Roadmap for Establishing a Measurement Framework for MCCs

Under the direction of the multi-stakeholder MCCs Steering Committee, NQF has developed a person-centric measurement framework for individuals with MCCs. Specifically, this framework provides a definition for MCCs, identifies high-leverage domains for performance measurement, and offers guiding principles as a foundation for supporting the quality of care provided to individuals with MCCs. Broadly, the primary intended uses of the framework are:

- Provide input to HHS to guide and help align programmatic initiatives targeting individuals with MCCs.
- Support standardization of measures by signaling to measure developers gaps in performance measurement for individuals with MCCs—specifically, signaling the need for cross-cutting measures that are highly important to individuals with MCCs, such as measures that assess the care provided across settings during a care transition.
- Guide the endorsement of measures that various public and private stakeholders can use to assess and improve the quality of care provided to individuals with MCCs. The framework will be used by NQF steering committees charged with evaluating measures to shape and inform their decision-making in conjunction with the endorsement criteria.
- Encourage the alignment of incentives by guiding the selection of measures for public reporting and performance-based payment programs. This framework will inform how the Measure Applications Partnership (MAP), particularly the MAP Dual Eligible Beneficiaries and Post-Acute Care/Long-Term Care Workgroups, gives guidance to public and private payers and purchasers on selecting measures for specific uses.
- Suggest a roadmap for new delivery models (e.g., accountable care organizations, patient-centered medical homes) that aim to provide patient-centered care across multiple settings.
- Inform and stimulate future research on the quality of care provided to individuals with MCCs.

Figure 1 presents the roadmap that guided the MCCs Steering Committee’s work in establishing a measurement framework for MCCs. Because an explicit goal of this project was supporting alignment across public and private initiatives targeting MCCs, a deliberate effort was made to consider various public- and private-sector inputs as the framework’s components were developed to serve the end users’ needs articulated above.
FIGURE 1.

Department of Health and Human Services (HHS) Frameworks

- National Quality Strategy
- Partnership for Patients
- National Prevention Strategy
- HHS Multiple Chronic Conditions Framework

Inputs

Public Private-Sector Frameworks/Models

- National Priorities Partnership
- NQF-Endorsed Patient-Focused Episode of Care Framework
- NQF measure endorsement ongoing projects
- Coordinated Care Models for Targeted Populations

Inputs

NQF-Endorsed Multiple Chronic Conditions Framework

- Definitions
- Domains
- Key methodological issues
- Guiding principles

Uses

Intended Uses of the NQF-Endorsed Multiple Chronic Conditions Framework

- Provide input to HHS
- Identify measure gaps
- Guide endorsement decisions for assessing & improving the quality of care
- Guide selection of measures for public reporting and payment
- Suggest roadmap for new delivery models (ACOs, PCMH)
- Inform research

NATIONAL QUALITY FORUM
Conceptual Model for Measuring Care Provided to Individuals with MCCs

The MCCs Steering Committee’s measurement priorities set the stage for the development of a conceptual model to guide measurement for individuals with MCCs. This model is designed to illustrate the complexity of providing care for an individual with MCCs by showing the various ways that conditions, patient and family preferences, sites and providers of care, and types of care interact (see Figure 2). Also represented in the model are the social and environmental context in which the individual lives and receives care and the public and private health policy priorities that guide the delivery of care.

FIGURE 2.
A Case Study Applying the MCC Conceptual Model

This case study illustrates use of the MCC Conceptual Model for a hypothetical patient with multiple chronic conditions.

Javier

Javier is a 59-year-old smoker who has been diagnosed with chronic obstructive pulmonary disease (COPD), diabetes, and major depression. Javier lives in a suburban community outside of a major metropolitan area with his wife Flora, a 65-year-old woman who also has MCC. Javier must take an active role in supporting Flora’s care, as her activities have been limited by worsening chronic kidney disease due to diabetes. Flora has been unable to work for several years, and as a result, the couple has had to access their retirement savings earlier than anticipated. While Flora is covered by Medicare, Javier receives coverage from his employer-sponsored health plan; however, Javier has noticed that his premiums and co-pays continue to rise, and he has begun to worry that his medical expenses will have to be covered with their retirement savings. Javier seeks primary care from an internist, specialty care from a pulmonologist and an endocrinologist, and consultation from his local pharmacist on occasion. In addition, as for most people with MCCs, Javier self-manages his care at home, which at times can be overwhelming. In conversations with his primary care physician, Javier has indicated that he would like to feel better so he would miss fewer days of work and be able to go to his grandson’s basketball games on weekends.

Javier’s Ideal Care

Ideally, Javier would receive evidence-based health and healthcare services, from a multi-disciplinary health care team, that consider his preferences. He and his primary care physician would work together to design a plan of care that incorporates his goals. His primary care physician, pulmonologist, and endocrinologist would share information to ensure that the care plan is integrated and updated as necessary. Additionally, Javier would be assisted in obtaining access to any needed community supports. Javier’s plan of care could include pharmacologic management of his COPD, diabetes, and depression along with nutrition counseling and smoking cessation counseling. The MCC Conceptual Model helps identify relevant measures to determine if Javier is receiving ideal care and the MCC Guiding Principles provide direction for how relevant measures should be used.

Application of the MCC Conceptual Model to Javier

Javier has been relatively stable during the past six months. Figure 3 represents application of the MCC Conceptual Model to Javier during this time. Javier’s goals and preferences are located in the center of the model (innermost ring). His COPD, diabetes, and major depression are also represented there. His conditions overlap and vary by severity and by the way in which the conditions interact. Moving from the center of the model outward, the next ring demonstrates that Javier is receiving care from multiple providers across several sites of care, including primary care, specialty care, and pharmacy; as well as self-care at home. Progressing to the next ring, the model highlights that Javier is receiving many types of care for his conditions, including screening, prevention, treatment and management, and community-based services. The outermost ring represents the domains of measurement that are relevant to all patients with MCCs at various points in time over the courses of their illnesses. The Conceptual Model also notes that Javier’s care is influenced by the social and environmental context in which Javier lives, and is framed by broader health policy context. While Javier has access to the providers he needs in his community, Javier’s care is influenced by his need to take an active role in his wife’s care. Additionally,
the trend of employers shifting costs to their employees is having an impact on Javier’s ability to afford his care.

Figure 3.

Referring to the MCC Conceptual Model, cross-cutting and condition-specific measures are identified within each domain; Figure 4 highlights the measurement opportunities within two domains—Patient- and Family-Centered Care and Affordable Care. Existing measurement opportunities within Patient- and Family-Centered Care related to treatment and management might include cross-cutting measures such as Patient Experience of Care and disease-specific measures such as Diabetes Management: HbA1c Control and COPD: Use of Long-Acting Bronchodilator Therapy. Ideally, measures within this domain would
also address patient-reported outcomes such as quality of life and functional status. Measurement opportunities for assessing Affordable Care include Relative Resource Use for People with COPD, Total Resource Use Population-based PMPM Index and Total Cost of Care Population-based PMPM Index. Ideally, measures within this domain would also address total cost of care for the patient.

Figure 4.

There are opportunities to measure aspects of Javier’s care across each of the remaining domains of measurement: Patient Safety; Health and Well-Being; Effective Prevention and Treatment; and Effective Communication and Care Coordination. This results in a multitude of applicable measures. The MCC Guiding Principles provide further direction for identifying the most relevant measures. As stated in Guiding Principle #3, to avoid a large measurement burden, and most importantly to avoid potential harm to Javier and other individuals with MCCs, the measures should be prioritized based on the best available medical evidence and Javier’s own preferences and treatment goals. The plethora of measures identified using the Conceptual Model may not be of equal importance or appropriate at any given point in time. For example, the Diabetes Management: HbA1c Control measure, which assesses if diabetic patients have an A1c less than 9%, is not appropriate for Javier as his current treatment goal is to lower his A1c from 14% to 12% and then progressively work toward decreasing A1c along with other diet and lifestyle changes. Additionally, Guiding Principles #1, 4, and 5 signal the need for measures that assess care over time, care coordination, and shared-decision making. In lieu the Diabetes Management: HbA1c Control measure, measure priorities for Javier may include assessing whether Javier’s providers shared information regarding his care plan in a timely manner, whether a shared-decision making process was
used to determine that stricter A1c management is not appropriate for Javier at this time, and whether
Javier’s A1c decreases from 14% to 12% over time.

**Application of the MCC Conceptual Model to Javier’s Hospitalization**

Following a stable six-month period, Javier is suddenly hospitalized with an acute exacerbation of COPD. Accordingly, Figure 5 represents application of the MCC Conceptual Model to changes in Javier’s condition. Javier’s COPD and depression have now become more dominant (inner ring), hospital/inpatient is now added to the sites and providers of care, and diagnosis and acute exacerbation are now added to the types of care. Most importantly, Javier’s goals and preferences remain at the center of the model, while the entire model sits within the broader social, environmental, and health policy contexts.

With the hospitalization event and a change in application of the Conceptual Model to Javier, there are different opportunities to measure aspects of Javier’s care across each of the domains of measurement. For example, existing measurement opportunities within the Safer Care domain, related to treatment and management and to acute exacerbation, might include adverse drug events and readmission rates. Within the Affordable Care domain, the measurement opportunities identified prior to Javier’s hospitalization persist.

**Figure 5.**

Again, it is important to prioritize measures based on the best available medical evidence and Javier’s own preferences for treatment as there are many opportunities to measure aspects of Javier’s care.
across each of the domains. Additionally, Guiding Principles #6, 7, and 8 provide direction for measurement methodological considerations. For example, the readmissions measure may be stratified by race to highlight racial and ethnic disparities in care.