

**HIT Policy Committee
Quality Measures Workgroup**

CARE COORDINATION TIGER TEAM

October 28, 2010

The Quality Measure Workgroup is one of seven workgroups within the HIT Policy Committee that will provide initial recommendations on quality measures prioritization and the quality measure convergence process pertaining to measure gaps and opportunities for Meaningful Use Stage 2.

The workgroup was divided into six tiger teams, each focused on a different measure domain. These tiger teams were charged with identifying a set of sub-domains, prioritizing these sub-domains, and identifying key measure concepts within each sub-domain.

The Care Coordination Tiger Team members include Tim Ferris, Helen Burstin, Daniel Green, Rainu Kaushal, David Kendrick, Marsha Lillie-Blanton, Laura Peterson, Eva Powell, Martin Rice, Sarah Scholle, and James Walker.

The Care Coordination tiger team used several criteria to prioritize measure concepts, including the state of measure development, endorsement status, potential impact to improve care transitions, quality of care delivered to patients, and the importance of outcomes such as reduction in readmissions. Empirical examples of measures were drawn primarily from the Gretzky Report, an environmental scan of existing health information technology (HIT) sensitive clinical quality measures.

The group first identified a set of sub-domains that captured the full extent of what is generally understood as care coordination. From these sub-domains the group followed an iterative process that used both its conceptual framework and empirical examples of existing measures to achieve consensus on a set of measure concepts the group considered most promising as indicators of quality of care coordination. These priority measure concepts included—

- **Measure of the presence of a comprehensive clinical summary in the EHR with an up to date problem list.**
- **Measure of receipt by patient of a self management plan for patients with conditions where a self management plan might reasonably be considered to benefit them (ie: Asthma and CHF self management plans)**
- **Measure of an Advance Care Plan- Availability of a completed advanced care plan and health care proxy in EHR**
- Measure of palliative care plans in patients with life limiting diagnosis
- Measure of content of referral that includes all the important information and no extraneous information included in summaries of care provided by the sending provider across any care transition
- **Measure of reconciliation of all medications when receiving a patient from different provider**
- **Receipt by patient of a comprehensive clinical summary after any care transition or made available upon provider or patient request.**
- **Receipt by care team members of a comprehensive clinical summary after any care transition or made available upon provider or patient request**
- **Measure of patient and family experience of care coordination across a care transition**
- Measure of readmissions that is sensitive to quality of transitions (reducing all cause readmissions)
- Measure of Emergency Department throughput for discharged and admitted patients.
- **Assessment of timeliness of provider and appropriate response to clinical information, including lab and diagnostic results**
- Assessment of quality of communication with patient about a proposed intervention (medication management, diagnostic imaging, referral, etc.)
- Assessment of quality of communication with other members of care team regarding a change in management plan or a planned intervention.
- **Assessment of duplicative test orders (lab and imaging)**
- Measure the number of patients who have a comprehensive care management assessment completed and documented
- Measure of medication reconciliation performed at all care transitions and intervals between transitions
- Measure provider follow-up on lab and diagnostic results
- Measure the timeliness of care plan transfer between health teams, health settings, and health systems.
- Assess timeliness of patient follow-up after care transitions
- Assess appropriateness of medication management
- Assess appropriateness of diagnostic management
- Generic medication use measure
- Shared decision making of medication management and diagnostic management.
- Measure of primary care and specialty care visits that were planned during the reporting month.

The following text describes both the sub-domains that the group considered most important for assessing care coordination as well as the measure concepts that fell within those sub-domains. It is important to point out that alternative categories to those used by the team are possible, so the classification that follows represents a pragmatic approach.

In addition, the definitions of the sub-domains and the measure concepts describe idealized conceptions of health care delivery. It is unlikely that actual measures would be able to completely capture the measure concepts described below. The eight measure concept recommendations were prioritized based on aspects of care coordination that are enabled by health information technology and can improve appropriate and timely patient and care team communication.

1. Effective Care Planning

Definition: A care plan is defined as a shared plan of care among the patient, his or her family, and all the members of health care team that addresses all the patient's health care needs. Post visit summaries and patient self-management plans are specific examples of care plans that may partially meet this definition. An annual care plan covering all aspects of a patient's health more fully meets this definition.

An effective care plan requires care coordination between the health care team and the patient/patient's family. The care plan, as defined above, would build on elements already included in the "Clinical Summary" as defined in the Meaningful Use Final Rule. This care plan would be comprehensive in nature, including a complete comprehensive clinical summary, and self-management plans. In addition, care plans may include advance directives and health care proxies. The group indicated that the ability to ensure receipt of the transfer information between care teams, care settings, and care systems may lead to improved outcomes such as reducing readmissions. Information transfer should be timely, appropriate, and encourage patient engagement. The group also acknowledged that effective care planning is more likely to benefit some specific populations such as those with complex medical conditions or life threatening illness.

Measure Concept Recommendation 1.1: Measure the presence of a comprehensive clinical summary in the EHR with an up-to-date problem list.

A comprehensive clinical summary with an up-to-date problem list is a key aspect to successful care planning. This measure concept builds on the existing Stage 1 Meaningful Use measure for "clinical summary" cited above. There are two distinct characteristics of this measure concept: bidirectional communication and transactional communication. A care plan based on these principles engages the patient and family in care planning, while allowing the care team to be in agreement. In addition, an up-to-date problem list can be used to identify the denominators for outcomes measures. Finally, a comprehensive clinical summary will guide patient care and provide the foundation for a self-management plan.

The group identified the After Visit Summary developed by Health Partners, which measures the percentage of completed visits where an after visit summary was printed, as an existing measure that may partially meet this measure concept but needs refinement, e-specification, and testing. The group noted a gap in existing measures relating to the bidirectional and transactional communication of clinical summaries.

Measure Concept Recommendation 1.2: Measure of receipt by the patient of a self-management plan for patients with conditions where a self-management plan might be reasonably considered to benefit them.

Current literature demonstrates a consistent improvement in health outcomes for chronic diseases and the use of action plans.^{1,2} Action plans for leading chronic conditions such as asthma and congestive heart failure are beneficial and should be considered for more parsimonious and health information technology sensitive measures.

A patient-focused self-management plan should include the capacity for multiple providers (including specialist and non-primary care providers and family members) to edit and/or retrieve data. In addition, action plans supplement outcome measure concepts in population health and reduce the burden of illness.

The team considered a number of different empirical measures that attempt to measure the appropriate use of action plans. Two such examples are “Percentage of Asthma Action Plans (AAP) updated and on file in schools,” from the Gretzky Report, and “Percentage of CHF or COPD patients in case management who activate their rescue plan during an exacerbation,” which is a proposed Beacon measure. However, these measures are not health information technology sensitive and were considered more aspirational by the team.

Measure Concept Recommendation 1.3 Measure of an Advance Care Plan—Availability of a completed advance care plan and health care proxy in the EHR.

Measuring the availability of an advanced care plan requires shared decision making by the patient and family in conjunction with the health care team. Stage 1 Meaningful Use includes a “menu” measure that states: “More than 50 % of all unique patients 65 years or older admitted to the eligible hospital’s or Critical Access Hospital’s inpatient department, have an indication of an advance directive status recorded.” The group thought there was opportunity to expand this measure to a broader measure concept. An individual’s advance care plan and assignment of a health care proxy is actionable and requires communication between the health care provider and the patient. However, there is a notable gap in measures that capture this degree of patient engagement outside the hospital setting.

The team identified a measure developed by Massachusetts General Hospital requiring 80 percent of active patients to have a health care proxy in their medical record as a potential measure to be e-specified, validated, and tested.

2. Care Transitions

Definition: The movement of a patient between health care providers or health care settings presents opportunities for coordination of care. Any patient handoff within health teams, care settings, or support systems represents potential for loss of information and/or management plans. The goal of measurement in this sub-domain is to assess and promote the successful transfer of information and management plans.

Care transitions can be assessed by defining the appropriate content of transition communication as well as the successful transfer of information and management plans. Without this successful transfer of information, care becomes fragmented. Care transitions should be viewed from both the patient's and health team's point of view. Examples of information exchanged during a care transition include the receipt of a care plan by the patient and receipt of relevant transfer records among health teams and health settings. The lack of care coordination during a care transition results in the risk of harm to the patient.

Measure Concept Recommendation 2.1: Measure of reconciliation of all medications when receiving a patient from a different provider.

Medication reconciliation is one of the most important aspects of care transitions, and to that extent, of care coordination. Published data support the hypothesis that the medication reconciliation process, with its increased coordination of information between health care providers and patients, can decrease mortality when a patient is transferred from one setting of care to another.³ Medication reconciliation is currently captured in Stage 1 Meaningful Use criteria.⁴ However, the group believes there are opportunities to expand this measure to include patients of all ages during all care transitions. This measure concept was also a priority for the efficiency tiger team. Medication reconciliation captures health information technology sensitive and longitudinal data, in addition to promoting parsimony.

A number of existing medication reconciliation measures, including the Meaningful Use Stage 1 measure, were discussed by the group. These empirical measures do not reflect the level of parsimony or health information technology sensitivity the group considers possible with EHR functionality.

Measure Concept Recommendation 2.2: Measure of receipt by patient and care team members of a comprehensive clinical summary after any care transition.

Sharing care transition information with the patient and other care team members is critical to care coordination. The transactional nature of this measure concept promotes parsimony and health information technology sensitivity. By measuring the receipt of a "comprehensive clinical summary," members of the health team may be able to identify areas in clinical workflow that need to be optimized to potentially reduce readmissions. This measure concept is applicable to multiple types of providers, care teams, care settings, and conditions.

The group thought about this concept as a potential composite measure. The group identified gaps in existing measures. For example, the National Quality Forum (NQF) measures (647, 648, 649) pertain narrowly to inpatient-to-outpatient transitions, while

relevant National Committee for Quality Assurance (NCQA) measures focus on specific outpatient transitions such as primary care provider referrals to specialists. This measure concept needs further development to become more parsimonious and health information technology sensitive.

Measure Concept Recommendation 2.3: Measure of patient and family experience across a care transition.

The patient experience of care transition is essential to successful care coordination. This measure concept allows the patient and family to engage in the patient's care. In addition, this measure concept provides feedback for the care team to improve the care transition experience. The patient and family engagement tiger team signaled this measure concept as a high priority.

To effectively measure the patient and family experience, improvements in current EHR functionality to achieve health information technology sensitivity will be required. The group identified Eric Coleman's NQF # 228 Care Transition Measure (CTM) three-item survey as a potential existing measure that could be retooled for e-specification, validation, and testing.

3. Appropriate and Timely Follow-Up

Definition: Response from the recipient (clinician), such as taking a follow-up action and acknowledging receipt of the information to the patient and/or sender (specialty provider, etc). The action taken by the responding clinician needs to be both clinically appropriate as well as timely.

Care cannot be coordinated without appropriate and timely follow-up on information. EHR functionality facilitates collection of data on clinician-specific actions and timeliness of response to clinical data. Follow-up on laboratory results and imaging studies may include measurement of a response by the recipient (clinician) and/or the receipt of information by or a specific action taken by the patient.

This sub-domain allows for longitudinal measurement over time as well as parsimony for a number of clinical scenarios. Most important, it reinforces the relationship between the patient and the health team through its bidirectional and transactional elements. EHR functionality allows communication and coordination between health teams outside of the hospital setting, such as communication among the primary care physician and specialists. Actions of the health team, therefore, need to be both clinically appropriate as well as timely.

Measure Concept Recommendation 3.1: Assessment of timeliness of and appropriate response by the provider to clinical information, including laboratory and diagnostic results.

This measurement concept ties two important attributes of the EHR functionality to care coordination: measuring appropriate response and the timeliness of information. The first concept is an assessment of the appropriate response to clinical data. In addition to the patient, who else should be notified of results (specialists, etc) and what actions need to

be taken (if any) to address the data (further testing, medication adjustment or increase/decrease, referral, or patient follow up)? The group discussed the potential of responsiveness to “alerts” as a method to gauge clinician or health team responsiveness. The group considered this measure concept to be very parsimonious because responding to clinical information is ubiquitous in the provision of health care. Similar measure concepts have been considered by the efficiency tiger team.

The group identified a measure developed by the Department of Veterans Affairs that calculates longitudinal performance measures for hypertension that cross all settings of the care spectrum as an example of how this measure concept can be applied in a more narrow sense.

4. Intervention Coordination

Definition: Intervention coordination includes medication management as well the ordering of tests (such as diagnostic imaging or blood tests), services (e.g., OT/PT) and referrals. The decision to intervene (change the plan of care for a given patient) is accompanied by a set of activities that increase the chance that the intervention will meet the patients’ health needs. Coordination in this context means intervention should be appropriate, affordable, and communicated to the patient and other care team members.

Intervention coordination includes management and coordination of laboratory and imaging studies in addition to ancillary services such as occupational therapy and physical therapy. Interventions should be appropriate, i.e., appropriate medication changes based on laboratory results. Tests and medications should be affordable to the patient, and the cost should be communicated to the patient and documented in the EHR. Finally, clinicians need to ensure patient understanding through adequate communication.

Measure Concept Recommendation 4.1: Assessment of duplicative test orders (laboratory and imaging).

The EHR provides the functionality to assess whether laboratory tests and imaging studies were duplicative. The group discussed many scenarios in which tests are duplicative and sees this as an important measurement concept. The group considered different empirical measures for this sub-domain, including, but not limited to, appropriate medication therapy in high-risk patients, some palliative care measures endorsed by the NQF, and polypharmacy in the elderly. Example measures in this sub-domain were not found to be parsimonious or particularly health information technology sensitive. The efficiency team also considers this measure concept to be a high priority.

The group proposed the following measure concepts to capture appropriate intervention coordination: “Assessment of quality of communication with patient about a proposed intervention (medication management, diagnostic imaging, referral, etc.)”, “Assessment of quality of communication with other members of care team regarding a change in management plan or a planned intervention,” and “Assessment of duplicative test orders (laboratory and imaging).”

The group felt the assessment of duplicative test orders is parsimonious and health information technology sensitive. The team liked the following measure: “Of all tests ordered over a 6-month time period, how many tests for which results were already completed are XX days old at time of second test?”

References:

- 1) Gibson, PG, Powell, H. Written action plans for asthma: an evidence-based review of the key components. *Thorax*. 2004;59:94-99 doi:10.1136/thorax.2003.011858
- 2) Bhogal, S, Zerneq, R, Ducharme, FM. Written action plans for asthma in children. *Cochrane Database of Systematic Reviews*, 4, 2006.
- 3) Delate, T, Chester, EA, Stubbings, TW, Barnes, CA. Clinical outcomes of a home-based medication reconciliation program after discharge from a skilled nursing facility. *Pharmacotherapy*. 2008 Apr;28(4):444–52.
- 4) Meaningful Use Final Rule. Meaningful Use Stage 1 criteria: Eligible Providers (EP) and Eligible Hospitals as the EP, eligible hospital, or critical access hospital (CAH) performs medication reconciliation for more than 50% of transitions of care in which the patient is transitioned into the care of the EP or admitted to the eligible hospital or CAH. *Federal Register*, July 28, 2010.