NATIONAL QUALITY FORUM

TO: NQF Members and Public

FR: NQF Staff

RE: Pre-voting review for National Voluntary Consensus Standards for Ambulatory Care—Additional Outpatient Measures 2010: A Consensus Report

DA: June 4, 2010

This is the draft report from NQF's Ambulatory Care project. NQF launched a new project to address additional outpatient measures concerned with emergency department and urgent care. A Steering Committee of 17 individuals representing the range of stakeholder perspectives reviewed and considered for endorsement a total of 27 candidate emergency department and urgent care standards. This draft report recommends that 17 of these measures be endorsed.

The draft document, *National Voluntary Consensus Standards for Ambulatory Care—Outpatient Measures 2010*, also is posted on the NQF website, http://www.qualityforum.org/Projects/Ambulatory_Care_2010.aspx, along with the following additional information:

- measure evaluations; and
- additional technical information for several of the measures.

Pursuant to section II.A of the Consensus Development Process v. 1.8, this draft document, along with the accompanying material, is being provided to you at this time for purposes of review and comment only—not voting. You may post your comments and view the comments of others on the NQF website.

NQF Member comments must be submitted no later than 6:00 pm ET, July 6, 2010. Public comments must be submitted no later than 6:00 pm ET, June 29, 2010.

Thank you for your interest in the NQF's work. We look forward to your review and comments.

NATIONAL QUALITY FORUM

NATIONAL VOLUNTARY CONSENSUS STANDARDS FOR AMBULATORY CARE—OUTPATIENT MEASURES 2010: A CONSENSUS REPORT

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EXECUTIVE SUMMARY

Ambulatory medical care is the predominant method of providing healthcare services in the United States. In 2006, there were approximately 1.1 billion patient visits across a wide range of settings, including clinician offices, emergency departments (EDs) and outpatient departments (OPDs). Although the largest proportion of ambulatory care services occurs in physician offices, approximately 9 percent occur in outpatient departments and 11 percent in the ED. From 1996 to 2006 the number of ED visits increased by 32 percent, while the number of hospital EDs in the United States decreased by about 12.4 percent during the same period. Demand and capacity issues have contributed to increased patient wait time and decreased clinician productivity, placing patients at risk for poor health outcomes.

The National Quality Forum (NQF) has endorsed more than 100 ambulatory care measures for assessing the quality of care provided in outpatient facilities, including hospital outpatient departments (HOPD), emergency departments, urgent care facilities, ambulatory surgery centers, community health centers, and clinician offices. These measures address issues ranging from timely treatments, antibiotic use, patient admissions and discharges, and the appropriate documentation by staff. Measures recommended for endorsement in this report focus on pediatric conditions, antibiotic overuse, endoscopy and polyp surveillance, and appropriate time to patient treatment and are applicable to the ED and/or urgent care settings. The endorsement of these measures, as well as those that preceded, is intended to encourage hospitals and clinicians to improve their quality of care through implementation and to empower consumers with appropriate information to make informed decisions about their healthcare.

Under NQF's most recent Ambulatory Care project, 17 process measures are recommended for endorsement. These measures were submitted by the American College of Emergency Physicians (ACEP), American Medical Association-convened Physician Consortium for Performance Improvement (AMA PCPI), Ingenix, Inc., and the Centers for Medicare and Medicaid Services (CMS) and are listed below:

- ACP-035-10: Patient(s) with an emergency medicine visit for syncope that had an ECG (Ingenix, Inc.)
- ACP-036: 10: Patient(s) with an emergency medicine visit for non-traumatic chest pain that had an ECG (Ingenix, Inc.)
- ACP-032-10: Patient(s) two years of age and older with acute otitis externa who were NOT prescribed systemic antimicrobial therapy (Ingenix, Inc.)
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- ACP-016-10: Endoscopy/polyp surveillance: appropriate follow-up interval for normal colonoscopy in average risk patients (AMA PCPI)
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- ACP-019-10: Troponin results for emergency department acute myocardial infarction (AMI) patients or chest pain patients (with probable cardiac chest pain) received within 60 minutes of arrival (CMS)

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- ACP-023-10: Median time to pain management for long bone fracture (CMS)
- ACP-043-10: Ultrasound guidance for internal jugular central venous catheter placement (ACEP)

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NATIONAL VOLUNTARY CONSENSUS STANDARDS FOR AMBULATORY CARE: ADDITIONAL OUTPATIENT MEASURES 2010: A CONSENSUS REPORT

BACKGROUND

Ambulatory medical care is the predominant method of providing healthcare services in the United States. In 2006, there were approximately 1.1 billion patient visits across a wide range of settings, including clinician offices, emergency departments (EDs) and outpatient departments (OPDs). Although the largest proportion of ambulatory care services occurs in physician offices, approximately nine percent occur in outpatient departments and 11 percent in the ED.[1] From 1996 to 2006 the number of ED visits increased by 32 percent, while the number of hospital EDs in the United States decreased by about 12.4 percent during the same period. Demand and capacity issues have contributed to increased patient wait time and decreased clinician productivity, placing patients at risk for poor health outcomes.[2]

The National Quality Forum (NQF) has endorsed more than 100 ambulatory care measures through general ambulatory care consensus development projects, as well as more specialized projects focusing on clinically enriched administrative data and specialty clinician measures. These measures lend themselves to addressing larger issues within ambulatory care, including capacity, productivity, and improving patient outcomes. This project focused on emergency and urgent care across settings. Ultimately, these standards will provide stakeholders with an improved picture of the quality of ambulatory care delivered in the United States.

STRATEGIC DIRECTIONS FOR NQF

NQF's mission includes three parts: 1) setting national priorities and goals for performance improvement, 2) endorsing national consensus standards for measuring and publicly reporting on performance, and 3) promoting the attainment of national goals through education and outreach programs. As greater numbers of quality measures are developed and brought to NQF for consideration of endorsement, it is incumbent on NQF to assist stakeholders to "measure what makes a difference" and address what is important to achieve the best outcomes for patients and populations. For more information see www.qualityforum.org.

Several strategic issues have been identified to guide consideration of candidate consensus standards:

DRIVE TOWARD HIGH PERFORMANCE. Over time, the bar of performance expectations should be raised to encourage the achievement of higher levels of system performance.

EMPHASIZE COMPOSITES. Composite measures provide much needed summary information pertaining to multiple dimensions of performance and are more comprehensible to patients and consumers.

MOVE TOWARD OUTCOME MEASUREMENT. Outcome measures provide information of keen interest to consumers and purchasers, and when coupled with healthcare process measures, they provide useful and actionable information to providers. Outcome measures also focus attention on much needed system-level improvements, because achieving the best patient outcomes often requires carefully designed care processes, teamwork, and coordinated action on the part of many providers.

CONSIDER DISPARITIES IN ALL THAT WE DO. Some of the greatest performance gaps relate to care of minority populations. Particular attention should be focused on the most relevant race/ethnicity/language/socioeconomic strata to identify relevant measures for reporting.

NATIONAL PRIORITIES PARTNERSHIP

NQF seeks to endorse measures that address the National Priorities and Goals of the National Priorities Partnership.[3] The National Priorities Partnership represents those who receive, pay for, provide, and evaluate healthcare. The National Priorities and Goals focus on these areas:

- patient and family engagement,
- population health,
- safety,
- care coordination,
- palliative and end-of-life care, and
- overuse.

NQF'S CONSENSUS DEVELOPMENT PROCESS (CDP)

Ambulatory Care Project[4]

The National Quality Forum's National Voluntary Consensus Standards for Ambulatory Care project seeks to endorse additional outpatient measures that address emergency department and/or urgent care and other invasive procedures in which sedation or general anesthesia is utilized in the outpatient setting. Potential consensus standards address a broad range of areas: safety and effectiveness of outpatient care, coordination of care and timely communication, appropriateness of care, pediatric urgent care, and clinician and or facility-level analysis. Additionally, the project will identify gaps in important outpatient measures.

This report does not represent the entire scope of NQF work relevant to the quality of outpatient care. NQF has endorsed emergency department setting-specific consensus standards through Phase I and II of the National Voluntary Consensus Standards for Emergency Care project (http://www.qualityforum.org/Publications/2009/09/National_Voluntary_Consensus_Standards_for_Emergency_Care.aspx) and clinician-level standards through its National Voluntary Consensus Standards for Ambulatory Care: Specialty Clinician Performance Measures project (http://www.qualityforum.org/Publications/2007/01/National_Consensus_Standards_for_Hospital_Care__Specialty_Clinician_Measures.aspx).

The full constellation of consensus standards, along with those presented in this report, provide a growing number of NQF-endorsed® voluntary consensus standards that directly reflect the importance of measuring and improving the quality of care provided to patients. Organizations that adopt these consensus standards will promote the delivery of safer and higher-quality care for patients.

Evaluating Potential Consensus Standards

Candidate standards were solicited though an open "Call for Measures" in January 2010 and were actively sought by NQF staff through literature reviews, a search of the National Quality Measures Clearinghouse, NQF Member websites, and an environmental scan. The Ambulatory Care Steering Committee evaluated 27 measures for appropriateness as voluntary consensus

standards for accountability and public reporting using the standardized measure evaluation criteria[5] on importance to measure and report, scientific acceptability of the measure properties, usability, and feasibility.

RECOMMENDATIONS FOR ENDORSEMENT

This report presents the results of the evaluation of 27 measures considered under NQF's Consensus Development Process. Seventeen measures are recommended for endorsement as voluntary consensus standards suitable for public reporting and quality improvement.

Candidate Consensus Standards Recommended for Endorsement

ACP-035-10: Patient(s) with an emergency medicine visit for syncope that had an ECG (Ingenix, Inc.) *Patients with an emergency medicine visit for syncope that had an ECG done as part of their evaluation.*

Syncope is a common presentation to the ED and while many factors underlying the presentation are benign and self-limited, others are associated with significant morbidity and mortality. Syncope causes may remain ambiguous during initial ED evaluation; therefore, risk stratification through electrocardiogram (ECG) testing is essential in identifying patients requiring additional attention and treatment. The measure developer presented data suggestive of a significant performance gap. The Steering Committee recognized the importance of the measure. Additionally, the use of multiple data sources was viewed favorably. The Committee recommended this measure for harmonization[6] with the current NQF-endorsed Measure # 0093: Electrocardiogram performed for syncope. The developer asserts that the proposed measure is harmonized with the endorsed measure to the extent possible (e.g., identical code set definitions of syncope), with the exception of data sources as this measure relies solely on electronic administrative data. This process measure addresses the National Priority of safety.

ACP-036-10: Patient(s) with an emergency medicine visit for non-traumatic chest pain that had an ECG (Ingenix, Inc.) *Patients with an emergency medicine visit for non-traumatic chest pain that had an ECG done as part of their evaluation.*

Clinical guidelines state that adults who present to an emergency department with non-traumatic chest pain should have a 12-lead ECG performed that is read by a physician within ten minutes of arrival. Prompt identification of ischemia or infarction on an ECG can result in quick initiation of life-saving interventions such as anti-embolic medication or percutaneous procedures.[7] The measure developer presented data suggestive of a significant performance gap, close to 20 percent. The Steering Committee recognized the importance of the measure. Additionally, the use of multiple data sources was viewed favorably. The Committee recommended this measure for harmonization with NQF-endorsed Measure # 0090: Electrocardiogram performed for non-traumatic chest pain. The developer asserts that the proposed measure is harmonized with the endorsed measure to the extent possible (e.g., identical code set definitions of chest pain), with the exception of data sources as this measure relies solely on electronic administrative data. This process measure addresses the National Priority of safety.

ACP-032-10: Patient(s) two years of age and older with acute otitis externa who were NOT prescribed systemic antimicrobial therapy (Ingenix, Inc.) *Patients two years of age and older with acute otitis externa who were or were not prescribed systemic antimicrobial therapy.*

The annual incidence of acute otitis externa (AOE), commonly referred to as swimmer's ear, is as high as ten percent. Topical preparations are recommended as the initial therapy for uncomplicated AOE because of safety and efficacy.[8] Although systemic oral antibiotics are frequently prescribed to treat uncomplicated AOE, there is no evidence to support their efficacy. The Steering Committee agreed that the exclusion criteria are defined extensively and the data sources are comprehensive enough to evaluate quality and facilitate improvement for a broad population base. The Committee also commended the developers for presenting a strong case about the cost and patient ramifications associated with oral antibiotic overuse. The prospect of harmonization with proposed Measure # ACP-011-10: Acute otitis externa: Systemic

antimicrobial therapy—avoidance of inappropriate use (AMA PCPI) was discussed at length but later abandoned because of differences with the denominator populations, specifically the time period eligible for inclusion. The Committee suggested that the developer change the measure name to an affirmative statement—one that clearly expresses a desired standard and is reflective of a behavioral modification. The developer responded that changing the name will give the impression that systemic antibiotics are recommended for treating AOE. The Committee agreed with the developer's assessment and recommended the measure for endorsement. This process measure addresses the National Priority of overuse.

Candidate Consensus Standards Recommended for Time-Limited Endorsement[9]

ACP-009-10: Acute otitis externa: topical therapy (AMA PCPI) *Percentage of patients aged two years and older with a diagnosis of acute otitis externa (AOE) who were prescribed topical preparations* **paired[10] with**
ACP-011-10 Acute otitis externa: systemic antimicrobial therapy—avoidance of inappropriate use (AMA PCPI) *Percentage of patients aged two years and older with a diagnosis of acute otitis externa who were not prescribed systemic antimicrobial therapy.*

The Committee agreed that there was strong empirical evidence underscoring the prevalence of acute otitis externa (AOE). While prevalent, some members noted considerable geographic variation in disease rates where some areas have lower prevalence of this condition. The measure developer cited clinical practice guidelines that recommend topical preparations as the initial therapy for uncomplicated AOE because of safety and efficacy against common AOE pathogens. While resolution is estimated to occur with 65 percent to 90 percent of patients who are prescribed topical preparations, antibiotics exclusively or amalgamated with topical treatments are increasingly prescribed to treat AOE. Some Committee members debated whether topical preparations in the absence of debridement and wick replacement are sufficient treatments. As a whole, the Committee believed that neither measure as a standalone accurately captured the scope of inappropriate treatment; therefore, they recommended pairing these two measures for a comprehensive assessment of the care provided. The Committee suggested that the measure

developer add greater specificity to the ICD-9-CM coding and exclusions to distinguish patients for whom this aspect of care is not appropriate (e.g., patients presenting with complicated AOE, co-morbidities, or specified immune-compromised conditions). The measure developer responded that omission of an exhaustive list of exclusions is intentional and in accordance with their methodology that uses three broad categories (medical, patient, and system) to define exclusions and that relies on clinicians to link those exclusions with documented reasons for not adhering to recommended treatment guidelines (e.g. reason for not prescribing topical preparation only). Some members were concerned about potential unintended consequences of measurement with the perceived lack of specificity of the exclusions. To address the Committee's concerns, the measure developer added examples to the exclusions as follows:

- ACP-009-10: Medical reason(s) for not prescribing topical preparation (e.g., coexisting acute otitis media, tympanic membrane perforation); and
- ACP-011-10: Medical reason(s) for prescribing systemic antimicrobial therapy (e.g., coexisting diabetes, immune deficiency).

The Committee accepted these modifications and recommended these measures for time-limited endorsement. These paired measures address the National Priorities of overuse and safety.

ACP-012-10 Otitis media with effusion: antihistamines or decongestants—avoidance of inappropriate use (AMA PCPI) *Percentage of patients aged 2 months through 12 years with a diagnosis of otitis media with effusion who were not prescribed or recommended to receive either antihistamines or decongestants* **grouped with**
ACP-013-10 Otitis media with effusion: systemic corticosteroids—avoidance of inappropriate use (AMA PCPI) *Percentage of patients aged 2 months through 12 years with a diagnosis of otitis media with effusion who were not prescribed systemic corticosteroids* **and**
ACP-015-10 Otitis media with effusion: Systemic antimicrobials—avoidance of inappropriate use (AMA PCPI) *Percentage of patients aged 2 months through 12 years with a diagnosis of otitis media with effusion who were not prescribed systemic antimicrobials.*

Ninety percent of children have otitis media with effusion (OME) at some time before school age. The majority of those cases resolve spontaneously with indications for therapy if the

condition persists. Evidence does not exist to support the efficacy of antihistamines, decongestants, systemic corticosteroids, and antimicrobials in treating OME; furthermore, these medications have potential adverse side effects. The measure developer presented data that indicated a lack of adherence to recommended guidelines for OME. The majority of the Committee's discussion focused on issues related to over-the-counter antihistamines and decongestants. Steering Committee members noted the difficulty of capturing non-recommended, non-prescribed over-the-counter antihistamine or decongestant medication use. Since these data cannot often be readily retrieved, the Committee believed grouping all three measures together would result in a more comprehensive assessment of inappropriate care for OME. The Committee further recommended that these measures be developed into a composite measure for consideration during the next measure maintenance review. In addition, the development of a standard that captures whether or not clinicians provide proactive counseling against the use of antihistamines and decongestants for uncomplicated OME would be a valuable component for inclusion in the composite. These measures address the National Priority of overuse.

ACP-002-10: Ultrasound determination of pregnancy location for pregnant patients with abdominal pain (ACEP) *Pregnant patients who present to the emergency department with a chief complaint of abdominal pain and or vaginal bleeding and receive a trans-abdominal or trans-vaginal ultrasound.*

The Steering Committee agrees that this process measure is important in identifying and rendering timely treatment for ectopic pregnancy, a leading cause of maternal morbidity and mortality in the first trimester. The inclusion criteria were discussed at length; specifically the Committee questioned whether the denominator is inclusive of all women regardless of timing of pregnancy determination (prior to and during the ED visit). The measure developer affirmed that both populations are included in the denominator. Committee members weighed the unintended consequences of this performance metric including delayed treatment if initial ultrasound testing revealed a pseudogestational sac, which at times presents with ectopic pregnancy and leads to a misdiagnosis of an intrauterine pregnancy. The measure developer is considering harmonization

with NQF-endorsed Measure #0502: Pregnancy test for female abdominal pain patients. This measure addresses the National Priority of safety.

ACP-003-10: Rh immunoglobulin (Rhogam) for Rh negative pregnant women at risk of fetal blood exposure (ACEP) *Percentage of Rh negative pregnant women at risk of fetal blood exposure who receive Rhogam in the ED.*

The Steering Committee recognized the importance of administering Rhogam as an effective prophylaxis for pregnant women at risk of maternal exposure to fetal blood. There is a fair amount of debate about the administration of Rhogam for first trimester pregnancy indications for threatened abortion, miscarriage, significant vaginal bleeding, and other complications, while the data for second and third trimester efficacy remain strong. The developer also noted concern that anti-D immunoglobulin may cross the placenta causing fetal anemia; however, it was believed to be a minor concern. While the Committee commended the intent of the measure, they also noted the subjectivity of pain and bleeding assessment for patients over 12 weeks of gestation and the difficulty clinicians and consumers may face in fully comprehending the complexities of the measure. The measure developer is considering harmonization with currently endorsed measure # 0014: Prenatal anti-D immune globulin. This process measure addresses the National Priority of safety.

ACP-016-10: Endoscopy/polyp surveillance: Appropriate follow-up interval for normal colonoscopy in average risk patients (AMA PCPI) *Percentage of patients 50 and older receiving a screening colonoscopy without biopsy or polypectomy who had a recommended follow-up interval of at least ten years for repeat colonoscopy documented in their colonoscopy report.*

The Committee agreed that assessing whether the appropriate follow-up interval for normal colonoscopy in average risk patients is addressed is an important process measure. In the average-risk population, colonoscopy screening is recommended at ten-year intervals in all current guidelines.[11] In recent years, screening has increased, often resulting in repeat

colonoscopies that are not needed. Although the Committee was concerned about the exclusion of endoscopy reports not captured in an electronically-generated reporting format (roughly 50 percent of all reports at this time), they believed that these concerns will subside as healthcare moves closer to a fully-integrated electronic health record (EHR) environment. This measure addresses the National Priority of overuse.

ACP-017-10: Endoscopy/polyp surveillance: colonoscopy interval for patients with a history of adenomatous polyps—avoidance of inappropriate use (AMA PCPI) *Percentage of patients aged 18 years and older receiving a surveillance colonoscopy, with a history of a prior colonic polyp in previous colonoscopy findings who had a follow-up interval of three or more years since their last colonoscopy documented in the colonoscopy report.*

Colorectal cancer is the second leading cause of cancer death in the United States. Colonoscopy is recommended for surveillance after the removal of adenomatous polyps as it significantly reduces subsequent colorectal cancer incidence;[12] however, there is growing evidence for overutilization of colonoscopies. While the Steering Committee noted the importance of this measure, they also debated the usefulness of this measure without specific recommendations for appropriate follow-up screening intervals. The measure developer clarified that the timing of a follow-up colonoscopy is dependent on a number of variables including clinically relevant polyp numbers, sizes, the endoscopic interpretation of adequate removal, and preparation. At the same time, the developer recognized the absence of specific guidelines may result in patient and physician confusion. The Committee suggested that future measure development for endoscopy screening and surveillance should incorporate a component of patient experience to facilitate discussion between patients and clinicians about appropriate testing intervals. This measure addresses the National Priority of overuse.

ACP-018-10: Endoscopy/polyp surveillance: comprehensive colonoscopy documentation (AMA PCPI) *Percentage of final colonoscopy reports for patients aged 18 years and older that include documentation of all of the following: pre-procedure risk assessment, depth of insertion,*

quality of the bowel preparation, complete description of polyp(s) found (including location of each polyp, size, number, and gross morphology), and recommendations for follow-up.

Incomplete colonoscopy reports that omit essential information about risk assessment, depth of insertion, quality of bowel preparation, and complete polyp description potentially lead to inaccurate diagnoses and repeat testing. The measure developer presented data that are indicative of significant gaps in the specificity of documentation on these procedures. The Committee engaged in lengthy discussion about the utility of a measure that solely evaluates the quality of colonoscopy report documentation rather than the performance of the colonoscopy. Committee members concluded that it is imperative to address these serious documentation gaps, while developing the colonoscopy effectiveness measure. This measure addresses the National Priority of safety.

ACP-019-10: Troponin results for emergency department acute myocardial infarction (AMI) patients or chest pain patients (with probable cardiac chest pain) received within 60 minutes of arrival (CMS) *Emergency Department acute myocardial infarction (AMI) patients or chest pain patients (with probable cardiac chest pain) with an order for troponin during the stay and having a time from ED arrival to completion of troponin results within 60 minutes of arrival*

The measure developer initially submitted a broad measure that assessed the median time from initial troponin order to time troponin results are reported to emergency department staff. While the Committee agreed that timely troponin results are important to patient health outcomes and to setting minimal expectations, all agreed that a disease-specific approach would be easier to define and report. The initial measure was broadly focused on median time to troponin for all patients. Committee members suggested limiting the denominator population to non-traumatic chest pain or acute myocardial infarction (AMI). Additionally, some members were concerned that reporting based on central tendency may not reflect outliers on either side of the timing interval. The measure developer proposed that the measure be changed to assess the proportion of patients who have the test completed within 60 minutes of arrival. The denominator statement

was revised to include only patients with non-traumatic chest pain or AMI with an order for troponin. The associated measure title was changed to reflect the aforementioned revisions. The Committee recommended the measure for endorsement following the developer's modifications. This measure addresses the National Priority of safety.

ACP-021-10: Head CT scan results for acute ischemic stroke or hemorrhagic stroke who received head CT scan interpretation within 45 minutes of arrival (CMS) *Emergency Department Acute Ischemic Stroke or Hemorrhagic Stroke patients who arrive at the ED within 2 hours of the onset of symptoms who have a head CT scan performed during the stay and having a time from ED arrival to interpretation of the Head CT scan within 45 minutes of arrival.*

The measure developer initially submitted a broad measure that assessed the median time from initial head computed tomography (CT) scan order to time head CT scan results are reported to emergency department staff for all patients. While the Committee agreed that timely head CT scan interpretation is very important to patient health outcomes and to setting minimal expectations of interpretation of turnaround time, all agreed that a disease-specific approach would be easier to define and report. One Committee member suggested a metric that evaluated timely head CT scan for ischemic stroke since the guidelines are clear and well established. The Committee also noted that reporting to the ED is not always feasible or indicative of hospital efficiency. Additionally, some Committee members were concerned that reporting based on median timing may not reflect outliers on either side of the timing interval. Upon recommendation from the Steering Committee, the developer modified this measure with a title change to reflect the proportion of stroke/ patients with acute onset of symptoms who have a CT brain interpreted scan within 45 minutes of arrival consistent with national stroke guidelines. The Committee recommended the measure for endorsement following the measure developer's modifications. This measure addresses the National Priority of safety.

ACP-023-10: Median time to pain management for long bone fracture (CMS) *Median time from emergency department arrival to time of initial parenteral pain medication administration*

or other regional/local anesthesia pain management for emergency department patients with a principal diagnosis of long bone fracture (LBF)

The measure developer presented data that reveal that patients with bone fractures typically do not receive adequate pain medication as part of treatment regimens. The data also reveal significant disparities in treatment for pain based on race, ethnicity, age, and other considerations.[13] While noting the importance of this measure to quality improvement, the Committee was concerned that the denominator exclusions include contraindications to pain medications. Steering Committee members suggested that this metric should also apply to pediatric patients as they also require close monitoring of medications. Based on the Committee's recommendations, the measure developer revised the specifications to include the following:

- inclusion of only mid-shaft long bone fractures (femur, tibia, and humerus only) in the denominator (parenteral pain medications and or regional anesthesia); and
- addition of regional/local anesthesia pain management medications to the list of pain medications.

Patients with contraindications to pain medication were removed as an appropriate exclusion from the denominator. Additionally, the measure developer broadened the specifications to also address pain management of oral medications for long bone fracture in patients aged 2 to 17 years, in addition to specifications that address patients 18 years and older and the use of parenteral medications and regional and or local anesthesia for long bone fracture pain. The restriction of shaft fractures of the femur, tibia, and humerus is applicable only to the adult populations. The Committee approved the developer's modifications. This measure addresses the National Priority of safety.

ACP-043-10: Ultrasound guidance for internal jugular central venous catheter placement (ACEP) *Percentage of adult patients aged 18 years and older with an internal jugular central venous catheter placed in the emergency department under ultrasound guidance.*

The Committee recognized the importance of ultrasound guidance in increasing first-attempt success of internal jugular central venous catheter placement and minimizing complications associated with the procedure. The measure developer stated that the procedure is grossly underutilized and has broad application across care settings including hospital critical care units and to some degree surgical settings. Committee members offered several potential limitations to the usability of the measure including the unavailability of ultrasound equipment in many EDs and undocumented ultrasound procedure use in medical records. Some members noted that this procedure using ultrasound requires multiple personnel, which may not be possible due to the staffing available at the time of the procedure. The Committee cautioned that there may be an unintended consequence as this measure is implemented where inexperienced clinicians may be asked to complete the procedure in an effort to comply with the measure. Based on this concern, the measure developer revised the denominator exclusions to include "clinicians not credentialed in ultrasound guided central venous cannulation, or not credentialed in ultrasound guided procedures." The Committee approved putting forward the measure for consideration following the developer's modification. This measure addresses the National Priority of safety.

Candidate Standards not Recommended for Endorsement

ACP-008-10: Otitis media with effusion: hearing test (AMA PCPI) *Percentage of patients aged 2 months through 12 years with a diagnosis of otitis media who received tympanostomy tube insertion who had a hearing test performed within six months prior to tympanostomy tube insertion.*

This measure did not pass the threshold for "importance to measure and report." While the Steering Committee noted the importance of this assessment, they believed that the data provided were not sufficient to demonstrate a strong link between the process of care and the desired outcome; specifically, the Committee was unclear about the patient age criteria and the degree to which OME results in hearing loss.

ACP-010-10: Acute otitis externa: pain assessment (AMA PCPI) *Percentage of patient visits for those patients aged two years and older with a diagnosis of acute otitis with assessment for auricular or periauricular pain.*

The Steering Committee agreed that this measure does not address a high-impact area. They believed that pain assessment is a standard clinical practice. The measure was weakened further because treatment recommendations have not been linked to pain assessment.

ACP-014-10: Otitis media with effusion: diagnostic evaluation—assessment of tympanic membrane mobility (AMA PCPI) *Percentage of patient visits for those patients aged 2 months through 12 years with a diagnosis of otitis media effusion with assessment of tympanic membrane mobility with pneumatic otoscopy or tympanometry.*

Steering Committee members noted that the hierarchal approach to diagnostic tools, pneumatic otoscopy followed by acoustic reflectometry, was not sufficiently differentiated. Furthermore, results of diagnostic methods that assess OME sensitivity and specificity were not included in the measure specifications. The shortage of pneumatic otoscopy/audio scopes in many settings was also highlighted as a key barrier to implementing this measure. For these reasons, the Committee did not recommend this measure for endorsement.

ACP-020-10: Median time to BMP or electrolyte results (CMS) *Median time from initial basic metabolic panel (BMP) or electrolyte order to time BMP or electrolyte results are reported to the emergency department staff.*

The Steering Committee determined that this measure did not meet the threshold for "importance to measure and report." The Committee noted that the measure only evaluates the ability of a system to provide lab results and does not address the quality of care that would be associated with timely results. A suggestion for a more meaningful measure is one that is disease-specific and evaluates the number of tests ordered related to that disease.

ACP-022-10: Median time to chest x-ray (CMS) *Median time from initial chest x-ray order to time chest x-ray exam is completed.*

This measure did not meet the threshold for "importance to measure and report." The Steering Committee concluded that a specified time period rather than a median time for results to be reported was more likely to improve patient care. They also noted that the goal of reducing inefficiencies in EDs throughput is dependent on several extenuating factors. The Committee stated that the metric only evaluates the ability of a system to provide lab results and does not address the quality of care that would be associated with timely results.

ACP-024-10: Patients left before being seen (CMS) *Percentage of emergency department patients who left before evaluation by the physician/APN/PA.*

The Committee agreed that this measure met the "importance to measure and report" criteria and therefore assessed the feasibility of harmonization with the currently endorsed Measure # 0499: Left without being seen. When comparing the two measures, they noted different numerator and denominator populations; specifically, Measure #0499 assesses all patients who present to the ED, while Measure #ACP-024-10 evaluates patients registered in the ED log only. Additionally, Committee members questioned the exclusion of patients younger than 18 years from the proposed measure's population. The Committee was also informed of the difficulty the steward of Measure #0499 has encountered in capturing relevant and accurate data for that measure. Because this measure has not been tested and does not address any potential concerns that have been raised with the currently endorsed measure, the Committee did not recommend this measure for endorsement.

ACP-025-10: Median time to CBC results (CMS) *Median time from initial complete blood count (CBC) to order to time CBC results are reported to emergency department staff.*

While the Steering Committee recognized the importance of timely CBC results, they determined that this measure did not meet the threshold for "importance to measure and report."

The Committee believed that this measure is not directly linked to a specific disease or condition, therefore making it difficult to demonstrate impact.

ACP-029-10: Patient(s) treated with an antibiotic for acute sinusitis that received a first line antibiotic (Ingenix, Inc.) *Patient(s) treated with an antibiotic for acute sinusitis that received a first line antibiotic.*

The Steering Committee noted that this is a clinically important topic; however, all recognized the difficulty in differentiating viral upper respiratory infections from acute bacterial sinusitis in patients with symptoms lasting more than 5 to 10 days. The Committee also discussed the difficulty in capturing accurate data from claims information entirely. The Committee was interested in future research that assesses community cost disparities of treating bacterial sinusitis with first line agents.

ACP-030-10: Adult(s) with community-acquired bacterial pneumonia that had a CXR (Ingenix, Inc.) *Patients with community-acquired bacterial pneumonia treated as outpatients that had a chest x-ray (CXR).*

The Steering Committee recognized the importance of the measure; however, they questioned the appropriateness of treating patients with antibiotics for community-acquired bacterial pneumonia (CAP) without confirmation of diagnosis through a chest x-ray (CXR). The Committee also noted the typical lag time in radiologic findings of pneumonia and actual onset of CAP. Additionally, the Committee was concerned that the numerator was not clearly defined and cited a discrepancy between the evidence in support of the measure's importance, which examined patients 65 years and older, and the targeted age in the measure specifications (18 years and older).

ACP-042-10: Patient(s) with frequent ER migraine encounters or frequent acute migraine medication use that had an office visit in last six reported months (Ingenix, Inc.) *Patients*

with frequent migraine encounters or frequent migraine abortive medication use that had an office visit within the last 6 reported months.

Although the Steering Committee noted the importance of evaluating frequent ED migraine encounters and medication use, all were concerned that there are no clinical standards for follow-up. The recommendations presented were based solely on expert panel consensuses and not on evidence-based medicine. Furthermore, the Committee believed that the measure was more appropriate for assessing primary care quality improvement and not necessarily useful for public reporting. The Committee suggested a more effective proactive measure that evaluates care coordination through ED referral to a primary care provider rather than assessing the frequency of ED visits.

Additional Recommendations

The following areas require further investigation and measure development:

Hypothermia for cardiac arrest survivors

- despite the availability of strong evidence, underutilization of hypothermia protocols in outpatient settings, and
- opportunity to collaborate with The Joint Commission on their sudden death measure development.

Availability of advanced directives

- potential resource for the public and practitioners in emergency medicine.

Head CT for children with minor trauma

- measure development that evaluates the efficient use of head CT for children, using existing clinical prediction rules, and
- significant evidence that documents overuse and harm from radiation and other procedures in which sedation is utilized.

Presence of pharmacists in the emergency department to help ensure safety and quality.

Pharmacist presence can:

- lead to a review of medication, reducing adverse drug events,

- expedite drug therapy leading to a reduction in emergency department costs, and
- provide screening, such as smoking cessation therapy, and immunizations leading to a quality improvement in patient care

NOTES

1. Schappert SM, Rechtsteiner EA, *Ambulatory Medical Care Utilization Estimates for 2006. National Health Statistics Reports; no. 8*, Hyattsville, MD: National Center for Health Statistics; 2008. Available at: www.cdc.gov/nchs/data/nhsr/nhsr008.pdf. Last accessed May 2010.
2. Pitts SR, Niska RW, Xu J, et al., *National Hospital Ambulatory Medical Care Survey: 2006 Emergency Department Summary. National Health Statistics Reports; no. 7*, Hyattsville, MD: National Center for Health Statistics; 2008. Available at: http://www.cdc.gov/nchs/data/nhsr/nhsr007.pdf. Last accessed May 2010.
3. National Quality Forum (NQF), *National Priorities Partnership*, Washington, DC: NQF. Available at www.nationalprioritiespartnership.org. Last accessed May 2010.
4. www.qualityforum.org/Projects/Ambulatory_Care_2010.aspx. Last accessed May 2010.
5. NQF. Measure Evaluation Criteria. Washington, DC: NQF; 2008. Available at www.qualityforum.org/docs/measure_evaluation_criteria.aspx. Last accessed May 2010.
6. Harmonization refers to the standardization of specifications for similar measures on the same topic (e.g., *influenza immunization* of patients in hospitals or nursing homes), or related measures for the same target population (e.g., eye exam and HbA1c for *patients with diabetes*), or definitions applicable to many measures (e.g., age designation for children) so that they are uniform or compatible, unless differences are dictated by the evidence. The dimensions of harmonization can include numerator, denominator, exclusions, and data source and collection instructions. The extent of harmonization depends on the relationship of the measures, the evidence for the specific measure focus, and differences in data sources.
7. National Guideline Clearinghouse (NGC), *ACC/AHA 2007 Guidelines for the Management of Patients with Unstable Angina/Non ST-elevation Myocardial Infarction*. Available at www.guideline.gov/summary/summary.aspx?doc_id=11333. Last accessed May 2010.
8. National Guideline Clearinghouse (NGC), *Clinical practice guideline: acute otitis externa*. Available at

www.guideline.gov/summary/summary.aspx?ss=15&doc_id=9310#s21. Last accessed May 2010.

9. Information regarding NQF's time-limited endorsement policy and the 2010 addendum is available at www.qualityforum.org/News_And_Resources/Press_Releases/2010/NQF_Updates_Policy_on_Time-Limited_Endorsement.aspx. Last accessed May 2010.
10. Paired or grouped measures refer to two or more measures grouped together for the purpose of public reporting. The measures maintain separate scores.
11. National Guideline Clearinghouse (NGC), *Practice Parameter for Detection of Colorectal Neoplasms: An Interim Report (Revised).* Available at www.guideline.gov/summary/summary.aspx?doc_id=10785&nbr=005613&string=colonoscopy+AND+screening. Last accessed May 2010.
12. Levin B, Lieberman DA, McFarland B, et al., Screening and surveillance for the early detection of colorectal cancer and adenomatous polyps, 2008: a joint guideline from the American Cancer Society, the U.S. Multi-Society Task Force on Colorectal Cancer, and the American College of Radiology, *Gastroenterology* 2008; 58. Available at www.gastrojournal.org/article/S0016-5085(08)00232-1/fulltext. Last accessed May 2010.
13. Agency for Healthcare Research and Quality (AHRQ), *Disparities/Minority Health. Blacks, Hispanics and Other Minority Groups are less Likely To Get Strong Pain Medications in Hospital Emergency Departments*, Rockville, MD: AHRQ; 2008. Available at www.ahrq.gov/research/feb08/0208RA4.htm. Last accessed May 2010.

NATIONAL VOLUNTARY CONSENSUS STANDARDS FOR AMBULATORY CARE – OUTPATIENT MEASURES 2010: A CONSENSUS REPORT
APPENDIX A: MEASURE SPECIFICATIONS

The following table presents the detailed specifications for the National Quality Forum (NQF)-endorsed® *National Voluntary Consensus Standards for Ambulatory Care—Outpatient Measures 2010*. All information presented has been derived directly from measure sources/developers without modifications or alteration (except when the measure developer agreed to such modifications during the NQF Consensus Development Process) and is current as of April 30, 2010. All NQF-endorsed voluntary consensus standards are open source, meaning they are fully accessible and disclosed. Measures were developed by the American College of Emergency Physicians, American Medical Association, Ingenix, Inc., and Center for Medicare & Medicaid Services.

Measure Numbers	Measure Title	Measure Steward	Measure Description	Numerator	Denominator	Exclusions	Data Source	Level of Analysis
ACP-035-10	Patient(s) with an emergency medicine visit for syncope that had an ECG.	Ingenix, Inc.	This measure identifies patients with an emergency medicine visit for syncope that had an ECG done as part of their evaluation.	Patients who have an emergency medicine visit for syncope, who had an electrocardiogram (ECG) during the event	Patients 60 years of age or older who have an emergency medicine encounter with a diagnosis of syncope	1. Exclude emergency medicine events which included hospitalizations 2. Exclude emergency medicine events without a preceding clear window 3. Exclude emergency medicine events where the member was less than 60 years of age on the episode end date	Lab data, Electronic administrative data/claims	Clinicians: Individual, Clinicians: Group, Population: states, Population: counties or cities, Program: Disease management, Program: QIO, Facility/Agency, Health Plan, Integrated delivery system, Multi-site/corporate chain, Can be measured at all levels

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Measure Numbers	Measure Title	Measure Steward	Measure Description	Numerator	Denominator	Exclusions	Data Source	Level of Analysis
ACP-036-10	Patient(s) with an emergency medicine visit for non-traumatic chest pain that had an ECG.	Ingenix, Inc.	This measure identifies patients with an emergency medicine visit for non-traumatic chest pain that had an ECG done as part of their evaluation.	Patients who have an emergency medicine visit for non-traumatic chest pain, who had an electrocardiogram (ECG) during the event	Patients 40 years of age or older who have an emergency medicine encounter with a diagnosis of chest pain	1. Exclude emergency medicine events that included hospitalizations 2. Exclude emergency medicine events without a preceding clear window 3. Exclude emergency medicine events where the member was less than 40 years of age on the episode end date	Electronic administrative data/claims, lab data	Clinicians: Individual, Clinicians: Group, Facility/ Agency, Health Plan, Integrated delivery system, Multi-site/corporate chain, Program: Disease management, Program: QIO, Can be measured at all levels, Population: states, Population: counties or cities

Measure Numbers	Measure Title	Measure Steward	Measure Description	Numerator	Denominator	Exclusions	Data Source	Level of Analysis
ACP-032-10	Patient(s) two years of age and older with acute otitis externa who were NOT prescribed systemic antimicrobial therapy	Ingenix, Inc.	This measure identifies patients two years of age and older with acute otitis externa who were or were not prescribed systemic antimicrobial therapy.	Patients who have a diagnosis of acute otitis externa who were NOT prescribed systemic antimicrobial therapy during the otitis externa event—the day of the initiating otitis externa encounter through two days after that encounter	Patients who are two years of age or older at the end of the report period who have an outpatient encounter with a diagnosis of acute otitis externa The following time period will be used to find eligible acute otitis externa encounters: 60 days after the start of the 12-month report period through 10 days prior to the end of the 12-month report period.	1. Exclude acute otitis externa events without a preceding disease free clear window 2. Exclude acute otitis externa events with hospitalizations or outpatient surgeries during the event 3. Exclude acute otitis externa events with relevant co-morbid infections 4. Exclude patients with recent organ transplants or recent chronic otitis externa 5. Exclude additional complex patients with any of the following diseases: AIDS, HIV sero-positive without AIDS, immunodeficiencies, diabetes mellitus, cystic fibrosis, leukemia, malignant neoplasm of the head and neck, or congenital and acquired anomalies of ear/ nose/ throat 6. Exclude patients who have had recent cochlear implant procedures 7. Exclude patients who did not have at least two face-to-face office visits with any diagnosis during the 12 months prior to the end of the report period.	paper medical record/ flowsheet, electronic administrative data/ claim	

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Measure Numbers	Measure Title	Measure Steward	Measure Description	Numerator	Denominator	Exclusions	Data Source	Level of Analysis
ACP-009-10	Acute otitis externa: topical therapy	American Medical Association-Physician Consortium for Performance Improvement	Percentage of patients aged two years and older with a diagnosis of acute otitis externa (AOE) who were prescribed topical preparations.	Patients who were prescribed topical preparations.	All patients aged two years and older with a diagnosis of AOE.	Documentation of medical reason(s) for not prescribing topical preparations (e.g., coexisting acute otitis media, tympanic membrane perforation) Documentation of patient reason(s) for not prescribing topical preparations (e.g., patient refusal)	Electronic administrative data/claims, electronic Health/Medical Record, paper medical record/ flowsheet, special or unique data	Clinicians: Individual, Clinicians: Group
ACP-011-10	Acute otitis externa: Systemic antimicrobial therapy—avoidance of inappropriate use	American Medical Association-Physician Consortium for Performance Improvement	Percentage of patients aged two years and older with a diagnosis of acute otitis externa (AOE) who were not prescribed systemic antimicrobial therapy.	Patients who were not prescribed systemic antimicrobial therapy once within the denominator time window	All patients aged two years and older with a diagnosis of AOE Each episode* of AOE within a 12 month period. *An episode of AOE is defined as a 30-day period from onset of acute otitis externa (as indicated by the first occurrence of qualifying diagnosis and CPT codes).	Documentation of medical reason(s) for prescribing systemic antimicrobial therapy (e.g., coexisting diabetes, immune deficiency)	Electronic administrative data/ claims, Survey: Patient, lab data, pharmacy data	Clinicians: Individual, Clinicians: Group

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Measure Numbers	Measure Title	Measure Steward	Measure Description	Numerator	Denominator	Exclusions	Data Source	Level of Analysis
ACP-012-10	Otitis media with effusion: antihistamines or decongestants—avoidance of inappropriate use	American Medical Association-Physician Consortium for Performance Improvement	Percentage of patients aged 2 months through 12 years with a diagnosis of otitis media with effusion (OME) who were not prescribed or recommended to receive either antihistamines or decongestants	Patients who were not prescribed or recommended to receive either antihistamines or decongestants	All patients aged 2 months through 12 years with a diagnosis of OME	Documentation of medical reason(s) for prescribing or recommending to receive either antihistamines or decongestants (e.g., patient has a coexisting condition like rhinitis for which antihistamines or decongestants are indicated)	Electronic administrative data/claims, electronic Health/Medical Record, paper medical record/ flowsheet, special or unique data	Clinicians: Individual, Clinicians: Group
ACP-013-10	Otitis media with effusion: systemic corticosteroids—avoidance of inappropriate use	American Medical Association-Physician Consortium for Performance Improvement	Percentage of patients aged 2 months through 12 years with a diagnosis of otitis media with effusion (OME) who were not prescribed systemic corticosteroids	Patients who were not prescribed systemic corticosteroids	All patients aged 2 months through 12 years with a diagnosis of OME	Documentation of medical reason(s) for prescribing systemic corticosteroids (e.g., patient has a coexisting condition like rhinitis for which systemic corticosteroids are indicated)	Electronic administrative data/claims, electronic Health/Medical Record, paper medical record/ flowsheet, special or unique data	Clinicians: Individual, Clinicians: Group
ACP-015-10	Otitis media with effusion: systemic antimicrobials—avoidance of inappropriate use	American Medical Association-Physician Consortium for Performance Improvement	Percentage of patients aged 2 months through 12 years with a diagnosis of OME who were not prescribed systemic antimicrobials	Patients who were not prescribed systemic antimicrobials	All patients aged 2 months through 12 years with a diagnosis of OME	Documentation of medical reason(s) for prescribing systemic antimicrobials (e.g., salvage therapy prior to surgery)	Electronic administrative data/claims, electronic Health/Medical Record, paper medical record/ flowsheet, special or unique data	Clinicians: Individual, Clinicians: Group

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Measure Numbers	Measure Title	Measure Steward	Measure Description	Numerator	Denominator	Exclusions	Data Source	Level of Analysis
ACP-002-10	Ultrasound determination of pregnancy location for pregnant patients with abdominal pain	American College of Emergency Physicians	Percentage of pregnant patients who present to the emergency department (ED) with a chief complaint of abdominal pain and or vaginal bleeding who receive a trans-abdominal or trans-vaginal ultrasound	Number of appropriate patients who receive a trans-abdominal or trans-vaginal ultrasound	All pregnant patients who present to the ED with a chief complaint of lower abdominal pain, and or vaginal bleeding	1. Women for whom location of pregnancy is already documented or reported as intra-uterine 2. Patient refusal 3. Ultrasound is not feasible (facility reason)	Paper medical record/ flowsheet, Electronic administrative data/claims, Electronic clinical data, electronic Health/Medical Record	Clinicians: Individual, Clinicians: Group, Can be measured at all levels

Measure Numbers	Measure Title	Measure Steward	Measure Description	Numerator	Denominator	Exclusions	Data Source	Level of Analysis
ACP-003-10	Rhogam for Rh negative pregnant women at risk of fetal blood exposure	American College of Emergency Physicians	Percent of Rh negative pregnant women at risk of fetal blood exposure who receive Rhogam the emergency department (ED).	Number of appropriate patients who receive Rhogam in the ED.	All Rh negative pregnant women at significant risk of fetal blood exposure, including: 1. those diagnosed with an ectopic pregnancy 2. those in the second or third trimester: a: with a threatened abortion (threatened, partial, complete, or spontaneous) b. those who report or are found to have significant vaginal bleeding (not just spotting) c. those who have sustained blunt abdominal trauma 3. those who undergo an invasive obstetric procedure in the ED (genetic amniocentesis; chorion villus sampling; fetal blood sampling, [illegible]	1. Patient refusal 2. Patients who have received appropriate Rh immunoglobulin previously 3. OB/GYN consultation documenting no Rh immunoglobulin	Paper medical record/ flowsheet, Electronic administrative data/claims, electronic Health/Medical Record, Electronic clinical data	Clinicians: Individual, Clinicians: Group, Can be measured at all levels

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Measure Numbers	Measure Title	Measure Steward	Measure Description	Numerator	Denominator	Exclusions	Data Source	Level of Analysis
ACP-016-10	Endoscopy/ polyp surveillance: appropriate follow-up interval for normal colonoscopy in average risk patients	American Medical Association-Physician Consortium for Performance Improvement	Percentage of patients aged 50 years and older receiving a screening colonoscopy without biopsy or polypectomy who had a recommended follow-up interval of at least 10 years for repeat colonoscopy documented in their colonoscopy report.	Patients who had a recommended follow-up interval of at least 10 years for repeat colonoscopy documented in their colonoscopy report	All patients aged 50 years and older receiving screening colonoscopy without biopsy or polypectomy	Documentation of medical reason(s) for not recommending at least a 10 year follow-up interval (e.g., above average risk patient, inadequate prep)	Electronic administrative data/claims, Electronic clinical data, electronic Health/Medical Record, paper medical record/ flowsheet, special or unique data	Clinicians: Individual, Clinicians: Group
ACP-017-10	Endoscopy/ polyp surveillance: colonoscopy interval for patients with a history of adenomatous polyps—avoidance of inappropriate use	American Medical Association-Physician Consortium for Performance Improvement	Percentage of patients aged 18 years and older receiving a surveillance colonoscopy, with a history of a prior colonic polyp in previous colonoscopy findings who had a follow-up interval of 3 or more years since their last colonoscopy documented in the colonoscopy report	Patients who had an interval of 3 or more years since their last colonoscopy	All patients aged 18 years and older receiving a surveillance colonoscopy with a history of a prior colonic polyp in a previous colonoscopy	Documentations of medical reason(s) for an interval of less than 3 years since the last colonoscopy (e.g., last colonoscopy incomplete, last colonoscopy had inadequate prep, piecemeal removal of adenomas, or last colonoscopy found greater than 10 adenomas) OR Documentation of a system reason(s) for an interval of less than 3 years since the last colonoscopy (e.g., unable to locate previous colonoscopy report, previous colonoscopy report was incomplete)	Electronic administrative data/claims, paper medical record/ flowsheet, electronic Health/Medical Record, special or unique data	Clinicians: Individual, Clinicians: Group

Measure Numbers	Measure Title	Measure Steward	Measure Description	Numerator	Denominator	Exclusions	Data Source	Level of Analysis
ACP-018-10	Endoscopy/ polyp surveillance: comprehensive colonoscopy documentation	American Medical Association-Physician Consortium for Performance Improvement	Percentage of final colonoscopy reports for patients aged 18 years and older that include documentation of all of the following: pre-procedure risk assessment; depth of insertion; quality of the bowel prep; complete description of polyp(s) found, including location of each polyp, size, number, and gross morphology; and recommendations for follow-up	Final reports that include documentation of ALL of the following: • Pre-procedure risk assessment (e.g., ASA class, Mallampati score) • Depth of insertion (i.e., to cecum or other landmark) • Quality of the bowel prep (i.e., prep was either adequate or inadequate) • Complete description of polyp(s) found, including location of each polyp, size, number, and gross morphology • Recommendations for follow-up	All final colonoscopy reports for patients aged 18 years and older	None	Paper medical record/ flowsheet, Electronic administrative data/claims, electronic Health/Medical Record, special or unique data	Clinicians: Individual, Clinicians: Group

Measure Numbers	Measure Title	Measure Steward	Measure Description	Numerator	Denominator	Exclusions	Data Source	Level of Analysis
ACP-019-10	Troponin results for emergency department acute myocardial infarction (AMI) patients or chest pain patients (with probable cardiac chest pain) received within 60 minutes of arrival.	Center for Medicare and Medicaid Services	Emergency department (ED) acute myocardial infarction (AMI) patients or chest pain patients (with probable cardiac chest pain) with an order for Troponin during the stay and having a time from ED arrival to completion of Troponin results within 60 minutes of arrival	Emergency department acute myocardial infarction (AMI) patients or chest pain patients (with probable cardiac chest pain) with an order for Troponin whose time from ED arrival to completion of Troponin results is within 60 minutes of arrival.	Emergency department acute myocardial infarction (AMI) patients or chest pain patients (with probable cardiac chest pain) patients with an order for Troponin.	• Patients less than 18 years of age • Patients who expired in the emergency department • Patients who left the emergency department against medical advice or discontinued care	Electronic administrative data/claims, paper medical record/ flowsheet, electronic Health/Medical Record, Electronic clinical data, lab data	Facility/ Agency
ACP-021-10	Head CT scan results for acute ischemic stroke or hemorrhagic stroke who received head CT scan interpretation within 45 minutes of arrival.	Center for Medicare and Medicaid Services	Emergency department (ED) acute ischemic stroke or hemorrhagic stroke patients who arrive at the ED within 2 hours of the onset of symptoms who have a head CT scan performed during the stay and having a time from ED arrival to interpretation of the Head CT scan within 45 minutes of arrival.	Emergency department acute ischemic stroke or hemorrhagic stroke patients arriving at the ED within two hours of the time last known well, with an order for a head CT scan whose time from ED arrival to interpretation of the head CT scan is within 45 minutes of arrival	Emergency department acute ischemic stroke or hemorrhagic stroke patients arriving at the ED within two hours of the time last known well with an order for a head CT scan.	• Patients less than 18 years of age • Patients who expired in the emergency department • Patients who left the emergency department against medical advice or discontinued care	Electronic administrative data/claims, Electronic clinical data, electronic Health/Medical Record, paper medical record/ flowsheet, lab data	Facility/ Agency

Measure Numbers	Measure Title	Measure Steward	Measure Description	Numerator	Denominator	Exclusions	Data Source	Level of Analysis
ACP-023-10	Median time to pain management for long bone fracture	Center for Medicare and Medicaid Services	Median time from emergency department arrival to time of initial oral or parenteral pain medication administration for emergency department patients with a principal diagnosis of long bone fracture (LBF).	Continuous variable statement: time (in minutes) from emergency department arrival to time of initial parenteral pain medication administration, or other regional/ local anesthesia pain management for emergency department patients with a diagnosis of a (long bone) fracture.	Emergency department patients with a principal diagnosis of long bone fracture (LBF).	•Patients less than 2 years of age •Patients who expired in the emergency department •Patients who left the emergency department against medical advice or discontinued care	paper medical record/ flowsheet, Electronic administrative data/claims, pharmacy data, Electronic clinical data, electronic Health/Medical Record	Facility/ Agency

Measure Numbers	Measure Title	Measure Steward	Measure Description	Numerator	Denominator	Exclusions	Data Source	Level of Analysis
ACP-043-10	Ultrasound guidance for internal jugular central venous catheter placement	American College of Emergency Physicians	Percent of adult patients aged 18 years and older with an internal jugular central venous catheter placed in the emergency department (ED) under ultrasound guidance.	Number of adult patients aged 18 years and older who underwent ultrasound guided internal jugular central venous catheter insertion in the emergency department (ED).	Number of adult patients aged 18 years and older who underwent internal jugular central venous catheter insertion in the emergency department (ED).	1. Patients receiving central lines in other sites (subclavian, femora) 2. Patients with allergy to ultrasound (US) gel 3. Central line placed in code situation (clinician documents that there was not time to perform ultrasound guidance) 4. US machine with high frequency linear probe not available • Not at bedside due to time constraint • ED does not have access to ultrasound 5. Clinicians not credentialed in ultrasound guided central venous cannulation, or not credentialed in ultrasound guided procedures.	Paper medical record/ flowsheet, Electronic administrative data/claims, Electronic clinical data, electronic Health/Medical Record	Clinicians: Individual, Clinicians: Group, Can be measured at all levels

NATIONAL VOLUNTARY CONSENSUS STANDARDS FOR AMBULATORY CARE—ADDITIONAL OUTPATIENT MEASURES 2010: A CONSENSUS REPORT

Appendix B—Main Steering Committee

John Moorhead, MD (Co-Chair)

Oregon Health & Science University, Portland, OR

Suzanne Stone-Griffith, RN, CNAA, MSN (Co-Chair)

Hospital Corporation of America, Nashville, TN

James Adams, MD

Northwestern Memorial HealthCare, Chicago, IL

Evaline A. Alessandrini, MD, MSCE

Cincinnati Children's Hospital Medical Center, Cincinnati, OH

Tanya Alteras, MPP

National Partnership for Women & Families, Washington, DC

Juan Carhuapoma, MD

Johns Hopkins Health System, Baltimore, MD

Ara Chalian, MD

University of Pennsylvania Health System, Philadelphia, PA

Victor Cohen, BS, PharmD, BCPS, CG

Maimonides Medical Center, Brooklyn, NY

Beverly Collins, MD, MS, MBA

CareFirst BlueCross BlueShield, Baltimore, MD

Jeffery Collins, MD, MA

Massachusetts General Hospital, Chelsea, MA

Andrew C. Eisenberg, MD, MHA

American Academy of Family Physicians, Sarasota, FL

Edward Jauch, MD, MS

Medical University of South Carolina, Charleston, SC

Leigh Ann McCartney, RN, MBA

University Hospitals of Cleveland, Cleveland, OH

Nathan Newman, MD

Solantic, LLC, Jacksonville, FL

Robert O'Connor, MD, MPH

University of Virginia, Charlottesville, VA

Catherine Roberts, MD

Mayo Clinic, Phoenix, AZ

John Saltzman, MD

Partners Healthcare System, Inc., Boston, MA

NQF Staff

Helen Burstin, MD, MPH

Senior Vice President

Heidi Bossley, MSN, MBA

Senior Director

Del Conyers, MPH

Assistant Managing Director

Elisa Munthali, MPH

Project Manager

Jessica Weber, MPH

Research Analyst

APPENDIX C: NQF-ENDORSED® MEASURES as of APRIL 2010

Measures Previously Endorsed as part of the National Voluntary Consensus Standards for Ambulatory Care: Specialty Clinician Performance Measures Project

TITLE	DESCRIPTION	IP Owner[1]
NQF #0090 Electrocardiogram 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 electrocardiogram (ECG) performed.	ACEP[2]/ AM PCPI[3]/ NCQA[4]
NQF #0092 Aspirin at Arrival of 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
NQF #0093 Electrocardiogram Performed for Syncope**	Percentage of patients aged 18 years and older with an emergency department discharge diagnosis of syncope who had an ECG performed.	ACEP/ AMA PCPI/ NCQA
NQF #0094 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 assessed.	ACEP/ AMA PCPI/ NCQA
NQF #0095 Assessment 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
NQF #0096 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

** Time-limited endorsement through May 8, 2009.

Measures Previously Endorsed as part of the National Voluntary Consensus Standards for Emergency Care – Phase I: ED Transfer Measures Project

TITLE	DESCRIPTION	IP OWNER
NQF #0286 Asprin at Arrival	Percentage of ED AMI or Chest Pain (with *Probable Cardiac Chest Pain*) adult (>=18 years old) patients without aspirin contraindications who received aspirin received within 24 hours before emergency department arrival or administered prior to transfer.	CMS[5]
NQF #0287 Median to Fibrinolysis	Median time (in minutes) from emergency department arrival to administration of fibrinolytic therapy in AMI adult (>=18 years old) patients with ST-segment elevation or LBBB on the ECG performed closest to ED arrival and prior to transfer.	CMS
NQF #0288 Fibrinolytic Therapy Received Within 30 minutes of ED Arrival	Percentage of ED AMI adult (>=18 years old) patients with ST-segment elevation or LBBB on ECG whose time from ED arrival to fibrinolysis is 30 minutes or less.	CMS
NQF #0289 Median to ECG	Median time (in minutes) from emergency department arrival to ECG (performed in the ED prior to transfer) for AMI or Chest Pain patients (with *Probable Cardiac Chest Pain*).	CMS
NQF #0290 Median Time to Transfer to Another Facility for Acute Coronary Intervention	Median time (in minutes) from emergency department arrival to transfer to another facility for acute coronary intervention.	CMS
NQF #0291 Administrative Communication	Percentage of patients transferred to another acute care hospital whose medical record documentation indicated that administrative information was communicated to the receiving hospital within 60 minutes of departure.	UMRHC[6]
NQF #0292 Vital Signs	Percentage of patients transferred to another acute care hospital whose medical record documentation indicated that the entire vital signs record was communicated to the receiving hospital within 60 minutes of departure.	UMRHC
NQF #0293 Medication Information	Percentage of patients transferred to another acute care hospital whose medical record documentation indicated that medical information was communicated to the receiving hospital within 60 minutes of departure.	UMRHC
NQF #0294 Patient Information	Percentage of patients transferred to another acute care hospital whose medical record documentation indicated that patient information was communicated to the receiving hospital within 60 minutes of departure.	UMRHC
NQF #0295 Physician Information	Percentage of patients transferred to another acute care hospital whose medical record documentation indicated that physician information was communicated to the receiving hospital within 60 minutes of departure.	UMRHC
NQF #0296 Nursing Information	Percentage of patients transferred to another acute care hospital whose medical record documentation indicated that nursing information was communicated to the receiving hospital within 60 minutes of departure.	UMRHC

NQF #0297 Procedures and Tests	Percentage of patients transferred to another acute care hospital whose medical record documentation indicated that procedure and test information was communicated to the receiving hospital within 60 minutes of departure.	UMRHC

Measures Previously Endorsed as part of the National Voluntary Consensus Standards for Hospital Care –
Phase II: Hospital ED Measures Project

TITLE	DESCRIPTION	IP OWNER
NQF #0495 Median Time from ED Arrival to ED Departure for Admitted ED Patients***	Median time from emergency department arrival to time to department from the emergency room for patients admitted to the facility from the emergency department.	CMS
NQF #0496 Median Time from ED Arrival to ED Departure for Discharged ED Patients***	Median time from emergency department arrival to time of department from emergency room for patients discharged from the emergency department.	CMS
NQF #0497 Admit Decision Time to ED Departure Time for Admitted Patients***	Median time from admit decision time to time of departure from the emergency department from emergency department patients admitted to inpatient status.	CMS
NQF #0498 Door to Diagnostic Evaluation by a Qualified Medical Personnel***	Time of first contact in the ED to the time when the patient sees the physician (provider) for the first time.	Louisiana State University Health Care Services Division
NQF #0499 Left Without Being Seen***	Percent of patients leaving without being seen by a physician.	Louisiana State University Health Care Services Division
NQF #0500 Severe Sepsis and Septic Shock: Management Bundle***	Initial Steps in the management of the patient presenting with infection (severe sepsis or septic shock).	Henry Ford Hospital
NQF #0501 Confirmation of Endotracheal Tube Placement***	Any time an endotracheal tube is placed into an airway in the Emergency Department or an endotraceal tube is placed by an outside provider and that patient arrives already intubated (EMS or hospital transfer) or when an airway is placed after patients arrives to the ED there should be some method attempted to confirm ETT placement.	Cleveland Clinic
NQF #0502 Pregnancy test for female abdominal pain patients***	Pregnancy test for female abdominal pain patients.	ACEP
NQF #0503 Anticoagulation for acute pulmonary embolus patients***	Anticoagulation for acute pulmonary embolus patients.	ACEP
NQF #0504 Pediatric Weight Documented in Kilograms	Percent of emergency department patients < 18 years of age with a current weight in kilograms documented in the ED record	AAP[7]

*** Time-limited endorsement through October 24, 2010.

Measures Previously Endorsed as part of the National Voluntary Consensus Standards for Hospital Care: Initial Performance Set Project 2003

TITLE	DESCRIPTION	IP Owner
NQF #0148 Blood cultures performed in the emergency department prior to initial antibiotic received in hospital	Percentage of pneumonia patients 18 years of age and older who have had blood cultures performed in the emergency department prior to initial antibiotic received in hospital	CMS/ TJC[8]
NQF #0527 Prophylactic antibiotic received within 1 hour prior to surgical incision SCIP-Inf-1	Surgical patients with prophylactic antibiotics initiated within one hour prior to surgical incision. Patients who received vancomycin or a fluoroquinolone for prophylactic antibiotics should have the antibiotics initiated within two hours prior to surgical incision. Due to the longer infusion time required for vancomycin or a fluoroquinolone, it is acceptable to start these antibiotics within two hours prior to incision time.	ACS; NCQA; PCPI

Measures Previously Endorsed as part of the National Voluntary Consensus Standards for Hospital Care: Clinician Performance Measures Project

TITLE	DESCRIPTION	IP Owner
NQF #0232 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.	AMA/ PCPI
NQF #0233 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	AMA/ PCPI
NQF #0234 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	AMA/ PCPI
NQF #0325 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	AMA/ PCPI

*** Time-limited endorsement through May 1, 2009.

Measures Previously Endorsed as part of the National Voluntary Consensus Standards for Ambulatory Care:
Phase 2 – An Initial Physician-Focused Performance Measure Set Project

TITLE	DESCRIPTION	IP Owner
NQF #0263 Patient Burn	Percentage of ASC admissions experiencing a burn prior to discharge	ASC Quality Collaboration[9]
NQF #0264 Prophylactic Intravenous (IV) Antibiotic Timing	Percentage of ASC patients who received IV antibiotics ordered for surgical site infection prophylaxis on time	ASC Quality Collaboration
NQF #0265 Hospital Transfer/Admission	Percentage of ASC admissions requiring a hospital transfer or hospital admission prior to being discharged from the ASC.	ASC Quality Collaboration
NQF #0266 Patient Fall	Percentage of ASC admissions experiencing a fall in the ASC.	ASC Quality Collaboration
NQF #0267 Wrong Site, Wrong Side, Wrong Patient, Wrong Procedure, Wrong Implant	Percentage of ASC admissions experiencing a wrong site, wrong side, wrong patient, wrong procedure, or wrong implant.	ASC Quality Collaboration

Measures Previously Endorsed as part of the National Voluntary Consensus Standards for Hospital Care:
Specialty Clinician Performance Measures; Clinician Level Perioperative Care

TITLE	DESCRIPTION	IP Owner
NQF #0271 Discontinuation of Prophylactic Antibiotics (Non-Cardiac Procedures)*****	Percentage of non-cardiac surgical patients aged 18 years and older undergoing procedures with the indications for prophylactic antibiotics AND who received a prophylactic antibiotic, who have an order for discontinuation of prophylactic antibiotics within 24 hours of surgical end time	ACS; NCQA; PCPI
NQF #454 Anesthesiology and Critical Care: Perioperative Temperature Management*****	Percentage of patients, regardless of age, undergoing surgical or therapeutic procedures under general or neuraxial anesthesia of 60 minutes duration or longer for whom either active warming was used intraoperatively for the purpose of maintaining normothermia, OR at least one body temperature equal to or greater than 36 degrees Centigrade (or 96.8 degrees Fahrenheit) was recorded within the 30 minutes immediately before or the 30 minutes immediately after anesthesia end time	American Society of Anesthesiologists; PCPI

***** Time-limited endorsement through July 31, 2010.

Measures Previously Endorsed as part of the National Voluntary Consensus Standards for Outpatient Efficiency

TITLE	DESCRIPTION	IP Owner
NQF #0512 Percentage of patients undergoing cervical spine radiographs in trauma who do not have neck pain, distracting pain, neurological deficits, reduced level of consciousness or intoxication.	Percentage of patients undergoing cervical spine radiographs in trauma who do not have neck pain, distracting pain, neurological deficits, reduced level of conciousness or intoxication.	Harborview Medical Center

Measures Previously Endorsed as part of the National Voluntary Consensus Standards for Surgery and Anesthesia: Additional Performance Measures 2008

TITLE	DESCRIPTION	IP Owner
NQF #0515 Ambulatory surgery patients with appropriate method of hair removal	Percentage of ASC admissions with appropriate surgical site hair removal.	ASC Quality Collaboration

Notes

1. Intellectual Property owner. For the most current specifications and supporting information please refer to the IP owner.
2. ACEP- American College of Emergency Physicians (www.acep.org)
3. AMA/PCPI – American Medical Association/ Physician Consortium for Performance Improvement (www.physicianconsortium.org)
4. NCQA – National Committee for Quality Assurance (www.ncqa.org)
5. CMS- Centers for Medicare & Medicaid Services (www.cms.hhs.gov)
6. UMRHRC – University of Minnesota Rural Health Research Center (www.hpm.umn.edu/rhrc/)
7. AAP- American Academy of Pediatrics (www.aap.org)
8. TJC- The Joint Commission (www.jointcommission.org)
9. ASC Quality Collaboration- Ambulatory Surgical Centers Quality Collaboration (http://www.ascquality.org/)