

## **What attributes of data quality are important to ensure that CQM data is useful and meaningful to the clinician?**

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There are multiple variables to consider when one analyzes the factors that make CQM data meaningful and useful to the practicing clinician. Current measures have done an excellent job incorporating a wide range of clinically relevant topics. It is clear that prior MU measures have relied heavily on the following characteristics:

- the performance metric must be well researched and from a research-validated source
- the performance metric must lead to identifiable health gains for the population
- the performance metric must lead to cost saving for the population
- the performance metric must be measurable and attainable to the available data collection means

These attributes have been rigorously applied to all current metrics of meaningful use criteria. Their inclusion has led to a series of largely successful measures, which have been accepted by the medical community.

As we look to future measure development, we build upon the success of the prior measures, expanding their impact and scope. This leads us to consider what attributes of measures are trustworthy and believable to the practicing physician. For the answer, we look to the experience gained from the current set of measures.

I base my recommendations from my experience in direct oversight of numerous providers within the Eastern Maine region, as well as through statewide work with the Maine chapter of the CHIPRA grant. It is my belief that incorporation of these suggestions will maximize the usefulness of future metric development to the average practicing clinician.

I suggest further focus upon the following:

1. Measures are viewed more meaningful when they are management-focused, as opposed to outcome-based.
2. Measures should endorse researched and vetted "tools" that supplement the clinical picture. These tools should be administered by physician extenders (medical assistants, educators).

3. The role of expanded education by a paraprofessional should receive support to encourage compliance and patient education.
4. The performance metric is not affected by "real world" aberrations in clinical medicine (such as those designed to protect a patient's confidentiality).

**1. Measures are viewed as more meaningful when they are management-focused, as opposed to outcome-based:**

Several of the current MU measures are clinically "end-result" oriented, i.e. they measure the end result of a process. In MU #0069, we look to the appropriate care of upper respiratory symptoms:

**Appropriate treatment for children with an Upper Respiratory Infection (URI):**  
Percentage of children 3 months-18 years of age who were diagnosed with upper respiratory infection (URI) and were not dispensed an antibiotic prescription on or three days after the episode.

While this metric has an admirable goal of reducing inappropriate use of antibiotics, its outcome is based entirely on clinical analysis. Diagnostic flexibility is inherent in the care of children with upper respiratory symptoms, as the line between URI and bacterial sinusitis is based largely on clinical grounds. However, a metric that is so easily modifiable via a colleague's coding practice is often not viewed as reliable in the eyes of peers. Basing a measure on something as subjective as clinical analysis reduces the power and effectiveness of this measure. It loses power and buy-in by colleagues, and can be viewed as more an issue of coding than of practice.

The other area where we see endpoint measurement is metrics designed around a particular value, such as a "BMI" or "HgbA1c". This data is usually surveillance for tracking characteristics of a chronic disease state or misbehavior. In these situations, the data is the endpoint of an established and ongoing treatment, such as weight management or Diabetes control.

It has been my experience through counseling colleagues on data review that such measures tend to start off as very effective, but that population management leads to clinician dissatisfaction and a general malaise about the data. What is witnessed is a slow and steady movement to a saturation point, where the data becomes stagnant and underappreciated by the provider. After this "critical threshold" is reached, the data becomes clinically sub-relevant.

To understand the frustrations inherent in this situation, we look to the process of personal change and choices. As we know through the study of motivational interviewing, individuals typically undergo several stages to a change in behavior:

**Pre-contemplative phase:** The phase of avoidance, where the patient either does not recognize a problem, or recognizes the problem but refuse to change.

**Contemplation phase:** The patient acknowledges that there is a problem, but their recognition is tempered by a high dose of ambivalence.

**Preparation/Determination phase:** The patient begins to move forward, taking small steps and preparing to change.

**Action/Willpower phase:** Change occurs and the behavior is altered or eradicated.

**Maintenance phase:** The new behavior becomes integrated into the person's life.

When we initiate analysis of an end-point metric among a large clinical population, we see initial and rapid changes, as the different "phases" shake themselves into their respective realms. Once this has been accomplished, energy is turned to those in the contemplation phase, and the elements of the Patient-Centered Medical Home are brought to bear. We celebrate the victories when contemplation becomes action, as our case managers, more frequent office visits, and expanded office systems work effectively to improve the quality of the individuals. However, after a period of intense activity, there remains a stubborn percentile locked in the pre-contemplative phase that is often non-responsive to effort. This is the stage where clinical ambivalence sets in. As the data is reviewed over and over, at quality meetings and at conferences with peers and leaders, providers become progressively disenfranchised with the data. Clinicians begin to view this data as "meaningless", and lose faith in the data. After a few cycles, the data becomes stagnant and clinically irrelevant.

Compare this measure to MU # 0001, an excellent example of a more "process" or "control-based" measure:

**Asthma assessment:** Percentage of patients aged 5 through 40 years with a diagnosis of asthma and who have been seen for at least 2 office visits, which were evaluated during at least one office visit within 12 months for the frequency (numeric) of daytime and nocturnal asthma.

This measure emphasizes the underlying control of asthma by requiring the clinician to alter the way he/she practices medicine. Emphasis in this regard includes:

- (a) The diagnosis must be made over time (...at least 2 office visits, which were evaluated during at least one office visit within 12 months).
- (b) The diagnosis must be made based on frequency and timing of symptoms (...for the frequency (numeric) of daytime and nocturnal asthma).

The relative power of this measure is considerable, in that it leads to a change in the process by which the clinicians care for asthmatics. Unlike the first example, there is little clinical variability to this measure. Unlike the second example, the process is not hampered by the patient's readiness to accept change. It is a purely office-system metric that is limited only by the providers' choice to perform the work. Not surprisingly, this metric has been well received by clinicians. The provider improves asthma care by increasing the frequency of patient evaluations, and deepening the understanding of the patient's symptoms. Clinicians have begun to see asthmatics back in the office for more routine follow-up care. There has been a progressive shift away from delivery of care that is more urgent or "flare"-based. NQF #0036 and has also supported this trend by encouraging correct use of preventative medication for persistent asthmatics. Future metric should emphasize a focus on office systems designed to provide care for a specific disease state by encouraging in-office process change.

**2. Measures should endorse researched and vetted pre-visit "tools" that supplement the clinical picture. These tools should be administered by physician extenders (medical assistants, educators, etc).**

A striking and powerful change in the nature of primary care is the realization that the modern American primary care provider is significantly overburdened. Nowhere is this more evident than in pediatrics, where office visits can be as short as 10 minutes, and appointments number anywhere from 25-35 per day. Many pediatricians have turned to a "team" system to improve both collection and dissemination of information to and from the patient. The patient-centered medical home initiative has strongly encouraged this concept as a way of streamlining health information and improving care delivery.

A central role in this process has been the Physician extender. The PE has evolved from responsibilities limited to obtaining vitals and administering vaccinations to become an integral player in primary health care. In the team concept of care, the PE obtains health information prior to the clinician's entry. Examples of such information include verbal screenings and procedural tests. Following the PE's collection of data, the clinician enters the room, reviews the collected data, and dispenses care. An excellent example of a metric that endorses the use of a screening tool is NQF-0418

**Preventive Care and Screening: Screening for Clinical Depression and Follow-Up**

**Plan:** Percentage of patients aged 12 years and older screened for clinical depression on the date of the encounter using an age appropriate standardized depression screening tool AND if positive, a follow-up plan is documented on the date of the positive screen

This metric endorses the use of a validated screening tool. However, there are many other areas that are ripe for the endorsement of screening tools. Examples of such tools currently utilized within our offices include:

- Asthma care
  - the Asthma Control Test (ACT)
  - Test for Respiratory and Asthma Control in Kids (TRACK),
- Child development
  - Ages and Stages questionnaire (ASQ)
  - Pediatric Evaluation of Development (PEDS)
- Autism
  - Modified Checklist for Autism in Toddlers (M-CHAT)
- Lead screening
  - Maine state lead screening criteria
- Attention Deficit Hyperactivity disorder
  - NICHQ tool
- Adolescent depression
  - PHQ-9

It is notable that all of these tools could easily be adaptable to current and future Meaningful Use metrics. Indeed, the TRACK and ACT test obtain information from MU#0001, previously discussed related to daytime and nighttime symptoms of asthma and duration of

asthma symptoms. Lead screening, developmental screening, Autism screening, and ADHD are all planned metrics for 2014 and beyond.

The endorsement of a tool increases the reliability of metrics viewed by clinicians in a number of ways. In addition to promoting a more modern workflow, use of a tool in clinical medicine completed by a clinician extender increases the reliability of the collected data in the minds of the clinician. Physicians tend to trust in this data more for a number of reasons:

- The data numerator (the number of patients who receive the screening) is larger because of the automatic nature of physician extender-based protocols.
- The metric is delivered to the patient in a standardized and scripted fashion.
- The screening tool has been reviewed and endorsed by the clinician prior to implementation into the office system.
- The screening tool prompts the provider to have a clinical discussion with the patient concerning the disease being screened, so as to not have the process rely only on memory.

The endorsement of researched tools in current and future measures will significantly improve the delivery of care by recognizing the changing face of the provider and physician extender workflow, and ensure that CQM data is useful and meaningful to the clinician

### **3. The role of expanded education by a paraprofessional should receive support to encourage compliance and patient education.**

When measures of quality are considered by practicing clinicians, one of the concerns discussed is the difference between “checking a box/satisfying a protocol/meeting a measure” and the act of truly making a change in a patient’s life. As stated previously, modern medicine has led to a reduction in the available time a clinician has to spend with a patient. There are numerous topics that require more in-depth teaching, in order to change behavior or instruct in the application of therapy. Two notable examples include dietary/health counseling and asthma education. In both of these examples, clinicians will often refer the patient to see other educators in consultation for specialized information following the visit. These referrals are often within the patient’s medical home, but not immediately available at the time of the office visit.

In Measure #NQF 0036, we examine the role of asthma education:

**Use of Appropriate Medications for Asthma:** Percentage of patients 5-64 years of age who were identified as having persistent asthma and were appropriately prescribed medication during the measurement period.

In this situation, we administered inhaled corticosteroids (ICS) to children and teenagers as a result of persistent symptoms. These therapies often involve complicated devices such as a variety of spacers, and inhalers. In addition, the patient must be made aware of when to take their medication – what are the asthma triggers? Does the patient need pre-sports treatment? How about pre-recess treatment? Does recess in summer need the same pre-treatment as recess in winter? Which medicine is used during an asthma flare? When should the patient call the clinician on call? When should they go to the emergency room? All of these questions are best

served by an independent visit with a certified asthma educator in order to improve the patient's understanding of their medication and its use. The inclusion of education in this metric would significantly improve the clinician's faith and trust in this metric.

A similar situation is found in metric NQF#0024, related to weight counseling:

**Weight Assessment and Counseling for Children and Adolescents:** The percentage of patients 2 -17 years of age who had an outpatient visit with a Primary Care Physician (PCP) or OB/GYN and who had evidence of BMI percentile documentation, counseling for nutrition and counseling for physical activity during the measurement year.

During a typical 20 minute well-child check, providers are able to provide brief minutes of dietary and exercise counseling. This education is important as part of a campaign to improve the general public's knowledge about the importance of diet and exercise. However, checking the "provided education about eating habits" box on an EHR to a child with normal BMIs from a clearly knowledgeable family can be a frustrating endeavor. Even more frustrating is the exercise of checking the same box when an obese child enters the room with a family that clearly would benefit from in-depth education. These opposite feelings of either "going through the motions" or "I don't have the time or the resources available" can quickly lead to provider dissatisfaction and lack of support for this metric. Ideally, this metric would be best served by inclusion of a recommendation for further nutritional education in those with an elevated BMI.

When we consider the importance of further education, one has to reflect upon the introduction of a landmark Meaningful use measure, that of core measure #13, the clinical visit summary.

### **Core Measure #13 -**

**Objective:** Provide clinical summaries for patients for each office visit.

When first introduced, there was widespread opposition at the idea of a clinical visit summary. Several providers initially dug in their heels and refused to move forward with the proposed change due to the increased charting requirements inherent in the metric. As time and experienced has passed, providers have embraced the summary process as a way of providing more education for patients. More than any other measure, it has changed the way our providers chart, teach, and educate our patients. Patients have accepted the process change enthusiastically, and have come to treasure their summaries full of "pearls" of data from sick and well child care visits.

It would appear that an emphasis on patient education is ripe for implementation. Endorsement of such educational programs will improve patient compliance and motivate patient change. Based on the experience of the clinical visit summary metrics, as well as provider feelings about the usefulness of metrics, clinicians will welcome measures endorsing the role of educators in chronic disease management.

#### **4. The performance metric is not affected by "real world" aberrations in clinical medicine (such as those designed to protect a patient's confidentiality).**

A recurring theme among physicians is the general distrust of billing in confidential situations. This leads to a challenge with measures such as HEDIS that rely largely on billing data. A major source of concern among clinicians involves Chlamydia screening in adolescent females. To quote the measure, NQF#0033:

**Chlamydia Screening for Women:** Percentage of women 16-24 years of age who were identified as sexually active and who had at least one test for Chlamydia during the measurement period.

The challenge associated with this measure is the data collection method. Since this data is populated from billing claims, if a bill for the diagnosis is not generated, the data is not recorded. A number of pediatricians do not bill for sexually transmitted disease in adolescence, in order to ensure patient confidentiality. As a result, this measure loses statistical power. In the eyes of many practicing clinicians, the lack of recognition of this common practice in pediatrics lowers the degree of buy-in of this metric. The solution to this is to utilize a direct-EHR measures, where the results from data culled directly from the EHR can be used to populate the metric. Such work is currently being investigated in many different areas around the country.

The current crop of meaningful use measures has been largely accepted by practicing clinicians. We have discussed several barriers to provider acceptance of the current measure set. Attributes that would improve clinician acceptance of EHR measures include those that are management-focused instead of outcome-based and those that endorse clinical "tools" administered by physician extenders. In addition, measures that emphasize the role of clinical educators and that mitigate billing aberrations in data gathering will improve provider acceptance of future metrics. I look forward to future measures from the meaningful use Electronic Health Record Incentive Program.