**DRAFT FOR HIT POLICY COMMITTEE REVIEW**

August 3, 2011

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Dear Dr. Mostashari:

The Health Information Technology Policy Committee's (HITPC)/ Quality Measures Workgroup developed several recommendations regarding the stage 2 clinical quality measure framework of Centers for Medicare and Medicaid Services' (CMS) EHR Incentive Program for the meaningful use (MU) of electronic health records (EHR). Clinical quality measures are critical in the evaluation of our delivery system and can assist providers and systems in the improvement of care. The growing adoption of EHR systems and emerging capabilities for health information exchange will allow our health system to measure clinical performance in critical areas previously considered infeasible. In a series of public meetings, calls, and hearings, the Workgroup heard strong endorsement for measures that are patient-centered, harmonized across Federal programs (e.g., using the same measures for PQRS, ACOs and MU), parsimonious in nature and balanced between process and outcomes. We heard from multiple provider groups asking for a set of "measures that matter," relevant to high impact diseases, and not burdensome to report. The Workgroup followed a transparent and collaborative process engaging multiple stakeholders from diverse organizations including providers, health systems, measure developers, software vendors, patient/consumer groups, and policy experts. Multiple Federal agencies had ex-officio representation on the Workgroups as well. As a result, our recommendations include both well-established measures and new measure concepts in the new domain areas. Some of these new concepts also require methodological innovation including 'delta measures', computational measures (e.g., LDL assessment using Framingham risk score) and patient reported outcome measures.

Following the endorsement of the quality measures framework approach on June 8, 2011, this letter provides recommendations to the Department of Health and Human Services (HHS) on: 1) a reporting framework that builds upon the Stage 1 core plus menu option for eligible providers; 2) a list of menu domains and measures to be developed, and 3) a list of methodological challenges/issues related to implementation of novel measures in the future.

## Background

In August 2010, the Quality Measures Workgroup was tasked to develop recommendations for potential clinical quality measure concepts/measures for Stage 2 and 3 in Meaningful Use. We

had dozens of calls and in-person hearings with vendors, measure developers, providers, and hospitals regarding the implementation and use of the measures. Six subcommittees were formed to address our six priorities: 1) Patient and Family Engagement; 2) Patient Safety; 3) Population Health; 4) Care Coordination; 5) Clinical Appropriateness and Efficiency and 6) Methodological Issues. These domains are based on the National Priorities Partnership framework and supported the Meaningful Use priority areas identified by the HITPC.

The measures and concepts were selected from suggestions that range from aspirational concepts to existing endorsed measures. We also held a Request for Comment on the proposed measure concepts which generated over 491 measure suggestions from 114 unique organizations. All of this input has collectively contributed to the recommendations below.

## Recommendations

### I. Recommendations related to Core and Menu framework of Stage 2 (Figure 1)

The Quality Measures Workgroup recommends that providers be required to report two sets of quality measures. The first is to be drawn from a list of "core measures," including those required for Stage 1. The second is to be drawn from a set of six "menus" of available and relevant measures for each specialty in each health priority area.

As in Stage 1, the provider will be required to complete all (or a specified number) of the core measures. The provider will also be required to complete at least one measure in each of the six menu domains. The menus can be constituted to map directly to the particular scope of practice for each designated specialty – so that a menu set of measures for cardiologists might be quite different than the menu set for radiologists, for example. We believe that our construct of core plus menu options of clinical quality measures would support HHS' National Quality Strategy (NQS), intended to promote better care, healthy people and communities, and reduce the cost of quality health care. The NQS contains six aims (safer care, patient and family engagement, care coordination, effective prevention and treatment for leading causes starting with cardiovascular health, community health promotion, and affordable care) which correspond closely to the six domains of the menu set. Additionally, our decision to continue the current Stage 1 core set of measures is based on the NQS objective of focusing on the number one cause of mortality in the U.S.-- cardiovascular events. The continuation of Stage 1 core measures focusing on BMI, smoking cessation, and blood pressure control aligns Meaningful Use with a focused set of clinical quality measures that allows providers to focus on fundamental components of cardiovascular health. Additionally, we have recommended two more core measures that reflect care coordination processes.

## The Framework:

**1. Core plus Menu for Eligible Providers (Figure 1)**- a schematic depicting the core/menu framework for clinical quality measures for eligible providers. We have recommended a set of core measure items. Eligible Professionals (EPs) could be required to complete all of the core measures; alternatively, CMS could allow EPs to complete a smaller number (e.g., five) selected

from the eight measures, which would allow for some recognition of variation across different practice types.

The framework is predicated on priorities identified in the National Priorities Partnership framework, the National Quality Strategy framework and domains found in the broader Meaningful Use framework. We recommend that providers be required to choose one or more measures from each domain. The Clinical Process domain was created to accommodate the many important quality measures recently identified by professional societies and other bodies seeking to improve clinical performance in areas of high consensus. The other domains address areas of increasing policy importance to the nation, but have received less attention from measurement developers. We encourage a requirement that every EP and hospital be required to report at least one measure from each domain in order to begin driving industry and professional attention to these areas of growing concern. We would also encourage CMS, working with professional specialty societies, to seek parsimony in the final construction of these menus, ideally identifying a small number of measures relevant to each specialty that can achieve general endorsement by affected providers and be perceived to add real value to quality of care in that area.

*Domains*

1) Patient and Family Engagement: measures/concepts that reflect potential impact to improve patient-centered care and quality of care delivered to patients, the importance of collecting patient-reported data, and measures with the ability to impact at the individual patient level as well as the population level.

2) Efficiency measures: measures/concepts that significantly improve outcomes and reduce errors and /or to impact and benefit a large number of patients with an emphasis on utilization, overuse and appropriate use of care.

3) Patient Safety: measures/concepts that reflect patient safety in both hospital and ambulatory settings and processes that would reduce harm to patients and reduce burden of illness; ability to enable longitudinal assessment of condition-specific, patient-focused episodes of care, and unmet needs of population/public health.

4) Population and Public Health: measures that are outcome focused, and delta-focused with the ability to achieve longitudinal measurement that will demonstrate improvement or lack of improvement of the health of the U.S. population.

5) Care Coordination: measures/concepts that reflect aspects of care coordination and can improve appropriate and timely patient and care team communication.

6) Clinical Processes: measures that reflect clinical care processes closely linked to outcomes, based on evidence and practice guidelines.

**2. Eligible Hospital Measures.** We've embedded the inpatient hospital measures within each domain. A list of inpatient hospital measures is included within a categorized framework. The

Workgroup recommends that ONC and CMS require eligible hospitals to report a balanced mix of process and outcome measures distributed across a range of domains that we have highlighted (Patient Safety, Care Coordination, and Patient/Family Engagement).

## II. Recommendations related to Methodological Issues

The HIT Policy Committee is committed to leveraging health IT to permit a more robust assessment of clinical quality in support of national health goals. Stage 1 focused on capturing the primary clinical data that could be used to evaluate quality performance. Most Stage 1 measures were long-accepted and followed established conventions for patient inclusion and computation of performance values, generally following a rate-based method comparing numerators and denominators. The HIT Policy Committee's interest in outcome measures, and the emerging focus on such domains as care coordination, patient engagement, and efficiency requires a consideration of the measurement methods appropriate to fair and objective measurement of performance in less "transactional" contexts. Early generation measures may have looked simply at whether a recommended service was or was not delivered to a qualifying population; the new measures may engage multiple measures of a biomarker over time, or reliable measurement of a patient's reported health status or symptom burden. In order for these new domains to be properly included in Stage 2 and 3, the Workgroup asked the methodological "Tiger Team" to identify areas where technical consensus needed to be developed. We recommend that the HIT Standards Committee or other appropriate bodies be asked to address the issues listed here and, where possible, to provide ONC and CMS with technical guidance in time for inclusion of new measures in Stage 2.

1) <u>Standards and quality data vehicle</u>
    a. A standard is needed to designate self-reported data with source tagged
    b. Standards should be in place to reduce the ambiguity of measure logic (e.g., need for standards for coding the problem list- inactive/active designation of problem; date of onset for a given disease process)
    c. CDA type standard and transport standard for self-reported data to address
        i. race, ethnicity, language, and equity
        ii. reported perception of experience
        iii. structured data for m-health/home devices.

2) <u>Longitudinal Measurement/ Delta measurement</u>
   Definition: The use of measures that assess patient change in outcomes across time, rather than only achievement of a threshold.

    a. Data may not be computed locally, and may consist of data points collected at various time frames as well as from multiple sources. How do we pick the data points? Need to determine the appropriate points in time for baseline and follow-up
    b. Many outcomes do not have a linear trajectory and may include a lower limit associated with harm

c. Selecting best/worst/average when there are multiple results in given time period; analysis is needed to determine method(s) of communicating data.

3) Need guidance policy to promote capacity and scalability of EHRs to be in step with increasing complexity of quality measures

   a. Establish if computation should be a core function of EHR product
   b. Advise if/how architecture should support data management and analytic platforms
   c. Identify what requirements should be specified in certification requirements.

4) Standards are needed for coding of problem lists, which address:

   a. Reliance on the problem list for assessment of conditions/diagnoses over time with attention to sensitivity and specificity of problem list entries
   b. A patient centered problem list (broad range of problems not limited to traditional medical diagnoses with billing codes)
   c. Conventions
   d. Value sets that align to standard terminology (e.g. date of diagnosis, onset of symptoms)
   e. Reconciliation of problems—resolved; stable/maintenance of diagnosis.

5) Standards are needed to assign attribution of each member to a panel for measurement—provider, team/team member, payer-- unique identifier is needed for who is participating in care associated with particular problem

The Quality Measures Workgroup appreciates the opportunity to provide input into the development of stage 2 MU clinical quality measure recommendations. The \Workgroup respectfully submits the recommendations contained in this letter, which we believe would support a framework for quality improvement, safer patient centered care, and a more efficient delivery system. We wish to express our particular appreciation for the extraordinary support provided by the ONC staff and the generous contribution of expertise and time by the many volunteer committee members, witnesses, and public commenters who have added substantially to the approach we recommend here.

We are available and willing to assist the Office and the Department in any way we can.

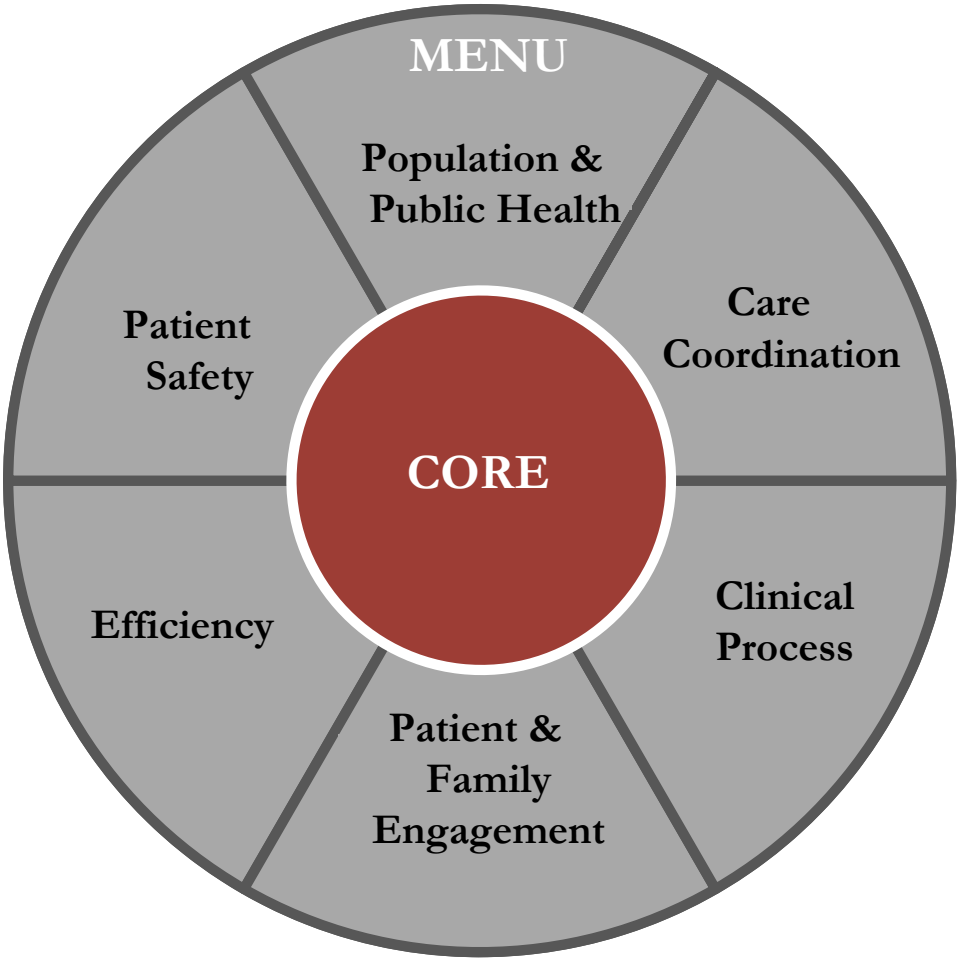
Sincerely yours,

/s/

Paul Tang, MD

Vice Chair, HIT Policy Committee

## FIG. 1 PROPOSED ELIGIBLE PROVIDER CORE MENU FRAMEWORK



# ELIGIBLE PROVIDER CORE MEASURES

| Measure Title | Measure Description | Measure Status | Outpatient \| Inpatient |
|---|---|---|---|
| Hypertension: Blood Pressure Measurement | Percentage of patient visits for patients aged 18 years and older with a diagnosis of hypertension with blood pressure (BP) recorded. | MU Stage 1 | Outpatient |
| Preventive Care and Screening Measure Pair: a. Tobacco Use Assessment | Percentage of patients aged 18 years or older who have been seen for at least 2 office visits, who were queried about tobacco use one or more times within 24 months. | MU Stage 1 | Outpatient |
| Preventive Care and Screening Measure Pair: b. Tobacco Cessation Intervention | Percentage of patients aged 18 years and older identified as tobacco users within the past 24 months and have been seen for at least 2 office visits, who received cessation intervention. | MU Stage 1 | Outpatient |
| Adult Weight Screening and Follow-Up | Percentage of patients aged 18 years and older with a calculated BMI in the past six months or during the current visit documented in the medical record AND if the most recent BMI is outside parameters, a follow-up plan is documented. | MU Stage 1 | Outpatient |
| Weight Assessment and Counseling for Children and Adolescents | The percentage of patients 2-17 years of age who had an outpatient visit with a PCP or OB/GYN and who had evidence of BMI percentile documentation, counseling for nutrition and counseling for physical activity during the measurement year. | MU Stage 1 | Outpatient |
| Childhood immunization Status | The percentage of children 2 years of age who had four diphtheria, tetanus and acellular pertussis (DTaP); three polio (IPV); one measles, mumps and rubella (MMR); two H influenza type B (HIB); three hepatitis B (Hep B), one chicken pox (VZV); four pneumococcal conjugate (PCV); two hepatitis A (Hep A); two or three rotavirus (RV); and two influenza (flu) vaccines by their second birthday. The percentage of children 2 years of age who had the complete series of vaccines by 2 years of age. There are 12 rates calculated for this measure 10 for the individual immunizations and 2 for the series of immunizations. | MU Stage 1 | Outpatient |
| Preventive Care and Screening: Influenza Immunization for Patients >= 50 Years Old | Percentage of patients aged 50 years and older who received an influenza immunization during the flu season (September through February). | MU Stage 1 | Outpatient |
| Medication Reconciliation | | Recently Retooled | |
| Closing the Referral Loop | | To be developed | |

# ELIGIBLE PROVIDER MENU MEASURES

## Patient & Family Engagement

| Measure Title | Measure Description | Measure Status | Outpatient \| Inpatient |
|---|---|---|---|
| Diabetic Retinopathy: Communication with the Physician Managing Ongoing Diabetes Care | Percentage of patients aged 18 years and older with a diagnosis of diabetic retinopathy who had a dilated macular or fundus exam performed with documented communication to the physician who manages the on-going care of the patient with diabetes mellitus regarding the findings of the macular or fundus exam at least once within 12 months. | MU Stage 1 | Outpatient |
| Major Depressive Disorder (MDD): Suicide Risk Assessment | Percentage of patients who had a suicide risk assessment completed at each visit. | Recently Retooled | Outpatient |
| PICU Pain Assessment | Percentage of PICU patients receiving pain assessment on admission. | Recently Retooled | Inpatient |
| PICU Periodic Pain Assessment | Percentage of PICU patients receiving periodic pain assessment. | Recently Retooled | Inpatient |
| Diabetic Foot Care and Patient/Caregiver Education Implemented During Short Term Episodes of Care | Percentage of short term home health episodes of care during which diabetic foot care and education were included in the physician-ordered plan of care and implemented for patients with diabetes. | Recently Retooled | Outpatient |
| Depression Remission at Twelve Months | Adult patients age 18 and older with major depression or dysthymia and an initial PHQ-9 score > 9 who demonstrate remission at twelve months defined as PHQ-9 score less than 5. This measure applies to both patients with newly diagnosed and existing depression whose current PHQ-9 score indicates a need for treatment. | Recently Retooled | Outpatient |
| Depression Remission at Six Months | Adult patients age 18 and older with major depression or dysthymia and an initial PHQ-9 score > 9 who demonstrate remission at six months defined as PHQ-9 score less than 5. This measure applies to both patients with newly diagnosed and existing depression whose current PHQ-9 score indicates a need for treatment. | Recently Retooled | Outpatient |
| Depression Utilization of the PHQ-9 Tool | Adult patients age 18 and older with the diagnosis of major depression or dysthymia who have a PHQ-9 tool administered at least once during a 4 month period in which there was a qualifying visit. | Recently Retooled | Outpatient |
| Measure assessing the percent of qualifying patients that complete a health risk or health status assessment for 10 priority conditions that are sensitive to functional or symptom improvement | | To be developed | |

| Measure Title | Measure Description | Measure Status | Outpatient \| Inpatient |
|---|---|---|---|
| Measure assessing functional status (for 10 priority conditions sensitive to functional or symptom improvement) | | To be developed | |
| Measure assessing the experience of care provided by a practice using a composite survey tool | | To be developed | |

# Efficiency

| Measure Title | Measure Description | Measure Status | Outpatient \| Inpatient |
|---|---|---|---|
| Cesarean Rate for Low-Risk Birth Women | Cesarean Rate for low-risk first birth women (aka NTSV CS rate: nulliparous, term, singleton, vertex) identifies the portion of cesarean births that has the most variation among practitioners, hospitals, regions and states. Unlike other cesarean measures, it focuses attention on the proportion of cesarean births that is affected by elective medical practices such as induction and early labor admission. Furthermore, the success (or lack thereof) of management of the first labor directly impacts the remainder of the woman's reproductive life especially given the current high rate of repeat cesarean births. This is also the measure used in Healthy Person 2010 (Objective 16.9a, US DHS, 2000). and previously received endorsement from the American College of Obstetricians and Gynecologists (American College of Obstetricians and Gynecologists: Task Force on Cesarean Delivery, 2000). A recent European review of cesarean birth measures also identified that this measure pinpointed the portion of cesarean births that had the greatest variation and contributed the most to the rise in overall rates in every country studied (Brennan, 2009). | Recently Retooled | Inpatient |
| Use of Contrast: Thorax CT | This measure calculates the percentage of thorax studies that are performed with and without contrast out of all thorax studies performed (those with contrast, those without contrast, and those with both). | Recently Retooled | Outpatient |
| Asthma Medication Ratio: Percentage of members who were identified as having persistent asthma and had a ratio of controller medications to total asthma medications | | To be developed | |
| Lipid control using Framingham risk score | | To be developed | |
| Lower Back Pain: Measure repeat imaging studies (extend beyond Medicare) | | To be developed | |
| Appropriate Head CT Imaging in Adults with Mild Traumatic Brain Injury | | To be developed | |
| Pulmonary CT Imaging for Pulmonary Embolism | | To be developed | |

| Measure Title | Measure Description | Measure Status | Outpatient \| Inpatient |
|---|---|---|---|
| Cardiac Imaging appropriateness measures (pre-op evaluation for low-risk surgeries, for routine screening, for non-cardiac low-risk surgeries | | To be developed | |

# Care Coordination:

| Measure Title | Measure Description | Measure Status | Outpatient \| Inpatient |
|---|---|---|---|
| Initiation and Engagement of Alcohol and Other Drug Dependence Treatment: (a) Initiation, (b) Engagement | The percentage of adolescent and adult patients with a new episode of alcohol and other drug (AOD) dependence who initiate treatment through an inpatient AOD admission, outpatient visit, intensive outpatient encounter or partial hospitalization within 14 days of the diagnosis and who initiated treatment and who had two or more additional services with an AOD diagnosis within 30 days of the initial visit. | MU Stage 1 | Outpatient |
| Diabetes: Foot Exam | The percentage of patients aged 18-75 years with diabetes (type 1 or type 2) who had a foot exam (visual inspection, sensory exam with monofilament, or pulse exam). | MU Stage 1 | Outpatient |
| Primary Open Angle Glaucoma (POAG): Optic Nerve Evaluation | Percentage of patients aged 18 years and older with a diagnosis of POAG who have been seen for at least 2 office visits, who have an optic nerve head evaluation during one or more office visits within 12 months. | MU Stage 1 | Outpatient |
| Diabetic Retinopathy: Communication with the Physician Managing Ongoing Diabetes Care | Percentage of patients aged 18 years and older with a diagnosis of diabetic retinopathy who had a dilated macular or fundus exam performed with documented communication to the physician who manages the on-going care of the patient with diabetes mellitus regarding the findings of the macular or fundus exam at least once within 12 months. | MU Stage 1 | Outpatient |
| Medication Reconciliation | Percentage of patients aged 65 years and older discharged from any inpatient facility (e.g. hospital, skilled nursing facility, or rehabilitation facility) and seen within 60 days following discharge in the office by the physician providing on-going care who had a reconciliation of the discharge medications with the current medication list in the medical record documented. | Recently Retooled | Inpatient |
| Chronic Obstructive Pulmonary Disease (COPD): Bronchodilator Therapy | Percentage of symptomatic patients aged 18 years and older with a diagnosis of COPD who were prescribed an inhaled bronchodilator. | Recently Retooled | Outpatient |
| Diagnosis of attention deficit hyperactivity disorder (ADHD) in primary care for school age children and adolescents | Percentage of patients newly diagnosed with ADHD whose medical record contains documentation of DSM-IV-TR or DSM-PC criteria. | Recently Retooled | Outpatient |
| Management of attention deficit hyperactivity disorder (ADHD) in primary care for school age children and adolescents | Percentage of patients treated psychostimulant with medication for the diagnosis of ADHD whose medical record contains documentation of a follow-up visit at least twice a year. | Recently Retooled | Outpatient |

| Measure Title | Measure Description | Measure Status | Outpatient \| Inpatient |
|---|---|---|---|
| ADHD: Follow-Up Care for Children Prescribed Attention-Deficit/Hyperactivity Disorder (ADHD) Medication | a. Initiation Phase: Percentage of children 6 - 12 years of age as of the Index Prescription Episode Start Date with an ambulatory prescription dispensed for and ADHD medication and who had one follow-up visit with a practitioner with prescribing authority during the 30-Day Initiation Phase.<br><br>b. Continuation and Maintenance (C&M) Phase: Percentage of children 6 - 12 years of age as of the Index Prescription Episode Start Date with an ambulatory prescription dispensed for ADHD medication who remained on the medication for at least 210 days and who in addition to the visit in the Initiation Phase had at least two additional follow-up visits with a practitioner within 270 days (9 months) after the Initiation Phase ends. | Recently Retooled | Outpatient |
| Perioperative Care: Timing of Prophylactic Antibiotics - Ordering Physician | Percentage of surgical patients aged 18 years and older undergoing procedures with the indications for prophylactic parenteral antibiotics who have an order for an 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). | Recently Retooled | Inpatient |
| Perioperative Care: 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. | Recently Retooled | Inpatient |
| End Stage Renal Disease (ESRD): Plan of Care for Inadequate Peritoneal Dialysis | Percentage of patients aged 18 years and older with a diagnosis of ESRD receiving peritoneal dialysis who have a Kt/V>=1.7 OR patients who have a Kt/V<1.7 with a documented plan of care 3 times a year (every 4 months) during the 12 month reporting period. | Recently Retooled | Outpatient |
| End Stage Renal Disease (ESRD): Plan of Care of Inadequate Hemodialysis in ESRD Patients | Percentage of patient calendar months during the 12 month reporting period in which patients aged 18 years and older with a diagnosis of ESRD and receiving hemodialysis have a Kt/V>=1.2 OR have a Kt/V<1.2 with a documented plan of care. | Recently Retooled | Outpatient |
| All Cause Readmission Index (risk adjusted) | 30-day Readmission Index for Non-Maternity and Non-Pediatric Discharges. | Recently Retooled | Inpatient |
| Iatrogenic Pneumothorax in Non-Neonates (risk adjusted) (PDI5) | Percent of medical and surgical discharges, age under 18 years, with ICD-9-CM code of iatrogenic pneumothorax in any secondary diagnosis field. | Recently Retooled | Inpatient |
| Median Time from ED Arrival to ED Departure for Discharged ED Patients | Median time from emergency department arrival to time of departure from the emergency room for patients discharged from the emergency department. | Recently Retooled | Inpatient |

| Measure Title | Measure Description | Measure Status | Outpatient \| Inpatient |
|---|---|---|---|
| Depression Remission at Twelve Months | Adult patients age 18 and older with major depression or dysthymia and an initial PHQ-9 score > 9 who demonstrate remission at twelve months defined as PHQ-9 score less than 5. This measure applies to both patients with newly diagnosed and existing depression whose current PHQ-9 score indicates a need for treatment. | Recently Retooled | Outpatient |
| Depression Remission at Six Months | Adult patients age 18 and older with major depression or dysthymia and an initial PHQ-9 score > 9 who demonstrate remission at six months defined as PHQ-9 score less than 5. This measure applies to both patients with newly diagnosed and existing depression whose current PHQ-9 score indicates a need for treatment. | Recently Retooled | Outpatient |
| Depression Utilization of the PHQ-9 Tool | Adult patients age 18 and older with the diagnosis of major depression or dysthymia who have a PHQ-9 tool administered at least once during a 4 month period in which there was a qualifying visit. | Recently Retooled | Outpatient |
| Measure of self-management plan for patients with leading conditions | | To be developed | |
| Measure of a documented advance care plan | | To be developed | |
| Measure of medication reconciliation after any care transition | | To be developed | |
| Measure of patient and family experience across a care transition | | To be developed | |
| Composite measures assessing closing the "referral loop" | | To be developed | |

# Patient Safety

| Measure Title | Measure Description | Measure Status | Outpatient \| Inpatient |
|---|---|---|---|
| Drugs to be avoided in the elderly: a. Patients who receive at least one drug to be avoided, b. Patients who receive at least two different drugs to be avoided | Percentage of patients ages 65 years and older who received at least one drug to be avoided in the elderly in the measurement year. Percentage of patients 65 years of age and older who received at least two different drugs to be avoided in the elderly in the measurement year. | Recently Retooled | Outpatient |
| Urinary catheter-associated urinary tract infection for intensive care unit (ICU) patients | Standardized Infection Ration (SIR) of healthcare-associated, catheter-associated urinary tract infections (CAUTI) among patients in intensive care units (ICUs), excluding patients in neonatal ICUs (NICUs). | Recently Retooled | Inpatient |
| Central line catheter-associated blood stream infection rate for ICU and high-risk nursery (HRN) patients | Standardized Infection Ration (SIR) of healthcare-associated, central line-associated bloodstream infections (CLABSI) among patients in intensive care units (ICUs) and Neonatal Intensive Care Units (NICUs). | Recently Retooled | Inpatient |
| Perioperative Care: Venous Thromboembolism (VTE) Prophylaxis (when indicated in ALL patients) | Patient Age: All patients age 18 years and older Procedures: surgical procedures for which VTE prophylaxis is indicated in all patients who had an order for LMWH, LDUH, adjusted-dose warfarin, fondaparinux or mechanical prophylaxis given within 24 hours prior to incision time or 24 hours after surgery end time. | Recently Retooled | Inpatient |
| Perioperative Care: Selection of Prophylactic Antibiotic - First OR Second Generation Cephalosporin | Percentage of surgical patients aged 18 years and older undergoing procedures with the indications for a first OR second generation cephalosporin prophylactic antibiotic who had an order for cefazolin OR cefuroxime for antimicrobial prophylaxis. | Recently Retooled | Inpatient |
| Perioperative Care: Timing of Prophylactic Antibiotics - Ordering Physician | Percentage of surgical patients aged 18 years and older undergoing procedures with the indications for prophylactic parenteral antibiotics who have an order for an 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). | Recently Retooled | Inpatient |
| Central Line Bundle Compliance | The percentage of intensive care patients in the included ICUs with central lines for who all five elements of the central line "bundle" are documented on the daily goals sheet, central line checklist, patients medical record, or other documentation tool. | Recently Retooled | Inpatient |
| Cardiac Surgery Patients With Controlled 6 A.M. Postoperative Blood Glucose | Cardiac surgery patients with controlled 6 A.M. blood glucose (less than or equal to 200 mg/dL) on postoperative day one (POD 1) and postoperative day two (POD 2) with Anesthesia End Date being postoperative day zero (POD 0). | Recently Retooled | Inpatient |

| Measure Title | Measure Description | Measure Status | Outpatient \| Inpatient |
|---|---|---|---|
| Ventilator Bundle | The percentage of intensive care patients on mechanical ventilation for whom all five elements of the ventilator "bundle" are implemented and documented. | Recently Retooled | Inpatient |
| All Cause Readmission Index (risk adjusted) | 30-day Readmission Index for Non-Maternity and Non-Pediatric Discharges. | Recently Retooled | Inpatient |
| Iatrogenic Pneumothorax in Non-Neonates (risk adjusted) (PDI5) | Percent of medical and surgical discharges, age under 18 years, with ICD-9-CM code of iatrogenic pneumothorax in any secondary diagnosis field. | Recently Retooled | Inpatient |
| Foreign Body left after procedure (PDI3) | Discharges with foreign body accidently left in during procedure per 1000 discharges. | Recently Retooled | Inpatient |
| Urinary catheter removed on Postoperative Day 1 (POD 1) or Postoperative Day 2 (POD 2) with day of surgery being day zero | Surgical patients with urinary catheter removed on Postoperative Day 1 or Postoperative Day 2 with day of surgery being day zero. | Recently Retooled | Inpatient |
| Cesarean Rate for Low-Risk Birth Women | Cesarean Rate for low-risk first birth women (aka NTSV CS rate: nulliparous, term, singleton, vertex) identifies the portion of cesarean births that has the most variation among practitioners, hospitals, regions and states. Unlike other cesarean measures, it focuses attention on the proportion of cesarean births that is affected by elective medical practices such as induction and early labor admission. Furthermore, the success (or lack thereof) of management of the first labor directly impacts the remainder of the woman's reproductive life especially given the current high rate of repeat cesarean births. This is also the measure used in Healthy Person 2010 (Objective 16.9a, US DHS, 2000). and previously received endorsement from the American College of Obstetricians and Gynecologists (American College of Obstetricians and Gynecologists: Task Force on Cesarean Delivery, 2000). A recent European review of cesarean birth measures also identified that this measure pinpointed the portion of cesarean births that had the greatest variation and contributed the most to the rise in overall rates in every country studied (Brennan, 2009). | Recently Retooled | Inpatient |
| Radiology: Exposure Time Reported for Procedures Using Fluoroscopy | Percentage of final reports for procedures using fluoroscopy that include documentation of radiation exposure or exposure time. | Recently Retooled | Outpatient |

| Measure Title | Measure Description | Measure Status | Outpatient \| Inpatient |
|---|---|---|---|
| Prophylactic Antibiotic Received Within One Hour Prior to Surgical Incision | 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. | Recently Retooled | Inpatient |
| Prophylactic Antibiotic Selection for Surgical Patients | Surgical patients who received prophylactic antibiotics consistent with current guidelines (specific to each type of surgical procedure). | Recently Retooled | Inpatient |
| Prophylactic Antibiotics Discontinued Within 24 Hours After Surgery End Time | Surgical patients whose prophylactic antibiotics were discontinued within 24 hours after Anesthesia End Time. The Society of Thoracic Surgeons (STS) Practice Guideline for Antibiotic Prophylaxis in Cardiac Surgery (2006) indicates that there is no reason to extend antibiotics beyond 48 hours for cardiac surgery and very explicitly states that antibiotics should not be extended beyond 48 hours even with tubes and drains in place for cardiac surgery. | Recently Retooled | Inpatient |
| Measure of medication monitoring for patients on chronic medications | | To be developed | |
| Measure of medication-disease or condition interactions in the elderly | | To be developed | |
| Measure of adverse drug event reporting | | To be developed | |
| Measure of falls screening | | To be developed | |
| Measure of medication monitoring for patients on chronic medications | | To be developed | |

# Population & Public Health

| Measure Title | Measure Description | Measure Status | Outpatient \| Inpatient |
|---|---|---|---|
| Controlling High Blood Pressure | The percentage of patients 18-85 years of age who had a diagnosis of hypertension and whose BP was adequately controlled during the measurement year. | MU Stage 1 | Outpatient |
| Smoking and Tobacco Use Cessation, Medical assistance: a. Advising Smokers and Tobacco Users to Quit, b. Discussing Smoking and Tobacco Use Cessation Medications, c. Discussing Smoking and Tobacco Use Cessation Strategies | The percentage of patients 18 years of age and older who were current smokers or tobacco users, who were seen by a practitioner during the measurement year and who received advice to quit smoking or tobacco use or whose practitioner recommended or discussed smoking or tobacco use cessation medications, methods or strategies. | MU Stage 1 | Outpatient |
| Breast Cancer Screening | The percentage of women 40-69 years of age who had a mammogram to screen for breast cancer. | MU Stage 1 | Outpatient |
| Cervical Cancer Screening | The percentage of women 21-63 years of age who received one or more Pap tests to screen for cervical cancer. | MU Stage 1 | Outpatient |
| Chlamydia Screening for Women | The percentage of women 15-24 years of age who were identified as sexually active and who had at least one test for chlamydia during the measurement year. | MU Stage 1 | Outpatient |
| Colorectal Cancer Screening | The percentage of adults 50-75 years of age who had appropriate screening for colorectal cancer. | MU Stage 1 | Outpatient |
| Pneumonia Vaccination Status for Older Adults | The percentage of patients 65 years of age and older who have ever received a pneumococcal vaccine. | MU Stage 1 | Outpatient |
| Diabetes: HbA1c Poor Control | The percentage of patients 18-75 years of age with diabetes (type 1 or type 2) who had HbA1c > 9.0%. | MU Stage 1 | Outpatient |
| Diabetes: Blood Pressure Management | The percentage of patients 18-75 years of age with diabetes (type 1 or type 2) who had BP < 140/90 mmHg. | MU Stage 1 | Outpatient |
| Diabetes: Urine Screening | The percentage of patients 18-75 years of age with diabetes (type 1 or type 2) who had a nephropathy screening test or evidence of nephropathy. | MU Stage 1 | Outpatient |
| Diabetes: LDL Management & Control | The percentage of patients 18-75 years of age with diabetes (type 1 or type 2) who had LDL-C <100mg/dL. | MU Stage 1 | Outpatient |
| Diabetes: HbA1c Control (<8%) | The percentage of patients 18-75 years of age with diabetes (type 1 or type 2) who had HbA1c <8.0%. | MU Stage 1 | Outpatient |

| Measure Title | Measure Description | Measure Status | Outpatient \| Inpatient |
|---|---|---|---|
| Osteoporosis: Screening or Therapy for Osteoporosis for Women Aged 65 Years and Older | Percentage of female patients aged 65 years and older who have a central dual-energy X-ray absorptiometry measurement ordered or performed at least once since age 60 or pharmacologic therapy prescribed within 12 months. | Recently Retooled | Outpatient |
| Bipolar Disorder: Monitoring change in level-of-functioning | Percentage of patients aged 18 years and older with an initial diagnosis or new episode/presentation of bipolar disorder. | Recently Retooled | Outpatient |
| Aspirin at Arrival | Acute myocardial infarction (AMI) patients who received aspirin within 24 hours before or after hospital arrival. | Recently Retooled | Outpatient |
| Aspirin Prescribed at Discharge | Acute myocardial infarction (AMI) patients who are prescribed aspirin at hospital discharge. | Recently Retooled | Inpatient |
| Hepatitis C: Counseling Regarding Risk of Alcohol Consumption | Percentage of patients aged 18 years and older with a diagnosis of hepatitis C who were counseled regarding the risks of alcohol consumption at least once within the 12 month reporting period. | Recently Retooled | Outpatient |
| Cesarean Rate for Low-Risk Birth Women | Cesarean Rate for low-risk first birth women (aka NTSV CS rate: nulliparous, term, singleton, vertex) identifies the portion of cesarean births that has the most variation among practitioners, hospitals, regions and states. Unlike other cesarean measures, it focuses attention on the proportion of cesarean births that is affected by elective medical practices such as induction and early labor admission. Furthermore, the success (or lack thereof) of management of the first labor directly impacts the remainder of the woman's reproductive life especially given the current high rate of repeat cesarean births. This is also the measure used in Healthy Person 2010 (Objective 16.9a, US DHS, 2000). and previously received endorsement from the American College of Obstetricians and Gynecologists (American College of Obstetricians and Gynecologists: Task Force on Cesarean Delivery, 2000). A recent European review of cesarean birth measures also identified that this measure pinpointed the portion of cesarean births that had the greatest variation and contributed the most to the rise in overall rates in every country studied (Brennan, 2009). | Recently Retooled | Inpatient |
| Proportion of Infants 22 to 29 Weeks Gestation Treated with Surfactant who are Treated within 2 Hours of Birth | Proportion of infants with gestational age between 22 and 29 completed weeks who were treated with surfactant and were treated within two hours of birth. | Recently Retooled | Inpatient |
| Pregnant women that had HBsAg testing | This measure reports compliance to hepatitis B surface antigen (HBsAg) testing during pregnancy; if the HBsAg test is absent, then the exclusion criteria (diagnosis of hepatitis B infection) is applied. | Recently Retooled | Outpatient |

| Measure Title | Measure Description | Measure Status | Outpatient \| Inpatient |
|---|---|---|---|
| Measure of alcohol screening using a validated instrument, including documentation of a brief intervention | | To be developed | |
| Measure tracking longitudinal change of individual patient BMI | | To be developed | |
| Measure of depression screening using a validated instrument, including documentation of a follow-up plan | | To be developed | |
| Measure assessing patients with undiagnosed hypertension using a calculated algorithm | | To be developed | |
| Measure of longitudinal assessment of blood glucose control | | To be developed | |

# Clinical Process

| Measure Title | Measure Description | Measure Status | Outpatient \| Inpatient |
|---|---|---|---|
| Asthma Assessment | Percentage of patients aged 5 through 40 years with a diagnosis of asthma who were evaluated during at least one office visit within 12 months for the frequency (numeric) of daytime and nocturnal asthma symptoms. | MU Stage 1 | Outpatient |
| Appropriate Testing for Children with Pharyngitis | The percentage of children 2-18 years of age who were diagnosed with Pharyngitis, dispensed an antibiotic and received a group A streptococcus (strep) test for the episode. | MU Stage 1 | Outpatient |
| Initiation and Engagement of Alcohol and Other Drug Dependence Treatment: (a) Initiation, (b) Engagement | The percentage of adolescent and adult patients with a new episode of alcohol and other drug (AOD) dependence who initiate treatment through an inpatient AOD admission, outpatient visit, intensive outpatient encounter or partial hospitalization within 14 days of the diagnosis and who initiated treatment and who had two or more additional services with an AOD diagnosis within 30 days of the initial visit. | MU Stage 1 | Outpatient |
| Prenatal Care: Screening for Human Immunodeficiency Virus (HIV) | Percentage of patients, regardless of age, who gave birth during a 12-month period who were screened for HIV infection during the first or second prenatal visit. | MU Stage 1 | Outpatient |
| Prenatal Care: Anti-D Immune Globulin | Percentage of D(Rh) negative, unsensitized patients, regardless of age, who gave birth during a 12-month period who received anti-D immune globulin at 26-30 weeks gestation. | MU Stage 1 | Outpatient |
| Controlling High Blood Pressure | The percentage of patients 18-85 years of age who had a diagnosis of hypertension and whose BP was adequately controlled during the measurement year. | MU Stage 1 | Outpatient |
| Smoking and Tobacco Use Cessation, Medical assistance: a. Advising Smokers and Tobacco Users to Quit, b. Discussing Smoking and Tobacco Use Cessation Medications, c. Discussing Smoking and Tobacco Use Cessation Strategies | The percentage of patients 18 years of age and older who were current smokers or tobacco users, who were seen by a practitioner during the measurement year and who received advice to quit smoking or tobacco use or whose practitioner recommended or discussed smoking or tobacco use cessation medications, methods or strategies. | MU Stage 1 | Outpatient |
| Breast Cancer Screening | The percentage of women 40-69 years of age who had a mammogram to screen for breast cancer. | MU Stage 1 | Outpatient |
| Cervical Cancer Screening | The percentage of women 21-63 years of age who received one or more Pap tests to screen for cervical cancer. | MU Stage 1 | Outpatient |
| Chlamydia Screening for Women | The percentage of women 15-24 years of age who were identified as sexually active and who had at least one test for chlamydia during the measurement year. | MU Stage 1 | Outpatient |

| Measure Title | Measure Description | Measure Status | Outpatient \| Inpatient |
|---|---|---|---|
| Colorectal Cancer Screening | The percentage of adults 50-75 years of age who had appropriate screening for colorectal cancer. | MU Stage 1 | Outpatient |
| Use of Appropriate Medications for Asthma | The percentage of patients 5-50 years of age during the measurement year who were identified as having persistent asthma and were appropriately prescribed medication during the measurement year. | MU Stage 1 | Outpatient |
| Pneumonia Vaccination Status for Older Adults | The percentage of patients 65 years of age and older who have ever received a pneumococcal vaccine. | MU Stage 1 | Outpatient |
| Asthma Pharmacologic Therapy | Percentage of patients aged 5 through 40 years with a diagnosis of mild, moderate, or severe persistent asthma who were prescribed either the preferred long-term control medication (inhaled corticosteroid) or an acceptable alternative treatment. | MU Stage 1 | Outpatient |
| Low Back Pain: Use of Imaging Studies | The percentage of patients with a primary diagnosis of low back pain who did not have an imaging study (plain X-ray, MRI, CT scan) within 28 days of diagnosis. | MU Stage 1 | Outpatient |
| Diabetes: Eye Exam | The percentage of patients 18-75 years of age with diabetes (type 1 or type 2) who had a retinal or dilated eye exam or a negative retinal exam (no evidence of retinopathy) by an eye care professional. | MU Stage 1 | Outpatient |
| Diabetes: Foot Exam | The percentage of patients aged 18-75 years with diabetes (type 1 or type 2) who had a foot exam (visual inspection, sensory exam with monofilament, or pulse exam). | MU Stage 1 | Outpatient |
| Diabetes: HbA1c Poor Control | The percentage of patients 18-75 years of age with diabetes (type 1 or type 2) who had HbA1c > 9.0%. | MU Stage 1 | Outpatient |
| Diabetes: Blood Pressure Management | The percentage of patients 18-75 years of age with diabetes (type 1 or type 2) who had BP < 140/90 mmHg. | MU Stage 1 | Outpatient |
| Diabetes: Urine Screening | The percentage of patients 18-75 years of age with diabetes (type 1 or type 2) who had a nephropathy screening test or evidence of nephropathy. | MU Stage 1 | Outpatient |
| Diabetes: LDL Management & Control | The percentage of patients 18-75 years of age with diabetes (type 1 or type 2) who had LDL-C <100mg/dL. | MU Stage 1 | Outpatient |
| Coronary Artery Disease (CAD): Oral Antiplatelet Therapy Prescribed for Patients with CAD | Percentage of patients aged 18 years and older with a diagnosis of CAD who were prescribed oral antiplatelet therapy. | MU Stage 1 | Outpatient |

| Measure Title | Measure Description | Measure Status | Outpatient \| Inpatient |
|---|---|---|---|
| Ischemic Vascular Disease (IVD): Use of Aspirin or another Antithrombotic | The percentage of patients 18 years of age and older who were discharged alive for acute myocardial infarction (AMI), coronary artery bypass graft (CABG) or percutaneous transluminal coronary angioplasty (PTCA) from January 1 - November 1 of the year prior to the measurement year, or who had a diagnosis of ischemic vascular disease (IVD) during the measurement year and the year prior to the measurement year and who had documentation of use of aspirin or another antithrombotic during the measurement year. | MU Stage 1 | Outpatient |
| Coronary Artery Disease (CAD): Beta-Blocker Therapy for CAD Patients with Prior Myocardial Infarction (MI) | Percentage of patients aged 18 years and older with a diagnosis of CAD and prior MI who were prescribed beta-blocker therapy. | MU Stage 1 | Outpatient |
| Ischemic Vascular Disease (IVD): Blood Pressure Management | The percentage of patients 18 years of age and older who were discharged alive for acute myocardial infarction (AMI), coronary artery bypass graft (CABG) or percutaneous transluminal coronary angioplasty (PTCA) from January 1-November 1 of the year prior to the measurement year, or who had a diagnosis of ischemic vascular disease (IVD) during the measurement year and the year prior to the measurement year and whose most recent blood pressure is in control (<140/90 mmHg). | MU Stage 1 | Outpatient |
| Coronary Artery Disease (CAD): Drug Therapy for Lowering LDL-Cholesterol | Percentage of patients aged 18 years and older with a diagnosis of CAD who were prescribed a lipid-lowering therapy (based on current ACC/AHA guidelines). | MU Stage 1 | Outpatient |
| Ischemic Vascular Disease (IVD): Complete Lipid Panel and LDL Control | The percentage of patients 18 years of age and older who were discharged alive for acute myocardial infarction (AMI), coronary artery bypass graft (CABG) or percutaneous transluminal coronary angioplasty (PTCA) from January 1- November 1 of the year prior to the measurement year, or who had a diagnosis of ischemic vascular disease (IVD) during the measurement year and the year prior to the measurement year and who had a complete lipid profile performed during the measurement year and whose LDL-C was < 100 mg/dL. | MU Stage 1 | Outpatient |
| Heart Failure (HF): Angiotensin-Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy for Left Ventricular Systolic Dysfunction (LVSD) | Percentage of patients aged 18 years and older with a diagnosis of heart failure and LVSD (LVEF < 40%) who were prescribed ACE inhibitor or ARB therapy. | MU Stage 1 | Outpatient |
| Heart Failure (HF): Beta-Blocker Therapy for Left Ventricular Systolic Dysfunction (LVSD) | Percentage of patients aged 18 years and older with a diagnosis of heart failure who also have LVSD (LVEF < 40%) and who were prescribed beta-blocker therapy. | MU Stage 1 | Outpatient |

| Measure Title | Measure Description | Measure Status | Outpatient \| Inpatient |
|---|---|---|---|
| Heart Failure (HF) : Warfarin Therapy Patients with Atrial Fibrillation | Percentage of all patients aged 18 and older with a diagnosis of heart failure and paroxysmal or chronic atrial fibrillation who were prescribed warfarin therapy. | MU Stage 1 | Outpatient |
| Primary Open Angle Glaucoma (POAG): Optic Nerve Evaluation | Percentage of patients aged 18 years and older with a diagnosis of POAG who have been seen for at least 2 office visits, who have an optic nerve head evaluation during one or more office visits within 12 months. | MU Stage 1 | Outpatient |
| Diabetic Retinopathy: Documentation of Presence or Absence of Macular Edema and Level of Severity of Retinopathy | Percentage of patients aged 18 years and older with a diagnosis of diabetic retinopathy who had a dilated macular or fundus exam performed which included documentation of the level of severity of retinopathy and the presence or absence of macular edema during one or more office visits within 12 months. | MU Stage 1 | Outpatient |
| Diabetic Retinopathy: Communication with the Physician Managing Ongoing Diabetes Care | Percentage of patients aged 18 years and older with a diagnosis of diabetic retinopathy who had a dilated macular or fundus exam performed with documented communication to the physician who manages the on-going care of the patient with diabetes mellitus regarding the findings of the macular or fundus exam at least once within 12 months. | MU Stage 1 | Outpatient |
| Anti-depressant medication management: (a) Effective Acute Phase Treatment, (b)Effective Continuation Phase Treatment | The percentage of patients 18 years of age and older who were diagnosed with a new episode of major depression, treated with antidepressant medication, and who remained on an antidepressant medication treatment. | MU Stage 1 | Outpatient |
| Oncology Colon Cancer: Chemotherapy for Stage III Colon Cancer Patients | Percentage of patients aged 18 years and older with Stage IIIA through IIIC colon cancer who are referred for adjuvant chemotherapy, prescribed adjuvant chemotherapy, or have previously received adjuvant chemotherapy within the 12-month reporting period. | MU Stage 1 | Outpatient |
| Oncology Breast Cancer: Hormonal Therapy for Stage IC-IIIC Estrogen Receptor/Progesterone Receptor (ER/PR) Positive Breast Cancer | Percentage of female patients aged 18 years and older with Stage IC through IIIC, ER or PR positive breast cancer who were prescribed tamoxifen or aromatase inhibitor (AI) during the 12-month reporting period. | MU Stage 1 | Outpatient |
| Prostate Cancer: Avoidance of Overuse of Bone Scan for Staging Low Risk Prostate Cancer Patients | Percentage of patients, regardless of age, with a diagnosis of prostate cancer at low risk of recurrence receiving interstitial prostate brachytherapy, OR external beam radiotherapy to the prostate, OR radical prostatectomy, OR cryotherapy who did not have a bone scan performed at any time since diagnosis of prostate cancer. | MU Stage 1 | Outpatient |
| Diabetes: HbA1c Control (<8%) | The percentage of patients 18-75 years of age with diabetes (type 1 or type 2) who had HbA1c <8.0%. | MU Stage 1 | Outpatient |

| Measure Title | Measure Description | Measure Status | Outpatient \| Inpatient |
|---|---|---|---|
| Drugs to be avoided in the elderly: a. Patients who receive at least one drug to be avoided, b. Patients who receive at least two different drugs to be avoided | Percentage of patients ages 65 years and older who received at least one drug to be avoided in the elderly in the measurement year. Percentage of patients 65 years of age and older who received at least two different drugs to be avoided in the elderly in the measurement year. | Recently Retooled | Outpatient |
| Osteoporosis: Communication with the Physician Managing Ongoing Care Post-Fracture of Hip, Spine or Distal Radius for Men and Women Aged 50 Years and Older | Percentage of patients aged 50 years and older treated for a hip, spine, or distal radial fracture with documentation of communication with the physician managing the patient's on-going care that a fracture occurred and that the patient was or should be tested or treated for osteoporosis. | Recently Retooled | Outpatient |
| Osteoporosis: Screening or Therapy for Osteoporosis for Women Aged 65 Years and Older | Percentage of female patients aged 65 years and older who have a central dual-energy X-ray absorptiometry measurement ordered or performed at least once since age 60 or pharmacologic therapy prescribed within 12 months. | Recently Retooled | Outpatient |
| Osteoporosis: Management Following Fracture of Hip, Spine or Distal radius for Men and Women Aged 50 Years and Older | Percentage of patients aged 50 years or older with fracture of the hip, spine or distal radius that had a central dual-energy X-ray absorptiometry measurement ordered or performed or pharmacologic therapy prescribed. | Recently Retooled | Outpatient |
| Osteoporosis: Pharmacologic Therapy for Men and Women Aged 50 Years and Older | Percentage of patients aged 50 years and older with a diagnosis of osteoporosis who were prescribed pharmacologic therapy within 12 months. | Recently Retooled | Outpatient |
| Osteoarthritis: assessment for use of anti-inflammatory or analgesic over-the-counter (OTC) medications | Percentage of patient visits for patients aged 21 years and older with a diagnosis of OA with an assessment for use of anti-inflammatory or analgesic OTC medications. | Recently Retooled | Outpatient |
| Hemoglobin A1c Test for Pediatric Patients | Percentage of pediatric patients with diabetes with a HBA1c test in a 12-month measurement period. | Recently Retooled | Outpatient |
| Coronary Artery Disease (CAD): Angiotensin-Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy for Patients with CAD and Diabetes and/or Left Ventricular Systolic Dysfunction (LVSD) | Percentage of patients aged 18 years and older with a diagnosis of CAD who also have diabetes and/or left ventricular systolic dysfunction (LVSD) who were prescribed ACE Inhibitor or ARB therapy. | Recently Retooled | Outpatient |
| Treatment for Children with Upper Respiratory Infection (URI): Avoidance of Inappropriate Use | Percentage of children who were given a diagnosis of URI and were not dispensed an antibiotic prescription on or three days after the episode date. | Recently Retooled | Outpatient |

| Measure Title | Measure Description | Measure Status | Outpatient \| Inpatient |
|---|---|---|---|
| Medication Reconciliation | Percentage of patients aged 65 years and older discharged from any inpatient facility (e.g. hospital, skilled nursing facility, or rehabilitation facility) and seen within 60 days following discharge in the office by the physician providing on-going care who had a reconciliation of the discharge medications with the current medication list in the medical record documented. | Recently Retooled | Inpatient |
| Chronic Obstructive Pulmonary Disease (COPD): Bronchodilator Therapy | Percentage of symptomatic patients aged 18 years and older with a diagnosis of COPD who were prescribed an inhaled bronchodilator. | Recently Retooled | Outpatient |
| Major Depressive Disorder (MDD): Diagnostic Evaluation | Percentage of patients with a diagnosis of major depressive disorder who met the DSM-IVÂ™ criteria during the visit in which the new diagnosis or recurrent episode was identified. | Recently Retooled | Outpatient |
| Major Depressive Disorder (MDD): Suicide Risk Assessment | Percentage of patients who had a suicide risk assessment completed at each visit. | Recently Retooled | Outpatient |
| Diagnosis of attention deficit hyperactivity disorder (ADHD) in primary care for school age children and adolescents | Percentage of patients newly diagnosed with ADHD whose medical record contains documentation of DSM-IV-TR or DSM-PC criteria. | Recently Retooled | Outpatient |
| Management of attention deficit hyperactivity disorder (ADHD) in primary care for school age children and adolescents | Percentage of patients treated psychostimulant with medication for the diagnosis of ADHD whose medical record contains documentation of a follow-up visit at least twice a year. | Recently Retooled | Outpatient |
| ADHD: Follow-Up Care for Children Prescribed Attention-Deficit/Hyperactivity Disorder (ADHD) Medication | a. Initiation Phase: Percentage of children 6 - 12 years of age as of the Index Prescription Episode Start Date with an ambulatory prescription dispensed for and ADHD medication and who had one follow-up visit with a practitioner with prescribing authority during the 30-Day Initiation Phase.<br><br>b. Continuation and Maintenance (C&M) Phase: Percentage of children 6 - 12 years of age as of the Index Prescription Episode Start Date with an ambulatory prescription dispensed for ADHD medication who remained on the medication for at least 210 days and who in addition to the visit in the Initiation Phase had at least two additional follow-up visits with a practitioner within 270 days (9 months) after the Initiation Phase ends. | Recently Retooled | Outpatient |
| Bipolar Disorder: Monitoring change in level-of-functioning | Percentage of patients aged 18 years and older with an initial diagnosis or new episode/presentation of bipolar disorder. | Recently Retooled | Outpatient |
| Aspirin at Arrival | Acute myocardial infarction (AMI) patients who received aspirin within 24 hours before or after hospital arrival. | Recently Retooled | Outpatient |

| Measure Title | Measure Description | Measure Status | Outpatient \| Inpatient |
|---|---|---|---|
| ACEI or ARB for LVSD | Acute myocardial infarction (AMI) patients with left ventricular systolic dysfunction (LVSD) who are prescribed an ACEI or ARB at hospital discharge. For purposes of this measure, LVSD is defined as chart documentation of a left ventricular ejection fraction (LVEF) less than 40% or a narrative description of left ventricular systolic (LVS) function consistent with moderate or severe systolic dysfunction. | Recently Retooled | Outpatient |
| Urinary catheter-associated urinary tract infection for intensive care unit (ICU) patients | Standardized Infection Ration (SIR) of healthcare-associated, catheter-associated urinary tract infections (CAUTI) among patients in intensive care units (ICUs), excluding patients in neonatal ICUs (NICUs). | Recently Retooled | Inpatient |
| Central line catheter-associated blood stream infection rate for ICU and high-risk nursery (HRN) patients | Standardized Infection Ration (SIR) of healthcare-associated, central line-associated bloodstream infections (CLABSI) among patients in intensive care units (ICUs) and Neonatal Intensive Care Units (NICUs). | Recently Retooled | Inpatient |
| Aspirin Prescribed at Discharge | Acute myocardial infarction (AMI) patients who are prescribed aspirin at hospital discharge. | Recently Retooled | Inpatient |
| Initial Antibiotic Selection for Community-Acquired Pneumonia (CAP) in Immunocompetent Patients | Immunocompetent patients with Community-Acquired Pneumonia who receive an initial antibiotic regimen during the first 24 hours that is consistent with current guidelines. | Recently Retooled | Inpatient |
| Blood Cultures Performed in the Emergency Department Prior to Initial Antibiotic Received in Hospital | Pneumonia patients whose initial emergency room blood culture specimen was collected prior to first hospital dose of antibiotics. This measure focuses on the treatment provided to Emergency Department patients prior to admission orders. | Recently Retooled | Inpatient |
| Initial Antibiotic Received Within 6 Hours of Hospital Arrival | Pneumonia patients who receive their first dose of antibiotics within 6 hours after arrival at the hospital. | Recently Retooled | Inpatient |
| Beta-Blocker Prescribed at Discharge | Acute myocardial infarction (AMI) patients who are prescribed a beta-blocker at hospital discharge. | Recently Retooled | Inpatient |
| Primary PCI Received Within 90 Minutes of Hospital Arrival | Acute myocardial infarction (AMI) patients with ST-segment elevation or LBBB on the ECG closest to arrival time receiving primary PCI during the hospital stay with a time from hospital arrival to PCI of 90 minutes or less. | Recently Retooled | Inpatient |
| Fibrinolytic Therapy Received Within 30 Minutes of Hospital Arrival | Acute myocardial infarction (AMI) patients with ST-segment elevation or LBBB on the ECG closest to arrival time receiving fibrinolytic therapy during the hospital stay and having a time from hospital arrival to fibrinolysis of 30 minutes or less. | Recently Retooled | Inpatient |
| Perioperative Care: Venous Thromboembolism (VTE) Prophylaxis (when indicated in ALL patients) | Patient Age: All patients age 18 years and older<br>Procedures: surgical procedures for which VTE prophylaxis is indicated in all patients who had an order for LMWH, LDUH, adjusted-dose warfarin, fondaparinux or mechanical prophylaxis given within 24 hours prior to incision time or 24 hours after surgery end time. | Recently Retooled | Inpatient |

| Measure Title | Measure Description | Measure Status | Outpatient \| Inpatient |
|---|---|---|---|
| Stroke and Stroke Rehabilitation: Anticoagulant Therapy Prescribed for Atrial Fibrillation at Discharge | Percentage of patients aged 18 years and older with a diagnosis of ischemic stroke or transient ischemic attack (TIA) with documented permanent, persistent, or paroxysmal atrial fibrillation who were prescribed an anticoagulant at discharge. | Recently Retooled | Inpatient |
| Stroke and Stroke Rehabilitation: Computed Tomography (CT) or Magnetic Resonance Imaging (MRI) Reports | Percentage of final reports for CT or MRI studies of the brain performed either: In the hospital within 24 hours of arrival, OR In an outpatient imaging center to confirm initial diagnosis of stroke, TIA or intracranial hemorrhage For patients aged 18 years and older with either a diagnosis of ischemic stroke or transient ischemic attack (TIA) or intracranial hemorrhage OR at least one documented symptom consistent with 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. | Recently Retooled | Inpatient |
| Perioperative Care: Selection of Prophylactic Antibiotic - First OR Second Generation Cephalosporin | Percentage of surgical patients aged 18 years and older undergoing procedures with the indications for a first OR second generation cephalosporin prophylactic antibiotic who had an order for cefazolin OR cefuroxime for antimicrobial prophylaxis. | Recently Retooled | Inpatient |
| Perioperative Care: Timing of Prophylactic Antibiotics - Ordering Physician | Percentage of surgical patients aged 18 years and older undergoing procedures with the indications for prophylactic parenteral antibiotics who have an order for an 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). | Recently Retooled | Inpatient |
| Perioperative Care: 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. | Recently Retooled | Inpatient |
| Central Line Bundle Compliance | The percentage of intensive care patients in the included ICUs with central lines for who all five elements of the central line "bundle" are documented on the daily goals sheet, central line checklist, patients medical record, or other documentation tool. | Recently Retooled | Inpatient |
| Cardiac Surgery Patients With Controlled 6 A.M. Postoperative Blood Glucose | Cardiac surgery patients with controlled 6 A.M. blood glucose (less than or equal to 200 mg/dL) on postoperative day one (POD 1) and postoperative day two (POD 2) with Anesthesia End Date being postoperative day zero (POD 0). | Recently Retooled | Inpatient |
| Ventilator Bundle | The percentage of intensive care patients on mechanical ventilation for whom all five elements of the ventilator "bundle" are implemented and documented. | Recently Retooled | Inpatient |

| Measure Title | Measure Description | Measure Status | Outpatient \| Inpatient |
|---|---|---|---|
| End Stage Renal Disease (ESRD): Plan of Care for Inadequate Peritoneal Dialysis | Percentage of patients aged 18 years and older with a diagnosis of ESRD receiving peritoneal dialysis who have a Kt/V>=1.7 OR patients who have a Kt/V<1.7 with a documented plan of care 3 times a year (every 4 months) during the 12 month reporting period. | Recently Retooled | Outpatient |
| End Stage Renal Disease (ESRD): Plan of Care of Inadequate Hemodialysis in ESRD Patients | Percentage of patient calendar months during the 12 month reporting period in which patients aged 18 years and older with a diagnosis of ESRD and receiving hemodialysis have a Kt/V>=1.2 OR have a Kt/V<1.2 with a documented plan of care. | Recently Retooled | Outpatient |
| All Cause Readmission Index (risk adjusted) | 30-day Readmission Index for Non-Maternity and Non-Pediatric Discharges. | Recently Retooled | Inpatient |
| PICU Pain Assessment | Percentage of PICU patients receiving pain assessment on admission. | Recently Retooled | Inpatient |
| PICU Periodic Pain Assessment | Percentage of PICU patients receiving periodic pain assessment. | Recently Retooled | Inpatient |
| Iatrogenic Pneumothorax in Non-Neonates (risk adjusted) (PDI5) | Percent of medical and surgical discharges, age under 18 years, with ICD-9-CM code of iatrogenic pneumothorax in any secondary diagnosis field. | Recently Retooled | Inpatient |
| Blood Cultures Performed Within 24 Hours Prior to or 24 Hours After Hospital Arrival for Patients Who Were Transferred or Admitted to the ICU Within 24 Hours of Hospital Arrival | Pneumonia patients transferred or admitted to the ICU within 24 hours of hospital arrival, who had blood cultures performed within 24 hours prior to or the day prior to arrival, the day of arrival, or within 24 hours after arrival to the hospital. | Recently Retooled | Inpatient |
| Foreign Body left after procedure (PDI3) | Discharges with foreign body accidently left in during procedure per 1000 discharges. | Recently Retooled | Inpatient |
| Hepatitis C: Antiviral Treatment Prescribed | Percentage of patients aged 18 years and older with a diagnosis of chronic hepatitis C who were prescribed peginterferon and ribavirin therapy within the 12 month reporting period. | Recently Retooled | Outpatient |
| Hepatitis C: Hepatitis A Vaccination in Patients with HCV | Percentage of patients aged 18 years and older with a diagnosis of hepatitis C who have received at least one injection of hepatitis A vaccine, or who have documented immunity to hepatitis A. | Recently Retooled | Outpatient |
| Hepatitis C: Hepatitis B Vaccination in Patients with HCV | Percentage of patients aged 18 years and older with a diagnosis of hepatitis C who have received at least one injection of hepatitis B vaccine, or who have documented immunity to hepatitis B. | Recently Retooled | Outpatient |

| Measure Title | Measure Description | Measure Status | Outpatient \| Inpatient |
|---|---|---|---|
| Hepatitis C: Counseling Regarding Risk of Alcohol Consumption | Percentage of patients aged 18 years and older with a diagnosis of hepatitis C who were counseled regarding the risks of alcohol consumption at least once within the 12 month reporting period. | Recently Retooled | Outpatient |
| Diabetic Foot and Ankle Care, Ulcer Prevention - Evaluation of Footwear | Percentage of patients aged 18 years and older with a diagnosis of diabetes mellitus who were evaluated for proper footwear and sizing. | Recently Retooled | Outpatient |
| Urinary catheter removed on Postoperative Day 1 (POD 1) or Postoperative Day 2 (POD 2) with day of surgery being day zero | Surgical patients with urinary catheter removed on Postoperative Day 1 or Postoperative Day 2 with day of surgery being day zero. | Recently Retooled | Inpatient |
| Proportion of Infants 22 to 29 Weeks Gestation Treated with Surfactant who are Treated within 2 Hours of Birth | Proportion of infants with gestational age between 22 and 29 completed weeks who were treated with surfactant and were treated within two hours of birth. | Recently Retooled | Inpatient |
| Median Time from ED Arrival to ED Departure for Discharged ED Patients | Median time from emergency department arrival to time of departure from the emergency room for patients discharged from the emergency department. | Recently Retooled | Inpatient |
| Stenosis Measurement in Carotid Imaging Studies | Percentage of final reports for carotid imaging studies (neck MR angiography [MRA], neck CT angiography [CTA], neck duplex ultrasound, carotid angiogram) performed that include direct or indirect reference to measurements of distal internal carotid diameter as the denominator for stenosis measurement. | Recently Retooled | Outpatient |
| Radiology: Inappropriate Use of "Probably Benign" Assessment Category in Mammography Screening | Percentage of final reports for screening mammograms that are classified as "probably benign". | Recently Retooled | Outpatient |
| Radiology: Exposure Time Reported for Procedures Using Fluoroscopy | Percentage of final reports for procedures using fluoroscopy that include documentation of radiation exposure or exposure time. | Recently Retooled | Outpatient |
| Nuclear Medicine: Correlation with Existing Imaging Studies for All Patients Undergoing Bone Scintigraphy | Percentage of final reports for all patients, regardless of age, undergoing bone scintigraphy that include physician documentation of correlation with existing relevant imaging studies (eg, x-ray, MRI, CT) that were performed. | Recently Retooled | Outpatient |
| Diabetic Foot Care and Patient/Caregiver Education Implemented During Short Term Episodes of Care | Percentage of short term home health episodes of care during which diabetic foot care and education were included in the physician-ordered plan of care and implemented for patients with diabetes. | Recently Retooled | Outpatient |

| Measure Title | Measure Description | Measure Status | Outpatient \| Inpatient |
|---|---|---|---|
| Prophylactic Antibiotic Received Within One Hour Prior to Surgical Incision | 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. | Recently Retooled | Inpatient |
| Prophylactic Antibiotic Selection for Surgical Patients | Surgical patients who received prophylactic antibiotics consistent with current guidelines (specific to each type of surgical procedure). | Recently Retooled | Inpatient |
| Prophylactic Antibiotics Discontinued Within 24 Hours After Surgery End Time | Surgical patients whose prophylactic antibiotics were discontinued within 24 hours after Anesthesia End Time. The Society of Thoracic Surgeons (STS) Practice Guideline for Antibiotic Prophylaxis in Cardiac Surgery (2006) indicates that there is no reason to extend antibiotics beyond 48 hours for cardiac surgery and very explicitly states that antibiotics should not be extended beyond 48 hours even with tubes and drains in place for cardiac surgery. | Recently Retooled | Inpatient |
| Pregnant women that had HBsAg testing | This measure reports compliance to hepatitis B surface antigen (HBsAg) testing during pregnancy; if the HBsAg test is absent, then the exclusion criteria (diagnosis of hepatitis B infection) is applied. | Recently Retooled | Outpatient |
| Endoscopy & Polyp Surveillance: Colonoscopy Interval for Patients with a History of Adenomatous Polyps - Avoidance of Inappropriate Use | 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. | Recently Retooled | Outpatient |
| Depression Remission at Twelve Months | Adult patients age 18 and older with major depression or dysthymia and an initial PHQ-9 score > 9 who demonstrate remission at twelve months defined as PHQ-9 score less than 5. This measure applies to both patients with newly diagnosed and existing depression whose current PHQ-9 score indicates a need for treatment. | Recently Retooled | Outpatient |
| Depression Remission at Six Months | Adult patients age 18 and older with major depression or dysthymia and an initial PHQ-9 score > 9 who demonstrate remission at six months defined as PHQ-9 score less than 5. This measure applies to both patients with newly diagnosed and existing depression whose current PHQ-9 score indicates a need for treatment. | Recently Retooled | Outpatient |
| Depression Utilization of the PHQ-9 Tool | Adult patients age 18 and older with the diagnosis of major depression or dysthymia who have a PHQ-9 tool administered at least once during a 4 month period in which there was a qualifying visit. | Recently Retooled | Outpatient |

# ADDITIONAL MEASURES FOR ELIGIBLE PROVIDER MENU

## Medicaid Measures to be Retooled

| Measure | | Measure Steward | Description |
|---|---|---|---|
| **Prevention and Health Promotion** | | | |
| 1 | Frequency of Ongoing Prenatal Care | NCQA/HEDIS | Percentage of Medicaid deliveries between November 6 of the year prior to the measurement year and November 5 of the measurement year that received the following number of visits:<br>< 21 percent of expected visits<br>21 percent – 40 percent of expected visits<br>41 percent – 60 percent of expected visits<br>61 percent – 80 percent of expected visits<br>≥ 81 percent of expected visits |
| 2 | Prenatal and Postpartum Care: Timeliness of Prenatal Care | NCQA/HEDIS | The percentage of deliveries of live births between November 6 of the year prior to the measurement year and November 5 of the measurement year that received a prenatal care visit in the first trimester or within 42 days of enrollment in the organization. |
| 3 | Percent of live births weighing less than 2,500 grams | Centers for Disease Control and Prevention | The measure assesses the number of resident live births less than 2,500 grams as a percentage of the number of resident live births in the State reporting period. |
| 4 | Cesarean rate for nulliparous singleton vertex | California Maternal Quality Care Collaborative | Percentage of women who had a cesarean section among women with first live singleton births [also known as nulliparous term singleton vertex (NTSV) births] at 37 weeks of gestation or later. |
| 5 | Developmental Screening in the First Three Years of Life | Child and Adolescent Health Measurement Initiative and NCQA | Assesses the extent to which children at various ages from 0-36 months were screened for social and emotional development with a standardized, documented tool or set of tools. |
| 6 | Well-Child Visits in the First 15 Months of Life | NCQA/HEDIS | Percentage of members who received zero, one, two, three, four, five, and six or more well-child visits with a primary care practitioner during their first 15 months of life. |

| Measure | | Measure Steward | Description |
|---|---|---|---|
| 7 | Well-Child Visits in the 3rd, 4th, 5th, and 6th Years of Life | NCQA/HEDIS | Percentage of members ages 3 through 6 years old who received one or more well-child visits with a primary care practitioner during the measurement year. |
| 8 | Adolescent Well-Care Visit | NCQA/HEDIS | Percentage of members ages 12 through 21 years who had at least one comprehensive well-care visit with a primary care practitioner or an OB/GYN practitioner during the measurement year. |
| 9 | Total Eligibles Who Received Preventive Dental Services | CMS | Total eligible children 1 through 20 years of age who received preventive dental services. |
| **Management of Acute Conditions** | | | |
| 10 | Otitis media with effusion (OME) – avoidance of inappropriate use of systemic antimicrobials in children – ages 2 through 12 | American Medical Association /PCPI[1] | Percentage of patients ages 2 months through 12 years with a diagnosis of OME who were not prescribed systemic antimicrobials. |
| 11 | Total Eligibles who Received Dental Treatment Services | CMS | Total eligible children 1 through 20 years of age who received dental treatment services. |
| 12 | Ambulatory Care: Emergency Department Visits | NCQA/HEDIS | The number of visits per member per year as a function of all child and adolescent members enrolled and eligible during the measurement year. |
| 13 | Pediatric central-line associated blood stream infections – Neonatal Intensive Care Unit and Pediatric Intensive Care Unit | Centers for Disease Control and Prevention | Rate of central line-associated blood stream infections (CLABSI) identified during periods selected for surveillance as a function of the number of central line catheter days selected for surveillance in pediatric and neonatal intensive care units. |
| **Management of Chronic Conditions** | | | |
| 14 | Annual number of asthma patients ages 2 through 20 years old with 1 or more asthma-related emergency room visits | Alabama Medicaid | Asthma emergency department utilization for for patients ages 2 through 20 years old diagnosed with asthma or treatment with at least 2 short-acting beta adrenergic agents during the measurement year who also had one or more asthma-related emergency room visits. |

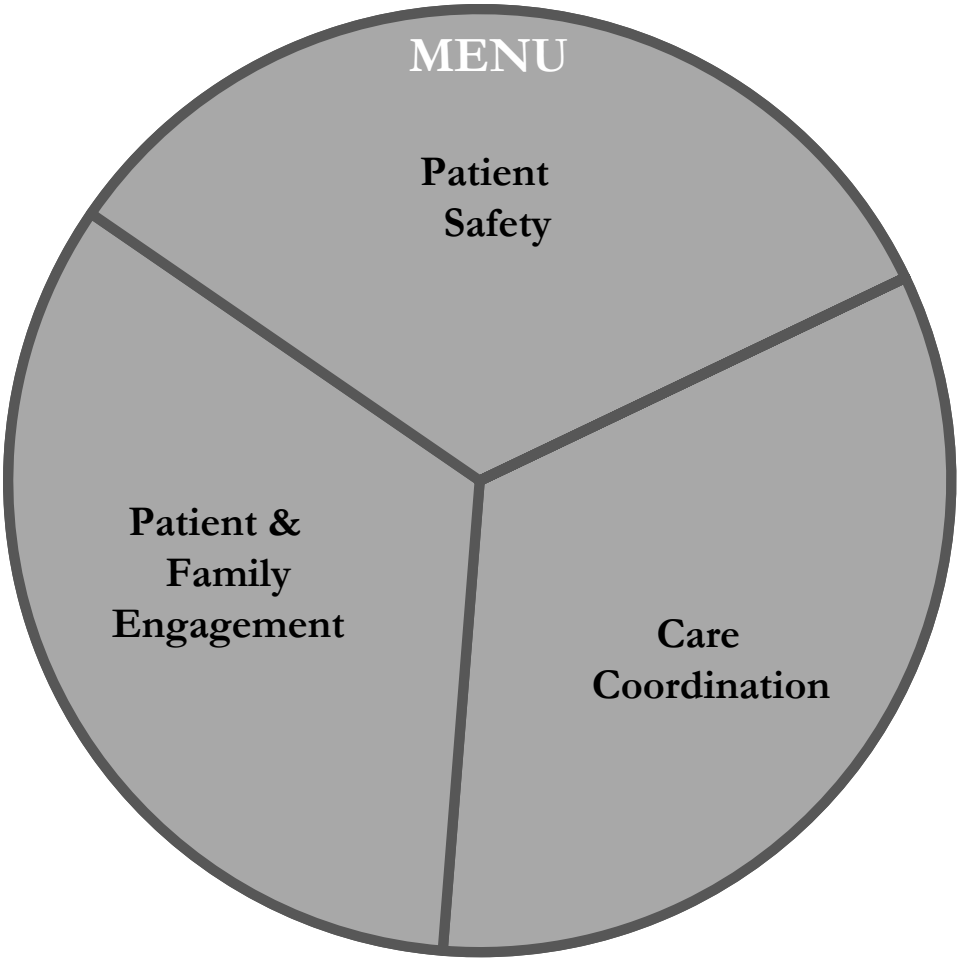
[1] Physician Consortium for Performance Improvement

| Measure | | Measure Steward | Description |
|---|---|---|---|
| 15 | Follow-Up Care for Children Prescribed Attention Deficit Hyperactivity Disorder (ADHD) Medication | NCQA/HEDIS | Percentage of children ages 6 through 12 years of age with newly prescribed ADHD medication who had at least 3 follow-up care visits within a 10-month period, one of which was within 30 days from the time the first ADHD medication was dispensed. |
| 16 | Follow-up after hospitalization for mental illness | NCQA/HEDIS | Percentage of discharges for members 6 years of age and older who were hospitalized for treatment of selected mental health disorders and who had an outpatient visit, an intensive outpatient encounter, or partial hospitalization with a mental health practitioner. |
| 17 | Annual Pediatric hemoglobin A1C testing | NCQA | Percentage of pediatric patients with diabetes who had a hemoglobin A1c test in a 12-month measurement period. |
| | | | |
| | | | |
| **Availability** | | | |
| 18 | Child and Adolescent Access to Primary Care Practitioners | NCQA/HEDIS | Percentage of enrollees 12 months through 19 years of age who had a visit with a primary care practitioner (PCP). Four separate percentages are reported:<br>• Children 12 months through 24 months and 25 months through 6 years who had a visit with a PCP during the measurement year.<br>• Children 7 through 11 years and adolescents 12 through 19 years who had a visit with a PCP during the measurement year or the year prior to the measurement year. |

# Recommended Behavioral Health Measures

| NQF Measure # | Measure Title | Measure Description | Measure Steward | eMeasure |
|---|---|---|---|---|
| 0104,0111 | Bipolar Disorder and Major Depression: Suicide Risk Assessment | Percentage of patients with depression or bipolar disorder who had an initial assessment that includes an appraisal for suicide risk | The American Medical Association Center for Quality Assessment and Improvement in mental health | Measure needs to be eSpecified |
| 0110 | Bipolar Disorder and Major Depression: Appraisal for Alcohol or Chemical Substance Use | Percentage of patients with depression or bipolar disorder with evidence of an initial assessment that includes an appraisal for alcohol or chemical substance use. | Center for Quality Assessment and Improvement in Mental Health | Measure needs to be eSpecified |
| N/A | Alcohol Screening and Brief Intervention (ASBI; adults) | Measure of alcohol screening using a validated instrument, including documentation of a brief intervention. Percentage of patients aged 18-21 years seen for a visit within the reporting period who were screened for any alcohol use. Percentage of patients aged 21 years and older seen for a visit within the reporting period who were screened for binge drinking (≥5 drinks per occasion for men; ≥4 drinks per occasion for women). | VA; IHS; AMA; TJC | Measure needs to be eSpecified |
| N/A | Depression Screening (PHQ-2 and PHQ-9) for primary care | Measure of depression screening using a validated instrument, including documentation of a follow-up plan. Percentage of patients aged 12 years and older who were seen for a visit within the reporting period who were screened for depression at least once. | VA; IHS; AMA; TJC | Measure needs to be eSpecified |
| NQF Review #1394 | Depression Screening by 13 years of age | The percentage of adolescents who turn 13 years of age in the measurement year who had a screening for depression using a standardized tool. | VA; HIS; AMA; TJC | Measure needs to be eSpecified |
| NQF Review # 1365 | Child and Adolescent Major Depressive Disorder Suicide Risk Assessment | Percentage of patient visits for those patients aged 6 through 17 years with a diagnosis of major depressive disorder with an assessment for suicide risk. | The American Medical Association | Measure needs to be eSpecified |
| N/A | Illicit substance use primary care single question screener (including illegal drugs and non-medical use of prescription drugs) | | NIDA | Measure needs to be eSpecified |
| N/A | Trauma exposure single question screener | | SAMHSA | Measure needs to be eSpecified |

## FIG. 2 PROPOSED ELIGIBLE HOSPITAL FRAMEWORK



# ELIGIBLE HOSPITAL MEASURES

| Measure Title | Measure Description | Measure Status | Outpatient \| Inpatient |
|---|---|---|---|
| Medication Reconciliation | Percentage of patients aged 65 years and older discharged from any inpatient facility (e.g. hospital, skilled nursing facility, or rehabilitation facility) and seen within 60 days following discharge in the office by the physician providing on-going care who had a reconciliation of the discharge medications with the current medication list in the medical record documented. | Recently Retooled | Inpatient |
| Urinary catheter-associated urinary tract infection for intensive care unit (ICU) patients | Standardized Infection Ration (SIR) of healthcare-associated, catheter-associated urinary tract infections (CAUTI) among patients in intensive care units (ICUs), excluding patients in neonatal ICUs (NICUs). | Recently Retooled | Inpatient |
| Central line catheter-associated blood stream infection rate for ICU and high-risk nursery (HRN) patients | Standardized Infection Ration (SIR) of healthcare-associated, central line-associated bloodstream infections (CLABSI) among patients in intensive care units (ICUs) and Neonatal Intensive Care Units (NICUs). | Recently Retooled | Inpatient |
| Aspirin Prescribed at Discharge | Acute myocardial infarction (AMI) patients who are prescribed aspirin at hospital discharge. | Recently Retooled | Inpatient |
| Initial Antibiotic Selection for Community-Acquired Pneumonia (CAP) in Immunocompetent Patients | Immunocompetent patients with Community-Acquired Pneumonia who receive an initial antibiotic regimen during the first 24 hours that is consistent with current guidelines. | Recently Retooled | Inpatient |
| Blood Cultures Performed in the Emergency Department Prior to Initial Antibiotic Received in Hospital | Pneumonia patients whose initial emergency room blood culture specimen was collected prior to first hospital dose of antibiotics. This measure focuses on the treatment provided to Emergency Department patients prior to admission orders. | Recently Retooled | Inpatient |
| Initial Antibiotic Received Within 6 Hours of Hospital Arrival | Pneumonia patients who receive their first dose of antibiotics within 6 hours after arrival at the hospital. | Recently Retooled | Inpatient |
| Beta-Blocker Prescribed at Discharge | Acute myocardial infarction (AMI) patients who are prescribed a beta-blocker at hospital discharge. | Recently Retooled | Inpatient |
| Primary PCI Received Within 90 Minutes of Hospital Arrival | Acute myocardial infarction (AMI) patients with ST-segment elevation or LBBB on the ECG closest to arrival time receiving primary PCI during the hospital stay with a time from hospital arrival to PCI of 90 minutes or less. | Recently Retooled | Inpatient |

| Measure Title | Measure Description | Measure Status | Outpatient \| Inpatient |
|---|---|---|---|
| Fibrinolytic Therapy Received Within 30 Minutes of Hospital Arrival | Acute myocardial infarction (AMI) patients with ST-segment elevation or LBBB on the ECG closest to arrival time receiving fibrinolytic therapy during the hospital stay and having a time from hospital arrival to fibrinolysis of 30 minutes or less. | Recently Retooled | Inpatient |
| Perioperative Care: Venous Thromboembolism (VTE) Prophylaxis (when indicated in ALL patients) | Patient Age: All patients age 18 years and older Procedures: surgical procedures for which VTE prophylaxis is indicated in all patients who had an order for LMWH, LDUH, adjusted-dose warfarin, fondaparinux or mechanical prophylaxis given within 24 hours prior to incision time or 24 hours after surgery end time. | Recently Retooled | Inpatient |
| Stroke and Stroke Rehabilitation: Anticoagulant Therapy Prescribed for Atrial Fibrillation at Discharge | Percentage of patients aged 18 years and older with a diagnosis of ischemic stroke or transient ischemic attack (TIA) with documented permanent, persistent, or paroxysmal atrial fibrillation who were prescribed an anticoagulant at discharge. | Recently Retooled | Inpatient |
| Stroke and Stroke Rehabilitation: Computed Tomography (CT) or Magnetic Resonance Imaging (MRI) Reports | Percentage of final reports for CT or MRI studies of the brain performed either: In the hospital within 24 hours of arrival, OR In an outpatient imaging center to confirm initial diagnosis of stroke, TIA or intracranial hemmorhage For patients aged 18 years and older with either a diagnosis of ischemic stroke or transient ischemic attack (TIA) or intracranial hemorrhage OR at least one documented symptom consistent with 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. | Recently Retooled | Inpatient |
| Perioperative Care: Selection of Prophylactic Antibiotic - First OR Second Generation Cephalosporin | Percentage of surgical patients aged 18 years and older undergoing procedures with the indications for a first OR second generation cephalosporin prophylactic antibiotic who had an order for cefazolin OR cefuroxime for antimicrobial prophylaxis. | Recently Retooled | Inpatient |
| Perioperative Care: Timing of Prophylactic Antibiotics - Ordering Physician | Percentage of surgical patients aged 18 years and older undergoing procedures with the indications for prophylactic parenteral antibiotics who have an order for an 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). | Recently Retooled | Inpatient |
| Perioperative Care: 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. | Recently Retooled | Inpatient |

| Measure Title | Measure Description | Measure Status | Outpatient \| Inpatient |
|---|---|---|---|
| Central Line Bundle Compliance | The percentage of intensive care patients in the included ICUs with central lines for who all five elements of the central line "bundle" are documented on the daily goals sheet, central line checklist, patient's medical record, or other documentation tool. | Recently Retooled | Inpatient |
| Cardiac Surgery Patients With Controlled 6 A.M. Postoperative Blood Glucose | Cardiac surgery patients with controlled 6 A.M. blood glucose (less than or equal to 200 mg/dL) on postoperative day one (POD 1) and postoperative day two (POD 2) with Anesthesia End Date being postoperative day zero (POD 0). | Recently Retooled | Inpatient |
| Ventilator Bundle | The percentage of intensive care patients on mechanical ventilation for whom all five elements of the ventilator "bundle" are implemented and documented. | Recently Retooled | Inpatient |
| All Cause Readmission Index (risk adjusted) | 30-day Readmission Index for Non-Maternity and Non-Pediatric Discharges. | Recently Retooled | Inpatient |
| PICU Pain Assessment | Percentage of PICU patients receiving pain assessment on admission. | Recently Retooled | Inpatient |
| PICU Periodic Pain Assessment | Percentage of PICU patients receiving periodic pain assessment. | Recently Retooled | Inpatient |
| Iatrogenic Pneumothorax in Non-Neonates (risk adjusted) (PDI5) | Percent of medical and surgical discharges, age under 18 years, with ICD-9-CM code of iatrogenic pneumothorax in any secondary diagnosis field. | Recently Retooled | Inpatient |
| Blood Cultures Performed Within 24 Hours Prior to or 24 Hours After Hospital Arrival for Patients Who Were Transferred or Admitted to the ICU Within 24 Hours of Hospital Arrival | Pneumonia patients transferred or admitted to the ICU within 24 hours of hospital arrival, who had blood cultures performed within 24 hours prior to or the day prior to arrival, the day of arrival, or within 24 hours after arrival to the hospital. | Recently Retooled | Inpatient |
| Foreign Body left after procedure (PDI3) | Discharges with foreign body accidently left in during procedure per 1000 discharges. | Recently Retooled | Inpatient |
| Urinary catheter removed on Postoperative Day 1 (POD 1) or Postoperative Day 2 (POD 2) with day of surgery being day zero | Surgical patients with urinary catheter removed on Postoperative Day 1 or Postoperative Day 2 with day of surgery being day zero. | Recently Retooled | Inpatient |

| Measure Title | Measure Description | Measure Status | Outpatient \| Inpatient |
|---|---|---|---|
| Cesarean Rate for Low-Risk Birth Women | Cesarean Rate for low-risk first birth women (aka NTSV CS rate: nulliparous, term, singleton, vertex) identifies the portion of cesarean births that has the most variation among practicioners, hospitals, regions and states. Unlike other cesarean measures, it focuses attention on the proportion of cesarean births that is affected by elective medical practices such as induction and early labor admission. Furthermore, the success (or lack thereof) of management of the first labor directly impacts the remainder of the woman's reproductive life especially given the current high rate of repeat cesarean births. This is also the measure used in Healthy Person 2010 (Objective 16.9a, US DHS, 2000). and previously recevived endorsement from the American College of Obstetricians and Gynecologists (American College of Obstetricians and Gynecologists: Task Force on Cesarean Delivery, 2000). A recent European review of cesarean birth measures also identified that this measure pinpointed the portion of cesarean births that had the greatest variation and contributed the most to the rise in overall rates in every country studied (Brennan, 2009). | Recently Retooled | Inpatient |
| Proportion of Infants 22 to 29 Weeks Gestation Treated with Surfactant who are Treated within 2 Hours of Birth | Proportion of infants with gestational age between 22 and 29 completed weeks who were treated with surfactant and were treated within two hours of birth. | Recently Retooled | Inpatient |
| Median Time from ED Arrival to ED Departure for Discharged ED Patients | Median time from emergency department arrival to time of departure from the emergency room for patients discharged from the emergency department. | Recently Retooled | Inpatient |
| Prophylactic Antibiotic Received Within One Hour Prior to Surgical Incision | 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. | Recently Retooled | Inpatient |
| Prophylactic Antibiotic Selection for Surgical Patients | Surgical patients who received prophylactic antibiotics consistent with current guidelines (specific to each type of surgical procedure). | Recently Retooled | Inpatient |

| Measure Title | Measure Description | Measure Status | Outpatient \| Inpatient |
|---|---|---|---|
| Prophylactic Antibiotics Discontinued Within 24 Hours After Surgery End Time | Surgical patients whose prophylactic antibiotics were discontinued within 24 hours after Anesthesia End Time. The Society of Thoracic Surgeons (STS) Practice Guideline for Antibiotic Prophylaxis in Cardiac Surgery (2006) indicates that there is no reason to extend antibiotics beyond 48 hours for cardiac surgery and very explicitly states that antibiotics should not be extended beyond 48 hours even with tubes and drains in place for cardiac surgery. | Recently Retooled | Inpatient |