NATIONAL QUALITY FORUM

National Voluntary Consensus Standards for Hospital Care: Specialty Clinician Performance Measures

A CONSENSUS REPORT

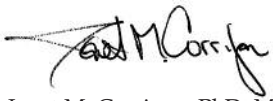
Foreword

We have benefited in recent years from the growing number, availability, and use of standardized performance measures to gauge the quality of healthcare across settings and clinical conditions. The National Quality Forum (NQF) has endorsed consensus standards in a variety of settings, including hospitals, home health, nursing homes, and ambulatory practices.

This report complements this work by identifying measures appropriate for use at the clinician level. The report details 26 national voluntary consensus standards for specialty clinician care provided in the hospital setting. The NQF-endorsed™ consensus standards for specialty clinician care will facilitate efforts to improve the quality of care delivered in four inpatient areas: emergency care; cardiac surgery; perioperative care; and stroke and stroke rehabilitation.

This project represents a significant contribution to existing nationally standardized performance measures to assess the quality of care provided in hospitals and by clinicians.

We thank NQF Members and the Specialty Clinician Performance Measures Steering Committee and Technical Advisory Panels for their thoughtful work and commitment to this project. Through their collaborative efforts, we look forward to witnessing continued healthcare quality improvement.



Janet M. Corrigan, PhD, MBA
President and Chief Executive Officer

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National Voluntary Consensus Standards for Hospital Care: Specialty Clinician Performance Measures

Table of Contents

Executive Summary v

Introduction 1

National Voluntary Consensus Standards for Hospital Care: Specialty Clinician Performance Measures 2

- Relationship to Other NQF-Endorsed Consensus Standards 2

Identifying the Set 3

- Purpose 4
- Scope 4
- Selection Criteria 4
- Identification of Candidate Consensus Standards 5
- Box A: Criteria for Evaluation and Selection 5

The NQF-Endorsed National Voluntary Consensus Standards for Hospital Care: Specialty Clinician Performance Measures 7

Research Recommendations 7

- General Recommendations 7
- Cardiac Surgery 8
- Stroke 8
- Geriatrics 8

Acknowledgment 8

Table 1. National Voluntary Consensus Standards for Hospital Care: Specialty Clinician Performance Measures 9

(continued)

Appendix A — Specifications of the National Voluntary Consensus Standards for Hospital Care: Specialty Clinician Performance Measures A-1

Appendix B — Members and Board of Directors B-1

Appendix C — Steering Committee, Technical Advisory Panels, and Project Staff C-1

Appendix D — Commentary D-1

Appendix E — Selected References E-1

Appendix F — Consensus Development Process: Summary F-1

National Voluntary Consensus Standards for Hospital Care: Specialty Clinician Performance Measures

Executive Summary

In the past several years, the public reporting of healthcare quality information has blossomed, with a variety of performance measures being used to assess the quality of care across settings and clinical areas. This movement initially focused on acute care hospitals—and was enhanced by the National Quality Forum's (NQF's) endorsement of 39 hospital-level voluntary consensus standards in 2002—but has led to increased interest in information about the quality of physician performance. To meet that need, NQF has endorsed 86 clinician-level ambulatory care performance measures and 7 patient experience with care measures that are specific to ambulatory care.

Yet not all aspects of care in the ambulatory setting have benefited equally from measure development and use. Specifically, measurement of the performance of specialty care providers has been neglected. Gaps have also emerged in hospital-based measure sets, particularly in the area of specialty clinician (physician and other licensed independent practitioners) hospital care.

This report details 26 national voluntary consensus standards for hospital care quality endorsed by NQF. Some of these standards have been endorsed by NQF for other circumstances, but their endorsement for this setting represents a significant contribution to existing nationally standardized performance measures to assess the quality of care provided in hospitals and by clinicians. The NQF-endorsed™ consensus standards for specialty clinician care will facilitate efforts to improve the quality of care delivered in the inpatient setting in four areas: emergency care; cardiac surgery; perioperative care; and stroke and stroke rehabilitation. These measures are intended for clinician-level accountability, including public reporting.

Implementation of these consensus standards and public reporting of the results will enhance the road map that consumers can use to select high-quality healthcare providers and will drive the improvement of care across the United States. It will also enhance performance-based quality improvement initiatives and provide a means to catalyze value-based purchasing.

National Voluntary Consensus Standards for Hospital Care: Specialty Clinician Performance Measures*

PRIORITY AREA	MEASURE
Emergency Care	■ Electrocardiogram performed for non-traumatic chest pain ■ Aspirin at arrival for acute myocardial infarction (AMI) ■ Vital signs for community-acquired bacterial pneumonia ■ Assessment of oxygen saturation for community-acquired bacterial pneumonia ■ Assessment of mental status for community-acquired bacterial pneumonia ■ Empiric antibiotic for community-acquired bacterial pneumonia
Cardiac Surgery	■ Use of internal mammary artery (IMA) in isolated coronary artery bypass graft (CABG) ■ Use of IMA in isolated CABG ■ Preoperative beta blocker in patient with isolated CABG ■ Preoperative beta blocker in patient with isolated CABG ■ Antiplatelet medication on discharge ■ Beta blocker on discharge
Perioperative Care	■ Venous thromboembolism (VTE) prophylaxis ■ Timing of prophylactic antibiotics – ordering physician ■ Timing of prophylactic antibiotics – administering physician ■ Selection of prophylactic antibiotics – first- or second-generation cephalosporin ■ Discontinuation of prophylactic antibiotics (non-cardiac procedures) ■ Discontinuation of prophylactic antibiotics (cardiac procedures)
Stroke	■ Deep vein thrombosis (DVT) prophylaxis for ischemic stroke or intracranial hemorrhage ■ Discharged on antiplatelet therapy ■ Anticoagulant therapy prescribed for atrial fibrillation at discharge ■ Tissue plasminogen activator (t-PA) considered ■ Screening for dysphagia ■ Consideration of rehabilitation services ■ Carotid imaging reports ■ Computed tomography (CT) or magnetic resonance imaging (MRI) reports

* See appendix A for specifications, risk adjustment (if applicable), additional background, and reference material.

National Voluntary Consensus Standards for Hospital Care: Specialty Clinician Performance Measures

Introduction

As public reporting of hospital, nursing home, and home health quality has been implemented nationally,[1] many stakeholders have shown great interest in having information about the quality of physician performance, which has prompted greater attention in the area of clinician-level measurement. Toward that end, in 2006 and 2007 the National Quality Forum (NQF) endorsed 86 clinician-level ambulatory care performance measures in 10 areas: asthma/respiratory illness; bone and joint conditions; diabetes; heart disease; hypertension; medication management; mental health and substance use disorders; obesity; prenatal care; and prevention, immunization, and screening.[2]

Ambulatory (outpatient) care has been an especially active area of performance measurement, even though not all aspects of care in that setting have benefited equally from measure development and use—specifically the performance of specialty care providers. Various stakeholders also have recognized a need to fill in the gaps of hospital-based measure sets, particularly in the area of specialty clinician (physician and other licensed independent practitioners) hospital care.

At the request of the Centers for Medicare & Medicaid Services (CMS), NQF has considered clinician-level (including physicians and other licensed independent practitioners) measures applicable to patients cared for by specialists in outpatient and hospital settings. This report identifies 26 candidate consensus standards for clinician-level specialty care in the hospital setting.

[1] See www.medicare.gov.

[2] National Quality Forum (NQF), *National Voluntary Consensus Standards for Ambulatory Care: A Consensus Report,* Washington, DC: NQF; 2006.

National Voluntary Consensus Standards for Hospital Care: Specialty Clinician Performance Measures

The growing interest in clinician-level measurement is not limited to ambulatory care settings. Information about the quality of and performance by physicians and other clinicians practicing in hospital settings is in great demand by many stakeholders.

Specialty care encompasses a broad array of areas. For this initial specialty clinician set, CMS requested that five areas of hospital care be considered:

- emergency care, including patients admitted to the hospital from the emergency department;
- cardiac surgery;
- perioperative prophylaxis of venous thromboembolic disease and surgical site infection;
- stroke and stroke rehabilitation; and
- geriatrics.[3]

Relationship to Other NQF-Endorsed Consensus Standards

This report does not represent the entire scope of NQF work relevant to the quality of outpatient or hospital care. NQF has completed or is currently working on separate projects relevant to various healthcare settings, patient safety issues, and patient conditions.

A National Framework for Healthcare Quality Measurement and Reporting[4] provides a standardized framework for identifying voluntary healthcare quality consensus standards and articulates guiding principles and priorities for healthcare quality improvement. *National Priorities for Healthcare Quality Measurement and Reporting* identifies priorities applicable to ambulatory care, including reducing disparities; care

[3] No measures were recommended in the area of geriatrics; see commentary (appendix D).

[4] NQF, *A National Framework for Healthcare Quality Measurement and Reporting: A Consensus Report,* Washington, DC: NQF; 2002.

coordination and communication; patient safety (including medication management); and healthcare conditions (asthma, depression, ischemic heart disease, hypertension, obesity, tobacco dependence, and pregnancy, childbirth, and newborn care).

Serious Reportable Events in Healthcare: 2006 Update identifies 28 serious adverse events (e.g., surgery performed on the wrong patient, infant discharged to the wrong person) that NQF believes should be reported by all healthcare facilities.[5] Similarly, *Safe Practices for Better Healthcare: 2006 Update* describes 30 healthcare "safe practices"[6] that should be universally used to reduce the risk of harm resulting from processes, systems, or environments of care.

Hospital-focused performance measures are encompassed across several NQF reports: *National Voluntary Consensus Standards for Hospital Care: An Initial Performance Measure Set*[7] endorsed an initial set of 39 measures in 8 priority areas that were chosen from existing measures as reasonable indicators of hospital quality that are useful to consumers, purchasers, hospitals, and quality improvement organizations alike. *National Voluntary Consensus Standards for Cardiac Surgery*[8] endorsed 21 performance measures for cardiac surgery that can be used for external accountability and public disclosure and for internal reporting and quality improvement. The initial phase *National Voluntary Consensus Standards for Prevention and Care of Venous Thromboembolism*[9] has resulted in the endorsement of a policy statement, key characteristics of preferred practices, and two performance measures.

The full constellation of measures, along with those endorsed in this report, provides a growing number of NQF-endorsed™ voluntary consensus standards that directly and indirectly reflect the importance of measuring and improving the quality of care. Organizations that adopt these consensus standards will promote the development of safer and higher-quality care for patients throughout the nation.

Identifying the Set

The NQF Steering Committee (appendix C) established the initial approach to evaluating potential consensus standards. The approach included establishing a scope, identifying selection criteria, and screening candidate measures through the application of NQF-endorsed standardized measure evaluation criteria. Additionally, the Steering Committee identified a purpose statement for the hospital care setting.

[5] NQF, *Serious Reportable Events in Healthcare: 2006 Update – A Consensus Report,* Washington, DC: NQF; 2007.

[6] NQF, *Safe Practices for Better Healthcare: 2006 Update – A Consensus Report,* Washington, DC: NQF; 2007.

[7] NQF, *National Voluntary Consensus Standards for Hospital Care: An Initial Performance Measure Set – A Consensus Report,* Washington, DC: NQF; 2003.

[8] NQF, *National Voluntary Consensus Standards for Cardiac Surgery – A Consensus Report,* Washington, DC: NQF; 2004.

[9] NQF, *National Voluntary Consensus Standards for Prevention and Care of Venous Thromboembolism: Policy, Preferred Practices, and Initial Performance Measures – A Consensus Report,* Washington, DC: NQF; 2006.

Purpose

The purpose of this set of consensus standards is to improve the quality of hospital specialty clinician care—through accountability and public reporting—by standardizing quality measurement for clinician care rendered in acute care hospitals, including clinician care provided in emergency departments.

Scope

The NQF-endorsed national voluntary consensus standards for specialty clinician care encompass those that:

- are suitable for clinician-level accountability;
- include performance of a multidisciplinary team of healthcare providers for which the clinician is ultimately accountable;
- are derived from all data sources;
- are fully developed and precisely specified; and
- are fully open source.[10]

Selection Criteria

The primary focus of hospital care quality and performance in this report is at the clinician level. Accordingly, the proposed consensus standards in this set do not include measures that are exclusively plan level, community level, or population based. The proposed consensus standards are intended for use at the clinical level, although this does not preclude roll-up analysis at the small- and large-group levels of analysis. Implementing organizations should determine the rules of attribution, samples size requirements, and statistical significance based on the characteristics and goals of the measurement program.

The following principles guided the selection of consensus standards:

- The focus of the measures is primarily accountability, as a driver of quality improvement.
- The focus should be on the unit of analysis—for example, the clinician practice level, rather than the data source.
- Measures should be feasible and scientifically accurate and should reflect an aspect of care substantially influenced by the clinician practice.

Additionally, the following important measure characteristics also were considered in the selection of potential consensus standards:

- measures that address vulnerable populations;
- measures that address all relevant populations;
- the consideration of possible perverse incentives or unintended consequences;
- the clarity and completeness of the specifications;

[10] On January 29, 2003, the NQF Board of Directors adopted a policy that NQF will endorse only fully open source measures. Open source is defined by NQF as being "fully disclosed" (i.e., data elements, measure algorithm, if applicable, and risk adjustment methods/data elements/algorithms are fully described and disclosed; if calculation requires database-dependent coefficients that change frequently, the existence of such coefficients shall be disclosed and the general frequency with which it changes shall be disclosed, but the precise numerical value need not be disclosed).

- measures that have been pilot tested or are already in use; and
- measures addressing high variation, including over/underuse.

Identification of Candidate Consensus Standards

Measures were evaluated based on the criteria derived from the work of the NQF Strategic Framework Board and endorsed by NQF (box A).[11,12,13,14] These criteria were applied to candidate consensus standards identified through several complementary strategies.

Box A – Criteria for Evaluation and Selection

Proposed consensus standards were evaluated for their suitability based on four sets of standardized criteria (e.g., importance, scientific acceptability, usability, and feasibility). Not all acceptable measures will be strong—or equally strong—among each of the four sets of criteria, or strong among each of their related criteria. Rather, a candidate consensus standard is assessed regarding the extent to which it meets any of the desired criteria within each set:

1. **Importance.** This set addresses the extent to which a measure reflects a variation in quality or low levels of overall performance and the extent to which it captures key aspects of the flow of care.
   a. The measure addresses one or more key leverage points for improving quality.
   b. Considerable variation in the quality of care exists.
   c. Performance in the area (e.g., setting, procedure, condition) is suboptimal, suggesting that barriers to improvement or best practice may exist.
2. **Scientific acceptability.** A measure is scientifically sound if it produces consistent and credible results when implemented.
   a. The measure is well defined and precisely specified. Measures must be specified sufficiently to be distinguishable from other measures, and they must be implemented consistently across institutions. Measure specifications should provide detail about cohort definition, as well as the denominator and numerator for rate-based measures and categories for range-based measures.
   b. The measure is reliable, producing the same results a high proportion of the time when assessed in the same population.
   c. The measure is valid, accurately representing the concept being evaluated.
   d. The measure is precise, adequately discriminating between real differences in provider performance.

continued

[11] The Strategic Framework Board's design for a national quality measurement and reporting system, *Med Care,* 2003;41(1)suppl:I-1—I-89.

[12] NQF, *A National Framework for Healthcare Quality Measurement and Reporting: A Consensus Report,* Washington, DC: NQF; 2002.

[13] NQF, *A Comprehensive Framework for Hospital Care Performance Evaluation: A Consensus Report,* Washington, DC: NQF; 2003.

[14] NQF. *National Voluntary Consensus Standards for Nursing-Sensitive Care: An Initial Performance Measure Set – A Consensus Report.* Washington, DC: NQF; 2004.

Box A – Criteria for Evaluation and Selection (continued)

e. The measure is adaptable to patient preferences and a variety of contexts of settings. Adaptability depends on the extent to which the measure and its specifications account for the variety of patient choices, including refusal of treatment and clinical exceptions.

f. An adequate and specified risk-adjustment strategy exists, where applicable.

g. Patient outcomes or consistent evidence is available linking the structure and process measures to patient outcomes.

3. **Usability.** Usability reflects the extent to which intended audiences (e.g., consumers, purchasers) can understand the results of the measure and are likely to find them useful for decisionmaking.

   a. The measure can be used by the stakeholder to make decisions.

   b. The differences in performance levels are statistically meaningful.

   c. The differences in performance are practically and clinically meaningful.

   d. Risk stratification, risk-adjustment, and other forms of recommended analyses can be applied appropriately.

   e. Effective presentation and dissemination strategies exist (e.g., transparency, ability to draw conclusions, information available when needed to make decisions).

   f. Information produced by the measure can/will be used by at least one healthcare stakeholder audience (e.g., public/consumers, purchasers, clinicians and providers, policymakers, accreditors/regulators) to make a decision or take an action.

   g. Information about specific conditions for which the measure is appropriate has been given.

   h. Methods for aggregating the measure with other, related measures (e.g., to create a composite measure) are defined, if those related measures are determined to be more understandable and more useful in decision-making. Risks of such aggregation, including misrepresentation, have been evaluated.

4. **Feasibility.** Feasibility is generally based on the way in which data can be obtained within the normal flow of clinical care and the extent to which an implementation plan can be achieved.

   a. The point of data collection is tied to care delivery, when feasible.

   b. The timing and frequency of measure collection are specified.

   c. The benefit of measurement is evaluated against the financial and administrative burden of implementation and maintenance of the measure set.

   d. An auditing strategy is designed and can be implemented.

   e. Confidentiality concerns are addressed.

The NQF-Endorsed National Voluntary Consensus Standards for Hospital Care: Specialty Clinician Performance Measures

The NQF-endorsed consensus standards for specialty clinician care encompass 26 measures that will facilitate efforts to improve the quality of care delivered in the inpatient setting in 4 areas: emergency care; cardiac surgery; perioperative care; and stroke and stroke rehabilitation. These measures are intended for clinician-level accountability, including public reporting. Table 1 presents brief descriptions of each recommended measure. Because consensus standards must be consistently specified to meet the goal of standardization, detailed specifications are provided in appendix A.

Research Recommendations

To accompany the set of consensus standards, many general recommendations for further research and development of measures were made, and recommendations also were made in specific topic areas.

General Recommendations

Several areas of great interest among stakeholders were identified. These areas were not specific to any particular condition but rather were cross-cutting for these hospital specialty clinician care measures:

- Evaluate validity, reliability, and other metrics relating to performance of the measures themselves.
- Evaluate what, if any, relationship exists between the documentation of practices and their delivery, and, ideally, the correlation with changes in patient outcomes.
- Evaluate clinician performance across a large number of characteristics and measures to ensure accurate and meaningful indicators of performance—especially prior to any widespread public reporting of results.
- Evaluate the burden of measurement if the provider reports on all services that should be provided to a target population.
- Pilot test all measures at the specified unit of measure.

- Compare results using electronic health record systems for the population "sample" with traditional sampling methods for non-electronic records.
- Compare existing measures derived from the Medicare Health Outcomes Survey and other sources with new CPT II-coded measures.
- Evaluate the outcomes related to "consideration" measures.

Stroke

In addition to considering the proposed consensus standards for endorsement for stroke and stroke rehabilitation care, additional areas for research and development should be pursued, as follows:

- Evaluate pairing the "t-PA [tissue plasminogen activator] considered" measure with an administration measure to ensure that those who are eligible are actually receiving the t-PA.
- Evaluate the need for developing measures that ensure that therapeutic levels are met.

Geriatrics

Research and development for geriatrics care should be pursued in the following areas:

- Broaden the denominator age from the current 75+ years.
- Explore the implications of "systems level" improvements and creating incentives—for example, a communication system for coordinating hospital discharge with community physicians.

Acknowledgment

This project was conducted under a grant from CMS (grant #HHSM-500-2006-000271).

Table 1 – National Voluntary Consensus Standards for Hospital Care: Specialty Clinician Performance Measures

MEASURE NAME	MEASURE DESCRIPTION	IP OWNER[1]
Emergency Care		
Electrocardiogram (ECG) performed for non-traumatic chest pain	Percentage of patients aged 40 years and older with an emergency department discharge diagnosis of non-traumatic chest pain who had an ECG performed	ACEP AMA PCPI* NCQA*
Aspirin at arrival for acute myocardial infarction (AMI)	Percentage of patients with an emergency department discharge diagnosis of AMI who had documentation of receiving aspirin within 24 hours before emergency department arrival or during emergency department stay	ACEP AMA PCPI* NCQA*
Vital signs for community-acquired bacterial pneumonia	Percentage of patients aged 18 years and older with a diagnosis of community-acquired bacterial pneumonia with vital signs (temperature, pulse, respiratory rate, and blood pressure) documented and reviewed	ACEP AMA PCPI* NCQA*
Assessment of oxygen saturation for community-acquired bacterial pneumonia	Percentage of patients aged 18 years and older with the diagnosis of community-acquired bacterial pneumonia with oxygen saturation documented and reviewed	ACEP AMA PCPI* NCQA*
Assessment of mental status for community-acquired bacterial pneumonia	Percentage of patients aged 18 years and older with the diagnosis of community-acquired bacterial pneumonia with mental status assessed	ACEP AMA PCPI* NCQA*
Empiric antibiotic for community-acquired bacterial pneumonia	Percentage of patients aged 18 years and older with the diagnosis of community-acquired bacterial pneumonia with an appropriate empiric antibiotic prescribed	ACEP AMA PCPI* NCQA*

(more)

[1] Intellectual Property (IP) owner. For the most current specifications and supporting information, please refer to the IP owner.

IP OWNERS

AAN - American Academy of Neurology (www.aan.com)
ACEP - American College of Emergency Physicians (www.acep.org)
ACR - American College of Radiology (www.acr.org)
ACS - American College of Surgeons (www.facs.org)
AGS - American Geriatrics Society (www.americangeriatrics.org)
AMA PCPI - American Medical Association Physician Consortium for Performance Improvement (www.physicianconsortium.org)
CMS PQRI - Centers for Medicare & Medicaid Services Physician Quality Reporting Initiative (www.cms.hhs.gov/PQRI/)
NCQA - National Committee for Quality Assurance (www.ncqa.org)
STS - The Society of Thoracic Surgeons (www.sts.org)

* Physician Performance Measures (Measures) and related data specifications, developed by the American Medical Association (AMA) in collaboration with the Physician Consortium for Performance Improvement (the Consortium) and the National Committee for Quality Assurance (NCQA) pursuant to government sponsorship under subcontract 6205-05-054 with Mathematica Policy Research, Inc. under contract 500-00-0033 with Centers for Medicare & Medicaid Services.

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Table 1 – National Voluntary Consensus Standards for Hospital Care: Specialty Clinician Performance Measures (continued)

MEASURE NAME	MEASURE DESCRIPTION	IP OWNER[1]
Cardiac Surgery		
Use of internal mammary artery (IMA) in isolated coronary artery bypass graft (CABG)	Percentage of patients eligible to receive an IMA graft (undergoing CABG) who receive an IMA graft	STS
Use of IMA in isolated CABG	Percentage of patients who received an IMA CABG who have a CABG	CMS PQRI
Preoperative beta blocker in patient with isolated CABG	Number of procedures for which the patient received beta blockers within 24 hours preceding surgery/total number of isolated CABG procedures	STS
Preoperative beta blocker in patient with isolated CABG	Percentage of patients undergoing CABG with documented preoperative beta blockade who had a CABG	CMS PQRI
Antiplatelet medication on discharge	Number of procedures for which the patient was discharged from the facility on aspirin, enteric-coated aspirin, or adenosine diphosphate (ADP) inhibitors/number of isolated CABG procedures excluding those that resulted in in-hospital mortalities based on the variables mortality discharge status, mortality date, and discharge date	STS
Beta blocker on discharge	Number of procedures for which the patient was discharged from the facility on beta blockers/number of isolated CABG procedures excluding those that resulted in in-hospital mortalities based on the variables mortality discharge status, mortality date, and discharge date	STS
Perioperative Care		
Venous thromboembolism (VTE) prophylaxis	Percentage of patients aged 18 years and older undergoing procedures for which VTE prophylaxis is indicated in all patients, who had an order for low molecular weight heparin (LMWH), low-dose unfractionated heparin (LDUH), adjusted-dose warfarin, fondaparinux, or mechanical prophylaxis to be given within 24 hours prior to incision time or within 24 hours after surgery end time	ACS AMA PCPI* NCQA*
Timing of prophylactic antibiotics – ordering physician	Percentage of surgical patients aged 18 or older undergoing procedures with the indications for prophylactic parenteral antibiotics who have an order for a prophylactic antibiotic to be given within one hour prior (if vancomycin, two hours) to the surgical incision (or start of procedure when no incision is required)	ACS AMA PCPI* NCQA*
Timing of prophylactic antibiotics – administering physician	Percentage of patients 18 or older undergoing surgical procedures who have an order for prophylactic antibiotics who have antibiotics initiated within one hour prior (two hours prior if vancomycin) to surgical incision (start of procedure if no incision is required)	ACS AMA PCPI* NCQA*
Selection of prophylactic antibiotics – first- or second-generation cephalosporin	Percentage of patients 18 or older undergoing surgical procedures with the indications for a first- or second-generation cephalosporin prophylactic antibiotic who have an order for either antibiotic	ACS AMA PCPI* NCQA*
Discontinuation of prophylactic antibiotics (non-cardiac procedures)	Percentage of patients 18 or older undergoing non-cardiac surgical procedures who received prophylactic antibiotics who have an order for discontinuation of antibiotics within 24 hours of surgical end time	ACS AMA PCPI* NCQA*
Discontinuation of prophylactic antibiotics (cardiac procedures)	Percentage of patients 18 or older undergoing cardiac surgical procedures who received prophylactic antibiotics who have an order for discontinuation of antibiotics within 48 hours of surgical end time	ACS AMA PCPI* NCQA*

(more)

Table 1 – National Voluntary Consensus Standards for Hospital Care: Specialty Clinician Performance Measures

MEASURE NAME	MEASURE DESCRIPTION	IP OWNER[1]
Stroke		
Deep vein thrombosis (DVT) prophylaxis for ischemic stroke or intracranial hemorrhage	Percentage of patients aged 18 years and older with the diagnosis of ischemic stroke or intracranial hemorrhage who received DVT prophylaxis by the end of hospital day two	AAN ACR AMA PCPI* NCQA*
Discharged on antiplatelet therapy	Percentage of patients aged 18 years and older with the diagnosis of ischemic stroke or transient ischemic attack (TIA) who were prescribed antiplatelet therapy at discharge	AAN ACR AMA PCPI* NCQA*
Anticoagulant therapy prescribed for atrial fibrillation at discharge	Percentage of patients aged 18 years and older with the diagnosis of ischemic stroke or TIA with documented permanent, persistent, or paroxysmal atrial fibrillation who were prescribed an anticoagulant at discharge	AAN ACR AMA PCPI* NCQA*
Tissue plasminogen activator (t-PA) considered	Percentage of patients aged 18 years and older with the diagnosis of ischemic stroke whose time from symptom onset to arrival is less than three hours who were considered for t-PA administration (given t-PA or documented reasons for patient not being a candidate for therapy)	AAN ACR AMA PCPI* NCQA*
Screening for dysphagia	Percentage of patients aged 18 years and older with the diagnosis of ischemic stroke or intracranial hemorrhage who receive any food, fluids, or medication by mouth who underwent a dysphagia screening process before taking any foods, fluids, or medication by mouth	AAN ACR AMA PCPI* NCQA*
Consideration of rehabilitation services	Percentage of patients aged 18 years and older with the diagnosis of ischemic stroke or intracranial hemorrhage for whom consideration of rehabilitation services (ordered rehabilitation or documented that rehabilitation was not indicated) is documented	AAN ACR AMA PCPI* NCQA*
Carotid imaging reports	Percentage of final reports for carotid imaging studies (neck MR angiography [MRA], neck computed tomography angiography [CTA], neck duplex ultrasound, carotid angiogram) performed for patients aged 18 years and older with the diagnosis of ischemic stroke or TIA that include direct or indirect reference to measurements of distal internal carotid diameter as the denominator for stenosis measurement	AAN ACR AMA PCPI* NCQA*
Computed tomography (CT) or magnetic resonance imaging (MRI) reports	Percentage of final reports for CT or MRI studies of the brain performed within 24 hours of arrival to the hospital for patients aged 18 years and older with the diagnosis of ischemic stroke or TIA or intracranial hemorrhage that includes documentation of the presence or absence of each of the following: hemorrhage and mass lesion and acute infarction	AAN ACR AMA PCPI* NCQA*

Appendix A

Specifications of the National Voluntary Consensus Standards for Hospital Care: Specialty Clinician Performance Measures

The following table summarizes the detailed specifications for each of the National Quality Forum (NQF)-endorsed™ national voluntary standards for hospital care: specialty clinician performance measures. All information presented has been derived directly from measure sources/developers without modification or alteration (except when the measure developer agreed to such modification during the NQF Consensus Development Process) and is current as of June 2007.

All NQF-endorsed voluntary consensus standards are open source, meaning they are fully accessible and disclosed.

Issues regarding any NQF-endorsed consensus standards (e.g., modifications to specifications, emerging evidence) may be submitted to NQF for review and consideration via the "Implementation Feedback Form" found at www.qualityforum.org/implementation_feedback.htm. NQF will transmit this information to the measure developers and/or compile it for consideration in updating the measure set.

Appendix A – Specifications of the National Voluntary Consensus Standards for Hospital Care: Specialty Clinician Measures

EMERGENCY CARE

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
ELECTRO-CARDIOGRAM PERFORMED FOR NON-TRAUMATIC CHEST PAIN	ACEP AMA PCPI* NCQA*	Patients who had an electrocardiogram (ECG) performed. **Electronic Data Collection** Electronic data collection requires users to identify the eligible population (denominator) and numerator using electronic data (also referred to as "administrative data"). Users report a rate based on all patients in a given practice for whom data are available and who meet the eligible population/denominator criteria. **Numerator** Patients who had an ECG performed. CPT Category II Codes are used to report the numerator of the measure. 1. If reporting CPT Category II Codes, submit the listed ICD-9, CPT E&M Service Codes and the appropriate CPT Category II Code.	All patients aged 40 years and older with an emergency department discharge diagnosis of non-traumatic chest pain. **Electronic Data Collection** Electronic data collection requires users to identify the eligible population (denominator) and numerator using electronic data (also referred to as "administrative data"). Users report a rate based on all patients in a given practice for whom data are available and who meet the eligible population/denominator criteria. **Denominator** All patients aged 40 years and older with an emergency department discharge diagnosis of non-traumatic chest pain.	**Denominator Exclusion** Documentation of medical reason(s) for not performing an ECG. Documentation of patient reason(s) for not performing an ECG. Exclude patients for whom an ECG was not performed by reason of appropriate denominator exclusion. If using electronic data, exclude patients using the following codes: Append a modifier (1P or 2P) to the CPT Category II Code to report patients with documented circumstances that meet the denominator exclusion criteria. ■ 1P: Documentation of medical reason(s) for not performing an ECG	Data sources used will depend on implementation and approach. The electronic data option requires use of data that is capable of being analyzed by computer including patient demographics, claims, or encounter data for visits and procedures. The medical record *(more)*

[1] Intellectual Property (IP) owner. *For the most current specifications and supporting information please refer to the IP owner.*

IP Owners
AAN - American Academy of Neurology (www.aan.com)
ACEP - American College of Emergency Physicians (www.acep.org)
ACR - American College of Radiology (www.acr.org)
ACS - American College of Surgeons (www.facs.org)
AGS - American Geriatrics Society (www.americangeriatrics.org)
AMA PCPI - American Medical Association Physician Consortium for Performance Improvement (www.physicianconsortium.org)
CMS PQRI - Centers for Medicare & Medicaid Services Physician Quality Reporting Initiative (www.cms.hhs.gov/PQRI/)
NCQA - National Committee for Quality Assurance (www.ncqa.org)
STS - The Society of Thoracic Surgeons (www.sts.org)

EMERGENCY CARE (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
ELECTRO-CARDIOGRAM PERFORMED FOR NON-TRAUMATIC CHEST PAIN *continued*		Identify patients who had an ECG performed: ■ CPT Codes: 93000, 93010 *OR* ■ CPT II 3120F: 12-Lead ECG performed. **Medical Record** Manual abstraction of data elements from patient records (hard-copy charts) constitutes medical record data collection. **Numerator** Patients who had an ECG performed. **Hybrid** Users should follow the requirements of electronic data collection, select a sample of patients, and then supplement the electronic data where needed with medical record abstraction of data elements to fulfill measure reporting requirements. **Electronic Health Record (EHR)** EHR users may opt to use this methodology or the electronic data collection methodology described previously. EHR users should collect data on 100% of their denominator population instead of a sample. **Numerator** Patients who had an ECG performed. EHR users may opt to use the codes listed in the electronic data collection methodology to identify patients who had an ECG performed.	ICD-9 Diagnosis Codes, CPT E/M Service Codes, and patient demographics (age, etc.) are used to determine patients that are included in the measure. ■ ICD-9-CM Codes: 786.50, 786.51, 786.52, 786.59; 413.0, 413.1, 413.9 *AND* ■ CPT E/M Service Codes: 99281, 99282, 99283, 99284, 99285, 99291. **Medical Record** Manual abstraction of data elements from patient records (hard-copy charts) constitutes medical record data collection. **Denominator** All patients aged 40 years and older with an emergency department discharge diagnosis of non-traumatic chest pain. **Denominator** (patients for inclusion): A sample should be determined using the most accurate data available in the settings in which the measure will be implemented. Sample sizes may be defined by different implementers. **Hybrid** Users should follow the requirements of electronic data collection, select a sample of patients, and then supplement the electronic data where needed with medical record abstraction of data elements to fulfill measure reporting requirements.	■ 2P: Documentation of patient reason(s) for not performing an ECG. If using the medical record or hybrid methodologies, exclude patients who have documentation in the medical record of: ■ Documentation of medical reason(s) for not performing an ECG ■ Documentation of patient reason(s) for not performing an ECG. If using the EHR methodology, exclude patients using the codes listed in the electronic data collection methodology or who have documentation in the medical record of the appropriate denominator exclusions.	option requires manual or electronically coded data for visits or encounters to determine the sample, and access to either written or electronic medical records to both confirm information in the sampling frame-work for the denominator and for determination of the numerator. As noted in the measure description, those practices that have electronic health records systems can use either the electronic or medical record approach but include all eligible patients, rather than a sample, in both the denominator and numerator. *(more)*

EMERGENCY CARE (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
ELECTRO-CARDIOGRAM PERFORMED FOR NON-TRAUMATIC CHEST PAIN *continued*			**Electronic Health Record (EHR)** EHR users may opt to use this methodology or the electronic data collection methodology described previously. EHR users should collect data on 100% of their denominator population instead of a sample. **Denominator** All patients aged 40 years and older with an emergency department discharge diagnosis of non-traumatic chest pain. EHR users may opt to use the codes listed in the electronic data collection methodology to identify all patients aged 40 years and older with an emergency department discharge diagnosis of non-traumatic chest pain.		
ASPIRIN AT ARRIVAL FOR ACUTE MYOCARDIAL INFARCTION	ACEP AMA PCPI* NCQA*	Patients who had documentation of receiving aspirin within 24 hours before emergency department arrival or during emergency department stay. **Electronic Data Collection** Electronic data collection requires users to identify the eligible population (denominator) and numerator using electronic data (also referred to as "administrative data"). Users report a rate based on all patients in a given practice for whom data are available and who meet the eligible population/denominator criteria. **Numerator** Patients with acute myocardial infarction (AMI) who had documentation of receiving aspirin within 24 hours before emergency department arrival or during emergency department stay.	All patients with an emergency department discharge diagnosis of AMI. **Electronic Data Collection** Electronic data collection requires users to identify the eligible population (denominator) and numerator using electronic data (also referred to as "administrative data"). Users report a rate based on all patients in a given practice for whom data are available and who meet the eligible population/denominator criteria. **Denominator** All patients with an emergency department discharge diagnosis of AMI. ICD-9 Diagnosis Codes, CPT E/M Service Codes, and patient demographics (age, etc.) are used to determine patients that are included in the measure.	**Denominator Exclusion** Documentation of medical reason(s) for not receiving or taking aspirin within 24 hours before emergency department arrival or during emergency department stay. Documentation of patient reason(s) for not receiving or taking aspirin within 24 hours before emergency department arrival or during emergency department stay. Exclude patients for whom aspirin was not received or taken within 24 hours before emergency department arrival or during emergency department stay by reason of appropriate denominator exclusion. If using electronic data, exclude patients using the following codes:	Data sources used will depend on implementation and approach. The electronic data option requires use of data that is capable of being analyzed by computer including patient demographics, claims, or encounter data for visits and procedures. The medical record *(more)*

EMERGENCY CARE (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
ASPIRIN AT ARRIVAL FOR ACUTE MYOCARDIAL INFARCTION *continued*		CPT Category II Codes are used to report the numerator of the measure. 1. If reporting CPT Category II Codes, submit the listed ICD-9, CPT E&M Service Codes, and the appropriate CPT Category II Codes. Identify patients who received or took aspirin 24 hours before emergency department arrival or during emergency department stay: ■ CPT II 4084F: Aspirin received within 24 hours before emergency department arrival or during emergency department stay. **Medical Record** Manual abstraction of data elements from patient records (hard-copy charts) constitutes medical record data collection. **Numerator** Patients who had documentation of receiving aspirin within 24 hours before emergency department arrival or during emergency department stay. **Hybrid** Users should follow the requirements of electronic data collection, select a sample of patients, and then supplement the electronic data where needed with medical record abstraction of data elements to fulfill measure reporting requirements. **Electronic Health Record (EHR)** EHR users may opt to use this methodology or the electronic data collection methodology described	■ ICD-9 Codes: 410.01, 410.11, 410.21, 410.31, 410.41, 410.51, 410.61, 410.71, 410.81, 410.91 *AND* ■ CPT E/M Service Codes: 99281, 99282, 99283, 99284, 99285, 99291. **Medical Record** Manual abstraction of data elements from patient records (hard-copy charts) constitutes medical record data collection. **Denominator** All patients with an emergency department discharge diagnosis of AMI. **Denominator** (patients for inclusion): A sample should be determined using the most accurate data available in the settings in which the measure will be implemented. Sample sizes may be defined by different implementers. **Hybrid:** Users should follow the requirements of electronic data collection, select a sample of patients, and then supplement the electronic data where needed with medical record abstraction of data elements to fulfill measure reporting requirements. **Electronic Health Record (EHR):** EHR users may opt to use this methodology or the electronic data collection methodology described previously. EHR users should collect data on 100% of their denominator population instead of a sample. **Denominator:** All patients with an emergency department discharge diagnosis of AMI.	Append a modifier (1P or 2P) to the CPT Category II Code to report patients with documented circumstances that meet the denominator exclusion criteria. ■ 1P: Documentation of medical reason(s) for not receiving or taking aspirin within 24 hours before emergency department arrival or during emergency department stay. ■ 2P: Documentation of patient reason(s) for not receiving or taking aspirin within 24 hours before emergency department arrival or during emergency department stay. If using the medical record or hybrid methodologies, exclude patients who have documentation in the medical record of: ■ Documentation of medical reason(s) for not receiving or taking aspirin within 24 hours before emergency department arrival or during emergency department stay. ■ Documentation of patient reason(s) for not receiving or taking aspirin within 24 hours before emergency department arrival or during emergency department stay. If using the EHR methodology, exclude patients using the codes listed in the electronic data collection methodology or who have documentation in the medical	option requires manual or electronically coded data for visits or encounters to determine the sample, and access to either written or electronic medical records to both confirm information in the sampling framework for the denominator and for determination of the numerator. As noted in the measure description, those practices that have electronic health records system can use either electronic or medical record approach but include all eligible patients, rather than a sample, in both the *(more)*

EMERGENCY CARE (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
ASPIRIN AT ARRIVAL FOR ACUTE MYOCARDIAL INFARCTION *continued*		previously. EHR users should collect data on 100% of their denominator population instead of a sample. **Numerator** Patients who had documentation of receiving aspirin within 24 hours before emergency department arrival or during emergency department stay. EHR users may opt to use the codes listed in the electronic data collection methodology to identify patients with AMI who received aspirin within 24 hours before emergency department arrival or during emergency department stay.	EHR users may opt to use the codes listed in the electronic data collection methodology to identify all patients with an emergency department discharge diagnosis of AMI.	record of the appropriate denominator exclusions.	denominator and numerator.
VITAL SIGNS FOR COMMUNITY-ACQUIRED BACTERIAL PNEUMONIA	ACEP AMA PCPI* NCQA*	Patients with vital signs (temperature, pulse, respiratory rate, and blood pressure) documented and reviewed. Medical record may include one of the following: physician documentation that vital signs were reviewed, dictation by the physician including vital signs, physician initials in the chart that vital signs were reviewed, or other indication that vital signs had been acknowledged by the physician. **Electronic Data Collection** Electronic data collection requires users to identify the eligible population (denominator) and numerator using electronic data (also referred to as "administrative data"). Users report a rate based on all patients in a given practice for whom data are available and who meet the eligible population/denominator criteria.	All patients aged 18 years and older with the diagnosis of community-acquired bacterial pneumonia. For purposes of measurement in the emergency department, this measure is intended to include only those patients with an emergency department discharge diagnosis of community-acquired bacterial pneumonia. **Electronic Data Collection** Electronic data collection requires users to identify the eligible population (denominator) and numerator using electronic data (also referred to as "administrative data"). Users report a rate based on all patients in a given practice for whom data are available and who meet the eligible population/denominator criteria. **Denominator** All patients aged 18 years and older with the diagnosis of community-acquired bacterial pneumonia.	None.	Data sources used will depend on implementation and approach. The electronic data option requires use of data that is capable of being analyzed by computer including patient demographics, claims, or encounter data for visits and procedures. The medical record option requires manual or *(more)*

EMERGENCY CARE (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
VITAL SIGNS FOR COMMUNITY-ACQUIRED BACTERIAL PNEUMONIA *continued*		**Numerator** Patients with vital signs documented and reviewed. CPT Category II Codes are used to report the numerator of the measure. 1. If reporting CPT Category II Codes submit the listed ICD-9, CPT E&M Service Codes, and the appropriate CPT Category II Codes. ■ CPT II 2010F: Vital signs documented and reviewed. **Medical Record** Manual abstraction of data elements from patient records (hard-copy charts) constitutes medical record data collection. **Numerator** Patients with vital signs documented and reviewed. **Hybrid** Users should follow the requirements of electronic data collection, select a sample of patients, and then supplement the electronic data where needed with medical record abstraction of data elements to fulfill measure reporting requirements. **Electronic Health Record (EHR)** EHR users may opt to use this methodology or the electronic data collection methodology described previously. EHR users should collect data on 100% of their denominator population instead of a sample.	ICD-9 Diagnosis Codes, CPT E/M Service Codes, and patient demographics (age, etc.) are used to determine patients that are included in the measure. ■ ICD-9-CM Codes: 481, 482.0, 482.1, 482.2, 482.30, 482.31, 482.32, 482.39, 482.40, 482.41, 482.49, 482.81, 482.82, 482.83, 482.84, 482.89, 482.9, 483.0, 483.1, 483.8, 485, 486, 487.0 *AND* ■ CPT E/M Service Codes: 99281, 99282, 99283, 99284, 99285, 99291. **Medical Record** Manual abstraction of data elements from patient records (hard-copy charts) constitutes medical record data collection. **Denominator** All patients aged 18 years and older with the diagnosis of community-acquired bacterial pneumonia. **Denominator** (patients for inclusion): A sample should be determined using the most accurate data available in the settings in which the measure will be implemented. Sample sizes may be defined by different implementers. **Hybrid** Users should follow the requirements of electronic data collection, select a sample of patients, and then supplement the electronic data where needed with medical record abstraction of data elements to fulfill measure reporting requirements.		electronically coded data for visits or encounters to determine the sample, and access to either written or electronic medical records to both confirm information in the sampling framework for the denominator and for determination of the numerator. As noted in the measure description, those practices that have electronic health records systems can use either the electronic or medical record approach but include all eligible patients, rather than a sample, in both the denominator and numerator. *(more)*

EMERGENCY CARE (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
VITAL SIGNS FOR COMMUNITY-ACQUIRED BACTERIAL PNEUMONIA *continued*		**Numerator** Patients with vital signs documented and reviewed. EHR users may opt to use the codes listed in the electronic data collection methodology to identify patients who had vital signs reviewed.	**Electronic Health Record (EHR)** EHR users may opt to use this methodology or the electronic data collection methodology described previously. EHR users should collect data on 100% of their denominator population instead of a sample. **Denominator** All patients aged 18 years and older with the diagnosis of community-acquired bacterial pneumonia. EHR users may opt to use the codes listed in the electronic data collection methodology to identify all patients aged 18 years and older with the diagnosis of community-acquired bacterial pneumonia.		
ASSESSMENT OF OXYGEN SATURATION FOR COMMUNITY-ACQUIRED BACTERIAL PNEUMONIA	ACEP AMA PCPI* NCQA*	Patients with oxygen saturation documented and reviewed. Medical record may include one of the following: physician documentation that oxygen saturation was reviewed, dictation by the physician including oxygen saturation, physician initials in the chart that oxygen saturation was reviewed, or other indication that oxygen saturation had been acknowledged by the physician. **Electronic Data Collection** Electronic data collection requires users to identify the eligible population (denominator) and numerator using electronic data (also referred to as "administrative data"). Users report a rate based on all patients in a given practice for whom data are available and who meet the eligible population/denominator criteria.	All patients aged 18 years and older with the diagnosis of community-acquired bacterial pneumonia. For purposes of measurement in the emergency department, this measure is intended to include only those patients with an emergency department discharge diagnosis of community-acquired bacterial pneumonia. **Electronic** Electronic data collection requires users to identify the eligible population (denominator) and numerator using electronic data (also referred to as "administrative data"). Users report a rate based on all patients in a given practice for whom data are available and who meet the eligible population/denominator criteria.	**Denominator Exclusion** Documentation of medical reason(s) for not documenting and reviewing oxygen saturation. Documentation of patient reason(s) for not documenting and reviewing oxygen saturation. Documentation of system reason(s) for not documenting and reviewing oxygen saturation. Exclude patients for whom oxygen saturation was not assessed by reason of appropriate denominator exclusion. If using electronic data, exclude patients using the following codes:	Data sources used will depend on implementation and approach. The electronic data option requires use of data that is capable of being analyzed by computer including patient demographics, claims, or encounter data for visits and procedures. The medical record *(more)*

EMERGENCY CARE (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
ASSESSMENT OF OXYGEN SATURATION FOR COMMUNITY-ACQUIRED BACTERIAL PNEUMONIA *continued*		**Numerator** Patients with oxygen saturation documented and reviewed. CPT Category II Codes are used to report the numerator of the measure. 1. If reporting CPT Category II Codes, submit the listed ICD-9, CPT E&M Service Codes, and the appropriate CPT Category II Codes. Identify patients who had their oxygen saturation documented and reviewed. ■ CPT II 3028F: Oxygen saturation results documented and reviewed. **Medical Record** Manual abstraction of data elements from patient records (hard-copy charts) constitutes medical record data collection. **Numerator** Patients with oxygen saturation documented and reviewed. **Hybrid** Users should follow the requirements of electronic data collection, select a sample of patients, and then supplement the electronic data where needed with medical record abstraction of data elements to fulfill measure reporting requirements. **Electronic Health Record (EHR)** EHR users may opt to use this methodology or the electronic data collection methodology described previously. EHR users should collect data on	**Denominator** All patients aged 18 years and older with the diagnosis of community-acquired bacterial pneumonia. ICD-9 Diagnosis Codes, CPT E/M Service Codes, and patient demographics (age, etc.) are used to determine patients that are included in the measure. ■ ICD-9-CM Codes: 481, 482.0, 482.1, 482.2, 482.30, 482.31, 482.32, 482.39, 482.40, 482.41, 482.49, 482.81, 482.82, 482.83, 482.84, 482.89, 482.9, 483.0, 483.1, 483.8, 485, 486, 487.0 *AND* ■ CPT E/M Service Codes: 99281, 99282, 99283, 99284, 99285, 99291. **Medical Record** Manual abstraction of data elements from patient records (hard-copy charts) constitutes medical record data collection. **Denominator** All patients aged 18 years and older with the diagnosis of community-acquired bacterial pneumonia. **Denominator** (patients for inclusion): A sample should be determined using the most accurate data available in the settings in which the measure will be implemented. Sample sizes may be defined by different implementers. **Hybrid** Users should follow the requirements of electronic data collection, select a sample of patients, and then supplement the electronic data where needed	Append a modifier (1P, 2P or 3P) to the CPT Category II Code to report patients with documented circumstances that meet the denominator exclusion criteria. ■ 1P: Documentation of medical reason(s) for not documenting and reviewing oxygen saturation ■ 2P: Documentation of patient reason(s) for not documenting and reviewing oxygen saturation ■ 3P: Documentation of system reason(s) for not documenting and reviewing oxygen saturation. If using the medical record or hybrid methodologies, exclude patients who have documentation in the medical record of: ■ Documentation of medical reason(s) for not documenting and reviewing oxygen saturation ■ Documentation of patient reason(s) for not documenting and reviewing oxygen saturation ■ Documentation of a system reason(s) for not documenting and reviewing oxygen saturation. If using the EHR methodology, exclude patients using the codes listed in the electronic data collection methodology or who have documentation in the medical record of the appropriate denominator exclusions.	option requires manual or electronically coded data for visits or encounters to determine the sample, and access to either written or electronic medical records to both confirm information in the sampling framework for the denominator and for determination of the numerator. As noted in the measure description, those practices that have electronic health records systems can use either the electronic or medical record approach but include all eligible patients, rather than a sample, in both the *(more)*

EMERGENCY CARE (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
ASSESSMENT OF OXYGEN SATURATION FOR COMMUNITY-ACQUIRED BACTERIAL PNEUMONIA *continued*		100% of their denominator population instead of a sample. **Numerator** Patients with oxygen saturation documented and reviewed. EHR users may opt to use the codes listed in the electronic data collection methodology to identify patients who had oxygen saturation documented and reviewed.	with medical record abstraction of data elements to fulfill measure reporting requirements. **Electronic Health Record (EHR)** EHR users may opt to use this methodology or the electronic data collection methodology described previously. EHR users should collect data on 100% of their denominator population instead of a sample. **Denominator** All patients aged 18 years and older with the diagnosis of community-acquired bacterial pneumonia. EHR users may opt to use the codes listed in the electronic data collection methodology to identify all patients aged 18 years and older with the diagnosis of community-acquired bacterial pneumonia.		denominator and numerator.
ASSESSMENT OF MENTAL STATUS FOR COMMUNITY-ACQUIRED BACTERIAL PNEUMONIA	ACEP AMA PCPI* NCQA*	Patients with mental status assessed. Medical record may include documentation by physician that patient's mental status was noted (e.g., patient is oriented or disoriented). **Electronic Data Collection** Electronic data collection requires users to identify the eligible population (denominator) and numerator using electronic data (also referred to as "administrative data"). Users report a rate based on all patients in a given practice for whom data are available and who meet the eligible population/denominator criteria.	All patients aged 18 years and older with the diagnosis of community-acquired bacterial pneumonia. For purposes of measurement in the emergency department, this measure is intended to include only those patients with an emergency department discharge diagnosis of community-acquired bacterial pneumonia. **Electronic Data Collection** Electronic data collection requires users to identify the eligible population (denominator) and numerator using electronic data (also referred to as "administrative data"). Users report a rate based on all patients in a given practice for whom	None.	Data sources used will depend on implementation and approach. The electronic data option requires use of data that is capable of being analyzed by computer including patient demographics, claims, or encounter data

(more)

EMERGENCY CARE (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
ASSESSMENT OF MENTAL STATUS FOR COMMUNITY-ACQUIRED BACTERIAL PNEUMONIA *continued*		**Numerator** Patients with mental status assessed. CPT Category II Codes are used to report the numerator of the measure. 1. If reporting CPT Category II Codes, submit the listed ICD-9, CPT E&M Service Codes, and the appropriate CPT Category II Codes. Identify patients who had their mental status assessed: ■ CPT II 2014F: Mental status assessed. **Medical Record** Manual abstraction of data elements from patient records (hard-copy charts) constitutes medical record data collection. **Numerator** Patients with mental status assessed. **Hybrid** Users should follow the requirements of electronic data collection, select a sample of patients, and then supplement the electronic data where needed with medical record abstraction of data elements to fulfill measure reporting requirements. **Electronic Health Record (EHR)** EHR users may opt to use this methodology or the electronic data collection methodology described previously. EHR users should collect data on 100% of their denominator population instead of a sample.	data are available and who meet the eligible population/denominator criteria. **Denominator** All patients aged 18 years and older with the diagnosis of community-acquired bacterial pneumonia. ICD-9 Diagnosis Codes, CPT E/M Service Codes, and patient demographics (age, etc.) are used to determine patients that are included in the measure. ■ ICD-9-CM Codes: 481, 482.0, 482.1, 482.2, 482.30, 482.31, 482.32, 482.39, 482.40, 482.41, 482.49, 482.81, 482.82, 482.83, 482.84, 482.89, 482.9, 483.0, 483.1, 483.8, 485, 486, 487.0 *AND* ■ CPT E/M Service Codes: 99281, 99282, 99283, 99284, 99285, 99291. **Medical Record** Manual abstraction of data elements from patient records (hard-copy charts) constitutes medical record data collection. **Denominator** All patients aged 18 years and older with the diagnosis of community-acquired bacterial pneumonia. **Denominator** (patients for inclusion): A sample should be determined using the most accurate data available in the settings in which the measure will be implemented. Sample sizes may be defined by different implementers.		for visits and procedures. The medical record option requires manual or electronically coded data for visits or encounters to determine the sample, and access to either written or electronic medical records to both confirm information in the sampling framework for the denominator and for determination of the numerator. As noted in the measure description, those practices that have electronic health records systems can use either the electronic or medical record approach but include all eligible patients, rather *(more)*

EMERGENCY CARE (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
ASSESSMENT OF MENTAL STATUS FOR COMMUNITY-ACQUIRED BACTERIAL PNEUMONIA *continued*		**Numerator** Patients with mental status assessed. EHR users may opt to use the codes listed in the electronic data collection methodology to identify patients who had mental status assessed.	**Hybrid** Users should follow the requirements of electronic data collection, select a sample of patients, and then supplement the electronic data where needed with medical record abstraction of data elements to fulfill measure reporting requirements. **Electronic Health Record (EHR)** EHR users may opt to use this methodology or the electronic data collection methodology described previously. EHR users should collect data on 100% of their denominator population instead of a sample. **Denominator** All patients aged 18 years and older with the diagnosis of community-acquired bacterial pneumonia. EHR users may opt to use the codes listed in the electronic data collection methodology to identify all patients aged 18 years and older with the diagnosis of community-acquired bacterial pneumonia.		than a sample, in both the denominator and numerator.
EMPIRIC ANTIBIOTIC FOR COMMUNITY-ACQUIRED BACTERIAL PNEUMONIA	ACEP AMA PCPI* NCQA*	Patients with an appropriate empiric antibiotic prescribed. Appropriate empiric antibiotic for treatment of community-acquired bacterial pneumonia should include any medication from one of the following four drug classes: Fluoroquinolones, Macrolides, Doxycycline, Beta Lactam with Macrolide or Doxycycline (as defined by current ATS/IDSA guidelines).	All patients 18 years and older with the diagnosis of community-acquired bacterial pneumonia. For purposes of measurement in the emergency department, this measure is intended to include only those patients with an emergency department discharge diagnosis of community-acquired bacterial pneumonia.	**Denominator Exclusion** Documentation of medical reason(s) for not prescribing appropriate empiric antibiotic. Documentation of patient reason(s) for not prescribing appropriate empiric antibiotic. Documentation of system reason(s) for not prescribing appropriate empiric antibiotic.	Data sources used will depend on implementation and approach. The electronic data option requires use of data that is capable of being analyzed by computer

(more)

EMERGENCY CARE (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
EMPIRIC ANTIBIOTIC FOR COMMUNITY-ACQUIRED BACTERIAL PNEUMONIA *continued*		**Electronic Data Collection** Electronic data collection requires users to identify the eligible population (denominator) and numerator using electronic data (also referred to as "administrative data"). Users report a rate based on all patients in a given practice for whom data are available and who meet the eligible population/denominator criteria. **Numerator** Patients with appropriate empiric antibiotic prescribed. CPT Category II Codes are used to report the numerator of the measure. 1. If reporting CPT Category II Codes, submit the listed ICD-9, CPT E&M Service Codes, and the appropriate CPT Category II Codes. Identify patients with appropriate empiric antibiotic prescribed: ■ CPT II 4045F: Appropriate empiric antibiotic prescribed. **Medical Record** Manual abstraction of data elements from patient records (hard-copy charts) constitutes medical record data collection. **Numerator** Patients with appropriate empiric antibiotic prescribed.	**Electronic Data Collection** Electronic data collection requires users to identify the eligible population (denominator) and numerator using electronic data (also referred to as "administrative data"). Users report a rate based on all patients in a given practice for whom data are available. **Denominator** All patients aged 18 years and older with the diagnosis of community-acquired bacterial pneumonia. ICD-9 Diagnosis Codes, CPT E/M Service Codes, and patient demographics (age, etc.) are used to determine patients that are included in the measure. ■ ICD-9-CM Codes: 481, 482.0, 482.1, 482.2, 482.30, 482.31, 482.32, 482.39, 482.40, 482.41, 482.49, 482.81, 482.82, 482.83, 482.84, 482.89, 482.9, 483.0, 483.1, 483.8, 485, 486, 487.0 *AND* ■ CPT E/M Service Codes: 99281, 99282, 99283, 99284, 99285, 99291. **Medical Record** Manual abstraction of data elements from patient records (hard-copy charts) constitutes medical record data collection. **Denominator** All patients aged 18 years and older with the diagnosis of community-acquired bacterial pneumonia.	Exclude patients for whom appropriate empiric antibiotic was not prescribed by reason of appropriate denominator exclusion. If using electronic data, exclude patients using the following codes: Append a modifier (1P, 2P, or 3P) to the CPT Category II Code to report patients with documented circumstances that meet the denominator exclusion criteria. ■ 1P: Documentation of medical reason(s) for not prescribing appropriate empiric antibiotic ■ 2P: Documentation of patient reason(s) for not prescribing appropriate empiric antibiotic ■ 3P: Documentation of system reason(s) for not prescribing appropriate empiric antibiotic. If using the medical record or hybrid methodologies, exclude patients who have documentation in the medical record of: ■ Documentation of medical reason(s) for not prescribing appropriate empiric antibiotic ■ Documentation of patient reason(s) for not prescribing appropriate empiric antibiotic ■ Documentation of system reason(s) for not prescribing appropriate empiric antibiotic.	including patient demographics, claims, or encounter data for visits and procedures. The medical record option requires manual or electronically coded data for visits or encounters to determine the sample, and access to either written or electronic medical records to both confirm information in the sampling framework for the denominator and for determination of the numerator. As noted in the measure description, those practices that have electronic health records systems can use either the *(more)*

EMERGENCY CARE (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
EMPIRIC ANTIBIOTIC FOR COMMUNITY-ACQUIRED BACTERIAL PNEUMONIA *continued*		**Hybrid** Users should follow the requirements of electronic data collection, select a sample of patients, and then supplement the electronic data where needed with medical record abstraction of data elements to fulfill measure reporting requirements. **Electronic Health Record (EHR)** EHR users may opt to use this methodology or the electronic data collection methodology described previously. EHR users should collect data on 100% of their denominator population instead of a sample. **Numerator** Patients with appropriate empiric antibiotic prescribed. EHR users may opt to use the codes listed in the electronic data collection methodology to identify patients who had an appropriate antibiotic prescribed.	**Denominator** (patients for inclusion): A sample should be determined using the most accurate data available in the settings in which the measure will be implemented. Sample sizes may be defined by different implementers. **Hybrid** Users should follow the requirements of electronic data collection, select a sample of patients, and then supplement the electronic data where needed with medical record abstraction of data elements to fulfill measure reporting requirements. **Electronic Health Record (EHR)** EHR users may opt to use this methodology or the electronic data collection methodology described previously. EHR users should collect data on 100% of their denominator population instead of a sample. **Denominator** All patients aged 18 years and older with the diagnosis of community-acquired bacterial pneumonia. EHR users may opt to use the codes listed in the electronic data collection methodology to identify all patients aged 18 years and older with the diagnosis of community-acquired bacterial pneumonia.	If using the EHR methodology, exclude patients using the codes listed in the electronic data collection methodology or who have documentation in the medical record of the appropriate denominator exclusions.	electronic or medical record approach but include all eligible patients, rather than a sample, in both the denominator and numerator.

(more)

Appendix A – Specifications of the National Voluntary Consensus Standards for Hospital Care: Specialty Clinician Measures (continued)

CARDIAC SURGERY

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
USE OF INTERNAL MAMMARY ARTERY IN ISOLATED CORONARY ARTERY BYPASS GRAFT	STS	Number of patients who receive internal mammary artery (IMA) graft.	Number of patients eligible to receive IMA graft undergoing coronary artery bypass graft (CABG).	Emergent operation Hx mastectomy Prior use of IMA Acute AMI Damaged or stenotic IMA or subclavian.	STS National Database.
USE OF INTERNAL MAMMARY ARTERY IN ISOLATED CORONARY ARTERY BYPASS GRAFT	CMS PQRI	Patient who received an IMA coronary artery bypass graft. ■ PTII 4110F Internal mammary artery graft performed for primary, isolated coronary artery bypass graft procedure.	Patients with coronary artery bypass graft. CPT Codes: 33510, 33511, 33512, 33513, 33514, 33516, 33533, 33534, 33535, 33536.	Documentation of medical reason(s) for not administering beta blocker within 24 hours prior to surgical incision.	Physician billing – self-report.
PREOPERATIVE BETA BLOCKER IN PATIENT WITH ISOLATED CORONARY ARTERY BYPASS GRAFT	STS	Number of procedures for which the patient received beta blockers within 24 hours preceding surgery.	Total number of isolated CABG procedures.	**Age Qualification** For patients ≥18 years, the data are accepted into the database, but are not included in the national analysis and report.	STS National Database.

(more)

Appendix A – Specifications of the National Voluntary Consensus Standards for Hospital Care: Specialty Clinician Measures (continued)

CARDIAC SURGERY (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
PREOPERATIVE BETA BLOCKER IN PATIENT WITH ISOLATED CORONARY ARTERY BYPASS GRAFT	CMS PQRI	Patients undergoing CABG with documented preoperative beta blockade. CPT II 4115F beta blocker administered within 24 hours prior to surgical incision.	Patients with CABG. **CPT Codes:** 33510, 33511, 33512, 33513, 33514, 33516, 33533, 33534, 33535, 33536.		Physician billing – self-report.
ANTIPLATELET MEDICATION ON DISCHARGE	STS	Number of procedures for which the patient was discharged from the facility on aspirin, enteric-coated aspirin or ADP Inhibitors.	Number of isolated CABG procedures excluding those that resulted in in-hospital mortalities based on the variables Mortality Discharge Status, Mortality Date, and Discharge Date.	In-hospital mortalities. **Age Qualification** For patients ≥18 years, the data are accepted into the database, but are not included in the national analysis and report.	STS National Database.
BETA BLOCKER ON DISCHARGE	STS	Number of procedures for which the patient was discharged from the facility on beta blockers.	Number of isolated CABG procedures excluding those that resulted in in-hospital mortalities based on the variables Mortality Discharge Status, Mortality Date, and Discharge Date.	In-hospital mortalities. **Age Qualification** For patients ≥18 years, the data are accepted into the database, but are not included in the national analysis and report.	STS National Database.

(more)

PERIOPERATIVE CARE

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
VENOUS THROMBO-EMBOLISM PROPHYLAXIS	ACS AMA PCPI* NCQA*	Surgical patients, who had an order for venous thromboembolism (VTE) prophylaxis (low molecular weight heparin (LMWH), low-dose unfractionated heparin (LDUH), adjusted-dose warfarin, fondaparinux or mechanical prophylaxis) to be given within 24 hours prior to incision time or within 24 hours after surgery end time. **Instructions:** There must be documentation of order (written order, verbal order, or standing order/protocol) for VTE prophylaxis *OR* documentation that VTE prophylaxis was given. **Electronic Data Collection** Electronic data collection requires users to identify the eligible population (denominator) and numerator using electronic data (also referred to as "administrative data"). Users report a rate based on all patients in a given practice for whom data are available and who meet the eligible population/denominator criteria. **Numerator** CPT Category II Codes are used to report the numerator of the measure. 1. If reporting CPT Category II Codes, submit the listed ICD-9, CPT E&M Service Codes, and the appropriate CPT Category II Code. Identify patients with documentation of order for VTE prophylaxis (LMWH, LDUH, adjusted-dose warfarin, fondaparinux or mechanical prophylaxis) to be given within 24 hours prior to incision time or within 24 hours after surgery end time.	All surgical patients aged 18 years and older undergoing procedures for which VTE prophylaxis is indicated in all patients. **Electronic Data Collection** Electronic data collection requires users to identify the eligible population (denominator) and numerator using electronic data (also referred to as "administrative data"). Users report a rate based on all patients in a given practice for whom data are available and who meet the eligible population/denominator criteria. **Denominator** CPT Procedure Codes and patient demographics (age, etc.) are used to determine patients that are included in the measure. **Neurological Surgery:** 22558, 22600, 22612, 22630, 61313, 61510, 61512, 61518, 61548, 61697, 61700, 62230, 63015, 63020, 63047, 63056, 63081, 63267, 63276 **Hip Reconstruction:** 27125, 27130, 27132, 27134, 27137, 27138 **Knee Reconstruction:** 27440, 27441, 27442, 27443, 27445, 27446, 27447 **Genitourinary Surgery:** 50020, 50220, 50225, 50230, 50234, 50236, 50240, 50320, 50340, 50360, 50365, 50370, 50380, 50543, 50545, 50546, 50547, 50548, 50715, 50722, 50725, 50727, 50728, 50760, 50770, 50780, 50782, 50783, 50785, 50800, 50810, 50815, 50820, 50947, 50948, 51550, 51555, 51565, 51570, 51575, 51580, 51585, 51590, 51595, 51596, 51597, 51800, 51820, 51900, 51920, 51952, 51960,	**Denominator Exclusion** Documentation of medical reason(s) for patient not receiving any accepted form of VTE prophylaxis (LMWH, LDUH, adjusted-dose warfarin, fondaparinux, or mechanical prophylaxis) within 24 hours prior to incision time or 24 hours after surgery end time. Exclude patients for whom VTE prophylaxis was not ordered by reason of appropriate denominator exclusion. If using electronic data, exclude patients using the following code: Append a modifier (1P) to the CPT Category II code to report patients with documented circumstances that meet the denominator exclusion criteria. ■ 1P: Documentation of medical reason(s) for patient not receiving any accepted form of VTE prophylaxis (LMWH, LDUH, adjusted-dose warfarin, fondaparinux, or mechanical prophylaxis) within 24 hours prior to incision time or 24 hours after surgery end time. If using the medical record or hybrid methodologies, exclude patients who have documentation in the medical record of: ■ Documentation of medical reason(s) for patient not receiving any accepted form of VTE prophylaxis (LMWH, LDUH, adjusted-dose warfarin, fondaparinux,	Data sources used will depend on implementation and approach. The electronic data option requires use of data that is capable of being analyzed by computer including patient demographics, claims, or encounter data for visits and procedures. The medical record option requires manual or electronically coded data for visits or encounters to determine the sample, and access to either written or electronic medical records to both confirm information in the sampling framework for the *(more)*

PERIOPERATIVE CARE (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
VENOUS THROMBO-EMBOLISM PROPHYLAXIS *continued*		■ CPT II 4044F: Documentation that an order was given for VTE prophylaxis to be given within 24 hours prior to incision time or within 24 hours after surgery end time. *Note:* A single CPT II Code is provided for VTE prophylaxis is ordered or VTE prophylaxis is given. If VTE prophylaxis is given, report 4044F. **Manual Abstraction** Manual abstraction of data elements from patient records (hard-copy charts) constitutes medical record data collection. Surgical patients, who had an order for VTE prophylaxis (LMWH, LDUH, adjusted-dose warfarin, fondaparinux or mechanical prophylaxis) to be given within 24 hours prior to incision time or within 24 hours after surgery end time. **Hybrid** Users should follow the requirements of electronic data collection, select a sample of patients, and then supplement the electronic data where needed with medical record abstraction of data elements to fulfill measure reporting requirements. **Electronic Health Record (EHR)** Surgical patients, who had an order for VTE prophylaxis (LMWH, LDUH, adjusted-dose warfarin, fondaparinux or mechanical prophylaxis) to be given within 24 hours prior to incision time or within 24 hours after surgery end time. EHR users may opt to use the codes listed in the electronic data collection methodology to identify surgical patients with documentation of an order	55810, 55812, 55815, 55821, 55831, 55840, 55842, 55845, 55866 **Gynecologic Surgery:** 58951, 58953, 58954, 58956, 56630-56634, 56637, 56640, 58200, 58210, 58240, 58285 **Hip Fracture Surgery:** 27235, 27236, 27244, 27245 **General Surgery:** 19260, 19271, 19272, 19316, 19318, 19324, 19325, 19328, 19301, 19302, 19303, 19304, 19305, 19306, 19307, 19330, 19342, 19350, 19355, 19357, 19361, 19364, 19366, 19367, 19368, 19369, 19370, 19371, 19380, 38100, 38101, 38115, 38120, 38571, 38572, 38700, 38720, 38724, 38740, 38745, 38747, 38760, 38765, 38770, 38780, 39501, 39502, 39503, 39520, 39530, 39531, 39540, 39541, 39545, 39560, 39561, 43020, 43030, 43045, 43100, 43101, 43107, 43108, 43112, 43113, 43116, 43117, 43118, 43121, 43122, 43123, 43124, 43130, 43135, 43280, 43300, 43305, 43310, 43312, 43313, 43314, 43320, 43324, 43325, 43326, 43330, 43331, 43340, 43341, 43350, 43351, 43352, 43360, 43361, 43400, 43401, 43405, 43410, 43415, 43420, 43425, 43496, 43500, 43501, 43502, 43510, 43520, 43605, 43610, 43611, 43620, 43621, 43622, 43631, 43632, 43633, 43634, 43640, 43641, 43644, 43645, 43651, 43652, 43653, 43770, 43771, 43772, 43773, 43774, 43800, 43810, 43820, 43825, 43830, 43832, 43840, 43842, 43843, 43845, 43846, 43847, 43848, 43850, 43855, 43860, 43865, 43870, 43880, 43886, 43887, 43888, 44005, 44010, 44020, 44021, 44025, 44050, 44055, 44110, 44111, 44120, 44125, 44126, 44127, 44130, 44140, 44141, 44143, 44144, 44145, 44146, 44147, 44150, 44151, 44155, 44156, 44157, 44158, 44160,	or mechanical prophylaxis) within 24 hours prior to incision time or 24 hours after surgery end time. If using the EHR methodology, exclude patients using the codes listed in the electronic data collection methodology or who have documentation in the medical record of the appropriate denominator exclusion.	denominator and for determination of the numerator. As noted in the measure description, those practices that have electronic health records system can use either electronic or medical record approach but include all eligible patients, rather than a sample, in both the denominator and numerator.

(more)

PERIOPERATIVE CARE (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
VENOUS THROMBO-EMBOLISM PROPHYLAXIS *continued*		for VTE prophylaxis (LMWH, LDUH, adjusted-dose warfarin, fondaparinux or mechanical prophylaxis) to be given within 24 hours prior to incision time or within 24 hours after surgery end time. Documentation of written order, verbal order, or standing order/protocol is acceptable.	44180, 44186, 44187, 44188, 44202, 44204, 44205, 44206, 44207, 44208, 44210, 44211, 44212, 44227, 44300, 44310, 44312, 44314, 44316, 44320, 44322, 44340, 44345, 44346, 44602, 44603, 44604, 44605, 44615, 44620, 44625, 44626, 44640, 44650, 44660, 44661, 44680, 44700, 44800, 44820, 44850, 44900, 44950, 44960, 44970, 45000, 45020, 45100, 45108, 45110, 45111, 45112, 45113, 45114, 45116, 45119, 45120, 45121, 45123, 45126, 45130, 45135, 45136, 45150, 45160, 45170, 45190, 45395, 45397, 45400, 45402, 45500, 45505, 45550, 45560, 45562, 45563, 45800, 45805, 45820, 45825, 46715, 46716, 46730, 46735, 46740, 46742, 46744, 46746, 46748, 46750, 46751, 46753, 46754, 46760, 46761, 46762, 47010, 47100, 47120, 47122, 47125, 47130, 47135, 47136, 47140, 47141, 47142, 47300, 47350, 47360, 47361, 47362, 47370, 47371, 47380, 47381, 47382, 47400, 47420, 47425, 47460, 47480, 47500, 47505, 47560, 47561, 47562, 47563, 47564, 47570, 47600, 47605, 47610, 47612, 47620, 47630, 47700, 47701, 47711, 47712, 47715, 47720, 47721, 47740, 47741, 47760, 47765, 47780, 47785, 47800, 47801, 47802, 47900, 48000, 48001, 48020, 48100, 48105, 48120, 48140, 48145, 48146, 48148, 48150, 48152, 48153, 48154, 48155, 48500, 48510, 48520, 48540, 48545, 48547, 48548, 48554, 48556, 49000, 49002, 49010, 49020, 49040, 49060, 49200, 49201, 49215, 49220, 49250, 49255, 49320, 49321, 49322, 49323, 49560, 49561, 49565, 49566, 49570, 50320, 50340, 50360, 50365, 50370, 50380, 60200, 60210, 60212, 60220, 60225, 60240, 60252, 60254, 60260, 60270, 60271, 60280, 60281, 60500, 60502, 60505, 60520, 60521, 60522, 60540, 60545, 60600, 60605, 60650.		

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PERIOPERATIVE CARE (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
VENOUS THROMBO-EMBOLISM PROPHYLAXIS *continued*			**Manual Abstraction** Manual abstraction of data elements from patient records (hard-copy charts) constitutes medical record data collection. **Denominator** All surgical patients aged 18 years and older undergoing procedures for which VTE prophylaxis is indicated in all patients. Physicians are encouraged to review data on all patients. Sample sizes may be defined by different implementers. **Hybrid** Users should follow the requirements of electronic data collection, select a sample of patients, and then supplement the electronic data where needed with medical record abstraction of data elements to fulfill measure reporting requirements. **Electronic Health Record (EHR)** All surgical patients aged 18 years and older undergoing procedures for which VTE prophylaxis is indicated in all patients. EHR users may opt to use the codes listed in the electronic data collection methodology to identify all patients aged 18 years and older undergoing procedures for which VTE prophylaxis is indicated in all patients.		

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PERIOPERATIVE CARE (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
TIMING OF PROPHYLACTIC ANTIBIOTICS – ORDERING PHYSICIAN	ACS AMA PCPI* NCQA*	Surgical patients who have an order for prophylactic antibiotic to be given within one hour (if fluoroquinolone or vancomycin, two hours) prior to the surgical incision (or start of procedure when no incision is required). **Instructions:** There must be documentation of order (written order, verbal order, or standing order/protocol) specifying that antibiotic is to be given within one hour (if fluoroquinolone or vancomycin, two hours) prior to the surgical incision (or start of procedure when no incision is required) *OR* documentation that antibiotic *has* been given within one hour (if fluoroquinolone or vancomycin, two hours) prior to the surgical incision (or start of procedure when no incision is required). The antimicrobial drugs listed below are considered prophylactic antibiotics for the purposes of this measure. ■ Ampicillin/sulbactam ■ Aztreonam ■ Cefazolin ■ Cefmetazole ■ Cefotetan ■ Cefoxitin ■ Cefuroxime ■ Ciprofloxacin ■ Clindamycin ■ Erythromycin base ■ Gatifloxacin Gentamicin ■ Levofloxacin	All surgical patients aged 18 years and older undergoing procedures with the indications for prophylactic parenteral antibiotics. **Electronic Data Collection** Electronic data collection requires users to identify the eligible population (denominator) and numerator using electronic data (also referred to as "administrative data"). Users report a rate based on all patients in a given practice for whom data are available and who meet the eligible population/denominator criteria. **Denominator** CPT Procedure Codes and patient demographics (age, etc.) are used to determine patients that are included in the measure. ■ CPT Procedure Codes **Integumentary:** 15734, 15738, 19260, 19271, 19272, 19301-19307, 19361, 19364, 19366-19369 **Le Fort Fractures:** 21422, 21423, 21346-21348, 21432, 21433, 21435, 21436 **Mandibular Fracture:** 21454, 21461, 21462, 21465, 21470 **Spine:** 22325, 22612, 22630, 22800, 22802, 22804, 63030, 63042 **Hip Reconstruction:** 27125, 27130, 27132, 27134, 27137, 27138 **Trauma (Fractures):** 27235, 27236, 27244, 27245, 27758, 27759, 27766, 27792, 27814 **Knee Reconstruction:** 27440-27443, 27445-27447	**Denominator Exclusion** Documentation of medical reason(s) for not ordering antibiotics to be given within one hour (if fluoroquinolone or vancomycin, two hours) prior to the surgical incision (or start of procedure when no incision is required). Exclude patients for whom prophylactic antibiotics were not ordered by reason of appropriate denominator exclusion. If using electronic data, exclude patients using the following code: Append a modifier (1P) to the CPT Category II Code to report patients with documented circumstances that meet the denominator exclusion criteria. ■ 1P: Documentation of medical reason(s) for not ordering antibiotics to be given within one hour (if fluoroquinolone or vancomycin, two hours) prior to the surgical incision (or start of procedure when no incision is required). If using the medical record or hybrid methodologies, exclude patients who have documentation in the medical record of: ■ Documentation of medical reason(s) for not ordering antibiotics to be given within one hour (if fluoroquinolone or vancomycin, two hours) prior to the surgical incision (or start of procedure when no incision is required).	Data sources used will depend on implementation and approach. The electronic data option requires use of data that is capable of being analyzed by computer including patient demographics, claims, or encounter data for visits and procedures. The medical record option requires manual or electronically coded data for visits or encounters to determine the sample, and access to either written or electronic medical records to both confirm information in the sampling framework for the *(more)*

PERIOPERATIVE CARE (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
TIMING OF PROPHYLACTIC ANTIBIOTICS – ORDERING PHYSICIAN *continued*		■ Metronidazole ■ Moxifloxacin ■ Neomycin ■ Vancomycin. **Electronic Data Collection** Electronic data collection requires users to identify the eligible population (denominator) and numerator using electronic data (also referred to as "administrative data"). Users report a rate based on all patients in a given practice for whom data are available and who meet the eligible population/denominator criteria. **Numerator** CPT Category II Codes are used to report the numerator of the measure. 2. If reporting CPT Category II Codes, submit the listed ICD-9, CPT E&M Service Codes, and the appropriate CPT Category II Code. Identify patients with documentation of order for prophylactic antibiotic: ■ CPT II 4047F: Documentation of order for prophylactic antibiotic to be given within one hour (if fluoroquinolone or vancomycin, two hours) prior to surgical incision (or start of procedure when no incision is required) *OR* Documentation that prophylactic antibiotic *has* been given within one hour prior to the surgical incision (or start of procedure when no incision is required).	**Laryngectomy:** 31360, 31365, 31367, 31368, 31370, 31375, 31380, 31382, 31390, 31395 **Vascular:** 33877, 33880, 33881, 33883, 33886, 33891, 34800, 34802-34805, 34825, 34830-34832, 34900, 35081, 35091, 35102, 35131, 35141, 35151, 35601, 35606, 35612, 35616, 35621, 35623, 35626, 35631, 35636-35638, 35642, 35645-35647, 35650, 35651, 35654, 35656, 35661, 35663, 35665, 35666, 35671, 36830 **Spleen and Lymph Nodes:** 38115 **Glossectomy:** 41130, 41135, 41140, 41145, 41150, 41153, 41155 **Esophagus:** 43045, 43100, 43101, 43107, 43108, 43112, 43113, 43116-43118, 43121-43124, 43130, 43135, 43300, 43305, 43310, 43312, 43313, 43320, 43324-43326, 43330, 43331, 43340, 43341, 43350, 43351, 43352, 43360, 43361, 43400, 43401, 43405, 43410, 43415, 43420, 43425, 43496 **Stomach:** 43500-43502, 43510, 43520, 43600, 43605, 43610, 43611, 43620-43622, 43631-43634, 43640, 43641, 43653, 43800, 43810, 43820, 43825, 43830-43832, 43840, 43842, 43843, 43845-43848, 43850, 43855, 43860, 43865, 43870 **Small Intestine:** 44005, 44010, 44020, 44021, 44050, 44055, 44100, 44120, 44125-44127, 44130, 44132, 44133, 44135, 44136 **Colon and Rectum:** 43880, 44025, 44110, 44111, 44140, 44141, 44143-44147, 44150, 44151, 44155-44158, 44160, 44202, 44204-44208, 44210-44212, 44300, 44310, 44312, 44314, 44316, 44320, 44322, 44340, 44345, 44346, 44602-44605, 44615, 44620,	If using the EHR methodology, exclude patients using the codes listed in the electronic data collection methodology or who have documentation in the medical record of the appropriate denominator exclusion.	denominator and for determination of the numerator. As noted in the measure description, those practices that have electronic health records system can use either electronic or medical record approach but include all eligible patients, rather than a sample, in both the denominator and numerator.

(more)

PERIOPERATIVE CARE (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
TIMING OF PROPHYLACTIC ANTIBIOTICS – ORDERING PHYSICIAN *continued*		■ CPT II 4048F: Documentation that prophylactic antibiotic was given within one hour (if fluoroquinolone or vancomycin, two hours) prior to surgical incision (or start of procedure when no incision is required). **Manual Abstraction** Manual abstraction of data elements from patient records (hard-copy charts) constitutes medical record data collection. Surgical patients who have an order for prophylactic antibiotic to be given within one hour (if fluoroquinolone or vancomycin, two hours) prior to the surgical incision (or start of procedure when no incision is required). **Hybrid** Users should follow the requirements of electronic data collection, select a sample of patients, and then supplement the electronic data where needed with medical record abstraction of data elements to fulfill measure reporting requirements. **Electronic Health Record (EHR)** Surgical patients who have an order for prophylactic antibiotic to be given within one hour (if fluoroquinolone or vancomycin, two hours) prior to the surgical incision (or start of procedure when no incision is required). EHR users may opt to use the codes listed in the electronic data collection methodology to identify surgical patients who have an order for prophylactic antibiotic to be given within one hour (if fluoroquinolone or vancomycin, two hours) prior	44625, 44626, 44640, 44650, 44660, 44661, 44700, 44950, 51597 **Anus and Rectum:** 45108, 45110-45114, 45116, 45119-45121, 45123, 45126, 45130, 45135, 45136, 45150, 45160, 45170, 45190, 45500, 45505, 45520, 45540, 45541, 45550, 45560, 45562, 45563, 45800, 45805, 45820, 45825 **Hepatic Surgery:** 47133, 47135, 47136, 47140-47142 **Biliary Surgery:** 47420, 47425, 47460, 47480, 47560, 47561, 47570, 47600, 47605, 47610, 47612, 47620, 47700, 47701, 47711, 47712, 47715, 47719-47721, 47740, 47741, 47760, 47765, 47780, 47785, 47800, 47802, 47900 **Pancreas:** 48020, 48100, 48120, 48140, 48145, 48146, 48148, 48150, 48152-48155, 48160, 48500, 48510, 48511, 48520, 48540, 48545, 48547, 48548, 48550, 48554, 48556 **Abdomen, Peritoneum, and Omentum:** 49215, 49568 **Renal Transplant:** 50300, 50320, 50340, 50360, 50365, 50370, 50380 **Gynecologic Surgery:** 58150, 58152, 58180, 58200, 58210, 58260, 58262, 58263, 58267, 58270, 58275, 58280, 58285, 58290-58294 **Acoustic Neuroma:** 61591, 61595, 61596, 61598, 61520, 61526, 61530, 61606, 61616, 61618, 61619, 69720, 69955, 69960, 69970 **Cochlear Implants:** 69930		

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PERIOPERATIVE CARE (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
TIMING OF PROPHYLACTIC ANTIBIOTICS – ORDERING PHYSICIAN *continued*		to the surgical incision (or start of procedure when no incision is required).	**Neurological Surgery:** 22524, 22554, 22558, 22600, 22612, 22630, 35301, 61154, 61312, 61313, 61315, 61510, 61512, 61518, 61548, 61697, 61700, 61750, 61751, 61867, 62223, 62230, 63015, 63020, 63030, 63042, 63045, 63047, 63056, 63075, 63081, 63267, 63276 **Cardiothoracic Surgery:** 33120, 33130, 33140, 33141, 33202, 33250, 33251, 33256, 33261, 33305, 33315, 33321, 33322, 33332, 33335, 33400, 33401, 33403-33406, 33410, 33411, 33413, 33416, 33422, 33425-33427, 33430, 33460, 33463-33465, 33475, 33496, 33510-33519, 33521-33523, 33530, 33533-33536, 33542, 33545, 33548, 33572, 35211, 35241, 35271 **Cardiothoracic (Pacemaker):** 33203, 33206-33208, 33212-33218, 33220, 33222-33226, 33233-33238, 33240, 33241, 33243, 33244, 33249, 33254, 33255 **Genitourinary Surgery:** 51550, 51555, 51565, 51570, 51575, 51580, 51585, 51590, 51595, 51596, 51920, 51925, 52450, 52601, 52612, 52614, 52620, 52630, 52647, 52648, 54401, 54405, 54406, 54408, 54410, 54415, 54416, 55801, 55810, 55812, 55815, 55821, 55831, 55840, 55842, 55845 **General Thoracic Surgery:** 19272, 21627, 21632, 21740, 21750, 21805, 21825, 31760, 31766, 31770, 31775, 31786, 31805, 32095, 32100, 32110, 32120, 32124, 32140, 32141, 32150, 32215, 32220, 32225, 32310, 32320, 32402, 32440, 32442, 32445, 32480, 32482, 32484, 32486, 32488, 32491, 32500, 32501, 32800, 32810, 32815, 32900, 32905, 32906, 32940, 33020, 33025, 33030, 33031, 33050, 33300, 33310,		

(more)

PERIOPERATIVE CARE (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
TIMING OF PROPHYLACTIC ANTIBIOTICS – ORDERING PHYSICIAN *continued*			33320, 34051, 35021, 35216, 35246, 35276, 35311, 35481, 35526, 37616, 38381, 38746, 38747, 39000, 39010, 39200, 39220, 39545, 39561, 60521, 60522, 64746. **Manual Abstraction** Manual abstraction of data elements from patient records (hard-copy charts) constitutes medical record data collection. **Denominator** All surgical patients aged 18 years and older undergoing procedures with the indications for prophylactic parenteral antibiotics. Physicians are encouraged to review data on all patients. Sample sizes may be defined by different implementers. **Hybrid** Users should follow the requirements of electronic data collection, select a sample of patients, and then supplement the electronic data where needed with medical record abstraction of data elements to fulfill measure reporting requirements. **Electronic Health Record (EHR)** All surgical patients aged 18 years and older undergoing procedures with the indications for prophylactic parenteral antibiotics. EHR users may opt to use the codes listed in the electronic data collection methodology to identify all surgical patients aged 18 years and older undergoing procedures with the indications for prophylactic parenteral antibiotics.		

(more)

PERIOPERATIVE CARE (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
TIMING OF PROPHYLACTIC ANTIBIOTICS – ADMINISTERING PHYSICIAN	ACS AMA PCPI* NCQA*	Surgical patients for whom administration of a prophylactic antibiotic has been initiated within one hour (if fluoroquinolone or vancomycin, two hours) prior to the surgical incision (or start of procedure when no incision is required). The antimicrobial drugs listed below are considered prophylactic antibiotics for the purposes of this measure. ■ Ampicillin/sulbactam ■ Aztreonam ■ Cefazolin ■ Cefmetazole ■ Cefotetan ■ Cefoxitin ■ Cefuroxime ■ Ciprofloxacin ■ Clindamycin ■ Erythromycin base ■ Gatifloxacin Gentamicin ■ Levofloxacin ■ Metronidazole ■ Moxifloxacin ■ Neomycin ■ Vancomycin. **Electronic Data Collection** Electronic data collection requires users to identify the eligible population (denominator) and numerator using electronic data (also referred to as "administrative data"). Users report a rate based on all patients in a given practice for whom	All surgical patients aged 18 years and older who have an order for a parenteral antibiotic to be given within one hour (if fluoroquinolone or vancomycin, two hours) prior to the surgical incision (or start of procedure when no incision is required). **Instructions:** For denominator inclusion, there must be documentation of order (written order, verbal order, or standing order/protocol) specifying that prophylactic parenteral antibiotic is to be given within one hour (if fluoroquinolone or vancomycin, two hours) prior to the surgical incision (or start of procedure when no incision is required). **Electronic Data Collection** Electronic data collection requires users to identify the eligible population (denominator) and numerator using electronic data (also referred to as "administrative data"). Users report a rate based on all patients in a given practice for whom data are available and who meet the eligible population/denominator criteria. **Denominator** A CPT Category II Code and patient demographics (age, etc.) are used to determine patients that are included in the measure. A CPT Category II Code to identify patients who have an order for a parenteral antibiotic is required for denominator inclusion. ■ CPT II 4047F: Documentation of order for prophylactic antibiotics to be given within one hour (if fluoroquinolone or vancomycin, two hours) prior to surgical incision (or start of procedure when no incision is required).	None.	Data sources used will depend on implementation and approach. The electronic data option requires use of data that is capable of being analyzed by computer including patient demographics, claims, or encounter data for visits and procedures. The medical record option requires manual or electronically coded data for visits or encounters to determine the sample, and access to either written or electronic medical records to both confirm information in the sampling framework for the *(more)*

PERIOPERATIVE CARE (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
TIMING OF PROPHYLACTIC ANTIBIOTICS – ADMINISTERING PHYSICIAN *continued*		data are available and who meet the eligible population/denominator criteria. **Numerator** CPT Category II Codes are used to report the numerator of the measure. 1. If reporting CPT Category II Codes, submit the listed ICD-9, CPT E&M Service Codes, and the appropriate CPT Category II Code. Identify patients with documentation of administration of prophylactic antibiotic: ■ CPT II 4048F: Documentation that prophylactic antibiotic was given within one hour (if fluoroquinolone or vancomycin, two hours) prior to surgical incision (or start of procedure when no incision is required). **Manual Abstraction** Manual abstraction of data elements from patient records (hard-copy charts) constitutes medical record data collection. Surgical patients for whom administration of a prophylactic antibiotic has been initiated within one hour (if fluoroquinolone or vancomycin, two hours) prior to the surgical incision (or start of procedure when no incision is required). **Hybrid** Users should follow the requirements of electronic data collection, select a sample of patients, and then supplement the electronic data where needed with medical record abstraction of data elements to fulfill measure reporting requirements.	**Manual Abstraction** Manual abstraction of data elements from patient records (hard-copy charts) constitutes medical record data collection. **Denominator** All surgical patients aged 18 years and older who have an order for a parenteral antibiotic to be given within one hour (if fluoroquinolone or vancomycin, two hours) prior to the surgical incision (or start of procedure when no incision is required). Physicians are encouraged to review data on all patients. Sample sizes may be defined by different implementers. **Hybrid** Users should follow the requirements of electronic data collection, select a sample of patients, and then supplement the electronic data where needed with medical record abstraction of data elements to fulfill measure reporting requirements. **Electronic Health Record (EHR)** All surgical patients aged 18 years and older who have an order for a parenteral antibiotic to be given within one hour (if fluoroquinolone or vancomycin, two hours) prior to the surgical incision (or start of procedure when no incision is required). EHR users may opt to use the codes listed in the electronic data collection methodology to identify all surgical patients aged 18 years and older who have an order for a parenteral antibiotic to be		denominator and for determination of the numerator. As noted in the measure description, those practices that have electronic health records system can use either electronic or medical record approach but include all eligible patients, rather than a sample, in both the denominator and numerator. *(more)*

PERIOPERATIVE CARE (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
TIMING OF PROPHYLACTIC ANTIBIOTICS – ADMINISTERING PHYSICIAN *continued*		**Electronic Health Record (EHR)** Surgical patients for whom administration of a prophylactic antibiotic has been initiated within one hour (if fluoroquinolone or vancomycin, two hours) prior to the surgical incision (or start of procedure when no incision is required). EHR users may opt to use the codes listed in the electronic data collection methodology to identify surgical patients for whom administration of a prophylactic antibiotic has been initiated within one hour (if fluoroquinolone or vancomycin, two hours) prior to the surgical incision (or start of procedure when no incision is required).	given within one hour (if fluoroquinolone or vancomycin, two hours) prior to the surgical incision (or start of procedure when no incision is required).		
SELECTION OF PROPHYLACTIC ANTIBIOTICS – FIRST- OR SECOND-GENERATION CEPHALOSPORIN	ACS AMA PCPI* NCQA*	Surgical patients who had an order for cefazolin *OR* cefuroxime for antimicrobial prophylaxis. **Instructions:** There must be documentation of order (written order, verbal order, or standing order/protocol) for cefazolin or cefuroxime for antimicrobial prophylaxis *OR* documentation that cefazolin or cefuroxime was *given*. Acceptable First- and Second-generation Cephalosporin Prophylactic Antibiotics: First-generation cephalosporin: cefazolin Second-generation cephalosporin: cefuroxime. **Electronic Data Collection** Electronic data collection requires users to identify the eligible population (denominator) and numerator using electronic data (also referred to as "administrative data"). Users report a rate based on all patients in a given practice for whom data are available and who meet the eligible population/denominator criteria.	All surgical patients aged 18 years and older undergoing procedures with the indications for a first- or second-generation cephalosporin prophylactic antibiotic. **Electronic Data Collection** Electronic data collection requires users to identify the eligible population (denominator) and numerator using electronic data (also referred to as "administrative data"). Users report a rate based on all patients in a given practice for whom data are available and who meet the eligible population/denominator criteria. **Denominator** CPT Procedure Codes and patient demographics (age, etc.) are used to determine patients that are included in the measure. ■ CPT Procedure Codes: **Integumentary:** 15734, 15738, 19260, 19271, 19272, 19301-19307, 19361, 19364, 19366-19369	**Denominator Exclusion** Documentation of medical reason(s) for not ordering cefazolin *OR* cefuroxime for antimicrobial prophylaxis. Exclude patients for whom prophylactic antibiotics was not ordered by reason of appropriate denominator exclusion. If using electronic data, exclude patients using the following code: Append a modifier (1P) to the CPT Category II Code to report patients with documented circumstances that meet the denominator exclusion criteria. ■ 1P: Documentation of medical reason(s) for not ordering cefazolin OR cefuroxime for antimicrobial prophylaxis.	Data sources used will depend on implementation and approach. The electronic data option requires use of data that is capable of being analyzed by computer including patient demographics, claims, or encounter data for visits and procedures. The medical record option requires *(more)*

PERIOPERATIVE CARE (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
SELECTION OF PROPHYLACTIC ANTIBIOTICS – FIRST- OR SECOND-GENERATION CEPHALOSPORIN *continued*		**Numerator** CPT Category II Codes are used to report the numerator of the measure. 1. If reporting CPT Category II Codes, submit the listed ICD-9, CPT E&M Service Codes, and the appropriate CPT Category II Code. Identify patients with documentation of order for cefazolin or cefuroxime for antimicrobial prophylaxis (written order, verbal order, or standing order/protocol): ■ CPT II 4041F: Documentation of order for cefazolin OR cefuroxime for antimicrobial prophylaxis. *Note:* CPT Category II Code **4041F** is provided for antibiotic **ordered** or antibiotic **given**. Report CPT Category II Code **4041F** if cefazolin *OR* cefuroxime was given for antimicrobial prophylaxis. **Manual Abstraction** Manual abstraction of data elements from patient records (hard-copy charts) constitutes medical record data collection. Surgical patients who had an order for cefazolin *OR* cefuroxime for antimicrobial prophylaxis. **Hybrid** Users should follow the requirements of electronic data collection, select a sample of patients, and then supplement the electronic data where needed with medical record abstraction of data elements to fulfill measure reporting requirements.	**Spine:** 22325, 22612, 22630, 22800, 22802, 22804, 63030, 63042 **Hip Reconstruction:** 27125, 27130, 27132, 27134, 27137, 27138 **Trauma (Fractures):** 27235, 27236, 27244, 27245, 27758, 27759, 27766, 27792, 27814 **Knee Reconstruction:** 27440-27443, 27445-27447 **Vascular:** 33877, 33880, 33881, 33883, 33886, 33891, 34800, 34802-34805, 34825, 34830-34832, 34900, 35081, 35091, 35102, 35131, 35141, 35151, 35601, 35606, 35612, 35616, 35621, 35623, 35626, 35631, 35636-35638, 35642, 35645-35647, 35650, 35651, 35654, 35656, 35661, 35663, 35665, 35666, 35671, 36830 **Spleen and Lymph Nodes:** 38115 **Esophagus:** 43045, 43100, 43101, 43107, 43108, 43112, 43113, 43116-43118, 43121-43124, 43130, 43135, 43300, 43305, 43310, 43312, 43313, 43320, 43324-43326, 43330, 43331, 43340, 43341, 43350, 43351, 43352, 43360, 43361, 43400, 43401, 43405, 43410, 43415, 43420, 43425, 43496 **Stomach:** 43500-43502, 43510, 43520, 43600, 43605, 43610, 43611, 43620-43622, 43631-43634, 43640, 43641, 43653, 43800, 43810, 43820, 43825, 43830-43832, 43840, 43842, 43843, 43845-43848, 43850, 43855, 43860, 43865, 43870 **Small Intestine:** 44005, 44010, 44020, 44021, 44050, 44055, 44100, 44120, 44125-44127, 44130, 44132, 44133, 44135, 44136 **Biliary Surgery:** 47420, 47425, 47460, 47480, 47560, 47561, 47570, 47600, 47605, 47610, 47612, 47620, 47700, 47701, 47711, 47712, 47715, 47719-47721, 47740, 47741, 47760, 47765, 47780, 47785, 47800, 47802, 47900	If using the medical record or hybrid methodologies, exclude patients who have documentation in the medical record of: ■ Documentation of medical reason(s) for not ordering cefazolin *OR* cefuroxime for antimicrobial prophylaxis. If using the EHR methodology, exclude patients using the codes listed in the electronic data collection methodology or who have documentation in the medical record of the appropriate denominator exclusion.	manual or electronically coded data for visits or encounters to determine the sample, and access to either written or electronic medical records to both confirm information in the sampling framework for the denominator and for determination of the numerator. As noted in the measure description, those practices that have electronic health records system can use either electronic or medical record approach but include all eligible patients, rather than a sample, in both the denominator and numerator. *(more)*

PERIOPERATIVE CARE (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
SELECTION OF PROPHYLACTIC ANTIBIOTICS – FIRST- OR SECOND-GENERATION CEPHALOSPORIN *continued*		**Electronic Health Record (EHR)** Surgical patients who had an order for cefazolin *OR* cefuroxime for antimicrobial prophylaxis. EHR users may opt to use the codes listed in the electronic data collection methodology to identify surgical patients who had an order for cefazolin *OR* cefuroxime for antimicrobial prophylaxis.	**Pancreas:** 48020, 48100, 48120, 48140, 48145, 48146, 48148, 48150, 48152-48155, 48160, 48500, 48510, 48511, 48520, 48540, 48545, 48547, 48548, 48550, 48554, 48556 **Abdomen, Peritoneum, and Omentum:** 49215, 49568 **Renal Transplant:** 50300, 50320, 50340, 50360, 50365, 50370, 50380 **Neurological Surgery:** 22524, 22554, 22558, 22600, 22612, 22630, 35301, 61154, 61312, 61313, 61315, 61510, 61512, 61518, 61548, 61697, 61700, 61750, 61751, 61867, 62223, 62230, 63015, 63020, 63030, 63042, 63045, 63047, 63056, 63075, 63081, 63267, 63276 **Cardiothoracic Surgery:** 33120, 33130, 33140, 33141, 33202, 33250, 33251, 33256, 33261, 33305, 33315, 33321, 33322, 33332, 33335, 33400, 33401, 33403-33406, 33410, 33411, 33413, 33416, 33422, 33425-33427, 33430, 33460, 33463-33465, 33475, 33496, 33510-33519, 33521-33523, 33530, 33533-33536, 33542, 33545, 33548, 33572, 35211, 35241, 35271 **General Thoracic Surgery:** 19272, 21627, 21632, 21740, 21750, 21805, 21825, 31760, 31766, 31770, 31775, 31786, 31805, 32095, 32100, 32110, 32120, 32124, 32140, 32141, 32150, 32215, 32220, 32225, 32310, 32320, 32402, 32440, 32442, 32445, 32480, 32482, 32484, 32486, 32488, 32491, 32500, 32501, 32800, 32810, 32815, 32900, 32905, 32906, 32940, 33020, 33025, 33030, 33031, 33050, 33300, 33310, 33320, 34051, 35021, 35216, 35246, 35276, 35311, 35481, 35526, 37616, 38381, 38746, 38747, 39000, 39010, 39200, 39220, 39545, 39561, 60521, 60522, 64746.		

(more)

PERIOPERATIVE CARE (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
SELECTION OF PROPHYLACTIC ANTIBIOTICS – FIRST- OR SECOND-GENERATION CEPHALOSPORIN *continued*			**Manual Abstraction** Manual abstraction of data elements from patient records (hard-copy charts) constitutes medical record data collection. **Denominator** All surgical patients aged 18 years and older undergoing procedures with the indications for a first- or second-generation cephalosporin prophylactic antibiotic. Physicians are encouraged to review data on all patients. Sample sizes may be defined by different implementers. **Hybrid** Users should follow the requirements of electronic data collection, select a sample of patients, and then supplement the electronic data where needed with medical record abstraction of data elements to fulfill measure reporting requirements. **Electronic Health Record (EHR)** All surgical patients aged 18 years and older undergoing procedures with the indications for a first- or second-generation cephalosporin prophylactic antibiotic. EHR users may opt to use the codes listed in the electronic data collection methodology to identify all surgical patients aged 18 years and older undergoing procedures with the indications for a first- or second-generation cephalosporin prophylactic antibiotic.		

(more)

PERIOPERATIVE CARE (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
DISCONTINUATION OF PROPHYLACTIC ANTIBIOTICS (NON-CARDIAC PROCEDURES)	ACS AMA PCPI* NCQA*	Non-cardiac surgical patients who have an order for discontinuation of prophylactic antibiotics within 24 hours of surgical end time. **Instructions:** There must be documentation of order (written order, verbal order, or standing order/protocol) specifying that prophylactic antibiotic is to be discontinued within 24 hours of surgical end time *OR* specifying a course of antibiotic administration limited to that 24-hour period (e.g.,"to be given every 8 hours for three doses") *OR* documentation that prophylactic antibiotic *was* discontinued within 24 hours of surgical end time. **Electronic Data Collection** Electronic data collection requires users to identify the eligible population (denominator) and numerator using electronic data (also referred to as "administrative data"). Users report a rate based on all patients in a given practice for whom data are available and who meet the eligible population/denominator criteria. **Numerator** CPT Category II Codes are used to report the numerator of the measure. 1. If reporting CPT Category II Codes, submit the listed ICD-9, CPT E&M Service Codes, and the appropriate CPT Category II Code. Identify patients with documentation of order for discontinuation of prophylactic antibiotics (written order, verbal order, or standing order/protocol) within 24 hours of surgical end time:	All non-cardiac surgical patients undergoing procedures with the indications for prophylactic antibiotics AND who received a prophylactic antibiotic. **Instructions:** For the purpose of this measure of antibiotic discontinuation, patients may be counted as having "received a prophylactic antibiotic" if the antibiotic was received within 4 hours prior to the surgical incision (or start of procedure when no incision is required) or intraoperatively. **Electronic Data Collection** Electronic data collection requires users to identify the eligible population (denominator) and numerator using electronic data (also referred to as "administrative data"). Users report a rate based on all patients in a given practice for whom data are available and who meet the eligible population/denominator criteria. **Denominator** CPT Procedure Codes, CPT Category II Codes, and patient demographics (age, etc.) are used to determine patients that are included in the measure. ■ CPT II 4046F: Documentation that prophylactic antibiotics were given within 4 hours prior to surgical incision or given intraoperatively; CPT II 4042F: Documentation that prophylactic antibiotics were neither given within 4 hours prior to surgical incision nor given intraoperatively *AND* ■ CPT Procedure Codes: **Integumentary:** 15734, 15738, 19260, 19271, 19272, 19301-19307, 19361, 19364, 19366-19369	**Denominator Exclusion** Documentation of medical reason(s) for not discontinuing prophylactic antibiotics within 24 hours of surgical end time. Exclude patients for whom prophylactic antibiotics was not ordered by reason of appropriate denominator exclusion. If using electronic data, exclude patients using the following code: Append a modifier (1P) to the CPT Category II Code to report patients with documented circumstances that meet the denominator exclusion criteria. ■ 1P: Documentation of medical reason(s) for not discontinuing prophylactic antibiotics within 24 hours of surgical end time. If using the medical record or hybrid methodologies, exclude patients who have documentation in the medical record of: ■ Documentation of medical reason(s) for not discontinuing prophylactic antibiotics within 24 hours of surgical end time. If using the EHR methodology, exclude patients using the codes listed in the electronic data collection methodology or who have documentation in the medical record of the appropriate denominator exclusion.	Data sources used will depend on implementation and approach. The electronic data option requires use of data that is capable of being analyzed by computer including patient demographics, claims, or encounter data for visits and procedures. The medical record option requires manual or electronically coded data for visits or encounters to determine the sample, and access to either written or electronic medical records to both confirm information in the sampling framework for the *(more)*

PERIOPERATIVE CARE (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
DISCONTINUATION OF PROPHYLACTIC ANTIBIOTICS (NON-CARDIAC PROCEDURES) *continued*		■ CPT II 4049F: Documentation that order was given to discontinue prophylactic antibiotics within 24 hours of surgical end time, non-cardiac procedure. *Note:* CPT Category II Code **4049F** is provided for documentation that antibiotic discontinuation was **ordered** *OR* that antibiotic discontinuation was **accomplished**. Report CPT Category II Code **4049F** if antibiotics were discontinued within 24 hours. **Manual Abstraction** Manual abstraction of data elements from patient records (hard-copy charts) constitutes medical record data collection. Non-cardiac surgical patients who have an order for discontinuation of prophylactic antibiotics within 24 hours of surgical end time. **Hybrid** Users should follow the requirements of electronic data collection, select a sample of patients, and then supplement the electronic data where needed with medical record abstraction of data elements to fulfill measure reporting requirements. **Electronic Health Record (EHR)** Non-cardiac surgical patients who have an order for discontinuation of prophylactic antibiotics within 24 hours of surgical end time. EHR users may opt to use the codes listed in the electronic data collection methodology to identify non-cardiac surgical patients who have an order for discontinuation of prophylactic antibiotics within 24 hours of surgical end time.	**Le Fort Fractures:** 21422, 21423, 21346-21348, 21432, 21433, 21435, 21436 **Mandibular Fracture:** 21454, 21461, 21462, 21465, 21470 **Spine:** 22325, 22612, 22630, 22800, 22802, 22804, 63030, 63042 **Hip Reconstruction:** 27125, 27130, 27132, 27134, 27137, 27138 **Trauma (Fractures):** 27235, 27236, 27244, 27245, 27758, 27759, 27766, 27792, 27814 **Knee Reconstruction:** 27440-27443, 27445-27447 **Laryngectomy:** 31360, 31365, 31367, 31368, 31370, 31375, 31380, 31382, 31390, 31395 **Vascular:** 33877, 33880, 33881, 33883, 33886, 33891, 34800, 34802-34805, 34825, 34830-34832, 34900, 35081, 35091, 35102, 35131, 35141, 35151, 35601, 35606, 35612, 35616, 35621, 35623, 35626, 35631, 35636-35638, 35642, 35645-35647, 35650, 35651, 35654, 35656, 35661, 35663, 35665, 35666, 35671, 36830 **Glossectomy:** 41130, 41135, 41140, 41145, 41150, 41153, 41155 **Esophagus:** 43045, 43100, 43101, 43107, 43108, 43112, 43113, 43116-43118, 43121-43124, 43130, 43135, 43300, 43305, 43310, 43312, 43313, 43320, 43324-43326, 43330, 43331, 43340, 43341, 43350, 43351, 43352, 43360, 43361, 43400, 43401, 43405, 43410, 43415, 43420, 43425, 43496 **Stomach:** 43500-43502, 43510, 43520, 43600, 43605, 43610, 43611, 43620-43622, 43631-43634,		denominator and for determination of the numerator. As noted in the measure description, those practices that have electronic health records system can use either electronic or medical record approach but include all eligible patients, rather than a sample, in both the denominator and numerator.

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PERIOPERATIVE CARE (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
DISCONTINUATION OF PROPHYLACTIC ANTIBIOTICS (NON-CARDIAC PROCEDURES) *continued*			43640, 43641, 43653, 43800, 43810, 43820, 43825, 43830-43832, 43840, 43842, 43843, 43845-43848, 43850, 43855, 43860, 43865, 43870 **Small Intestine:** 44005, 44010, 44020, 44021, 44050, 44055, 44100, 44120, 44125-44127, 44130, 44132, 44133, 44135, 44136 **Colon and Rectum:** 43880, 44025, 44110, 44111, 44140, 44141, 44143-44147, 44150, 44151, 44155-44158, 44160, 44202, 44204-44208, 44210-44212, 44300, 44310, 44312, 44314, 44316, 44320, 44322, 44340, 44345, 44346, 44615, 44620, 44625, 44626, 44640, 44650, 44660, 44661, 44700, 44950, 51597 **Anus and Rectum:** 45108, 45110-45114, 45116, 45119-45121, 45123, 45126, 45130, 45135, 45136, 45150, 45160, 45170, 45190, 45500, 45505, 45520, 45540, 45541, 45550, 45560, 45562, 45563, 45800, 45805, 45820, 45825 **Biliary Surgery:** 47420, 47425, 47460, 47480, 47560, 47561, 47570, 47600, 47605, 47610, 47612, 47620, 47700, 47701, 47711, 47712, 47715, 47719-47721, 47740, 47741, 47760, 47765, 47780, 47785, 47800, 47802, 47900 **Pancreas:** 48020, 48100, 48120, 48140, 48145, 48146, 48148, 48150, 48152-48155, 48160, 48500, 48510, 48511, 48520, 48540, 48545, 48547, 48548, 48550, 48554, 48556 **Abdomen, Peritoneum, and Omentum:** 49215, 49568 **Renal Transplant:** 50300, 50320, 50340, 50360, 50365, 50370, 50380		

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PERIOPERATIVE CARE (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
DISCONTINUATION OF PROPHYLACTIC ANTIBIOTICS (NON-CARDIAC PROCEDURES) *continued*			**Gynecologic Surgery:** 58150, 58152, 58180, 58200, 58210, 58260, 58262, 58263, 58267, 58270, 58275, 58280, 58285, 58290-58294 **Acoustic Neuroma:** 61591, 61595, 61596, 61598, 61520, 61526, 61530, 61606, 61616, 61618, 61619, 69720, 69955, 69960, 69970 **Cochlear Implants:** 69930 **Neurological Surgery:** 22524, 22554, 22558, 22600, 22612, 22630, 35301, 61154, 61312, 61313, 61315, 61510, 61512, 61518, 61548, 61697, 61700, 61750, 61751, 61867, 62223, 62230, 63015, 63020, 63030, 63042, 63045, 63047, 63056, 63075, 63081, 63267, 63276 **Cardiothoracic (Pacemaker):** 33203, 33206-33208, 33212-33218, 33220, 33222-33226, 33233-33238, 33240, 33241, 33243, 33244, 33249, 33254, 33255 **General Thoracic Surgery:** 19272, 21627, 21632, 21740, 21750, 21805, 21825, 31760, 31766, 31770, 31775, 31786, 31805, 32095, 32100, 32110, 32120, 32124, 32140, 32141, 32150, 32215, 32220, 32225, 32310, 32320, 32402, 32440, 32442, 32445, 32480, 32482, 32484, 32486, 32488, 32491, 32500, 32501, 32800, 32810, 32815, 32900, 32905, 32906, 32940, 33020, 33025, 33030, 33031, 33050, 33300, 33310, 33320, 34051, 35021, 35216, 35246, 35276, 35311, 35481, 35526, 37616, 38381, 38746, 38747, 39000, 39010, 39200, 39220, 39545, 39561, 60521, 60522, 64746. **Manual Abstraction** Manual abstraction of data elements from patient records (hard-copy charts) constitutes medical record data collection.		

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PERIOPERATIVE CARE (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
DISCONTINUATION OF PROPHYLACTIC ANTIBIOTICS (NON-CARDIAC PROCEDURES) *continued*			**Denominator** All non-cardiac surgical patients undergoing procedures with the indications for prophylactic antibiotics *AND* who received a prophylactic antibiotic. Physicians are encouraged to review data on all patients. Sample sizes may be defined by different implementers. **Hybrid** Users should follow the requirements of electronic data collection, select a sample of patients, and then supplement the electronic data where needed with medical record abstraction of data elements to fulfill measure reporting requirements. **Electronic Health Record (EHR)** All non-cardiac surgical patients undergoing procedures with the indications for prophylactic antibiotics *AND* who received a prophylactic antibiotic. EHR users may opt to use the codes listed in the electronic data collection methodology to identify all non-cardiac surgical patients undergoing procedures with the indications for prophylactic antibiotics *AND* who received a prophylactic antibiotic.		

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PERIOPERATIVE CARE (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
DISCONTINUATION OF PROPHYLACTIC ANTIBIOTICS (CARDIAC PROCEDURES)	ACS AMA PCPI* NCQA*	Cardiac surgical patients who have an order for discontinuation of prophylactic antibiotics within 48 hours of surgical end time. **Instructions:** There must be documentation of order (written order, verbal order, or standing order/protocol) specifying that prophylactic antibiotic is to be discontinued within 48 hours of surgical end time *OR* specifying a course of antibiotic administration limited to that 48-hour period (e.g.,"to be given every 8 hours for three doses") *OR* documentation that prophylactic antibiotic *was* discontinued within 48 hours of surgical end time. **Electronic Data Collection** Electronic data collection requires users to identify the eligible population (denominator) and numerator using electronic data (also referred to as "administrative data"). Users report a rate based on all patients in a given practice for whom data are available and who meet the eligible population/denominator criteria. **Numerator** CPT Category II Codes are used to report the numerator of the measure. 1. If reporting CPT Category II Codes, submit the listed ICD-9, CPT E&M Service Codes, and the appropriate CPT Category II Code. Identify patients with documentation of an order for discontinuation of prophylactic antibiotics within 48 hours of surgical end time:	All cardiac surgical patients aged 18 years and older undergoing procedures with the indications for prophylactic antibiotics *AND* who received a prophylactic antibiotic. **Instructions:** For the purpose of this measure of antibiotic discontinuation, patients may be counted as having "received a prophylactic antibiotic" if the antibiotic was received within 4 hours prior to the surgical incision (or start of procedure when no incision is required) or intraoperatively. **Electronic Data Collection** Electronic data collection requires users to identify the eligible population (denominator) and numerator using electronic data (also referred to as "administrative data"). Users report a rate based on all patients in a given practice for whom data are available and who meet the eligible population/denominator criteria. **Denominator** CPT Procedure Codes, CPT Category II Codes, and patient demographics (age, etc.) are used to determine patients that are included in the measure. ■ CPT II 4046F: Documentation that prophylactic antibiotics were given within 4 hours prior to surgical incision or given intraoperatively; CPT II 4042F: Documentation that prophylactic antibiotics were neither given within 4 hours prior to surgical incision nor given intraoperatively *AND* ■ CPT Procedure Codes: **Cardiothoracic Surgery:** 33120, 33130, 33140, 33141, 33202, 33250, 33251, 33256, 33261, 33305, 33315, 33321, 33322, 33332, 33335, 33400, 33401, 33403-33406, 33410, 33411, 33413, 33416, 33422,	**Denominator Exclusion** Documentation of medical reason(s) for not discontinuing prophylactic antibiotics within 48 hours of surgical end time, cardiac procedure. Exclude patients for whom prophylactic antibiotics was not ordered by reason of appropriate denominator exclusion. If using electronic data, exclude patients using the following code: Append a modifier (1P) to the CPT Category II Code to report patients with documented circumstances that meet the denominator exclusion criteria. ■ 1P: Documentation of medical reason(s) for not discontinuing prophylactic antibiotics within 48 hours of surgical end time, cardiac procedure. If using the medical record or hybrid methodologies, exclude patients who have documentation in the medical record of: ■ Documentation of medical reason(s) for not discontinuing prophylactic antibiotics within 48 hours of surgical end time, cardiac procedure. If using the EHR methodology, exclude patients using the codes listed in the electronic data collection methodology or who have documentation in the medical record of the appropriate denominator exclusion.	Data sources used will depend on implementation and approach. The electronic data option requires use of data that is capable of being analyzed by computer including patient demographics, claims, or encounter data for visits and procedures. The medical record option requires manual or electronically coded data for visits or encounters to determine the sample, and access to either written or electronic medical records to both confirm information in the sampling framework for the *(more)*

PERIOPERATIVE CARE (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
DISCONTINUATION OF PROPHYLACTIC ANTIBIOTICS (CARDIAC PROCEDURES) *continued*		■ CPT II 4043F: Documentation that an order was given to discontinue prophylactic antibiotics within 48 hours of surgical end time, cardiac procedure. *Note:* CPT Category II Code **4043F** may be provided for documentation that antibiotic discontinuation was **ordered** *OR* that antibiotic discontinuation was **accomplished**. Report CPT Category II Code **4043F** if antibiotics were discontinued within 48 hours. **Manual Abstraction** Manual abstraction of data elements from patient records (hard-copy charts) constitutes medical record data collection. Cardiac surgical patients who have an order for discontinuation of prophylactic antibiotics within 48 hours of surgical end time. **Hybrid** Users should follow the requirements of electronic data collection, select a sample of patients, and then supplement the electronic data where needed with medical record abstraction of data elements to fulfill measure reporting requirements. **Electronic Health Record (EHR)** Cardiac surgical patients who have an order for discontinuation of prophylactic antibiotics within 48 hours of surgical end time. EHR users may opt to use the codes listed in the electronic data collection methodology to identify cardiac surgical patients who have an order for discontinuation of prophylactic antibiotics within 48 hours of surgical end time.	33425-33427, 33430, 33460, 33463-33465, 33475, 33496, 33510-33519, 33521-33523, 33530, 33533-33536, 33542, 33545, 33548, 33572, 35021, 35211, 35216, 35241, 35246, 35271, 35276, 35311. **Manual Abstraction** Manual abstraction of data elements from patient records (hard-copy charts) constitutes medical record data collection. **Denominator** All cardiac surgical patients aged 18 years and older undergoing procedures with the indications for prophylactic antibiotics *AND* who received a prophylactic antibiotic. Physicians are encouraged to review data on all patients. Sample sizes may be defined by different implementers. **Hybrid** Users should follow the requirements of electronic data collection, select a sample of patients, and then supplement the electronic data where needed with medical record abstraction of data elements to fulfill measure reporting requirements. **Electronic Health Record (EHR)** All cardiac surgical patients aged 18 years and older undergoing procedures with the indications for prophylactic antibiotics *AND* who received a prophylactic antibiotic. EHR users may opt to use the codes listed in the electronic data collection methodology to identify all cardiac surgical patients aged 18 years and older undergoing procedures with the indications for prophylactic antibiotics *AND* who received a prophylactic antibiotic.		denominator and for determination of the numerator. As noted in the measure description, those practices that have electronic health records system can use either electronic or medical record approach but include all eligible patients, rather than a sample, in both the denominator and numerator.

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STROKE

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
DEEP VEIN THROMBOSIS PROPHYLAXIS FOR ISCHEMIC STROKE OR INTRACRANIAL HEMORRHAGE	AAN ACR AMA PCPI* NCQA*	Patients who received deep vein thrombosis (DVT) prophylaxis by the end of hospital day two (2). **Definition:** For purposes of this measure, DVT prophylaxis can include low molecular weight heparin (LMWH), low-dose unfractionated heparin (LDUH), intravenous heparin, low-dose subcutaneous heparin, or intermittent pneumatic compression devices. **Electronic Data Collection** Electronic data collection requires users to identify the eligible population (denominator) and numerator using electronic data (also referred to as "administrative data"). Users report a rate based on all patients in a given practice for whom data are available and who meet the eligible population/denominator criteria. **Numerator** CPT Category II Codes are used to report the numerator of the measure. 1. If reporting CPT Category II Codes submit the listed ICD-9, CPT E&M Service Codes, and the appropriate CPT Category II Code. Identify patients with documentation of DVT prophylaxis by end of hospital day two (2) ■ CPT II 4070F: Deep Vein Thrombosis (DVT) prophylaxis received by end of hospital day two (2). **Manual Abstraction** Manual abstraction of data elements from patient records (hard-copy charts) constitutes medical record data collection.	All patients aged 18 years and older with the diagnosis of ischemic stroke or intracranial hemorrhage. **Electronic Data Collection** Electronic data collection requires users to identify the eligible population (denominator) and numerator using electronic data (also referred to as "administrative data"). Users report a rate based on all patients in a given practice for whom data are available and who meet the eligible population/denominator criteria. **Denominator** ICD9 Diagnosis Codes, CPT E/M Service Codes, and patient demographics (age, gender, etc.) are used to determine patients that are included in the measure. ■ ICD-9-CM Codes: 431, 433.01, 433.11, 433.21, 433.31, 433.81, 433.91, 434.01, 434.11, 434.91, 435.9, 436, 438.2, 438.89, 438.9, 997.02 *AND* CPT E/M Service Codes: 99221,99222, 99223, 99231, 99232, 99233, 99238, 99239, 99251, 99252, 99253, 99254, 99255, 99291. **Manual Abstraction** Manual abstraction of data elements from patient records (hard-copy charts) constitutes medical record data collection. **Denominator** All patients aged 18 years and older with the diagnosis of ischemic stroke or intracranial hemorrhage.	**Denominator Exclusion** Documentation of medical reason(s) for not receiving DVT prophylaxis by end of hospital day two (2), including physician documentation that patient is ambulatory. Documentation of patient reason(s) for not receiving DVT prophylaxis by end of hospital day two (2). Exclude patients for whom DVT prophylaxis was not received by reason of appropriate denominator exclusion. If using electronic data, exclude patients using the following codes: Append a modifier (1P or 2P) to a CPT Category II Code to report patients with documented circumstances that meet the denominator exclusion criteria. ■ 1P: Documentation of medical reason(s) for not receiving DVT prophylaxis by end of hospital day two (2), including physician documentation that patient is ambulatory ■ 2P: Documentation of patient reason(s) for not receiving DVT prophylaxis by end of hospital day two (2). If using the medical record or hybrid methodologies, exclude patients who have documentation in the medical record of: ■ Documentation of medical reason(s) for not receiving DVT prophylaxis by end of hospital day two (2), including physician documentation that patient is ambulatory	Data sources used will depend on implementation and approach. The electronic data option requires use of data that is capable of being analyzed by computer including patient demographics, claims, or encounter data for visits and procedures. The medical record option requires manual or electronically coded data for visits or encounters to determine the sample, and access to either written or electronic medical records to both confirm information in the sampling framework for the *(more)*

STROKE (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
DEEP VEIN THROMBOSIS PROPHYLAXIS FOR ISCHEMIC STROKE OR INTRACRANIAL HEMORRHAGE *continued*		**Numerator** Documentation in medical record that patient received Deep Vein Thrombosis (DVT) prophylaxis by the end of hospital day two (2). **Hybrid** Users should follow the requirements of electronic data collection, select a sample of patients, and then supplement the electronic data where needed with medical record abstraction of data elements to fulfill measure reporting requirements. **Electronic Health Record (EHR)** Electronic Health Record (EHR) users may opt to use this methodology or the electronic data collection methodology described previously. EHR users should collect data on 100% of their denominator population instead of a sample. Patients who received Deep Vein Thrombosis (DVT) prophylaxis by the end of hospital day two (2). EHR users may opt to use the codes listed in the electronic data collection methodology to identify patients with documentation of DVT prophylaxis received.	**Denominator** (patients for inclusion): A sample should be determined using the most accurate data available in the settings in which the measure will be implemented. Sample sizes may be defined by different implementers. **Hybrid** Users should follow the requirements of electronic data collection, select a sample of patients, and then supplement the electronic data where needed with medical record abstraction of data elements to fulfill measure reporting requirements. **Electronic Health Record (EHR)** Electronic Health Record (EHR) users may opt to use this methodology or the electronic data collection methodology described previously. EHR users should collect data on 100% of their denominator population instead of a sample. All patients aged 18 years and older with the diagnosis of ischemic stroke or intracranial hemorrhage. EHR users may opt to use the codes listed in the electronic data collection methodology to identify all patients aged 18 years and older with the diagnosis of ischemic stroke or intracranial hemorrhage.	■ Documentation of patient reason(s) for not receiving DVT prophylaxis by end of hospital day two (2). If using the EHR methodology, exclude patients using the codes listed in the electronic data collection methodology or who have documentation in the medical record of the appropriate denominator exclusions.	denominator and for determination of the numerator. As noted in the measure description, those practices that have electronic health records systems can use either the electronic or medical record approach but include all eligible patients, rather than a sample, in both the denominator and numerator.

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STROKE (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
DISCHARGED ON ANTIPLATELET THERAPY	AAN ACR AMA PCPI* NCQA*	Patients who were prescribed antiplatelet therapy at discharge. **Definition:** Antiplatelet therapy: aspirin, combination of aspirin and extended-release dipyridamole, clopidogrel, ticlopidine. Discharge refers to discharge from the acute care setting, whether patient received care in the emergency department or as an inpatient or from a rehabilitation facility. **Electronic Data Collection** Electronic data collection requires users to identify the eligible population (denominator) and numerator using electronic data (also referred to as "administrative data"). Users report a rate based on all patients in a given practice for whom data are available and who meet the eligible population/denominator criteria. **Numerator** CPT Category II Codes are used to report the numerator of the measure. 1. If reporting CPT Category II Codes submit the listed ICD-9, CPT E&M Service Codes, and the appropriate CPT Category II Code. Identify patients with documentation of antiplatelet therapy prescription at discharge ■ CPT II 4073F: Oral antiplatelet therapy prescribed at discharge. **Manual Abstraction** Manual abstraction of data elements from patient records (hard-copy charts) constitutes medical record data collection.	All patients aged 18 years and older with the diagnosis of ischemic stroke or transient ischemic attack (TIA). **Electronic Data Collection** Electronic data collection requires users to identify the eligible population (denominator) and numerator using electronic data (also referred to as "administrative data"). Users report a rate based on all patients in a given practice for whom data are available and who meet the eligible population/denominator criteria. **Denominator** ICD-9 Diagnosis Codes, CPT E/M Service Codes, and patient demographics (age, gender, etc.) are used to determine patients that are included in the measure. ■ ICD-9-CM Codes: 433.01, 433.11, 433.21, 433.31, 433.81, 433.91, 434.01, 434.11, 434.91, 435.0, 435.1, 435.2, 435.3, 435.8, 435.9, 436, 438.2, 438.89, 438.9, 997.02 *AND* CPT E/M Service Codes: ■ 99218, 99219, 99220, 99221, 99222, 99223, 99231, 99232, 99233, 99291, 99281, 99282, 99283, 99284, 99285, 99238, 99239. **Manual Abstraction** Manual abstraction of data elements from patient records (hard-copy charts) constitutes medical record data collection.	**Denominator Exclusion** Documentation of medical reason(s) for not prescribing antiplatelet therapy at discharge, including identification from the medical record that patient on anticoagulation therapy. Documentation of patient reason(s) for not prescribing antiplatelet therapy at discharge. Exclude patients for whom antiplatelet therapy prescription at discharge was not completed for appropriate denominator exclusion. If using electronic data, exclude patients using the following codes: Append a modifier (1P or 2P) to the CPT Category II Code to report patients with documented circumstances that meet the denominator exclusion criteria. ■ 1P: Documentation of medical reason(s) for not prescribing antiplatelet therapy at discharge, including identification from medical record that patient on anticoagulation therapy ■ 2P: Documentation of patient reason(s) for not prescribing antiplatelet therapy at discharge. If using the medical record or hybrid methodologies, exclude patients who have documentation in the medical record of:	Data sources used will depend on implementation and approach. The electronic data option requires use of data that is capable of being analyzed by computer including patient demographics, claims, or encounter data for visits and procedures. The medical record option requires manual or electronically coded data for visits or encounters to determine the sample, and access to either written or electronic medical records to both confirm information in the sampling framework for the *(more)*

STROKE (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
DISCHARGED ON ANTIPLATELET THERAPY *continued*		**Numerator** Patients who were prescribed antiplatelet therapy at discharge. **Hybrid** Users should follow the requirements of electronic data collection, select a sample of patients, and then supplement the electronic data where needed with medical record abstraction of data elements to fulfill measure reporting requirements. **Electronic Health Record (EHR)** Electronic Health Record (EHR) users may opt to use this methodology or the electronic data collection methodology described previously. EHR users should collect data on 100% of their denominator population instead of a sample. Patients who were prescribed antiplatelet therapy at discharge. EHR users may opt to use the codes listed in the electronic data collection methodology to identify patients with documentation of antiplatelet therapy prescribed.	**Denominator** All patients aged 18 years and older with the diagnosis of ischemic stroke or transient ischemic attack (TIA). **Denominator** (patients for inclusion): A sample should be determined using the most accurate data available in the settings in which the measure will be implemented. Sample sizes may be defined by different implementers. **Hybrid** Users should follow the requirements of electronic data collection, select a sample of patients, and then supplement the electronic data where needed with medical record abstraction of data elements to fulfill measure reporting requirements. **Electronic Health Record (EHR)** Electronic Health Record (EHR) users may opt to use this methodology or the electronic data collection methodology described previously. EHR users should collect data on 100% of their denominator population instead of a sample. All patients aged 18 years and older with the diagnosis of ischemic stroke or transient ischemic attack (TIA). EHR users may opt to use the codes listed in the electronic data collection methodology to identify all patients aged 18 years and older with the diagnosis of ischemic stroke or transient ischemic attack (TIA).	■ Documentation of medical reason(s) for not prescribing antiplatelet therapy at discharge, including identification from medical record that patient on anticoagulation therapy ■ Documentation of patient reason(s) for not prescribing antiplatelet therapy at discharge. If using the EHR methodology, exclude patients using the codes listed in the electronic data collection methodology or who have documentation in the medical record of the appropriate denominator exclusions.	denominator and for determination of the numerator. As noted in the measure description, those practices that have electronic health records systems can use either the electronic or medical record approach but include all eligible patients, rather than a sample, in both the denominator and numerator.

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STROKE (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
ANTICOAGULATION THERAPY PRESCRIBED FOR ATRIAL FIBRILLATION AT DISCHARGE	AAN ACR AMA PCPI* NCQA*	Patients who were prescribed an anticoagulant at discharge. Discharge refers to discharge from the acute care setting, whether patient received care in the emergency department or as an inpatient or a rehabilitation facility. **Electronic Data Collection** Electronic data collection requires users to identify the eligible population (denominator) and numerator using electronic data (also referred to as "administrative data"). Users report a rate based on all patients in a given practice for whom data are available and who meet the eligible population/denominator criteria. **Numerator** CPT Category II Codes are used to report the numerator of the measure. 1. If reporting CPT Category II Codes submit the listed ICD-9, CPT E&M Service Codes, and the appropriate CPT Category II Code. Identify patients with documentation of anticoagulant prescription at discharge ■ CPT II 4075F: Anticoagulant therapy prescribed at discharge. **Manual Abstraction** Manual abstraction of data elements from patient records (hard-copy charts) constitutes medical record data collection.	All patients aged 18 years and older with the diagnosis of ischemic stroke or transient ischemic attack (TIA) with documented permanent, persistent, or paroxysmal atrial fibrillation. **Definitions:** ■ **Persistent Atrial Fibrillation:** recurrent atrial fibrillation, not self-terminating or terminated electrically or pharmacologically. ■ **Paroxysmal Atrial Fibrillation:** recurrent atrial fibrillation, self-terminating ■ **Permanent Atrial Fibrillation:** long-standing atrial fibrillation (>1 year), cardioversion failed or not attempted. **Electronic Data Collection** Electronic data collection requires users to identify the eligible population (denominator) and numerator using electronic data (also referred to as "administrative data"). Users report a rate based on all patients in a given practice for whom data are available and who meet the eligible population/denominator criteria. **Denominator** ICD-9 Diagnosis Codes, CPT E/M Service Codes, CPT Category II Codes, and patient demographics (age, gender, etc.) are used to determine patients that are included in the measure. ■ ICD-9-CM Codes: 433.01, 433.11, 433.21, 433.31, 433.81, 433.91, 434.01, 434.11, 434.91, 435.0, 435.1, 435.2, 435.3, 435.8, 435.9, 436, 438.89, 438.9, 997.02	**Denominator Exclusion** Documentation of medical reason(s) for not prescribing anticoagulant therapy at discharge. Documentation of patient reason(s) for not prescribing anticoagulant therapy at discharge. Exclude patients for whom anticoagulant prescription at discharge not completed for appropriate denominator exclusion. If using electronic data, exclude patients using the following codes: Append a modifier (1P or 2P) to the CPT Category II Code to report patients with documented circumstances that meet the denominator exclusion criteria. ■ 1P: Documentation of medical reason(s) for not prescribing anticoagulant therapy at discharge ■ 2P: Documentation of patient reason(s) for not prescribing anticoagulant therapy at discharge. If using the medical record or hybrid methodologies, exclude patients who have documentation in the medical record of: ■ Documentation of medical reason(s) for not prescribing anticoagulant therapy at discharge ■ Documentation of patient reason(s) for not prescribing anticoagulant therapy at discharge.	Data sources used will depend on implementation and approach. The electronic data option requires use of data that is capable of being analyzed by computer including patient demographics, claims, or encounter data for visits and procedures. The medical record option requires manual or electronically coded data for visits or encounters to determine the sample, and access to either written or electronic medical records to both confirm information in the sampling framework for the denominator and *(more)*

STROKE (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
ANTICOAGULATION THERAPY PRESCRIBED FOR ATRIAL FIBRILLATION AT DISCHARGE *continued*		**Numerator** Documentation in medical record that a patient was prescribed anticoagulant at discharge. **Hybrid** Users should follow the requirements of electronic data collection, select a sample of patients, and then supplement the electronic data where needed with medical record abstraction of data elements to fulfill measure reporting requirements. **Electronic Health Record (EHR)** Electronic Health Record (EHR) users may opt to use this methodology or the electronic data collection methodology described previously. EHR users should collect data on 100% of their denominator population instead of a sample. Patients who were prescribed anticoagulant at discharge. EHR users may opt to use the codes listed in the electronic data collection methodology to identify patients with documentation of anticoagulant prescribed.	*AND* ■ ICD-9 Code: 427.31 *AND* ■ CPT II 1060F: Documentation of permanent *OR* persistent *OR* paroxysmal atrial fibrillation; 1061F: Documentation of absence of permanent *AND* persistent *AND* paroxysmal atrial fibrillation *AND* CPT E/M Service Codes: ■ 99218, 99219, 99220, 99221, 99222, 99223, 99231, 99232, 99233, 99291, 99281, 99282, 99283, 99284, 99285, 99238, 99239, 99251, 99252, 99253, 99254, 99255. **Manual Abstraction** Manual abstraction of data elements from patient records (hard-copy charts) constitutes medical record data collection. **Denominator** All patients aged 18 years and older with the diagnosis of ischemic stroke or transient ischemic attack (TIA) with documented permanent, persistent, or paroxysmal atrial fibrillation. **Denominator** (patients for inclusion): A sample should be determined using the most accurate data available in the settings in which the measure will be implemented. Sample sizes may be defined by different implementers.	If using the EHR methodology, exclude patients using the codes listed in the electronic data collection methodology or who have documentation in the medical record of the appropriate denominator exclusions.	for determination of the numerator. As noted in the measure description, those practices that have electronic health records systems can use either the electronic or medical record approach but include all eligible patients, rather than a sample, in both the denominator and numerator.

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STROKE (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
ANTICOAGULATION THERAPY PRESCRIBED FOR ATRIAL FIBRILLATION AT DISCHARGE *continued*			**Hybrid** Users should follow the requirements of electronic data collection, select a sample of patients, and then supplement the electronic data where needed with medical record abstraction of data elements to fulfill measure reporting requirements. **Electronic Health Record (EHR)** Electronic Health Record (EHR) users may opt to use this methodology or the electronic data collection methodology described previously. EHR users should collect data on 100% of their denominator population instead of a sample. All patients aged 18 years and older with the diagnosis of ischemic stroke or transient ischemic attack (TIA) with documented permanent, persistent, or paroxysmal atrial fibrillation. EHR users may opt to use the codes listed in the electronic data collection methodology to identify all patients aged 18 years and older with the diagnosis of ischemic stroke or transient ischemic attack (TIA) with documented permanent, persistent, or paroxysmal atrial fibrillation.		

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STROKE (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
TISSUE PLASMINOGEN ACTIVATOR (t-PA) CONSIDERED	AAN ACR AMA PCPI* NCQA*	Patients who were considered for t-PA administration (given t-PA or documented reasons for patient not being a candidate for therapy). **Definition:** For purposes of this measure, patients "considered for t-PA administration" includes patients to whom t-PA was given or patients for whom reasons for not being a candidate for t-PA therapy are documented. **Electronic Data Collection** Electronic data collection requires users to identify the eligible population (denominator) and numerator using electronic data (also referred to as "administrative data"). Users report a rate based on all patients in a given practice for whom data are available and who meet the eligible population/denominator criteria. **Numerator** CPT Category II Codes are used to report the numerator of the measure. 1. If reporting CPT Category II Codes, submit the listed ICD-9, CPT E&M Service Codes, and the appropriate CPT Category II Code. Identify patients with documentation of t-PA administration or consideration documented or reasons for not being a candidate for t-PA therapy. ■ CPT II 4077F: Documentation that t-PA administration was considered. **Manual Abstraction** Manual abstraction of data elements from patient records (hard-copy charts) constitutes medical record data collection.	All patients aged 18 years and older with the diagnosis of ischemic stroke whose time from symptom onset to arrival is less than 3 hours. **Electronic Data Collection** Electronic data collection requires users to identify the eligible population (denominator) and numerator using electronic data (also referred to as "administrative data"). Users report a rate based on all patients in a given practice for whom data are available and who meet the eligible population/denominator criteria. **Denominator** ICD-9 Diagnosis Codes, CPT E/M Service Codes, CPT Category II Codes, and patient demographics (age, gender, etc.) are used to determine patients that are included in the measure. ■ ICD-9-CM Codes: 433.01, 433.11, 433.21, 433.31, 433.81, 433.91, 434.01, 434.11, 434.91. 997.02 ■ CPT II 1065F: Ischemic stroke symptom onset of less than 3 hours prior to arrival; 1066F: Ischemic stroke symptom onset of greater than or equal to 3 hours prior to arrival *AND* CPT E/M Service Codes: ■ 99218, 99219, 99220 (initial observation care), *OR* 99281, 99282, 99283, 99284, 99285 (emergency department), *OR* 99221, 99222, 99223 (initial inpatient), 99251, 99252, 99253, 99254, 99255, 99291. **Manual Abstraction** Manual abstraction of data elements from patient records (hard-copy charts) constitutes medical record data collection.	None.	Data sources used will depend on implementation and approach. The electronic data option requires use of data that is capable of being analyzed by computer including patient demographics, claims, or encounter data for visits and procedures. The medical record option requires manual or electronically coded data for visits or encounters to determine the sample, and access to either written or electronic medical records to both confirm information in the sampling framework for the denominator and *(more)*

STROKE (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
TISSUE PLASMINOGEN ACTIVATOR (T-PA) CONSIDERED *continued*		**Numerator** Documentation in medical record that a patient was considered for t-PA administration (given t-PA or documented reasons for patient not being a candidate for therapy). **Hybrid** Users should follow the requirements of electronic data collection, select a sample of patients, and then supplement the electronic data where needed with medical record abstraction of data elements to fulfill measure reporting requirements. **Electronic Health Record (EHR)** Electronic Health Record (EHR) users may opt to use this methodology or the electronic data collection methodology described previously. EHR users should collect data on 100% of their denominator population instead of a sample. Patients who were considered for t-PA administration (given t-PA or documented reasons for patient not being a candidate for therapy). EHR users may opt to use the codes listed in the electronic data collection methodology to identify patients with documentation of t-PA administration or consideration documented or reasons for not being a candidate for t-PA therapy.	**Denominator** All patients aged 18 years and older with the diagnosis of ischemic stroke whose time from symptom onset to arrival is less than 3 hours. **Denominator** (patients for inclusion): A sample should be determined using the most accurate data available in the settings in which the measure will be implemented. Sample sizes may be defined by different implementers. **Hybrid** Users should follow the requirements of electronic data collection, select a sample of patients, and then supplement the electronic data where needed with medical record abstraction of data elements to fulfill measure reporting requirements. **Electronic Health Record (EHR)** Electronic Health Record (EHR) users may opt to use this methodology or the electronic data collection methodology described previously. EHR users should collect data on 100% of their denominator population instead of a sample. All patients aged 18 years and older with the diagnosis of ischemic stroke whose time from symptom onset to arrival is less than 3 hours. EHR users may opt to use the codes listed in the electronic data collection methodology to identify all patients aged 18 years and older with the diagnosis of ischemic stroke whose time from symptom onset to arrival is less than 3 hours.		for determination of the numerator. As noted in the measure description, those practices that have electronic health records systems can use either the electronic or medical record approach but include all eligible patients, rather than a sample, in both the denominator and numerator.

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STROKE (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
SCREENING FOR DYSPHAGIA	AAN ACR AMA PCPI* NCQA*	Patients who underwent a dysphagia screening process before taking any foods, fluids, or medication by mouth. **Definition:** Dysphagia Screening: use of a tested and validated dysphagia screening tool (e.g. Burke dysphagia screening test, 3 oz. water swallow test, Mann assessment of swallowing ability [MASA], standardized bedside swallowing assessment [SSA]) *OR* a dysphagia screening tool approved by the hospital's speech/language pathology (SLP) services. **Numerator instruction:** For purposes of this measure, patients "who receive any food, fluids, or medication by mouth" may be identified by the absence of an NPO (nothing by mouth) order. **Electronic Data Collection** Electronic data collection requires users to identify the eligible population (denominator) and numerator using electronic data (also referred to as "administrative data"). Users report a rate based on all patients in a given practice for whom data are available and who meet the eligible population/denominator criteria. **Numerator** CPT Category II Codes are used to report the numerator of the measure. 1. If reporting CPT Category II Codes, submit the listed ICD-9, CPT E&M Service Codes, and the appropriate CPT Category II Code. Identify patients with documentation of dysphagia screening (dysphagia screening conducted):	All patients aged 18 years and older with the diagnosis of ischemic stroke or intracranial hemorrhage who receive any food, fluids, or medication by mouth. **Electronic Data Collection** Electronic data collection requires users to identify the eligible population (denominator) and numerator using electronic data (also referred to as "administrative data"). Users report a rate based on all patients in a given practice for whom data are available and who meet the eligible population/denominator criteria. **Denominator** ICD-9 Diagnosis Codes, CPT E/M Service Codes, CPT Category II Codes, and patient demographics (age, gender, etc.) are used to determine patients that are included in the measure. ■ ICD-9-CM Codes: 431, 433.01, 433.11, 433.21, 433.31, 433.81, 433.91, 434.01, 434.11, 434.91, 435.9, 436, 438.2, 438.89, 438.9, 997.02 *AND* ■ CPT II 6015F: Patient receiving or eligible to receive foods, fluids, or medication by mouth; 6020F: NPO (nothing by mouth) ordered *AND* CPT E/M Service Codes: ■ 99218, 99219, 99220, 99281-99285, 99221, 99222, 99223, 99231, 99232, 99233, 99251, 99252, 99253, 99254, 99255. **Manual Abstraction** Manual abstraction of data elements from patient records (hard-copy charts) constitutes medical record data collection.	**Denominator Exclusion** Documentation of medical reason(s) for not conducting dysphagia screening prior to taking any foods, fluids, or medication by mouth. Exclude patients for whom a dysphagia screening was not conducted by reasons of appropriate denominator exclusion. If using electronic data, exclude patients using the following codes: Append a modifier (1P) to a CPT Category II Code to report patients with documented circumstances that meet the denominator exclusion criteria. ■ 1P: Documentation of medical reason(s) for not conducting dysphagia screening prior to taking any foods, fluids or medication by mouth. If using the medical record or hybrid methodologies, exclude patients who have documentation in the medical record of: ■ Documentation of medical reason(s) for not conducting dysphagia screening prior to taking any foods, fluids or medication by mouth. If using the EHR methodology, exclude patients using the codes listed in the electronic data collection methodology or who have documentation in the medical record of the appropriate denominator exclusions.	Data sources used will depend on implementation and approach. The electronic data option requires use of data that is capable of being analyzed by computer including patient demographics, claims, or encounter data for visits and procedures. The medical record option requires manual or electronically coded data for visits or encounters to determine the sample, and access to either written or electronic medical records to both confirm information in the sampling framework for the denominator and *(more)*

STROKE (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
SCREENING FOR DYSPHAGIA *continued*		■ CPT II 6010F: Dysphagia screening conducted prior to order for or taking of any foods, fluids or medication by mouth. **Manual Abstraction** Manual abstraction of data elements from patient records (hard-copy charts) constitutes medical record data collection. **Numerator** Documentation in medical record that a patient underwent a dysphagia screening process before taking any foods, fluids, or medication by mouth. **Hybrid** Users should follow the requirements of electronic data collection, select a sample of patients, and then supplement the electronic data where needed with medical record abstraction of data elements to fulfill measure reporting requirements. **Electronic Health Record (EHR)** Electronic Health Record (EHR) users may opt to use this methodology or the electronic data collection methodology described previously. EHR users should collect data on 100% of their denominator population instead of a sample. Patients who underwent a dysphagia screening process before taking any foods, fluids, or medication by mouth. EHR users may opt to use the codes listed in the electronic data collection methodology to identify patients with documentation of dysphagia screening.	**Denominator** All patients aged 18 years and older with the diagnosis of ischemic stroke or intracranial hemorrhage who receive any food, fluids, or medication by mouth. **Denominator** (patients for inclusion): A sample should be determined using the most accurate data available in the settings in which the measure will be implemented. Sample sizes may be defined by different implementers. **Hybrid** Users should follow the requirements of electronic data collection, select a sample of patients, and then supplement the electronic data where needed with medical record abstraction of data elements to fulfill measure reporting requirements. **Electronic Health Record (EHR)** Electronic Health Record (EHR) users may opt to use this methodology or the electronic data collection methodology described previously. EHR users should collect data on 100% of their denominator population instead of a sample. All patients aged 18 years and older with the diagnosis of ischemic stroke or intracranial hemorrhage who receive any food, fluids or medication by mouth. EHR users may opt to use the codes listed in the electronic data collection methodology to identify all patients aged 18 years and older with the diagnosis of ischemic stroke or intracranial hemorrhage who receive any food, fluids, or medication by mouth.		for determination of the numerator. As noted in the measure description, those practices that have electronic health records systems can use either the electronic or medical record approach but include all eligible patients, rather than a sample, in both the denominator and numerator.

(more)

STROKE (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
CONSIDERATION OF REHABILITATION SERVICES	AAN ACR AMA PCPI* NCQA*	Patients for whom consideration of rehabilitation services (ordered rehabilitation or documented that rehabilitation was not indicated) is documented. **Definition:** For purposes of this measure, "consideration of rehabilitation services" includes an order for rehabilitation services or documentation that rehabilitation was not indicated. **Electronic Numerator** CPT Category II Codes are used to report the numerator of the measure. 1. If reporting CPT Category II Codes, submit the listed ICD-9, CPT E&M Service Codes, and the appropriate CPT Category II Code. Identify patients with documentation of consideration of rehabilitation services, either ordered rehabilitation or rehabilitation not indicated. ■ CPT II 4079F: Documentation that rehabilitation services were considered. **Manual Abstraction** Manual abstraction of data elements from patient records (hard-copy charts) constitutes medical record data collection. **Numerator** Documentation in medical record that patient received consideration of rehabilitation services (ordered rehabilitation or documented that rehabilitation was not indicated).	All patients aged 18 years and older with the diagnosis of ischemic stroke or intracranial hemorrhage. **Electronic Denominator** ICD-9 Diagnosis Codes, CPT E/M Service Codes, and patient demographics (age, gender, etc.) are used to determine patients that are included in the measure. ■ ICD-9-CM Codes: 431, 433.01, 433.11, 433.21, 433.31, 433.81, 433.91, 434.01, 434.11, 434.91, 435.9, 997.02 *AND* CPT E/M Service Codes: ■ 99217, 99220, 99221, 99222, 99223, 99231, 99232, 99233, 99234, 99235, 99236, 99238, 99239, 99251, 99252, 99253, 99254, 99255. **Manual Abstraction** Manual abstraction of data elements from patient records (hard-copy charts) constitutes medical record data collection. **Denominator** All patients aged 18 years and older with the diagnosis of ischemic stroke or intracranial hemorrhage. **Denominator** (patients for inclusion): A sample should be determined using the most accurate data available in the settings in which the measure will be implemented. Sample sizes may be defined by different implementers.	None.	Data sources used will depend on implementation and approach. The electronic data option requires use of data that is capable of being analyzed by computer including patient demographics, claims, or encounter data for visits and procedures. The medical record option requires manual or electronically coded data for visits or encounters to determine the sample, and access to either written or electronic medical records to both confirm information in the sampling framework for the denominator and *(more)*

STROKE (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
CONSIDERATION OF REHABILITATION SERVICES *continued*		**Hybrid** Users should follow the requirements of electronic data collection, select a sample of patients, and then supplement the electronic data where needed with medical record abstraction of data elements to fulfill measure reporting requirements. **Electronic Health Record (EHR)** Electronic Health Record (EHR) users may opt to use this methodology or the electronic data collection methodology described previously. EHR users should collect data on 100% of their denominator population instead of a sample. Patients for whom consideration of rehabilitation services (ordered rehabilitation or documented that rehabilitation was not indicated) is documented. EHR users may opt to use the codes listed in the electronic data collection methodology to identify patients with documentation of consideration of rehabilitation services or rehabilitation not indicated.	**Hybrid** Users should follow the requirements of electronic data collection, select a sample of patients, and then supplement the electronic data where needed with medical record abstraction of data elements to fulfill measure reporting requirements. **Electronic Health Record (EHR)** Electronic Health Record (EHR) users may opt to use this methodology or the electronic data collection methodology described previously. EHR users should collect data on 100% of their denominator population instead of a sample. All patients aged 18 years and older with the diagnosis of ischemic stroke or intracranial hemorrhage. EHR users may opt to use the codes listed in the electronic data collection methodology to identify all patients aged 18 years and older with the diagnosis of ischemic stroke or intracranial hemorrhage.		for determination of the numerator. As noted in the measure description, those practices that have electronic health records systems can use either the electronic or medical record approach but include all eligible patients, rather than a sample, in both the denominator and numerator.

(more)

STROKE (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
CAROTID IMAGING REPORTS	AAN ACR AMA PCPI* NCQA*	Final carotid imaging study reports that include direct or indirect reference to measurements of distal internal carotid diameter as the denominator for stenosis measurement. **Definition:** "Direct or indirect reference to measurements of distal internal carotid diameter as the denominator for stenosis measurement" includes direct angiographic stenosis calculations based on the distal lumen as the denominator for stenosis measurement *OR* an equivalent validated method referenced to the above method (e.g., for duplex ultrasound studies, velocity parameters that correlate the **residual** internal carotid lumen with methods based on the **distal** internal carotid lumen). **Electronic Data Collection** Electronic data collection requires users to identify the eligible population (denominator) and numerator using electronic data (also referred to as "administrative data"). Users report a rate based on all patients in a given practice for whom data are available and who meet the eligible population/denominator criteria. **Numerator** CPT Category II Codes are used to report the numerator of the measure. 1. If reporting CPT Category II codes, submit the listed ICD-9, CPT E&M Service Codes, and the appropriate CPT Category II Code.	All final reports for carotid imaging studies (neck MR angiography [MRA], neck CT angiography [CTA], neck duplex ultrasound, carotid angiogram) performed for patients aged 18 years and older with a diagnosis of ischemic stroke or TIA. **Electronic Data Collection** Electronic data collection requires users to identify the eligible population (denominator) and numerator using electronic data (also referred to as "administrative data"). Users report a rate based on all patients in a given practice for whom data are available and who meet the eligible population/denominator criteria. **Denominator** ICD-9 Diagnosis Codes, CPT Procedure Codes, and patient demographics (age, gender, etc.) are used to determine patients that are included in the measure. ■ ICD-9-CM Codes: 433.01, 433.11, 433.21, 433.31, 433.81, 433.91, 434.01, 434.11, 434.91, 435.0, 435.1, 435.2, 435.3, 435.8, 435.9, 997.02 *AND* ■ CPT Codes with or without Modifier 26 to specify physician component: 70498, 70547, 70548, 70549, 75660, 75662, 75665, 75671, 75676, 75680, 93880, 93882. **Manual Abstraction** Manual abstraction of data elements from patient records (hard-copy charts) constitutes medical record data collection.	**Denominator Exclusion** Documentation of medical reason(s) for not including direct or indirect reference to measurements of distal internal carotid diameter. Exclude patients for whom measurements of distal internal carotid diameter not referenced directly or indirectly by reason of appropriate denominator exclusion. If using electronic data, exclude patients using the following codes: Append a modifier (1P) to the CPT Category II code to report patients with documented circumstances that meet the denominator exclusion criteria. ■ 1P: Documentation of medical reason(s) for not including direct or indirect reference to measurements of distal internal carotid diameter. If using the medical record or hybrid methodologies, exclude patients who have documentation in the medical record of: ■ 1P: Documentation of medical reason(s) for not including direct or indirect reference to measurements of distal internal carotid diameter. If using the EHR methodology, exclude patients using the codes listed in the electronic data collection methodology or who have documentation in the medical record of the appropriate denominator exclusions.	Data sources used will depend on implementation and approach. The electronic data option requires use of data that is capable of being analyzed by computer including patient demographics, claims, or encounter data for visits and procedures. The medical record option requires manual or electronically coded data for visits or encounters to determine the sample, and access to either written or electronic medical records to both confirm information in the sampling framework for the denominator and *(more)*

STROKE (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
CAROTID IMAGING REPORTS *continued*		Identify final carotid imaging study reports that include direct or indirect reference to measurements of distal internal carotid diameter as the denominator for stenosis measurement. ■ CPT II 3100F: Carotid image study report includes direct or indirect reference to measurements of distal internal carotid diameter as the denominator for stenosis measurement. **Manual Abstraction** Manual abstraction of data elements from patient records (hard-copy charts) constitutes medical record data collection. **Numerator** Documentation in medical record of final carotid imaging study reports that include direct or indirect reference to measurements of distal internal carotid diameter as the denominator for stenosis measurement. **Hybrid** Users should follow the requirements of electronic data collection, select a sample of patients, and then supplement the electronic data where needed with medical record abstraction of data elements to fulfill measure reporting requirements. **Electronic Health Record (EHR)** Electronic Health Record (EHR) users may opt to use this methodology or the electronic data collection methodology described previously. EHR users should collect data on 100% of their denominator population instead of a sample.	**Denominator** All final reports for carotid imaging studies (neck MR angiography [MRA], neck CT angiography [CTA], neck duplex ultrasound, carotid angiogram) performed for patients aged 18 years and older with a diagnosis of ischemic stroke or TIA. **Denominator** (patients for inclusion): A sample should be determined using the most accurate data available in the settings in which the measure will be implemented. Sample sizes may be defined by different implementers. **Hybrid** Users should follow the requirements of electronic data collection, select a sample of patients, and then supplement the electronic data where needed with medical record abstraction of data elements to fulfill measure reporting requirements. **Electronic Health Record (EHR)** Electronic Health Record (EHR) users may opt to use this methodology or the electronic data collection methodology described previously. EHR users should collect data on 100% of their denominator population instead of a sample. All final reports for carotid imaging studies (neck MR angiography [MRA], neck CT angiography [CTA], neck duplex ultrasound, carotid angiogram) performed for patients aged 18 years and older with a diagnosis of ischemic stroke or TIA.		for determination of the numerator. As noted in the measure description, those practices that have electronic health records systems can use either the electronic or medical record approach but include all eligible patients, rather than a sample, in both the denominator and numerator.

(more)

STROKE (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
CAROTID IMAGING REPORTS *continued*		Final carotid imaging study reports that include direct or indirect reference to measurements of distal internal carotid diameter as the denominator for stenosis measurement. EHR users may opt to use the codes listed in the electronic data collection methodology to identify patients with documentation of final carotid imaging study reports that include direct or indirect reference to measurements of distal internal carotid diameter as the denominator for stenosis measurement.	EHR users may opt to use the codes listed in the electronic data collection methodology to identify all final reports for carotid imaging studies (neck MR angiography [MRA], neck CT angiography [CTA], neck duplex ultrasound, carotid angiogram) performed for patients aged 18 years and older with a diagnosis of ischemic stroke or TIA.		
COMPUTED TOMOGRAPHY OR MAGNETIC RESONANCE IMAGING REPORTS	AAN ACR AMA PCPI* NCQA*	Final reports of the initial computed tomography (CT) or magnetic resonance imaging (MRI) that include documentation of the presence or absence of each of the following: hemorrhage and mass lesion and acute infarction. Equivalent terms or synonyms for hemorrhage, mass lesion, or infarction, if documented in the CT or MRI report, would meet the measure. **Electronic Data Collection** Electronic data collection requires users to identify the eligible population (denominator) and numerator using electronic data (also referred to as "administrative data"). Users report a rate based on all patients in a given practice for whom data are available and who meet the eligible population/denominator criteria. **Numerator** CPT Category II are used to report the numerator of the measure.	All final reports for CT or MRI studies of the brain performed within 24 hours of arrival to the hospital for patients aged 18 years and older with the admitting diagnosis of ischemic stroke or TIA or intracranial hemorrhage. **Electronic Data Collection** Electronic data collection requires users to identify the eligible population (denominator) and numerator using electronic data (also referred to as "administrative data"). Users report a rate based on all patients in a given practice for whom data are available and who meet the eligible population/denominator criteria. **Denominator** ICD-9 Diagnosis Codes, CPT Procedure Codes, CPT Category II Codes, and patient demographics (age, gender, etc.) are used to determine patients that are included in the measure.	None.	Data sources used will depend on implementation and approach. The electronic data option requires use of data that is capable of being analyzed by computer including patient demographics, claims, or encounter data for visits and procedures. The medical record option requires manual or electronically coded

(more)

STROKE (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
COMPUTED TOMOGRAPHY OR MAGNETIC RESONANCE IMAGING REPORTS *continued*		1. If reporting CPT Category II codes, submit the listed ICD-9, CPT E&M Service Codes, and the appropriate CPT Category II Codes. Identify final reports of the initial CT or MRI that include documentation of the presence or absence of each of the following: hemorrhage and mass lesion and acute infarction. ■ CPT II 3110F: Presence or absence of hemorrhage and mass lesion and acute infarction documented in final CT or MRI report. **Manual Abstraction** Manual abstraction of data elements from patient records (hard-copy charts) constitutes medical record data collection. **Numerator** Documentation in medical record of final reports of the initial CT or MRI that include documentation of the presence or absence of each of the following: hemorrhage and mass lesion and acute infarction. **Hybrid** Users should follow the requirements of electronic data collection, select a sample of patients, and then supplement the electronic data where needed with medical record abstraction of data elements to fulfill measure reporting requirements. **Electronic Health Record (EHR)** Electronic Health Record (EHR) users may opt to use this methodology or the electronic data collection methodology described previously. EHR users should collect data on 100% of their denominator population instead of a sample.	■ ICD-9-CM Codes: 431, 433.01, 433.11, 433.21, 433.31, 433.81, 433.91, 434.01, 434.11, 434.91, 435.0, 435.1, 435.2, 435.3, 435.8, 435.9, 997.02 *AND* ■ CPT II 3111F: CT or MRI of the brain performed within 24 hours of arrival to the hospital; 3112F: CT *OR* MRI of the brain performed greater than 24 hours of arrival to the hospital *AND* ■ CPT Codes with or without Modifier 26 to specify physician component: 70450, 70460, 70470, 70551, 70552, 70553, 0042T. **Manual Abstraction** **Denominator** All final reports for CT or MRI studies of the brain performed within 24 hours of arrival to the hospital for patients aged 18 years and older with the admitting diagnosis of ischemic stroke or TIA or intracranial hemorrhage. **Denominator** (patients for inclusion): A sample should be determined using the most accurate data available in the settings in which the measure will be implemented. Sample sizes may be defined by different implementers. **Hybrid** Users should follow the requirements of electronic data collection, select a sample of patients, and then supplement the electronic data where needed with medical record abstraction of data elements to fulfill measure reporting requirements.		data for visits or encounters to determine the sample, and access to either written or electronic medical records to both confirm information in the sampling framework for the denominator and for determination of the numerator. As noted in the measure description, those practices that have electronic health records systems can use either the electronic or medical record approach but include all eligible patients, rather than a sample, in both the denominator and numerator. *(more)*

STROKE (continued)

Measure	IP Owner[1]	Numerator	Denominator	Exclusions	Data Source
COMPUTED TOMOGRAPHY OR MAGNETIC RESONANCE IMAGING REPORTS *continued*		Final reports of the initial CT or MRI that include documentation of the presence or absence of each of the following: hemorrhage and mass lesion and acute infarction. EHR users may opt to use the codes listed in the electronic data collection methodology to identify final reports of the initial CT or MRI that include documentation of the presence or absence of each of the following: hemorrhage and mass lesion and acute infarction.	**Electronic Health Record (EHR)** Electronic Health Record (EHR) users may opt to use this methodology or the electronic data collection methodology described previously. EHR users should collect data on 100% of their denominator population instead of a sample. **Denominator** All final reports for CT or MRI studies of the brain performed within 24 hours of arrival to the hospital for patients aged 18 years and older with the admitting diagnosis of ischemic stroke or TIA or intracranial hemorrhage. EHR users may opt to use the codes listed in the electronic data collection methodology to identify all final reports for CT or MRI studies of the brain performed within 24 hours of arrival to the hospital for patients aged 18 years and older with the admitting diagnosis of ischemic stroke or TIA or intracranial hemorrhage.		

Appendix B
Members and Board of Directors

Members*

CONSUMER COUNCIL

AARP
AFL-CIO
Alliance for Retired Americans
American Federation of Teachers Healthcare
American Hospice Foundation
Childbirth Connection
Consumer Coalition for Quality Health Care
Consumers Advancing Patient Safety
Consumers' Checkbook
Coordinating Center
Health Care for All
International Association of Machinists
March of Dimes
National Breast Cancer Coalition
National Citizen's Coalition for Nursing Home Reform
National Coalition for Cancer Survivorship
National Consumers League
National Partnership for Women & Families
Service Employees Industrial Union

HEALTH PROFESSIONAL, PROVIDER, AND HEALTH PLAN COUNCIL

Academy of Managed Care Pharmacy
Administrators for the Professions
Adventist HealthCare
Advocate Health Partners
Aetna
Alegent Health
American Academy of Family Physicians
American Academy of Hospice and Palliative Medicine
American Academy of Ophthalmology
American Academy of Orthopaedic Surgeons
American Academy of Pediatrics
American Association of Ambulatory Surgery Centers
American Association of Nurse Anesthetists
American Chiropractic Association
American College of Cardiology
American College of Chest Physicians
American College of Gastroenterology
American College of Obstetricians and Gynecologists
American College of Physicians
American College of Radiology
American College of Rheumatology
American College of Surgeons
American Geriatrics Society
American Heart Association
American Hospital Association
American Medical Association
American Medical Group Association
American Nurses Association
American Optometric Association
American Organization of Nurse Executives
American Osteopathic Association
American Society for Gastrointestinal Endoscopy
American Society for Therapeutic Radiology and Oncology
American Society of Anesthesiologists
American Society of Breast Surgeons
American Society of Clinical Oncology
American Society of Colon and Rectal Surgeons
American Society of Health-System Pharmacists

*When voting under the NQF Consensus Development Process occurred for this report.

American Society of Hematology
American Society of Interventional Pain Physicians
American Society of Plastic Surgeons
American Thoracic Society
America's Health Insurance Plans
AmSurg Corporation
Aramark Healthcare
Ascension Health
Association for Behavioral Health and Wellness
Atlantic Health
Aurora Health Care
Baptist Memorial Health Care Corporation
Bayhealth Medical Center
Baylor Health Care System
BJC HealthCare
Blue Cross Blue Shield Association
Boca Raton Community Hospital
Bon Secours Health System
Bronson Healthcare Group
Calgary Health Region - Quality Improvement and Health Information
Carolinas Medical Center
Catholic Health Association of the United States
Catholic Health Initiatives
Catholic Healthcare Partners
Cedars-Sinai Medical Center
Central Baptist Hospital
Chesapeake Bay ENT
Child Health Corporation of America
Children's Hospitals and Clinics of Minnesota
CHRISTUS Health
CIGNA Healthcare
Clark Consulting
College of American Pathologists
Community Health Accreditation Program
Community Health Plan of Washington
Condell Health Network
Connecticut Hospital Association
Council of Medical Specialty Societies
DaVita
Detroit Medical Center
Duke University Health System
Emergency Department Practice Management Association
Evanston Northwestern Healthcare
Exeter Health Resources
Federation of American Hospitals
Florida Hospital Medical Center
Gentiva Health Services
Good Samaritan Hospital
Greater New York Hospital Association
Hackensack University Medical Center
HCA, Inc.
Health Management Associates
Healthcare Leadership Council
HealthHelp
HealthPartners
HealthSouth Corporation
Henry Ford Health System
Highmark, Inc.
HIP Health Plans
Hoag Hospital
Horizon Blue Cross Blue Shield of New Jersey
Hospice and Palliative Nurses Association
Hospital for Special Surgery
HRDIA
Hudson Health Plan
Illinois Hospital Association
Infusion Nurses Society
INTEGRIS Health
Intermountain Healthcare
John Muir Health
Johns Hopkins Health System
Kaiser Permanente
KU Med at the University of Kansas Medical Center
Lake Forest Hospital
Los Angeles County - Department of Health Services
Mayo Foundation
MedQuest Associates
MedStar Health
Memorial Health University Medical Center
Memorial Hermann Healthcare System
Memorial Sloan Kettering Cancer Center
Mercy Medical Center
Meridian Health System
Milliman Care Guidelines
Munson Medical Center
National Association for Home Care and Hospice
National Association of Chain Drug Stores
National Association of Children's Hospitals and Related Institutions
National Association of Public Hospitals and Health Systems
National Consensus Project for Quality Palliative Care
National Consortium of Breast Centers
National Hospice and Palliative Care Organization
National Rural Health Association
Nebraska Heart Hospital
Nemours Foundation
New York-Presbyterian Hospital and Health System
North Carolina Baptist Hospital
North Mississippi Medical Center
North Shore - Long Island Jewish Health System
North Texas Specialty Physicians
Northwestern Memorial Healthcare
Norton Healthcare, Inc.
Oakwood Healthcare System
Palmetto Health Alliance
Park Nicollet Health Services
Partners HealthCare System, Inc.
Pharmacy Quality Alliance
Planetree
Premier, Inc.

Presbyterian Healthcare Services
Providence Health System
Robert Wood Johnson Health Network
Robert Wood Johnson Hospital - Hamilton
Robert Wood Johnson University Hospital - New Brunswick
Rockford Health System
Sentara Norfolk General Hospital
Sisters of Mercy Health System
Society of Critical Care Medicine
Society of Thoracic Surgeons
Sodexho Healthcare Services
St. Mary's Hospital
Stamford Health System
State Associations of Addiction Services
State University of New York - College of Optometry
Sutter Health
Tampa General Hospital
Tenet Healthcare
Texas Health Resources
The Methodist Hospital
Thomas Jefferson University Hospital
Triad Hospitals
Trinity Health
UAB Health Systems
UnitedHealth Group
University Health Systems of Eastern Carolina
University Hospitals of Cleveland
University of California-Davis Medical Group
University of Michigan Hospitals and Health Centers
University of Pennsylvania Health System
University of Texas-MD Anderson Cancer Center
US Department of Defense - Health Affairs
UW Health
Vail Valley Medical Center
Vanguard Health Management
Veterans Health Administration
VHA, Inc.
Virtua Health
Washington State Hospital Association
Waukesha Elmbrook Health Care
WellPoint
WellStar Health System
Yale New Haven Health System

PURCHASER COUNCIL

BoozAllenHamilton
Buyers Health Care Action Group
Centers for Medicare & Medicaid Services
District of Columbia Department of Health
Employer Health Care Alliance Cooperative
Employers' Coalition on Health
Florida Health Care Coalition
General Motors
Greater Detroit Area Health Council
HealthCare 21
KPMG LLP
Leapfrog Group
Lehigh Valley Business Conference on Health
Maine Health Management Coalition
National Association of Health Data Organizations
National Association of State Medicaid Directors
National Business Coalition on Health
National Business Group on Health
New Jersey Health Care Quality Institute
Pacific Business Group on Health
Schaller Anderson
St. Louis Business Health Coalition
Washington State Health Care Authority

RESEARCH AND QUALITY IMPROVEMENT COUNCIL

Abbott Laboratories
ABIM Foundation
Abiomed
ACC/AHA Task Force on Performance Measures
Accreditation Association for Ambulatory Health Care - Institute for Quality Improvement
ACS/MIDAS+
Advanced Medical Technology Association
AGA Institute
Agency for Healthcare Research and Quality
American Academy of Nursing
American Association of Colleges of Nursing
American Board of Medical Specialties
American College of Emergency Physicians
American College of Medical Quality
American Data Network
American Health Quality Association
American Medical Association - Physician Consortium for Performance Improvement
American Medical Informatics Association
American Pharmacists Association Foundation
American Psychiatric Association for Research and Education
American Society for Quality - Health Care Division
AMGEN Inc.
Association for the Advancement of Wound Care
Association for Professionals in Infection Control and Epidemiology
Association of American Medical Colleges
AstraZeneca
AYR Consulting Group
Battelle Memorial Institute
Baxter
Bristol-Myers Squibb Company
C.R. Bard
California HealthCare Foundation
Cancer Care Ontario

Cardinal Health, Inc.
CareScience
Center to Advance Palliative Care
Centers for Disease Control and Prevention
Cerner Corporation
City of New York Department of Health and Hygiene
Cleveland Clinic Foundation
CNA Corporation
Cook Group Incorporated
Coral Initiative, LLC
CRG Medical
Delmarva Foundation
Dialog Medical
Disease Management Association of America
ECRI Institute
eHealth Initiative
Eli Lilly and Company
excelleRx
Florida Initiative for Children's Healthcare Quality
Forum of End Stage Renal Disease Networks
GlaxoSmithKline
Health Alliance of Mid-America
Health Care Compliance Strategies
Health Grades
Health Resources and Services Administration
Health Services Advisory Group
Healthcare Association of New York State
Hospira
Illinois Department of Public Health
Infectious Diseases Society of America
Institute for Clinical Systems Improvement
Institute for Safe Medication Practices
Integrated Healthcare Association
Integrated Resources for the Middlesex Area
Iowa Foundation for Medical Care
Iowa Healthcare Collaborative
IPRO
Jefferson Health System, Office of Health Policy and Clinical Outcomes
Johnson & Johnson Health Care Systems
Kidney Care Partners
Long Term Care Institute
Loyola University Health System - Center for Clinical Effectiveness
Lumetra
Maine Quality Forum
McKesson Corporation
MedAssets
MedMined
MEDRAD, Inc.
MHA Keystone Center for Patient Safety and Quality
Minnesota Community Measurement
National Academy for State Health Policy
National Association for Healthcare Quality
National Committee for Quality Assurance
National Institutes of Health
National Minority Quality Forum
National Patient Safety Foundation
National Research Corporation
Neocure
New Jersey Hospital Association
New York University College of Nursing
North Carolina Center for Hospital Quality and Patient Safety
Northeast Health Care Quality Foundation
Ohio KePRO
OmniCare
Online Users for Computer-assisted Healthcare
Partnership for Prevention
Pennsylvania Health Care Cost Containment Council
Pennsylvania Patient Safety Authority
Pfizer
PhRMA
Press, Ganey Associates
Professional Research Consultants, Inc.
Renal Physicians Association
Research!America
Rhode Island Department of Health
Roswell Park Cancer Institute
sanofi-aventis
Schering-Plough
Society for Healthcare Epidemiology of America
Society of Hospital Medicine
Solucient
State of New Jersey Department of Health and Senior Services
Substance Abuse and Mental Health Services Administration
Texas Medical Institute of Technology
The Joint Commission
The Lewin Group
Thomson Healthcare
Uniform Data System for Medical Rehabilitation
United Hospital Fund
United Surgical Partners International
University of North Carolina - Program on Health Outcomes
URAC
US Pharmacopeia
Virginia Cardiac Surgeon Quality Initiative
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Senior Vice President for Public Policy and Government Affairs
March of Dimes
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Clyde J. Behney
Deputy Executive Officer
Institute of Medicine
Washington, DC

Nancy H. Nielsen, MD, PhD
Speaker, House of Delegates
AMA for Physician Consortium for Performance Improvement
Chicago, IL

Margaret E. O'Kane
President
National Committee for Quality Assurance
Washington, DC

Dennis S. O'Leary, MD
President
The Joint Commission
Oakbrook Terrace, IL

Curt Selquist
Company Group Chairman and Worldwide Franchise Chairman
Johnson & Johnson
Piscataway, NJ

Elias A. Zerhouni, MD
Director
National Institutes of Health
Bethesda, MD

[1] Since March 2006
[2] Through October 2006
[3] Through October 2006

Appendix C
Steering Committee, Technical Advisory Panels, and Project Staff

Hospital Care Steering Committee

David J. Ballard, MD, MSPH, PhD (Co-Chair)
Baylor Health Care System
Dallas, TX

Barbara B. Fleming, MD, PhD (Co-Chair)
Veterans Health Administration
Washington, DC

Peter Angood, MD
The Joint Commission
Oakbrook Terrace, IL

Kristine Martin Anderson
Booz Allen Hamilton
Washington, DC

Bruce Hall, MD, PhD, MBA
Washington University
St. Louis, MO

Arthur Levin, MPH
Center for Medical Consumers
New York, NY

Lynn Mitchell, MD, MPH
National Association of State Medicaid Directors
Oklahoma City, OK

Nicholas Sears, MD
Medassets, Inc.
Tampa, FL

Lisa J. Thiemann, CRNA, MNA
American Association of Nurse Anesthetists
Park Ridge, IL

Patrick J. Torcson, MD, MMM
St. Tammany Parish Hospital
Covington, LA

Anne Wojner-Alexandrov, PhD, RN
Arizona State University
Fountain Hills, AZ

Stephen Wright, MD
Faulkner Hospital
Boston, MA

James Young, MD
Division of Medicine
Cleveland Clinic Foundation
Cleveland, OH

Technical Advisory Panels

Emergency Care

Dennis Cochrane, MD (Chair)
Morristown Memorial Hospital
Morristown, NJ

David Johnson, PA, RN
New York-Presbyterian Hospital
New York, NY

Martin Landa, MD
St. Mary's Hospital Medical Center
Green Bay, WI

Patryce Toye, MD, MBA
Helix Family Choice
Baltimore, MD

Ron M. Walls, MD
Brigham and Women's Hospital
Harvard Medical School
Boston, MA

Cardiac Surgery

James Miller Wilson, MD (Chair)
Mercy Hospital
Fairfield, OH

Michael K. Banbury, MD
Christiana Care Hospital
Newark, DE

Cheryl L. Damberg, PhD
RAND
Santa Monica, CA

Karl H. Krieger, MD
New York-Presbyterian Weill Cornell Medical Center
New York, NY

William Nugent, MD
Dartmouth Hitchcock Medical Center
Lebanon, NH

Joseph P. Parker, PhD
Office of Statewide Health Planning and Development
Sacramento, CA

Colleen Roberts, MS, RN
Intermountain Health Care
Salt Lake City, UT

Perioperative Care–Surgical Site Infection

Robert S.D. Higgins, MD (Chair)
American Medical Association
Chicago, IL

Raymond Chinn, MD
SHARP Memorial Hospital
San Diego, CA

E. Patchen Dellinger, MD
University of Washington School of Medicine
Seattle, WA

Aaron S. Fink, MD
Atlanta Veterans Affairs Medical Center
Atlanta, GA

Anthony Harris, MD
University of Maryland
Baltimore, MD

Keith M. Olsen, PharmD
University of Nebraska Medical Center
Omaha, NE

William E. Scheckler, MD
St. Mary's Hospital Medical Center
Madison, WI

Rachel L. Stricof, MT, MPH
New York State Department of Health
Albany, NY

Rodney Thompson, MD
Mayo Clinic
Rochester, MN

Robert A. Weinstein, MD
John H. Stroger Hospital of Cook County
Chicago, IL

Perioperative Care–Venous Thromboembolic Disease

Dale Bratzler, DO, MPH (Co-Chair)
Oklahoma Foundation for Medical Quality
Oklahoma City, OK

Joseph A. Caprini, MD, MS, RVT (Co-Chair)
Evanston Northwestern Healthcare
Evanston, IL

Anne Bass, MD
Weill Medical College of Cornell University
Hospital for Special Surgery
New York, NY

Stephen V. Cantrill, MD
Denver Health Medical Center
Denver, CO

Vanessa K. Dalton, MD, MPH
University of Michigan Hospitals
Ann Arbor, MI

William H. Geerts, MD
Sunnybrook Health Sciences Centre
Toronto, Canada

James Boyd Groce, III, PharmD
Moses H. Cone Memorial Hospital
Greensboro, NC

Kathryn Hassell, MD
University of Colorado Health Sciences Center
Denver, CO

John A. Heit, MD
Mayo Clinic
Rochester, MN

Scott Kaatz, DO
Henry Ford Hospital
Detroit, MI

Nicos Labropoulos, PhD, RVT
Loyola University Medical Center
Maywood, IL

Franklin A. Michota, Jr., MD
Cleveland Clinic Foundation
Cleveland, OH

Ruth Morrison, RN, BSN
Brigham and Women's Hospital
Boston, MA

Robert J. Panzer, MD
University of Rochester
Rochester, NY

Vincent Pellegrini, Jr., MD
University of Maryland School of Medicine
Baltimore, MD

Jodi Beth Segal, MD, MPH
Johns Hopkins University School of Medicine
Baltimore, MD

Victor F. Tapson, MD
Duke University Medical Center
Durham, NC

Alexander G.G. Turpie, MD
McMaster University
Hamilton, Ontario, Canada

Suresh Vedantham, MD
Washington University School of Medicine
St. Louis, MO

Stroke

Jinnet B. Fowles, PhD (Chair)
Research Park Nicollet Institute
Minneapolis, MN

Shalini Bansil, MD
Atlantic Neuroscience Institute-Overlook Hospital
Summit, NJ

Dexanne Clohan, MD
HealthSouth
Birmingham, AL

Chelsea Kidwell, MD
Georgetown University
Washington, DC

Lee H. Schwamm, MD
Massachusetts General Hospital
Boston, MA

Geriatrics

David R. Gifford, MD, MPH (Chair)
Rhode Island Department of Health
Providence, RI

Michael Gloth, III, MD
Victory Springs Senior Health Associates
Reisterstown, MD

Belinda Ireland, MD, MS
BJC Healthcare
St. Louis, MO

Jeffrey Levin-Scherz, MD, MBA
Partners Community HealthCare
Boston, MA

Haydee Muse, MD
Aetna Healthcare
Chicago, IL

Joseph G. Ouslander, MD
Emory Center for Health in Aging
Atlanta, GA

Kathy Ralph, RN, MPH
New York Presbyterian Hospital
New York, NY

Project Staff

Janet M. Corrigan, PhD, MBA
President and Chief Executive Officer

Robyn Y. Nishimi, PhD
Chief Operating Officer[1]
Senior Advisor[2]

Helen Burstin, MD, MPH
Senior Vice President, Performance Measures

Reva Winkler, MD, MPH
Clinical Consultant

Lisa Hines, BSN, MS
Consultant

Dianne Feeney, BSN, MS
Senior Vice President, Operations

Lawrence D. Gorban, MA
Vice President, Operations

Del Conyers, MPH
Program Director

Liza Greenberg, RN, MPH
Consultant

Melinda Murphy, MS, RN, CNA
Consultant

Rodger Winn, MD
Clinical Consultant

Katherine Griffith
Research Assistant

Kate Blenner
Program Director

Kristyne McGuinn
Research Analyst

[1] Through December 2006
[2] Since January 2007

Appendix D
Commentary

Introduction

In October 2006, the National Quality Forum (NQF) initiated a project to achieve consensus on a set of specialty clinician performance measures at the request of the Centers for Medicare & Medicaid Services (CMS). The Hospital Specialty Clinician Care Steering Committee, composed of representatives from key healthcare constituencies—including consumers, providers, purchasers, and researchers (appendix C) — was formed to oversee the project activities. Technical Advisory Panels (TAPs) (appendix C) in each area were formed to assist NQF staff in measure evaluations, advise the Steering Committee on the technical aspects of the measures, and make recommendations to the Steering Committee. This appendix summarizes the deliberations of the Steering Committee and the TAPs.

Approach to Measure Evaluation

CMS asked NQF to consider measures in five specialty areas: emergency care, cardiac surgery, perioperative care, stroke and stroke rehabilitation, and geriatrics.

Identifying Candidate Consensus Standards

The process for identifying the universe of candidate consensus standards, evaluating the measures, and TAP review was the same as that used in previous project activities. NQF staff used several strategies to identify candidate consensus standards:

- open solicitation of measures through NQF's "Call for Measures." From October 10, 2006, through November 8, 2006, the "Call" was distributed through the following avenues:
  - posted on NQF's web site,
  - e-mailed to NQF Members,
  - e-mailed to all ambulatory care project Steering Committee and TAP members, and
  - e-mailed to more than 1,300 individuals requesting to be kept apprised of NQF activities;
- review of NQF-endorsed™ measures and other related, ongoing NQF consensus work to identify hospital specialty clinician care measures within these other efforts; and
- active search of additional candidate measures from the Society of Thoracic Surgeons (STS).

Measures were excluded if an organization would not sign an intellectual property agreement or submit the information necessary for evaluation.

Purpose

The Steering Committee adopted the following statement of purpose:

> The purpose of this set of consensus standards is to improve the quality of hospital specialty clinician care—via accountability and public reporting—by standardizing quality measurement for clinician care rendered in acute care hospitals, including emergency departments.

Scope

The Steering Committee identified several criteria to define the scope of the measure set. The set of hospital clinician specialty care measures includes measures that are:

- suitable for physician/clinician practice level accountability;
- derived from all data sources;
- fully developed and precisely specified; and
- fully open source.[1]

Evaluation of Candidate Consensus Standards

NQF staff prepared detailed measure evaluations using the standardized criteria established in NQF's *National Framework for Healthcare Quality Measurement and Reporting*.[2] Information for the measure evaluations was obtained from the measure developers, through a literature review, and through independent research. A TAP for each specialty area was established to provide preliminary review of the measure evaluations prepared by NQF staff and make recommendations to the Steering Committee based on the perceived strengths and weaknesses of each measure and technical reasons regarding whether or not a measure should be recommended.

Additionally, the Steering Committee provided guidance to the TAPs requesting recommendations regarding:

[1] On January 29, 2003, the National Quality Forum (NQF) Board of Directors adopted a policy that NQF will endorse only fully open source measures. Open source is defined by NQF as being "fully disclosed" (i.e., data elements, measure algorithm, if applicable, and risk-adjustment methods/data elements/algorithms are fully described and disclosed; if calculation requires database-dependent coefficients that change frequently, the existence of such coefficients shall be disclosed and the general frequency with which they change shall be disclosed, but the precise numerical value need not be disclosed).

[2] NQF, *National Framework for Healthcare Quality Measurement and Reporting: A Consensus Report,* Washington, DC: NQF; 2002.

- the clarity and completeness of specifications, including definitions and coding;
- possible perverse incentives/unintended consequences;
- level of analysis;
- accountability/ability to influence process or outcome;
- some inference about data burden;
- consideration of all data sources; and
- when testing data are not provided by the developer, need for assessment of the "face validity" and feasibility of the data source.

The five TAPs met in person or by conference calls to review the candidate consensus standards in each area. The TAP comments and recommendations were included in each measure evaluation, and summary tables were prepared to facilitate the Steering Committee's consideration of the TAP comments and recommendations.

Harmonization of Similar Measures

Because some of the recommended clinician-level consensus standards are similar to hospital-level measures, the TAPs and Steering Committee discussed alignment with hospital-level measures where needed and were advised of other harmonization efforts.

Specifically, in 2006 NQF led discussions with measure developers to review clinician- and hospital-level measures in use or under development for use by the Alliances and to facilitate the alignment of the measure specifications where alignment is desirable and critical. The Harmonization Work Group of the Quality Alliance Steering Committee strove to identify and take advantage of immediate opportunities to harmonize measures. Where harmonization was not possible in the near term, the Work Group identified next steps, including the establishment of a timeframe and the identification of responsible organizations to work toward further measure alignment.

Recommendation of the Measures

The Steering Committee considered the measures in each area during conference calls and a meeting in Washington, D.C. Comments and recommendations from the TAPs formed the basis of the initial deliberations. The chairs or representatives of the TAPs attended the meeting to present their recommendations.

Criteria

The Steering Committee established several potential inclusion criteria in addition to the standardized measure evaluation criteria (importance, scientific acceptability, usability, and feasibility). The Steering Committee also identified priorities to select the set of consensus standards:

- clinician practice-level measures;
- measures that address vulnerable populations;
- measures addressing all relevant populations;
- consideration of possible perverse incentives or unintended consequences;
- clarity and completeness of specifications;
- measures that have been pilot tested or that already are in use; and

- measures that address high variation, including over/underuse.

The Steering Committee determined that the following principles also should guide the selection of measures:

- The driving force of the measures primarily is accountability, as well as quality improvement.
- The focus should be on who collects the data, rather than the data source per se.
- Measures should be feasible, controllable, and scientifically accurate.

General Issues

During the Steering Committee deliberations about the measures, several themes recurred across specialty areas.

CMS Plans for Implementation in the Physician Quality Reporting Initiative

Discussion frequently focused on CMS's planned use of the measures in the Physician Quality Reporting Initiative (PQRI). Representatives from CMS advised that even though the agency had contracted for the development of the measures and would be using them in the PQRI, the measures are specified for broad use—that is, they are specified for use by many different potential implementers.

CPT-II and G-Codes

The proposed measures are specified for many different data sources, including self-reporting by physicians using new codes on billing forms. TAP and Steering Committee members raised the concern that because the new CPT-II and G-Codes have not been widely used, clinician uptake, understanding and consistency of use, and therefore data reliability are unknown; pilot testing was recommended.

Exclusions

TAP discussions revealed concerns regarding the broad exclusions common to all of the measures, namely the exclusions for "medical reasons," "patient reasons," and "system reasons." The Steering Committee acknowledged that it had recommended measures developed by the American Medical Association Physician Consortium for Performance Improvement (AMA PCPI) with the same exclusion specifications; however, specific concerns were raised by the TAPs, including the following:

- lack of definition for what is acceptable to include under each type of reason for exclusion;
- difficulty in determining whether the exclusions are appropriate without medical record review by a knowledgeable clinician;
- difficulties involved in auditing;
- the fact that broad categories of exclusions such as "medical-," "patient-," or "system-related" are likely to introduce a great deal of variability in the way the measures are reported, because physicians are likely to derive different interpretations regarding what should be excluded. The use of exclusions should be tracked and reported by physician groups if the current process for exclusions is implemented;

- issues involving the overall methodology of removing excluded patients from the denominator (patients for whom the service was measured). The denominator is affected by exclusions (as opposed to simply having the denominator be the true population and indicating what percent received the service). The TAP recommended that the excluded patients be included in the denominator, but also recommended that a reason code should be provided to indicate why a service was not performed;
- that certain reasons should not be acceptable exclusions, such as "patient did feel like it";
- that the exclusions too easily let the clinician off the hook and may encourage "gaming"; and
- that more narrowly defined exclusions could provide more meaningful information on reasons for excluding patients, such as lack of insurance coverage for a test or drug or religious reasons.

The Steering Committee requested additional information from the AMA PCPI/National Committee for Quality Assurance (NCQA) measure developers about the exclusions included in many of the measures. The measure developers provided guidelines for use of the three categories of exclusions in more detail and noted that the data would identify outliers that could be further evaluated.

The Steering Committee, through its deliberations, identified the following issues:

- Measure development is still imperfect; therefore, the current measures are what are available for use.
- These measures will be used prospectively by physicians, which will require them to decide whether a patient is excluded at the time of treatment. This leads to a deliberative thought process.
- Some physicians will overuse these exclusions; thus, further analysis/audit will be needed to determine the reasons.
- The shared decisionmaking roles of physicians and patients regarding the right course of action are marked by tension.

"Low-Threshold" Performance

The Steering Committee noted that several of the measures address very basic clinical care processes, and sufficient evidence was not presented to demonstrate a lack of performance or opportunity for quality improvement. Steering Committee members noted that, in the absence of evidence of an opportunity to improve performance, these "low-threshold" measures do not provide sufficient information about the quality of care to offset the burden of data collection and reporting. Additionally, Steering Committee members noted that the minimal nature of the measures does not have credibility with some stakeholder groups, particularly consumers and purchasers.

Emergency Care

The TAP and Steering Committee identified many issues that recurred throughout the deliberations involving these measures:

- Individual physician measurement, rather than collective department performance, has not been validated in the emergency department setting, either with respect to the validity of the data (i.e., ability to gather and correctly attribute the relevant data) or with respect to whether individual clinician measurement can positively influence patient outcomes.
- The attribution of emergency care patients may be confounded by special characteristics of the emergency department such as shift changes and hand-offs; inaccurate "physician of record" designations that may be arbitrarily assigned on admission; and other clinicians participating in care, such as specialists, residents, and nurse practitioners. It was believed that there would be a large burden associated with identification and attribution for proper physician accountability.
- Emergency department physician billing may be distinct from facility/hospital billing mechanisms and may be done by an off-site billing company. An automated approach will therefore require merging the disparate databases. The diagnosis codes on the two billing forms may not match, and the real-time collection of CPT-II or G-Codes during the delivery of care to the patient may be unrealistic in a busy emergency department; retrospective chart review likely would be required to identify the proper coding.
- The patient population captured by these measures and the meaning of "emergency department discharge diagnosis" might be problematic. The AMA PCPI/NCQA measure developers stated that the measures are intended to apply to all patients discharged from the emergency department, including those admitted to the hospital or intensive care unit, transferred to another healthcare facility, or sent home. For patients who are hospitalized, the "emergency department discharge diagnosis" at the time of admission into the hospital may be different from the final hospital discharge diagnosis at the time of discharge from the hospital stay. The emergency department discharge diagnosis, for example, may be undifferentiated chest pain, but the hospital discharge diagnosis may be acute myocardial infarction (AMI).

Recommended Measures

Electrocardiogram performed for non-traumatic chest pain (ACEP, AMA PCPI, NCQA[3])

The Emergency Care TAP recommended the measure to the Steering Committee because it has strong face validity, it has been in widespread use, and the current variation in care is significant. However, the TAP warned that medical documentation generally supports the clinical decision-making process regarding why specific tests were ordered rather than why they were not; requiring a clinician to document why an ECG was not performed may potentially lead to the unintended consequence of inappropriate use of ECGs (overuse). The Steering Committee accepted the TAP's recommendation of the measure.

[3]See table 1 in the report or appendix A for the full names of the organizations, intellectual property owners, and measure developers.

Aspirin at arrival for AMI (ACEP, AMA PCPI, NCQA)

The Emergency Care TAP advised the Steering Committee of the strong evidence regarding the relationship of this measure to outcomes. Also, this measure has been tested at the institution level using hospital discharge data. The TAP noted, however, that the emergency department discharge diagnosis on admission to the hospital (e.g., "undifferentiated chest pain" or "weakness") may be different from the hospital discharge diagnosis based on later developments (e.g., "AMI"). The Steering Committee agreed with the TAP's recommendation of the measure.

Vital signs for community-acquired bacterial pneumonia (ACEP/AMA PCPI/NCQA)

The Emergency Care TAP noted that recording and reviewing vital signs have important face validity, even if there is no evidence that reviewing vital signs changes outcomes. The Steering Committee discussed what constitutes "vital signs reviewed." The developers stated that if vital signs were recorded in the physician notes, that would be an acceptable indication that the physician had acknowledged and reviewed them. It also was noted that this is very consistent with the expectations and the rules and regulations for Evaluation & Management (E&M) coding. The Steering Committee voted to recommend the measure.

Assessment of oxygen saturation for community-acquired bacterial pneumonia (ACEP, AMA PCPI, NCQA)

The Emergency Care TAP supported the measure with revised numerator wording consistent with the specifications and CPT-II Codes. The measure developer specified that the medical record may include one of following: clinician documentation that oxygen saturation was reviewed, dictation by the clinician including oxygen saturation, clinician initials in the chart that oxygen was reviewed, or other indication that oxygen saturation had been acknowledged by the clinician. With this clarification, the TAP noted that the measure has good scientific evidence and reliability. The Steering Committee supported the TAP's recommendation of the measure.

Assessment of mental status for community-acquired bacterial pneumonia (ACEP, AMA PCPI, NCQA)

The Emergency Care TAP agreed to recommend the measure after the measure developer provided language clarifying what is meant by mental status assessment (documentation by the physician that the patient's mental status was noted, e.g., that the patient is oriented or disoriented). The Steering Committee accepted the TAP recommendation to advance the measure.

Empiric antibiotic for community-acquired bacterial pneumonia (ACEP, AMA PCPI, NCQA)

The Emergency Care TAP noted that this measure is consistent with strong national guidelines. The Steering Committee accepted the TAP recommendation to advance the measure.

Measures Not Recommended

Percentage of patients aged 60 years and older with an emergency department discharge diagnosis of syncope who had an ECG performed (AMA PCPI/NCQA)

The Emergency Department TAP recommended this measure after the developers changed the age from 18 to 60. The Steering Committee voted not to recommend the measure based on the application of arbitrary age limits that were not supported by clinical evidence.

AMI patients who received a beta blocker within 24 hours before or after hospital arrival (CMS PQRI)

The Emergency Care TAP members did not recommend this measure because the evidence does not support a specific, "within 24 hours" timeframe for use (unlike aspirin use), and there is recent evidence that beta blocker use may be problematic or harmful in patients who have unstable vital signs in the emergency department. Additionally, the Emergency Care TAP noted that the diagnosis of AMI is rarely made in the emergency department, but rather in a majority of cases is made during hospital admission. Even when the diagnosis is made in the emergency department, the ongoing care is assumed by the admitting physician for most of the initial 24-hour period. Both factors put this requirement as specified beyond the control of the emergency physician in most cases. The Steering Committee agreed with the TAP recommendation not to move the measure forward based on the lack of scientific evidence regarding both the use of a 24-hour timeframe and the ability to improve outcomes in the short run.

Contact continuity provider from emergency room (AGS/RAND)

The Emergency Care TAP did not recommend this measure because, while communication is important, experience shows that communication systems are variable and complex and are often system based and that there is no evidence that this process impacts outcomes. The Emergency Care TAP felt that the measure would not be productive, would be a burden that would affect the ability to deliver care, and would disrupt the emergency care physicians' relationships with community physicians. The Geriatrics TAP also reviewed this measure and noted that self-reporting information may be meaningless since most physicians say they try to communicate, yet community physicians believe there is no communication. The Geriatrics TAP did not recommend the measure unless the specifications were changed to include a chart verification or automated hospital system with verification of effectiveness. Steering Committee members decided that the measure addresses an important issue concerning care coordination and communications among providers but agreed that clarification is needed regarding the term "contact" to ensure that physicians consistently interpret this measure.

Cardiac Surgery

The STS cardiac surgery measures were endorsed by NQF at the hospital level and were reviewed under this project for use at the physician level. Additionally, CMS had submitted two similar measures using G-Codes for consideration. Overall the Cardiac Surgery TAP believed that all of the measures were sound, relevant, and accepted measures that were already in use for reporting at the hospital level. Similar measures that use different data sources were recommended for advancement.

Recommended Measures

Use of internal mammary artery (IMA) in isolated coronary artery bypass graft (CABG) (STS)

Use of IMA in isolated CABG (CMS PQRI)

The Steering Committee agreed with the TAP recommendation to advance the measures.

Preoperative beta blocker in patient with isolated CABG (STS)

Preoperative beta blocker in patient with isolated CABG (CMS PQRI)

The Steering Committee agreed with the TAP's recommendation to accept these measures.

Antiplatelet medication on discharge (STS)

After discussions regarding the listed exclusions and the use of a trade name in the measure language, the Steering Committee agreed with the TAP's recommendations to advance the measure as amended by the measure developer.

Beta blocker on discharge (STS)

After discussions regarding the listed exclusions, the Steering Committee agreed with the TAP's recommendation to advance the measure.

Measure Not Recommended

Number of procedures for which the patient was discharged from the facility on lipid-lowering medication/number of isolated CABG procedures excluding those that resulted in in-hospital mortalities based on the variables Mortality Discharge Status, Mortality Date, and Discharge Date (STS)

Although the TAP recommended this measure, the Steering Committee chose not to move the measure forward based on concerns about potential unintended consequences. The measure as currently specified does not provide for exclusions beyond in-hospital death, and the Steering Committee believed that there were appropriate reasons that some patients should not receive statins. The Steering Committee also felt that measure did not provide for appropriate the long-term follow-up, which could lead to unintended consequences.

Perioperative Care

The perioperative care measures were divided among two expert TAPs. In order to provide consistency with existing VTE projects, the perioperative measure regarding VTE prophylaxis was reviewed by the existing NQF VTE TAP. Its review was presented to the Steering Committee as well as to the Surgical Site Infections TAP during their deliberations.

Recommended Measures

Venous thromboembolism (VTE) prophylaxis (NCQA/AMA PCPI)

The NQF VTE TAP reviewed this measure based on its clinical expertise and prior approval of the hospital-based NQF-endorsed VTE prophylaxis measures. VTE TAP members noted that the physician-level measure under consideration captures only the ordering of the prophylaxis and not its appropriateness. After discussion, the TAP felt that this was acceptable in order to increase the rate of patients who receive prophylaxis and noted that hospitals can be expected to influence physician conformance to evidence-based guidelines.

Timing of prophylactic antibiotics - ordering physician (ACS/AMA PCPI/ NCQA)

Timing of prophylactic antibiotics - administering physician (ACS/AMA PCPI/NCQA)

Selection of prophylactic antibiotic - first OR second generation cephalosporin (ACS/AMA PCPI/NCQA)

Discontinuation of prophylactic antibiotics (non-cardiac procedures) (ACS/AMA PCPI/NCQA)

Discontinuation of prophylactic antibiotics (cardiac procedures) (ACS/AMA PCPI/ NCQA)

These five measures that address prophylactic antibiotic use in a variety of surgical

procedures were submitted for consideration. The procedures included in the denominators encompassed procedures from the Surgical Care Improvement Project (SCIP) as well as additional procedures recommended by the development work group, for example, head and neck surgery; hepatic and biliary surgery; colorectal surgery; esophageal and stomach surgery; non-cardiac thoracic surgery; genitourinary surgery; gynecologic surgery; breast surgery; laryngectomy; neurological surgery; renal transplant; trauma surgery; and vascular surgery. More than 20 surgical specialty societies were involved in the development effort, which required review of the evidence base for every procedure in each measure. A major resource consideration in the review process was that the ICD-9 Codes used for hospital-level data collection in the SCIP effort needed to be replaced with CPT Procedure Codes as well as CPT-II and G-Codes for data collection at the individual surgeon level. An initial review was attempted by the Surgical Site Infection (SSI) TAP, but because of the large volume of CPT Procedure Codes that need to be carefully reviewed and considered, the SSI TAP and Steering Committee required more time to complete their evaluation and make recommendations.

The SSI TAP reconvened March 27, 2007, in order to review revised documents prepared by the measure developers that provided the necessary detail to consider these five SSI measures. The SSI TAP expressed concern with the apparent documentation burden that will occur without an electronic medical record system. The antibiotic timing measures require additional data collection from the hospital record for clinicians to be able to report from their offices. It was noted that there are some registries already in place collecting these data items. SSI TAP members noted that evaluating the correct use of prophylactic antibiotics is important in order to avoid encouraging the inappropriate use or overuse of antibiotics. The Steering Committee voted unanimously to recommend the measures after discussion with the measure developers regarding edits to the codes.

Stroke and Stroke Rehabilitation

The Stroke TAP convened to review eight newly developed measures from NCQA/AMA PCPI addressing stroke and stroke rehabilitation care, including documentation of diagnostic tests. The TAP was provided the specifications for the Joint Commission's hospital-level stroke measures currently undergoing pilot testing as a reference during its deliberations. All eight moved forward to the Steering Committee, which ultimately recommended them all.

Recommended Measures

Deep vein thrombosis (DVT) prophylaxis for ischemic stroke or intracranial hemorrhage (AAN/ACR/AMA PCPI/NCQA)

This measure also was reviewed by the NQF VTE TAP to promote harmonization and provide expert antithrombotic input. The VTE TAP commented on the inconsistency created by using "receiving prophylaxis" versus "ordering prophylaxis" in the measure. The measure developers pointed out that the Joint Commission hospital-level measure for DVT prophylaxis in stroke also uses the term "received prophylaxis." The VTE TAP and the Steering Committee expressed concern about patient safety because ischemic stroke and intracranial hemorrhage

patients are both included in the measure. The measure developer pointed out that the measure began as two separate measures, but were combined based on the public comment and that care was taken to provide the clinical guideline for each component in the technical specifications. The Stroke TAP and Steering Committee believed that despite their concerns, this was an important measure that is supported by scientific evidence.

Discharged on antiplatelet therapy (AAN/ACR/AMA PCPI/NCQA)

The Stroke TAP believed that this was an important measure, since there is scientific evidence that antiplatelet therapy works and there is a gap in care. Discussion occurred within the Stroke TAP that appropriate therapies and doses should be included in the measure itself, but the measure was determined to be acceptable as long as the dosing information is added to the user manual. The Steering Committee agreed with the TAP's recommendation to advance the measure.

Anticoagulant therapy prescribed for atrial fibrillation at discharge (AAN/ACR/AMA PCPI/NCQA)

The Stroke TAP discussed the possibility of using the term "therapeutic anticoagulation" in the measure, but the TAP determined that there was no way to know whether it would be therapeutic after the time of discharge. The TAP agreed that this is an important measure supported by scientific evidence and supported the inclusion of paroxysmal atrial fibrillation. The Steering Committee concurred with the TAP's recommendation.

Tissue plasminogen activator (t-PA) considered (AAN/ACR/AMA PCPI/NCQA)

The Stroke TAP members agreed that this is an important measure with scientific evidence to support it and that there is a gap in care. They discussed moving away from using the word "considered" to instead using language involving the percentage of patients "receiving" t-PA. The Joint Commission representative commented that it has moved away from using "considered" to using "administered." After much discussion, the TAP members agreed to recommend the measure because of its importance to care. The TAP did ask that this measure be paired with an administration measure, and this was added to the research recommendations. The Steering Committee approved the TAP's recommendations.

Screening for dysphagia (AAN/ACR/AMA PCPI/NCQA)

The Stroke TAP members discussed physician accountability if the screening is performed by other hospital personnel as part of standing orders or other protocols. The TAP ultimately recommended the measure because it is important, evidence based, and ultimately the responsibility of the physician to make sure that the screening occurred. The Steering Committee agreed with the TAP's recommendation.

Consideration of rehabilitation services (AAN/ACR/AMA PCPI/NCQA)

The Stroke TAP agreed this was important because rehabilitation is a critical component of stroke recovery and reintegration into the community. The TAP also noted that there is evidence that shows there is variability in who receives rehabilitation services. The TAP was concerned about the use of the word

"considered," which implies only that an assessment was conducted; however, ultimately it recommended the measure. The Steering Committee approved the TAP's recommendation.

Carotid imaging reports (AAN/ACR/AMA PCPI/NCQA)

The Stroke TAP and the Steering Committee agreed that standardized documentation is appropriate, but they were concerned about choosing a single scale (the North American Symptomatic Carotid Endarterectomy Trial [NASCET]) over others, because it was not in their area of expertise. A representative from the American College of Radiologists noted that the important point was the reference to the distal internal carotid artery and its measurement, not the use of the NASCET scale. Additional expertise was provided to the group by an international expert in carotid ultrasound. After discussion, the developers revised the language to better represent the intent of the measure and later presented it to their development work group for approval. The revised measure was approved by the Steering Committee during a subsequent conference call. Additionally, the measure developers expressed their commitment to reconvening their expert panel of radiologists and other physicians to consider expanding the denominator of the Carotid Imaging Reports measure to include patients and care settings in addition to those currently included in the measure.

Computerized tomography (CT) or magnetic resonance imaging (MRI) reports (AAN/ACR/AMA PCPI/NCQA)

The Stroke TAP members agreed that the concept of the measure is important. The measure developers provided clarification at the TAP's request to the three categories under evaluation. The TAP recommended the measure, and the Steering Committee concurred with the TAP.

Geriatrics

The Geriatrics TAP considered seven measures from the RAND Assessing Care of Vulnerable Elders (ACOVE) measure set that were thought to measure individual physician-level care within the hospital setting. Since the ACOVE project focused on vulnerable elderly, overall the TAP and the Steering Committee felt they could be perpetuating a cutoff of 75 years should they recommend these measures. While the TAP and the Steering Committee agreed that the concepts within the measures were important, they chose not to recommend any of the measures as currently specified. It was noted that the developer plans to request CPT-II Codes to allow data collection at the physician level, but those codes have not yet been developed.

Measures Not Recommended

Consideration of patient's preferences for care or an attempt to identify preferences within 48 hours of admission for persons 75 years and older with a diagnosis of dementia who are admitted to an acute care hospital (AGS/RAND)

The Geriatric TAP believed that obtaining the preferences of older patients with dementia admitted to the hospital is good patient care; there was concern, however, that because of the way the measure currently is constructed, it may not result in better care. The Geriatric TAP also expressed concerns that the denominator was not 65 years of age; that some TAP

members did not believe this really was a physician-level measure; and that using CPT-II Codes was problematic because they had not been tested at all in this measure. The TAP also noted that dementia is underdiagnosed, adding problems to this measure. The Steering Committee agreed with the TAP and chose not to recommend the measure.

Consideration of patient's preferences for care or an attempt to identify preferences within 48 hours of admission to intensive care for persons 75 years and older admitted to the intensive care unit in an acute care hospital (AGS/RAND)

The Geriatric TAP believed that this was an important topic; however, the evidence base did not clearly show that the measure necessarily changed outcomes. There also was some concern that assessing preferences once a patient is admitted to the intensive care unit is not the best timing, although this was not viewed as a fatal flaw because having the discussion is still worthwhile. TAP members also felt that the exclusion criterion of up to two days was too long, because given the poor outcomes of the elderly, not assessing preferences quickly is problematic. The developers reported that they had designed the measure for use at the group physician level or the entire intensive care unit level, if it was all the same group covering it. The Steering Committee agreed with the TAP and chose not to recommend the measure.

Screening exam for delirium performed daily for the first three days after surgery for persons 75 years and older admitted to an acute care hospital who undergo major surgery (AGS/RAND)

The Geriatric TAP recommended this measure because there are some good randomized trial data and other data that show what the risk factors are and that the development of postoperative delirium can be prevented if those risk factors are reduced. The TAP also noted that some data suggest that changing those risk factors after a patient has developed delirium and other interventional steps have been taken can decrease the intensity or the severity of the delirium—and its duration—although this evidence is somewhat weaker. Because of the age limitations, the Steering Committee chose not to recommend the measure.

Documentation of information from an emergency room visit with a continuity provider, of an attempt to contact a continuity provider, or that there is no continuity provider for persons 75 years and older treated at an emergency department (AGS/RAND)

This measure was reviewed by the both the Geriatric TAP and the Emergency Care TAP. While both TAPs agreed that communication between care providers is an important aspect of care, they believed that the technical aspects of the measure as presented were not feasible. The Steering Committee agreed and chose not to move the measure forward.

Assessment prior to discharge of: level of independence, need for home health services, and patient and caregiver preparedness for discharge time and location for persons 75 years and older discharged from an acute care hospital to home (AGS/RAND)

The Geriatrics TAP felt that this was a new measure with too many unknowns for implementation. The TAP also believed that the measure was more likely to be implemented in the areas of nursing or social work. The Steering Committee agreed with the TAP.

Functional assessment during initial primary care outpatient visit or within 3 months for persons 75 years or older who visit a new primary care provider for an initial visit (AGS/RAND)

Cognitive assessment during initial primary care outpatient visit or within 3 months for persons 75 years or older who visit a new primary care provider for an initial visit (AGS/RAND)

The Geriatric TAP chose to discuss these measures together because they are similarly constructed. The TAP believed that these measures are probably best specified as two measures—one inpatient and one outpatient—to reflect the different assessments, tools, and timelines. The Steering Committee agreed and did not recommend that the measures move forward.

Appendix E
Selected References

The following list of references summarizes the evidence considered and reviewed during the screening, evaluation, and selection of measures for the National Quality Forum-endorsed™ voluntary consensus standards. Evidence includes literature that supports a measure's responsiveness to the evaluation criteria (importance, scientific acceptability, usability, and feasibility).

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Appendix F
Consensus Development Process: Summary

The National Quality Forum (NQF), a voluntary consensus standards-setting organization, brings together diverse healthcare stakeholders to endorse performance measures and other standards to improve healthcare quality. Because of its broad stakeholder representation and formal Consensus Development Process (CDP), NQF-endorsed™ products have special legal standing as voluntary consensus standards. The primary participants in the NQF CDP are NQF member organizations, which include:

- consumer and patient groups;
- healthcare purchasers;
- healthcare providers, professionals, and health plans; and
- research and quality improvement organizations.

Any organization interested in healthcare quality measurement and improvement may apply to be a member of NQF. Membership information is available on the NQF web site, www.qualityforum.org.

Members of the public with particular expertise in a given topic also may be invited to participate in the early identification of draft consensus standards, either as technical advisors or as Steering Committee members. In addition, the NQF process explicitly recognizes a role for the general public to comment on proposed consensus standards and to appeal healthcare quality consensus standards endorsed by NQF. Information on NQF projects, including information on NQF meetings open to the public, is posted at www.qualityforum.org.

Each project NQF undertakes is guided by a Steering Committee (or Review Committee) composed of individuals from each of the four critical stakeholder perspectives. With the assistance of NQF staff and

technical advisory panels and with the ongoing input of NQF Members, a Steering Committee conducts an overall assessment of the state of the field in the particular topic area and recommends a set of draft measures, indicators, or practices for review, along with the rationale for proposing them. The proposed consensus standards are distributed for review and comment by NQF Members and non-members.

Following the comment period, a revised product is distributed to NQF Members for voting. The vote need not be unanimous, either within or across all Member Councils, for consensus to be achieved. If a majority of Members within each Council do not vote approval, staff attempts to reconcile differences among Members to maximize agreement, and a second round of voting is conducted. Proposed consensus standards that have undergone this process and that have been approved by all four Member Councils on the first ballot or by at least two Member Councils after the second round of voting are forwarded to the Board of Directors for consideration. All products must be endorsed by a vote of the NQF Board of Directors.

Affected parties may appeal voluntary consensus standards endorsed by the NQF Board of Directors. Once a set of voluntary consensus standards has been approved, the federal government may utilize it for standardization purposes in accordance with the provisions of the National Technology Transfer and Advancement Act of 1995 (P.L. 104-113) and the Office of Management and Budget Circular A-119. Consensus standards are updated as warranted.

For this report, the NQF CDP, version 1.7, was in effect. The complete process can be found at www.qualityforum.org.

The National Quality Forum (NQF) is a private, nonprofit, open membership, public benefit corporation whose mission is to improve the American healthcare system so that it can be counted on to provide safe, timely, compassionate, and accountable care using the best current knowledge. Established in 1999, NQF is a unique public-private partnership having broad participation from all parts of the healthcare industry. As a voluntary consensus standards setting organization, NQF seeks to develop a common vision for healthcare quality improvement, create a foundation for standardized healthcare performance data collection and reporting, and identify a national strategy for healthcare quality improvement. NQF provides an equitable mechanism for addressing the disparate priorities of healthcare's many stakeholders.

National Quality Forum
601 Thirteenth Street, NW, Suite 500 North
Washington, DC 20005

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