduled measure update period. This measure uses the new specification to be consistent with the current guideline.
Numerator Statement:	Patients whose most recent blood pressure (BP) is adequately controlled during the measurement year (after the diagnosis of hypertension) based on the following criteria: -Patients 18-59 years of age as of December 31 of the measurement year whose BP was <140/90 mm Hg. -Patients 60-85 years of age as of December 31 of the measurement year and flagged with a diagnosis of diabetes whose BP was <140/90 mm Hg. -Patients 60-85 years of age as of December 31 of the measurement year and flagged as not having a diagnosis of diabetes whose BP was <150/90 mm Hg.
Denominator Statement:	All patients 18-85 years of age as of December 31 of the measurement year with at least one acute inpatient visit or two outpatient visits for schizophrenia or bipolar I disorder, or at least one inpatient visit for major depression during the measurement year AND a diagnosis of hypertension on or before June 30th of the measurement year.
Exclusions:	All patients who meet one or more of the following criteria should be excluded from the measure: - Evidence of end-stage renal disease (ESRD) or kidney transplant - A diagnosis of pregnancy
Type of Measure:	Outcome
Intended Level of Attribution:	Health Plan
Care Setting:	Outpatient Services
Data Source:	Claims, Electronic Health Records, Paper Medical Records

Recommendation
ACP does not support NQF #2600: "Tobacco Use Screening and Follow-up for People with Serious Mental Illness or Alcohol or Other Drug Dependence" because of uncertain validity.

Rationale
ACP does not support NQF measure #2600: "Tobacco Use Screening and Follow-up for People with Serious Mental Illness or Alcohol or Other Drug Dependence." While this measure represents an important clinical concept and patients diagnosed with schizophrenia should be screened for tobacco use, we note several flaws in in the specifications and developers do not cite sufficient evidence to form the basis of the measure. First, the specifications should include some element of risk-adjustment. Treatment success is likely to be confounded by the mental illness. Second, it's complicated to combine tobacco use with other drug dependence and alcohol dependence because the efficacy of treatment varies by disorder. Third, the specifications do not account for pharmacotherapy options that may be as effective as counseling in managing alcohol- and drug-use disorders. And finally, specifications should include exclusion criteria for patient refusal and patients with limited life expectancy.

Measure Specifications

NQF 2600: Tobacco Use Screening and Follow-up for People with Serious Mental Illness	
Measure Steward:	National Committee for Quality Assurance
NQF Status:	NQF Endorsed, Last Updated Apr 08, 2018
Use in Federal Program:	Public Reporting, Quality Improvement (external benchmarking to organizations), Quality Improvement (Internal to the specific organization), Regulatory and Accreditation Programs
Description:	The percentage of patients 18 years and older with a serious mental illness or alcohol or other drug dependence who received a screening for tobacco use and follow-up for those identified as a current tobacco user. Two rates are reported. Rate 1: The percentage of patients 18 years and older with a diagnosis of serious mental illness who received a screening for tobacco use and follow-up for those identified as a current tobacco user. Rate 2: The percentage of adults 18 years and older with a diagnosis of alcohol or other drug dependence who received a screening for tobacco use and follow-up for those identified as a current tobacco user. Note: The proposed health plan measure is adapted from an existing provider-level measure for the general population (Preventive Care & Screening: Tobacco Use: Screening & Cessation Intervention NQF #0028). This measure is currently stewarded by the AMA-PCPI and used in the Physician Quality Reporting System.

Numerator Statement:	Rate 1: Screening for tobacco use in patients with serious mental illness during the measurement year or year prior to the measurement year and received follow-up care if identified as a current tobacco user. Rate 2: Screening for tobacco use in patients with alcohol or other drug dependence during the measurement year or year prior to the measurement year and received follow-up care if identified as a current tobacco user.
Denominator Statement:	Rate 1: All patients 18 years of age or older as of December 31 of the measurement year with at least one inpatient visit or two outpatient visits for schizophrenia or bipolar I disorder, or at least one inpatient visit for major depression during the measurement year. Rate 2: All patients 18 years of age or older as of December 31 of the measurement year with any diagnosis of alcohol or other drug dependence during the measurement year.
Exclusions:	None
Type of Measure:	Process
Intended Level of Attribution:	Health Plan
Care Setting:	Outpatient Services
Data Source:	Claims, Electronic Health Records, Paper Medical Records

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Drs. Metersky and Persell reported financial relationships with commercial entities and were recused from authorship of this paper.

APPROVED BY THE ACP BOARD OF REGENTS ON:
July 21, 2018

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References

1. Agerwala SM, McCance-Katz EF. Integrating Screening, Brief Intervention, and Referral to Treatment (SBIRT) into Clinical Practic Settings: A Brief Review. Journal of Psychoactive Drugs. 2012;44(4): 307-317. doi:10.1080/02791072.2012.720169

2. Chou WC, Tinetti ME, King MB, Irwin K, Fortinsky RH**.** Perceptions of physicians on the barriers and facilitators to integrating fall risk evaluation and management into practice. J Gen Intern Med. 2006;21:117-22.

3. Fortinsky RH, Iannuzzi-Suchich M, Baker DI, et al. Fall-risk assessment and management in clinical practice: views from healthcare providers. J Am Geriatr Soc. 2004;52(1522-1526).

4. U.S. Census Bureau. Interim Projections By Age, Sex, Race, and Hispanic Origin: 2000–2050. In: U.S. Census Bureau PD, ed. Suitland, MD; 2004.

5. Van Schayck OC, Pinnock H, Ostrem A, Litt J, Tomlins R, Williams S, et al**.** IPCRG Consensus statement: tackling the smoking epidemic – practical guidance for primary care. Prim Care Respir J. 2008;17(3):185-93.

6. World Health Organization**.** Preventing chronic diseases: a vital investment: WHO global report. 1.Chronic disease – therapy 2.Investments 3.Evidence-based medicine 4.Public policy 5.Intersectoral cooperation I. 2005.

7. Epstein AM, Jha AK, Orav EJ**.** The Relationship between Hospital Admission Rates and Rehospitalizations. New England Journal of Medicine. 2011;365(24):2287-95.

8. IDSA Sepsis Task Force**.** Infectious Diseases Society of America (IDSA) POSITION STATEMENT: Why IDSA Did Not Endorse the Surviving Sepsis Campaign Guidelines. Clinical Infectious Diseases. 2018;66(10):1631-5.