QUALITY MEASURES FOR PUBLIC REPORTING: PRELIMINARY RECOMMENDATIONS TO THE MINNESOTA DEPARTMENT OF HEALTH

January 19, 2009

BACKGROUND

Through MN Community Measurement, the Minnesota health care community has pioneered collaborative health care reporting: building a set of measures that have become both more sophisticated and less administratively burdensome; establishing a process that allow for the collection of quality measure data from medical groups as well as health plans; and providing for the reporting of Minnesota quality data to health care providers and to consumers. Now MN Community Measurement has contracted with the Minnesota Department of Health (MDH) to assist the state in establishing a unified statewide quality reporting system for health care providers. In turn, MN Community Measurement is working with community partners including Stratis Health, the Minnesota Medical Association, the Minnesota Hospital Association and the University of Minnesota School of Public Health to assist us in completing this work.

In December 2008, MN Community Measurement completed an inventory of measures in use across the country for public reporting of quality information. The inventory of measures was presented to MDH and at a series of public meetings. From that inventory of measures, MN Community Measurement now presents its preliminary recommendations to MDH regarding a subset of measures identified in the inventory that we now recommend for public reporting purposes. We also include the criteria used to select the subset of measures.

PROCESS

To identify measures for public reporting, MN Community Measurement has relied on a Reporting Advisory Committee (RAC) made up of physicians and other clinicians, purchasers, consumers, technical specialists and health plans to establish priorities for new measures. The RAC uses sub-committees of content experts when evaluating particular measurement areas. The RAC is informed by the availability of national measures and consults with the Institute for Clinical Systems Improvement (ICSI) on the most recent guidelines approved by the providers in

our community based on a review of national research and evidence. The RAC uses criteria for the selection of new measures that have been adapted from the National Quality Forum. Those criteria are discussed below.

MEASURES OF AMBULATORY CARE

CRITERIA FOR PRELIMINARY RECOMMENDATIONS: The MN Community Measurement Reporting Advisory Committee (RAC) considered the following criteria in making these preliminary recommendations regarding which measures should be part of the statewide quality reporting system:

- **Degree of impact** – the magnitude of the individual and societal burden imposed by a clinical condition, including disability, mortality and economic costs.
- **Degree of improvability** – the extent of the gap between current practices and evidenced-based practices (variation) and the likelihood that the gap can be closed and conditions improved through changes in the clinical processes, as well as the opportunity to achieve improvement in the six quality aims laid out by the Institute of Medicine in their March 2001 report titled *Crossing the Quality Chasm: A New Health System for the 21st Century (a brief of the report can be found at* http://www.iom.edu/Object.File/Master/27/184/Chasm-8pager.pdf).
- **Degree of inclusiveness** – the relevance of a measure to a broad range of individuals with regard to (a) age, gender, socioeconomic status, and race/ethnicity; (b) the generalizability of quality improvement strategies across the spectrum of health care conditions; and (c) the capacity for change across a range of health care settings and providers.
- **National consensus** – the measure has either been developed or accepted/approved through a national consensus effort (e.g., National Quality Forum or Physician Consortium for Performance Improvement).
- **Degree of performance variation** – the performance rates show a wide degree of variation (e.g., range from low performer to top performer) from one reported entity to another.

RECOMMENDATIONS FOR MEASURES:

MN Community Measurement recommends that the state's quality reporting system include the measures currently in use on a voluntary basis by Minnesota's health care providers and health plans:

- **Optimal Diabetes Care** - the percentage of patients with diabetes (Types 1 and 2) ages 18-75 who reached all five treatment goals:

- HbA1c <7
- Blood Pressure <130/80
- Low Density Lipoprotein (LDL) <100
- Daily Aspirin Use
- Documented Tobacco Free

Rationale: *Diabetes is a high impact clinical condition, with opportunity for improvement, evidence-based guidelines on patient care and variation in treatment from one entity to another.*

- **Optimal Vascular Care** - the percentage of patients with vascular disease ages 18-75 who reached all four treatment goals:
  - Blood Pressure < 130/80
  - LDL <100
  - Daily Aspirin Use
  - Documented Tobacco Free

Rationale: *Vascular disease is a high impact clinical condition, with opportunity for improvement, evidence-based guidelines on patient care and variation in treatment from one entity to another.*

- **Use of Appropriate Medicines for Asthma** - percentage of patients ages 5-56 with persistent asthma who were appropriately prescribed medication

Rationale: *Asthma is a clinical condition relevant to a broad range of individuals, with opportunity for improvement, evidence-based guidelines on patient care and variation in treatment from one entity to another.*

- **Appropriate Treatment for Children with Upper Respiratory Infection** - percentage of children ages three months to 18 years with diagnosis of URI who were <u>not</u> given antibiotic within three days of episode

Rationale: *Upper respiratory infections are relevant to a broad range of individuals, with opportunity for improvement in preventing overuse of antibiotics, evidence-based guidelines to support it and variation from one entity to another.*

- **Appropriate Treatment of Children with Pharyngitis** - percentage of children ages 2-18 years with sore throats who were given an antibiotic and a group A strep test for episode period

Rationale: *Pharyngitis is relevant to a broad range of individuals, with opportunity for improvement in ensuring appropriate testing, evidence-based guidelines to support it and variation from one entity to another.*

- **Breast Cancer Screening** -percentage of women ages 52-69 who had mammogram in past 2 years

- **Cervical Cancer Screening** - percentage of women ages 24-64 who received one or more Pap tests in past 3 years

- **Colorectal Cancer Screening** - percentage of adults ages 51-80 who had appropriate colorectal cancer screenings

- **Cancer Screening Combined** - percentage of adults ages 51-80 who received appropriate cancer screening services (breast, cervical, colorectal)

Rationale: *Cancer is a high-impact clinical condition, relevant to a broad range of individuals, with opportunity for improvement in ensuring appropriate screening, evidence-based guidelines to support it and variation from one entity to another.*

- **Chlamydia Screening** - percentage of sexually active women ages 16-25 who had at least one test for chlamydia infection

Rationale: *Chlamydia is relevant to a broad range of individuals, with opportunity for improvement in ensuring appropriate screening, evidence-based guidelines to support it and variation from one entity to another.*

- **Childhood Immunization** - percentage of children two years of age who had appropriate shots by second birthday

Rationale: *Childhood immunizations are relevant to a broad range of individuals, with opportunity for improvement, evidence-based guidelines to support it and variation from one entity to another.*

The MN Community Measurement RAC recommends as new measures:

- **Depression measure, primary care** –
    - Six Month Remission Rate (PHQ-9 score <5 at six months); outcome measure demonstrating improved mental health for patients with depression
    - Use of the PHQ-9 Tool (patient has a PHQ-9 done at least once during the time frame); process measure to track use of new tool used for diagnosis, treatment and monitoring depression care
    - Collected through Direct Data Submission

Rationale: *Depression is a high-impact clinical condition, relevant to a broad range of individuals, with opportunity for improvement in ensuring appropriate screening, evidence-based guidelines to support it and variation from one entity to another.*

- **Depression measure, behavioral health specialists** – Includes patients with primary depression diagnosis
    - Six Month Remission Rate (PHQ-9 score <5 at six months); outcome measure demonstrating improved mental health for patients with depression
    - Use of the PHQ-9 Tool (patient has a PHQ-9 done at least once during the time frame); process measure to track use of new tool used for diagnosis, treatment and monitoring depression care
    - Collected through Direct Data Submission
- **Health information technology –**
    - Self-reported medical group survey assessing their use of HIT
    - As stated in IOM report, the use of IS has potential to improve each of the 6 aims of the health care system by helping clinicians manage large amounts of clinical information
    - Report available in mid 2009

Rationale: *There is broad agreement that use of health information technology can improve patient safety and the quality of care; there is variation from one entity to another.*

- **Patient experience** -
    - Using national CG-CAHPS survey; four domains:
        - Getting Appointments & Health Care When Needed
        - How Well Doctors Communicate

    - Courteous and Helpful Office Staff
    - Overall Rating
- Surveys administered by medical groups (vendors) using MNCM specifications
- First pilot report in early 2009

Rationale: *This measures addresses a sixth Aim of the Institute of Medicine – patient centeredness.*

In addition, the RAC recommends:

- **Lead Screening**
    - The percentage of children 2 years of age who had one or more capillary or venous lead blood tests for lead poisoning by their second birthday
    - Relevance to MN Health Care Programs
    - Medical group performance variation exists
    - HEDIS hybrid method measure collected by health plans

Rationale: *Led-poisoning is a high-impact clinical condition, relevant to a broad range of individuals, with opportunity for improvement in ensuring appropriate screening, evidence-based guidelines to support it and variation from one entity to another.*

- **Appropriate Management of Adult Acute Bronchitis**
    - The percentage of adults 18-64 years of age with a diagnosis of acute bronchitis who were not dispensed an antibiotic prescription
    - An overuse measure – a higher rate indicates appropriate treatment of adults with bronchitis (i.e., the proportion for whom antibiotics were not dispensed)
    - HEDIS administrative method measure collected by health plans

Rationale: *Adult acute bronchitis is relevant to a broad range of individuals, with opportunity for improvement in preventing overuse of antibiotics, evidence-based guidelines to support it and variation from one entity to another.*

DATA SPECIFICATIONS

The data specifications for all recommended measures, including measures currently in use and new measures, are provided in the appendix of this document.

MEASURES OF HOSPITAL CARE

As required by MDH, MN Community Measurement subcontracted with the Minnesota Hospital Association to fulfill the State's requirement that at least twelve measures from the Agency for Healthcare Research and Quality (AHRQ) Quality Indicators of hospital care quality be selected for public reporting in 2009. The AHRQ Quality Indicators are measures of health care quality that make use of readily available hospital inpatient administrative data. They include four modules:

- Inpatient Quality Indicators (28 provider level measures)
- Patient Safety Indicators (20)
- Prevention Quality Indicators (0)
- Pediatric Quality Indicators (13 – newest – pediatric version of patient safety indicators, mostly)

Other states, including Colorado and Texas, use AHRQ measures for public reporting.

CRITERIA FOR PRELIMINARY RECOMMENDATIONS: In order to select 12 measures out of the roughly 50 available AHRQ measures in its Inpatient Quality Indicators (IQI) and Patient Safety Indicators (PSI), several factors were considered:

- Alignment with other public reporting or quality improvement activities. For example, does the measure relate to prevention of adverse health events or to process measures reported to the Centers for Medicare and Medicaid Services?
- Number of hospitals with significant volume. Does this apply to most hospitals?
- Likelihood of consumer interest. Does this relate to relatively common conditions or procedures?
- Coding/severity adjustment issues. Is performance on this measure affected significantly by the accuracy and completeness of coding? Is there some controversy whether the severity adjustment methodology is adequately robust for this measure?
- Outcome measures. Does the indicator capture the contract's stated preference for measuring performance on outcomes?

RECOMMENDATIONS FOR NEW MEASURES: A group of experts reviewed the AHRQ measures against these criteria. Based on their feedback, MN Community Measurement and the Minnesota Hospital Association preliminarily recommend the following measures for public reporting:

- Abdominal aortic aneurysm repair (AAA) – IQI 4
- AAA repair mortality rate – IQI 11
- Coronary artery bypass graft (CABG) – IQI 5
- CABG mortality rate – IQI 12
- Percutaneous transluminal coronary angioplasty (PTCA) – IQI 6
- PTCA mortality rate – IQI 30

Rationale: *These measures align with Leapfrog Initiative measures; are likely to be of interest to consumers; the volume measures have no coding issues although severity adjustment is imperfect on the mortality measures; and the mortality issues are outcome measures while volume is a marker for higher quality.*

- Hip fracture mortality rate – IQI 19

Rationale: *This measure is a CMS measure; applies to all hospitals; is meaningful to consumers although of low occurrence; the severity adjustment is imperfect; it is an outcome measure.*

- Decubitus Ulcer – PSI 3

Rationale: *This measure aligns with both a CMS measure and is a state Adverse Health Event measure; applies to all hospitals; is of consumer interest as an avoidable condition; and is an outcome measure; but is subject to coding variations, particularly with regard to whether it is present on admission.*

- Death among surgical patients with treatable serious complications – PSI 4

Rationale: *This measure aligns with a CMS measure and is related to reported Adverse Health Events; it applies to most hospitals and is tracked by all hospitals; it is of consumer interest as an avoidable event; and is an outcome measure; it does have some coding issues as coding is often not uniform across hospitals.*

- Post-operative pulmonary embolism or deep vein thrombosis – PSI 12

Rationale: *This measure aligns with the Hospital Quality Alliance Venous Thromboembolism topic; applies to most hospitals; may not be of extremely high interest to consumers but does apply to all surgeries; is an outcome measure and does not have coding issues.*

- Obstetric trauma (3rd and 4th degree lacerations) – vaginal delivery with instrument – PSI 18
- Obstetric trauma (3rd and 4th degree lacerations) – vaginal delivery without instrument – PSI 19

Rationale: *These measures align with a JCAHO measure reported by some hospitals; applies to most hospitals; will be of interest to consumers as one of the few obstetrical measures available; is an outcome measure; but there are some coding issues and some uncertainty about how these events can be prevented.*

While meeting all of the criteria for every measure would have been ideal, it should be noted that most do not meet every criteria listed. However, each measure chosen had significant positive attributes that outweighed the drawbacks relative to other candidate measures. Below follows a discussion of why other ARQH measures were not chosen:

- **Mortality for specific medical conditions (6 out of 7 indicators not chosen)**
    - Severity adjustment less robust than for surgical; hip fracture chosen
- **Mortality for specific surgical conditions (5 out 8 indicators not chosen)**

- 3 chosen are higher volume and have corresponding volume indicators

- **Utilization measures (none of 7 chosen)**
    - e.g. C-section & VBAC rate: controversy about what is “good”

- **Volume measures (3 of 6 not chosen)**
    - Higher volume procedures chosen
    - Carotid Endarterectomy was a candidate, along with its mortality measure , but not all hospitals do it

- **Other PSIs**
    - Some are very low occurrence, < 1 per 1000;
    - Others have coding issues; accidental puncture/laceration was a candidate, but fell short here

- **Composite measures**
    - In CMS proposed list: death in medical conditions, death in surgical conditions, overall patient safety
    - Methodology not widely accepted

- **Pediatric measures**
    - Very low occurrence

DATA SPECIFICATIONS

The data specifications for the recommended all AHRQ measures are provided in the appendix of this document.

CONCLUSION: MN Community Measurement and the Minnesota Hospital Association appreciate the opportunity to provide these preliminary recommendations and look forward to the input of stakeholders and other interested parties in developing final recommendations to the Minnesota Department of Health.