The Multiple Chronic Conditions (MCC) Steering Committee held an open session, in-person meeting on August 8, 2011.

I. WELCOME, INTRODUCTION, AND OVERVIEW OF MEETING OBJECTIVES

Barbara McCann and Caroline Blaum, Co-Chairs, welcomed the Multiple Chronic Conditions (MCC) Steering Committee members and thanked them for their participation. Ms. McCann reviewed the objectives for the meeting, which included:

- finalizing the definition of multiple chronic conditions (MCCs),
- establishing guiding principles for measurement,
- finalizing the MCCs conceptual model,
- prioritizing key measure concepts areas, and
- discussing path forward and policy implications of framework.

Ms. Blaum provided a brief overview of the scope of work and the intended uses of the MCCs framework. Under the guidance of a multi-stakeholder Steering Committee, NQF will develop a patient-centric measurement framework for individuals with MCCs. Specifically the framework will build upon the National Quality Strategy (NQS), Partnership for Patients, National Prevention Strategy, Health and Human Services’ (HHS’s) Strategic Framework on MCCs, and the work of other private-sector initiatives such as the National Priorities Partnership (NPP). In particular, the framework will establish key terms and definitions, domains for performance measurement for evaluating efficiency, and key policy guiding principles that are instrumental for measuring and reporting the efficiency of care for patients with MCCs. Furthermore, the MCC measurement framework will provide input to HHS on MCC strategic framework and initiatives, inform measure development for people with MCCs by identifying measure gaps, guide selection of measures for public reporting and payment, serve as a roadmap for new delivery models (accountable care organizations and patient centered medical homes), and informational research.

II. DEFINING MULTIPLE CHRONIC CONDITIONS

As a follow-up item from the July 8 in-person meeting, NQF staff reached out to Committee members with pediatric expertise to further enhance the MCC definition to ensure its relevance to children. Prior to this meeting, Committee members were sent a revised definition and their collective feedback was synthesized by staff. At the meeting, Committee members discussed the revised definition and agreed on the definition presented below:
Persons with MCCs are defined as having two or more concurrent chronic conditions that collectively have an adverse effect on health status, function, or quality of life and that require complex health care management, decisionmaking, or coordination.¹, ²

Assessment of the quality of care³ provided to the MCC population should consider persons with two or more concurrent chronic conditions that require ongoing clinical, behavioral⁴, or developmental care from members of the health care team and act together to significantly increase the complexity of management and coordination of care—including but not limited to potential interactions between conditions and treatments.

Importantly, from an individual’s perspective, the presence of MCCs would:

- affect functional roles and health outcomes across the lifespan;
- compromise life expectancy; or
- hinder a patient’s ability to self manage or a family or caregiver’s capacity to assist in that individual’s care.

III. GUIDING PRINCIPLES FOR MCC MEASUREMENT

A webinar was held on July 29 where Committee members discussed key methodological issues pertaining to performance measurement for people with MCC. Three case studies were presented including a child with cystic fibrosis; a middle aged man with obesity, diabetes, and depression; and a frail elder. From this discussion the group began to formulate guiding principles. Ms. McCann, MCC co-chair, and Karen Adams, NQF vice president for National Priorities, presented the draft guiding principles from the webinar during the meeting. Based on discussion the following iteration of the guiding principles emerged.

Performance measurements for people with MCCs should:

1. Promote collaborative care among providers and across settings at all levels of the system⁵, while aligning across various public and private sector applications (e.g., public reporting, payment).
2. Assess the quality of care⁶ and incorporate measures that are crosscutting⁷, condition-specific, structural⁸, behavioral⁹, and address appropriateness of care¹⁰.

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¹ In the context of this definition, chronic conditions encompass a spectrum of disease and other clinical (e.g. obesity), behavioral (e.g. problem drinking), and developmental (e.g. learning disabilities) conditions. Additionally, the social context in which a person lives (e.g., homelessness) is also considered an important influencing factor.
² A complication associated with a primary diagnosis would also meet the requirements of two or more concurrent conditions (e.g., cystic fibrosis in children with an associated complication such as pancreatic insufficiency)
³ Quality of care is defined by the Institute of Medicine (IOM) six aims as: safe, timely, effective, efficient, equitable, and patient centered.
⁴ Behavioral care includes mental health and substance use illness.
⁵ The system includes, but is not limited to; individual patients; individual health care professionals; group practices; hospitals, health systems, and other provider organizations; and health plans.
⁶ Quality of care is defined by the IOM six aims: safe, timely, effective, efficient, equitable, and patient-centered.
⁷ Crosscutting measures apply to a variety of conditions at the same time or a single disease with multi-organ system ramifications (e.g. cystic fibrosis). Example measure concepts include: care coordination and integration, shared
3. Capture inputs in a standardized fashion from multiple data sources\textsuperscript{11}, particularly patient-reported data, to ensure key outcomes of care (e.g., functional status) are assessed and monitored over time.

4. Be prioritized based on the best available evidence of linkage to optimum outcomes, and take into consideration patient preferences jointly established through care planning.

5. Assess if a shared decisionmaking process was undertaken as part of care planning and ultimately that the care provided was in concordance with patient preferences or, as appropriate, family or caregiver preferences on behalf of the patient.

6. Assess care longitudinally (i.e., provided over extended periods of time) and changes in care over time (i.e., delta measures of improvement rather than attainment).

7. Be as inclusive as possible, as opposed to excluding people with MCCs from measure denominators. Where exclusions are appropriate, either existing measures should be modified or new measures should be developed.

8. Include methodological approaches such as stratification to illuminate and track disparities in care for people with MCCs. In addition to stratifying the MCC population in measurement (which is particularly important to understand application of disease-specific measures to the MCC population), additional bases for stratification include disability, cognitive impairments, life expectancy, illness burden, shadow conditions or dominant conditions, socioeconomic status, and race/ethnicity.

9. Employ risk adjustment for comparability with caution, as risk adjustment may result in the unintended consequence of obscuring serious gaps in care for the MCC population. Risk adjustment should only be applied to outcomes measures and not process measures.

As follow-up, NQF staff will work closely with the MCC co-chairs and Johns Hopkins University (JHU) as a subcontractor to further refine the guiding principles. The revised draft will be circulated to the full committee for comment and final sign-off.

IV. CONCEPTUAL MODEL FOR MEASUREMENT OF PERFORMANCE IN PEOPLE WITH MCC

Erin Giovannetti, researcher at JHU, presented an illustrative case study that was applied to the conceptual model JHU developed for MCCs.

Case Study of the Model

decision making, medication reconciliation, functional status, health related quality of life, and screening and assessment.

8 Structural measures assess if essential infrastructure (e.g., team-based care, registries, EHRs) is in place to support integrated approaches to care management.

9 Behavioral measures targeting major behavioral health risk factors such as obesity, smoking, alcohol and substance abuse, poor diet/nutrition, and physical inactivity.

10 Appropriateness of care includes measures of overuse, underuse, and misuse. For example, measures that assess overuse of services such as imaging. Evidence-based guidelines for people with MCCs are not well developed in this area.

11 Data sources including, but not limited to: claims, EHRs, PHRs, HIEs, registries, and patient reported data.
Ms. Giovannetti presented a case study of a 60-year-old woman with heart failure, diabetes, hypertension, and depression. Over the course of six months, this patient received care from an internist in primary care, a cardiologist in specialty care, a spousal caregiver at home, and a pharmacist in an outpatient setting. The types of care being provided include screening, prevention, and treatment and management. Over a relatively stable episode of care, the patient has some weight loss and fatigue. In this case, performance measurement was examined over six months across six domains of measurement in the model. In each measurement domain there are non-disease specific cross-cutting measures and disease specific measures to be considered and these would need to be prioritized, as not all measures are of equal importance or appropriate at any given point in time. For example, the following domains areas are relevant for this patient:

- **Communication, care coordination, and integration** may consist of non-disease-specific measures such as continuity of care, care coordination, patient centered-communication, and shared decisionmaking to develop treatment plan based on patient and family goals for care.
- **Cost and resource use** may include disease-specific measures such as site-specific health care cost and disease specific health care cost, but may also include non-disease-specific measures such as total health care cost, total out-of-pocket cost to patient and family, and caregiver work-productivity loss.
- **Patient- and family-level outcomes** measures may encompass a wide range of non-disease-specific measures (e.g., treatment burden, patient and family experience/satisfaction, goal attainment, quality of life, and function) and disease-specific measures (e.g., diabetes and heart failure related quality of life, blood pressure control, lipid control, and depression control) most important to patients and their families.
- **Processes of care** measures may include non-disease specific measures such as advance care planning and medication reconciliation, but may also include disease-specific measures such as anti-depressant medication, eye examination, foot examination, lipid profile, and physical activity assessment. Furthermore, processes of care measures may include cognitive screening, colorectal cancer screening, flu shots, osteoporosis screening, pneumonia vaccination, and urinary incontinence assessment.
- **Safety** measures may comprise non-disease-specific measures such as treatment interaction risk assessment, falls risk assessment, and medication reconciliation.
- **Structure** measures may contain non-disease-specific measures such as availability of self-management education resources and use of electronic health records.

Continuing this case illustration, the patient has experienced an acute exacerbation and is hospitalized with a diagnosis of pneumonia. Hospital care is now added as a setting to the patient’s measurement framework; thus, additional measures are necessary to measure performance over the course of this new episode. Measures linked to this episode include non-disease-specific measures, such as hospital readmission and delirium as well as disease-specific measures, such as mental status assessment, oxygen saturation assessment, and use of antibiotics.

Feedback on the model from the committee emphasized the importance of having consistent, terminology as appropriate that aligns with the National Quality Strategy (NQS) priority areas. There was also discussion of how the model applied more broadly to almost any patient and how this could be made more specific to the MCC population. In addition, measures should be ideally able to capture both population and individual level health outcomes.
V. PRIORITIZATION OF KEY MEASURE CONCEPT AREAS FOR THE MCCS POPULATION

Ms. Blaum, MCC co-chair, and Aisha Pitman, NQF senior program director, presented the key measure concept areas mapped to the six priority areas of the NQS. The Committee discussed the chart in Appendix A, offered refinements, and then completed a prioritization exercise to identify the highest leverage measure concept areas. The following measure concept areas ranked the highest:

1. Optimize function, maintain function, prevent decline in function;
2. Seamless transitions between multiple providers and sites of care;
3. Patient clinical outcomes (e.g., mortality, morbidity);
4. Avoiding inappropriate, non-beneficial end of life care;
5. Access to usual source of care;
6. Transparency of cost (total cost); and
7. Shared decisionmaking.

VI. PATH FORWARD: POLICY IMPLICATIONS OF MCC FRAMEWORK

To facilitate cross-fertilization among various HHS initiatives targeting individuals with MCCs, Sarah Lash, NQF program director, presented the work of the Measure Applications Partnership (MAP) Dual Eligible Beneficiaries Workgroup.

The MAP Dual Eligible Beneficiaries Workgroup has been charged with constructing a strategic approach to performance measurement for the population of individuals dually eligible for both Medicare and Medicaid. Many individuals in that population, though not all, have MCCs. The group is an artifact of payment policy and is highly heterogeneous from a clinical or social perspective. This population also accounts for a disproportionate use of health care resources.

As elements of their strategic approach to performance measurement, the Dual Eligible Workgroup has developed a vision statement, guiding principles, and a list of high-need population subgroups. Additionally they have identified four high-leverage improvement opportunities: 1) quality of life, 2) care coordination, 3) screening and assessment, and 4) mental health and substance abuse. Data source and alignment issues are also considered in the strategic approach. The MCC Steering Committee discussed the synergy amongst these two projects and recommended ongoing dialogue to ensure alignment and reinforcement of common theme areas.

VII. NEXT STEPS

A brief snapshot of the MCC Steering Committee schedule for 2011-2012 is as follows:

- September 30, 2011—final commissioned paper;
- December 2, 2011—web meeting;
- December 5, 2011—draft framework report;
- Late December 2011 or January 2012—public comment;
- Early February 2012—final framework report;
- March 2012—NQF Member voting; and
April 2012—Consensus Standards Approval Committee (CSAC) consideration, followed by Board endorsement.