Purpose of the Project

People with multiple chronic conditions (MCCs) now comprise over one-quarter of the U.S. population. As the population ages in coming decades, that percentage is expected to grow. This population is at significantly higher risk of adverse outcomes and complications. They are also more likely to see multiple clinicians, take five or more medications, and receive care that is fragmented, incomplete, inefficient, and ineffective. As a result, MCCs are associated with higher healthcare costs and utilization rates, and individuals with MCCs are at increased risk for potentially avoidable inpatient admissions and preventable hospital complications.

Despite the growing prevalence of MCCs and associated complications, existing quality measures largely do not address individuals with MCCs. As a result, in June 2010 NQF – under contract with the Department of Health and Human Services (HHS) – convened a multi-stakeholder steering committee to develop a measurement framework for individuals with MCCs. The steering committee’s work was informed by several important national initiatives spearheaded by HHS and public-private sector initiatives, including HHS’s Multiple Chronic Conditions Strategic Framework, the National Quality Strategy, and the National Priorities Partnership, among others.

This framework will serve as a guide for future NQF-endorsement decisions for measures that address the MCC population. Specifically, the framework:

- Establishes a definition for MCCs in order to achieve a common understanding and a shared vision for effectively measuring the quality of care for individuals with MCCs;
- Identifies high-leverage measurement areas for the MCCs population in an effort to mitigate unintended consequences and measurement burden;
- Presents a conceptual model that serves as an organizing structure for identifying and prioritizing quality measures; and
- Offers guiding principles to address methodological and practical measurement issues.

In addition, the report identifies several timely strategic opportunities for applying the framework that are relevant to current policy context. These include: a coordinated approach for filling measure gaps; building a common data platform to consistently and seamlessly collect information, including patient-reported data; opportunities to apply the core tenets of the framework as new delivery models are implemented and tested; and transparency through public reporting to enable informed consumer decision-making.

Components of the Framework

The MCC framework endorsed by NQF includes several core components:

**DEFINITION OF MULTIPLE CHRONIC CONDITIONS**

MCCs are defined in a multitude of ways in literature and in practice. Widespread adoption of a standardized definition will help align quality measurement initiatives across the healthcare spectrum. As a result, the steering committee built upon previously established definitions from HHS and the Agency for Healthcare Research and Quality and defined MCCs to be:

*Persons 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 healthcare management, decision-making, or coordination.*
**KEY MEASUREMENT CONCEPTS**

Strict adherence to disease-specific measures for patients with MCCs may lead to the unintended consequences of delivering inappropriate care that is not aligned with patient goals and preferences. Additionally, applying numerous measures targeting a variety of diseases could lead to high measurement burden. Therefore, the steering committee sought to identify the highest-leverage measurement areas for the MCC population in an effort to mitigate these two important concerns. The committee’s selection criteria was based on identifying cross-cutting areas that offer the greatest potential for reducing disease burden and cost and improving well-being, and are valued most by patients and their families. The final measure concepts include:

- Optimizing function, maintaining function, or preventing further decline in function;
- Seamless transitions between multiple providers and sites of care;
- Patient important outcomes (includes patient-reported outcomes and relevant disease-specific outcomes);
- Avoiding inappropriate, non-beneficial care, particularly at the end of life;
- Access to a usual source of care;
- Transparency of cost (total cost);
- Shared accountability across patients, families, and providers; and
- Shared decision-making.

**CONCEPTUAL MODEL FOR MEASURING CARE PROVIDED TO MCC INDIVIDUALS**

The 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 these individuals by showing the various ways that conditions, patient and family preferences, sites and providers of care, and types of care interact. 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 care delivery.

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* Each priority domain of measurement may be addressed using several types of measures, including structure, process, outcome, efficiency, cost/resource use, and composite measures. The use of outcomes measures, when available, and process measures that are most closely linked to outcomes is preferable.
Please see the full report for a further explanation of the conceptual model.

GUIDING PRINCIPLES

In considering implementation challenges for the conceptual model and measure concepts, the steering committee adopted the following guiding principles:

To evaluate the full spectrum of care for individuals with MCCs, measurement should:

1. Promote collaborative care among providers and across settings at all levels of the system, while aligning across various public- and private-sector applications, such as public reporting and payment.

2. Assess the quality of care and incorporate several types of measures including cross-cutting, condition-specific, structure, process, outcomes, efficiency, cost/resource use, composites, and behavioral; and that address appropriateness of care.

3. Be prioritized based on the best available evidence of links to optimum outcomes and consider patient preferences jointly established through care planning.

4. Assess if a shared decision-making process was undertaken as part of initial and ongoing 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.

5. Assess care longitudinally (care provided over extended periods of time) and changes in care over time (delta measures of improvement or maintenance rather than attainment).

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

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

8. Use 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 be applied only to outcomes measures and not process measures.

9. Capture inputs in a standardized fashion from multiple data sources, particularly patient-reported data, to ensure key outcomes of care (e.g., functional status) are assessed and monitored over time.

The guiding principles address methodological considerations including assessment of care across episodes, measure prioritization, and the infrastructure needed for data collection. These methodological considerations are further discussed in the final report.

The Future of Quality Measurement for MCCs

The MCC framework will need to evolve over time as it is implemented in real-life settings. It will be critical to have a feedback loop to capture experiences from the field to further refine the approaches recommended within.

The forward-looking considerations for applying this framework lay out a pathway toward providing patient-centered, efficient care to people with MCCs. This pathway will be critical to achieving the aims of the National Quality Strategy – better care, healthy people and communities, and affordable care.

For further explanation of the MCC framework, please see the final report.