NATIONAL QUALITY FORUM
Driving measurable health improvements together

NQF 2021 Activities: Report to Congress and the Secretary of the Department of Health and Human Services

Final Report

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Contents

I. Executive Summary

The National Quality Forum (NQF) is a not-for-profit, nonpartisan, membership-based organization that brings together public- and private-sector stakeholders from across the healthcare landscape to build consensus on quality measures and improvement strategies that can advance the nation's health outcomes, equity, and affordability.

This Annual Report to Congress and the Secretary of the Department of Health and Human Services (HHS) summarizes NQF's work under contract with HHS between January 1 – December 31, 2021. This report, mandated by section 1890(b)(5)(A) of the Social Security Act (SSA), provides a summary of the following items:

- Recommendations on national strategies and priorities
- Quality and efficiency measurement initiatives (i.e., performance measures)
- Stakeholder recommendations on quality and efficiency measures and national priorities
- Gaps in endorsed quality and efficiency measures
- Gaps in evidence and targeted research needs (i.e., framework projects)
- Other activities under contract with HHS

During this past year, the coronavirus disease 2019 (COVID-19) and its dire effects strained the country's healthcare resources, highlighting challenges in America's healthcare delivery system and bringing increased attention to the inequities that lead to disparate health outcomes for vulnerable populations. Delays and disruptions in care, reduced access to care, increased behavioral health challenges, and increased health and patient safety risks are key among the many reasons that the COVID-19 pandemic has exacerbated existing health and healthcare issues and brought about new ones. These impacts have increased the urgency to address systemic issues using measurement as a vital tool to drive better health outcomes.

Through the Centers for Medicare & Medicaid Services' (CMS) funding in 2021, NQF and CMS collaborated on endorsing and maintaining high quality measures, identifying measurement gaps, and making recommendations on measurement. These activities purposefully align with the Meaningful Measures (MM) 2.0 Framework and address some of the most critical gaps and challenges that the COVID-19 pandemic has highlighted: maternal health outcomes and disparities, overdose and mortality related to opioid use with behavioral health conditions, and telehealth and healthcare system readiness in rural areas. Through these efforts, NQF supports CMS' priority to lead in facing current measurement challenges while continuing to improve healthcare quality and address health disparities.

Recommendations on National Strategies and Priorities

NQF is committed to working with stakeholders to address national priorities, which often have gaps in quality measurement. In 2021, NQF made recommendations on areas with underlying health disparities that have become more prominent as the COVID-19 pandemic has continued. More specifically, NQF convened multistakeholder Committees focused on maternal morbidity and mortality measurement, opioid use and behavioral health conditions, and telehealth and healthcare system readiness in rural communities. NQF Committees are defined as volunteer, multistakeholder groups that build consensus and are responsible for tasks such as evaluating measures and providing technical expertise.

Since its inception in 1999, NQF has played a key role in addressing national priorities to drive better health outcomes, health equity, and affordability in priority areas through measurement. In 2017, CMS launched the MM initiative, which identified the highest priorities for quality measurement while addressing growing concerns about the volume of measures by reducing the number of Medicare quality measures by 18 percent (Centers for Medicare & Medicaid Services, 2021b). In response to the rapidly changing healthcare environment, CMS released the updated MM 2.0 Framework to continue bolstering its two-pronged focus: to decrease measure burden while promoting quality measurement innovation and modernization in high-priority areas essential to driving value-based care. Since its release, NQF's efforts have aligned with the priorities of the MM 2.0 Framework.

The United States (U.S.) has struggled to improve maternal health outcomes, and maternal mortality rates continue to rise. As in other areas of health and healthcare, COVID-19 magnified already disparate maternal health outcomes. NQF's Maternal Morbidity and Mortality Committee suggested approaches to enhance maternal morbidity and mortality measurement that focuses on patient-reported outcomes (PROs) and measures that reflect the impacts of social determinants of health (SDOH). The Committee also emphasized access to care and a patient's lived experience to drive toward improved outcomes in maternal care.

Opioid-related overdoses and deaths continue to challenge the U.S healthcare system. Furthermore, the number of individuals with substance use disorder (SUD) and mental illness has increased. The convergence of the COVID-19 pandemic and the opioid crisis has accelerated drug overdose and opioid-related deaths. The result of this effort was a recommended approach to improve the prevention and monitoring of SUDs, opioid-related overdoses, and opioid-related mortality among individuals with behavioral health conditions.

The COVID-19 pandemic highlighted and exacerbated the factors that influence poor health outcomes in rural communities. These include greater health risks due to the impacts of SDOH as well as reduced access to care and health education. Telehealth presents an opportunity to improve access to care and reduce the health disparities between rural and urban communities. The NQF-convened multistakeholder Committee that worked on this effort recommended a framework to guide quality and performance improvement for telehealth in rural areas in response to disasters.

A key component of the guidance across these projects was addressing the negative health impacts of SDOH. This focus on SDOH and their convergence with the COVID-19 pandemic aligns closely with national priorities and MM 2.0 Framework areas, such as equity, person-centered care, seamless care coordination, chronic conditions, wellness and prevention, and behavioral health.

Quality and efficiency measurement initiatives (performance measures)

NQF engages stakeholders from across the healthcare spectrum to review and endorse measures that can drive meaningful improvements in care, fill known measure gaps, and align with healthcare improvement priorities. NQF also plays a key role in advancing the science of performance measurement and complex methodological issues.

In 2021, NQF reviewed 78 measures across a variety of topics, such as hospitalizations, behavioral health and substance use, cost and efficiency, patient experience and safety, and women's health. Many of the measures address areas that have been exacerbated by the COVID-19 pandemic through delays and disruptions in care, reduced access to care, increased health risks, increased behavioral health

challenges, and the increased impacts of SDOH. In addition, NQF's work this year provided technical guidance on how to adjust measurement to reflect social and other factors, assign accountability to specific organizations or providers, use electronic health records (EHRs) to facilitate care communication and coordination, develop digital measures that incorporate the patient voice, and better incorporate patient and caregiver perspectives into NQF's work. These areas of measurement science support MM initiative priorities to address the SDOH that lead to health disparities, transition to digital quality measurement, and promote consumer and caregiver perspectives.

Stakeholder recommendations on quality and efficiency measures and national priorities

NQF plays a unique role in supporting federal healthcare programs. The Measure Applications Partnership (MAP) provides input to HHS on which measures to use in federal reporting and value-based programs. The MAP provides input to CMS that ensures the measures used in federal programs address national healthcare priorities, fill critical measurement gaps, and increase public-private payer alignment.

This year, NQF piloted an initiative to remove measures from federal healthcare quality programs and created a new advisory group focused on health equity. Similar to the Rural Health Advisory Group that focuses on measurement issues in rural settings, the Health Equity Advisory Group considers measurement issues related to health disparities and critical access hospitals. In the most recently completed cycle, the MAP recommended measures for CMS programs covering ambulatory, acute, and post-acute/long-term care settings. During its deliberations, the MAP considered measurement issues related to rural settings and reviewed COVID-19-specific measures. The measures also addressed priorities related to incorporating person-centered care into performance measures and seamless care coordination.

Gaps in endorsed quality and efficiency measures

Driving better health outcomes through measurement depends on knowing where gaps exist in performance measures. By highlighting these areas, NQF encourages the development of measures on these topics. During 2021, NQF convened groups that identified gaps in NQF's existing measure portfolios in areas such as opioid use, behavioral health, PROs, and digital measures. The MAP also identified topics with too few or no measures at the individual federal program level. This year, the MAP identified gaps in measures related to PROs, health equity, telehealth, and care coordination. Many of these areas align with critical healthcare priorities and CMS' MM areas. Identification of these gaps often informs the emphasis of future quality measures and improvement strategies.

Gaps in evidence and targeted research needs (i.e., framework projects)

Another critical step toward performance improvement and better health outcomes is to provide guidance on how to address identified measurement gap areas. In 2021, NQF undertook projects that presented strategic approaches and recommendations for measuring performance in priority gap areas. In addition to the work described in earlier sections (on maternal health outcomes, opioids and behavioral health conditions, rural telehealth and healthcare system readiness, attribution, use of EHRs for care coordination, risk adjustment, and PROs), NQF also developed recommendations for social risk factors and public-private payer alignment.

One of the major impacts of COVID-19 was bringing increased attention and urgency to long-standing health disparities that were exacerbated by the pandemic. This, along with increasing evidence showing that social factors—or SDOH—affect health outcomes, suggests that measurement and value-based programs should consider these factors when attributing care to accountable entities. In 2021, NQF built off previous work and explored whether to consider risk factors in the development of performance measures so that they are fair, accurate, and unbiased. The NQF-convened Disparities Standing Committee recommended creating a conceptual model to understand how social risk factors (e.g., race and ethnicity, education, and language) might affect outcomes and for this model to be used in determining the appropriateness of adjusting measure scores for social risk factors. The Committee also directed a recommendation to the Risk Adjustment Technical Expert Panel (TEP) to provide comprehensive technical guidance on how measure developers should develop and test risk adjustment models that account for the social and functional risk factors influencing quality measures.

NQF addressed identified measurement gap areas by releasing advice to the field on the topics described above. The guidance organized ideas that are important to measure for each topic area and described how measurement should take place. This level of direction facilitates the development of new measures to fill those gaps. These measures may then undergo the endorsement process or be used for quality improvement purposes. As a result, these projects completed the cycle of measurement facilitated by NQF: measure endorsement, recommendations on the areas in which measures should be used, technical guidance on the science of measurement, identification of measure gap areas, and lastly, recommendations on what measurement should look like in a gap area. NQF's role in this cycle is critical to supporting CMS and addressing national priorities using measurement.

Coordination with measurement initiatives by other payers

Using performance measurement to drive better health outcomes requires alignment across payers to achieve the highest impact. In 2021, NQF continued using its unique convening power to bring together public and private payers to coordinate their quality measures and improvement strategies.

Both public and private payers use value-based programs to incentivize high quality, cost-efficient care. However, they often use different measures and large numbers of measures, resulting in higher burden and complexity for providers. In response, NQF partnered with CMS and America's Health Insurance Plans (AHIP) to bring together public and private payers in the Core Quality Measures Collaborative (CQMC). The CQMC is designed to address these challenges by forging alignment in the measures used and reducing measurement burden in these public- and private-sector value-based payment programs. In 2021, the CQMC convened to keep their existing sets of core measures up to date so that they continue to reflect the changing measurement landscape. It also developed a new set of cross-cutting measures applicable across multiple clinical conditions, settings, or procedures/services. The CQMC released guidance on new promising practices in implementing measures in value-based programs and approaches to increase the use of digital measures. The CQMC also took initial steps toward creating a new health equity group, updating criteria for adding and removing measures, and making new recommendations for filling measurement gaps and promoting greater harmonization. This work aligns closely with the goals of and enhancements to the MAP this year through recommending the removal of measures from value-based programs and convening stakeholders to bring a focus on health equity to the work.

Other activities under contract with HHS

NQF is committed to supporting patient safety in partnership with the Agency for Healthcare Research and Quality (AHRQ). In 2021, NQF gathered public comments and provided feedback on a set of definitions and formats that allows providers and clinicians to collect and exchange information for any patient safety event. The ongoing COVID-19 pandemic has compounded existing risks and introduced new patient safety risks, thus making improvement in patient safety more necessary and complex than ever. This work aligns with the MM 2.0 Framework area of safety.

Conclusion

NQF has the unique and distinguished responsibility of bringing stakeholders together to build consensus on quality measures and improvement strategies that can enhance the nation's health outcomes, health equity, and affordability. Over the past year, NQF's work has focused on advancing measurement to meet the challenges presented by the COVID-19 pandemic and the inequities that lead to disparate health outcomes for vulnerable populations. NQF's measurement activities continue to be key to driving a cost-efficient, safe, and high quality value-based healthcare system that strives for the best care and best use of the nation's healthcare dollars.

The deliverables produced under contract with HHS in 2021 are referenced throughout this report, and a full list is included in Appendix A. For more information on the contents of this report as required in statutory language, please reference Appendix I.

II. NQF Funding and Operations

Section 1890(b)(5)(A)(VI)((ii and iii) of the Social Security Act contains a requirement for the Consensus-Based Entity (CBE) to include in its annual report to Congress and the Secretary contractual, financial, and operational information related to the Consensus-Based Entity (CBE), specifically it requires the following financial and operations information—

- *An itemization of financial information for the fiscal year ending September 30 of the preceding year, including—*
    - Annual revenues of the entity (including any government funding, private sector contributions, grants, membership revenues, and investment revenue);
    - Annual expenses of the entity (including grants paid, benefits paid, salaries or other compensation, fundraising expenses, and overhead costs); and
    - A breakdown of the amount awarded per contracted task order and the specific projects funded in each task order assigned to the entity.
- *Any updates or modifications of internal policies and procedures of the entity as they relate to the duties of the entity under this section, including: (I) specifically identifying any modifications to the disclosure of interests and conflicts of interests for committees, work groups, task forces, and advisory panels of the entity and (II) information on external stakeholder participation in the duties of the entity under this section (including complete rosters for all committees, work groups, task forces, and advisory panels funded through government contracts, descriptions of relevant interests and any conflicts of interest for members of all committees, work groups, task forces, and advisory panels, and the total percentage by health care sector of all convened committees, work groups, task forces, and advisory panels.*

NQF's revenues for fiscal year (FY) 2021 were $22,655,517, including federal funds authorized under section 1890(d) of the SSA, private-sector contributions, membership revenue, and investment revenue. NQF's expenses for FY 2021 were $21,153,337. These expenses include grants and benefits paid, salaries and other compensations, fundraising expenses, and overhead costs.

A complete breakdown of the amount awarded per contract is available in Appendix A. NQF has made no updates or modifications to the disclosure of interest and conflict of interest policies. Rosters of Committees and Workgroups funded under the CBE contract are available in Appendix B.

III. Recommendations on National Strategies and Priorities

Section 1890(b)(1) of the Social Security Act (the Act) mandates that the consensus-based entity (entity) shall "synthesize evidence and convene key stakeholders to make recommendations . . . on an integrated national strategy and priorities for health care performance measurement in all applicable settings. In making such recommendations, the entity shall ensure that priority is given to measures: (i) that address the health care provided to patients with prevalent, high-cost chronic diseases; (ii) with the greatest potential for improving the quality, efficiency, and patient-centeredness of health care; and (iii) that may be implemented rapidly due to existing evidence, standards of care, or other reasons." In addition, the entity is to "take into account measures that: (i) may assist consumers and patients in making informed health care decisions; (ii) address health disparities across groups and areas; and (iii) address the continuum of care a patient receives, including services furnished by multiple health care providers or practitioners and across multiple settings." The CBE is required to describe this activity in this report pursuant to section 1890(b)(5)(A)(i)(II) of the Act.

NQF is committed to working with stakeholders to address national priorities, which often lack quality measures and need additional research to identify the path forward to measurement and improvement. In 2021, NQF continued fulfilling its commitment to addressing top priorities, which it has done since its inception. NQF has closely aligned with HHS' and CMS' priorities throughout that time, using those goals to guide much of its work. An example of an HHS initiative to which NQF has aligned itself with follows: HHS released the National Quality Strategy (NQS) in 2011, which incorporated input from the NQF-convened National Priorities Partnership (NPP). The NQS is a nationwide plan for healthcare quality improvement geared toward providing better and more affordable care for individuals and communities. In 2017, CMS launched the MM initiative to identify the highest priorities for quality measurement, focusing on topics that are most critical to providing high quality care and improving health outcomes. In response to the evolving healthcare landscape, CMS created the MM 2.0 Framework to promote patient perspectives, transition toward digital measurement, decrease measure burden, and promote innovation and modernization in quality measurement. Since then, NQF's and CMS' efforts have aligned with the MM 2.0.

In 2021, NQF made recommendations on areas with underlying health disparities that have become more prominent as the COVID-19 pandemic has continued. In response, NQF convened Committees of stakeholders from across the healthcare industry to address maternal morbidity and mortality, opioids and behavioral health conditions, and rural telehealth and healthcare system readiness. These projects offered approaches to guide measurement in these significant areas. This work closely aligns with the priorities of the MM 2.0 Framework, such as person-centered care, safety, chronic conditions, seamless care coordination, equity, affordability and efficiency, wellness and prevention, and behavioral health. More details about each priority initiative follow below.

Figure 1. Crosswalk Between NQF's Projects and CMS' Meaningful Measures 2.0 Goals

Source: CMS, 2021. https://www.cms.gov/meaningful-measures-20-moving-measure-reduction-modernization

Priority Initiative I: Maternal Morbidity and Mortality

Maternal morbidity and mortality measures are significant indicators of women's health and the quality of healthcare. The U.S. has struggled to improve maternal health measurement outcomes, and since 2000 (MacDorman et al, 2016; Rossen et al, 2020), maternal mortality rates have risen each year. While maternal mortality rates in the U.S. vary by location, the most significant disparities exist among racial and ethnic groups (Howell et al, 2018). For example, the mortality rates among non-Hispanic Black women (37.1 deaths per 100,000 live births) are significantly higher than the mortality rates for non-Hispanic White women (14.7 deaths per 100,000 live births) and Hispanic women (11.8 deaths per 100,000 live births) (Centers for Disease Control and Prevention [CDC], 2021a). The rates of severe maternal morbidity are also 1.7 times higher for Native Americans/Native Alaskans compared with White women in data from seven states. Sixty percent of pregnancy-related deaths in the U.S. are thought to be preventable (Petersen et al, 2019).

Completed in 2021, the dual aim of the Maternal Morbidity and Mortality Measurement project was to develop tangible recommendations to enhance maternal morbidity and mortality measurement in the

U.S. and to drive toward improved health outcomes in maternity care. To achieve this dual aim, NQF convened a Committee to assess the current state of maternal morbidity and mortality measurement; recommend specific short- and long-term, innovative, and actionable ways to improve maternal morbidity and mortality measurement; and use that measurement to improve maternal health outcomes.

The Committee finalized an environmental scan in 2020 that assessed the current state of measurement in this area. It focused on prevalence; incidence; risk factors (medical and nonmedical); measure concepts; fully developed measures; measures in use; processes for maternal care delivery; maternal health outcomes; and other factors/areas influencing outcomes, including health disparities. The environmental scan included further definition of the risk factors that influence outcomes. The definitions focus on individual factors (e.g., age, education, knowledge, beliefs, and behaviors); societal/community factors (e.g., social network, built environment, and housing); hospital factors (e.g., implicit bias, cultural competence, and communication); and system-level factors (e.g., access, structural racism, and policy). Importantly, the environmental scan highlighted several nonmedical factors that influence outcomes. These included healthcare disparities, race and racism, discrimination, residential segregation, implicit bias, language barriers in healthcare, health literacy, rural communities, and other SDOH. These factors are interrelated: They contribute to each other and emphasize the importance of comprehensively assessing medical and nonmedical risk factors. This assessment facilitates a better understanding of the larger context of influencers and contributors for adverse outcomes beyond traditional hospital risk factors. The scan also highlighted innovations in measurement methodology, limitations or gaps in measurement, and considerations regarding measurement data sources.

A key topic that the Committee prioritized, based on the risk factors above, is health equity. It also highlighted access to care and a patient's lived experience, among other areas. Accordingly, the Recommendations Report from this project highlights health equity and maternal health disparities as contributing factors to differences in maternal health outcomes in the U.S. This focus aligns with the underlying health disparities highlighted and compounded by the COVID-19 pandemic. This work also aligns with CMS' MM 2.0 Framework by recommending measurement that largely focuses on person-centered care, safety, seamless care coordination, equity, wellness, and prevention. The Committee emphasized the need for a patient's lived experience to be accounted for at every stage, as well as the importance of ensuring the patient has access to the appropriate care settings for any eventuality and at each step of their care. The Committee recommended a focus on outcome measures, including PROs, and emphasized the importance of measures that reflect social and economic determinants.

Priority Initiative II: Measurement Framework for Addressing Opioid-Related Outcomes Among Individuals With Co-occurring Behavioral Health Conditions

Opioid-related overdose morbidity and mortality have emerged as complex and evolving challenges for the U.S healthcare system. In 2020, the CDC released preliminary data showing that over 75 percent of all drug overdose-related deaths involved opioids, which is an all-time high since the beginning of the opioid crisis in the late 1990s (Ahmad et al, 2021; Baumgartner & Radley, 2021b). Over time, the number of individuals with SUD, mental illness, and co-occurring SUDs and mental illness has increased. As of 2019, approximately 9.5 million adults have co-occurring mental disorders and SUDs, with nearly 50 percent of individuals with SUDs having a co-occurring mental health condition (Substance Abuse and Mental Health Services Administration [SAMHSA], 2020). Individuals with both SUD and mental illness

are an especially high-risk population for opioid-related overdose death and morbidity, and these two are the focus of the Opioid and Behavioral Health project.

The convergence of the COVID-19 pandemic and the opioid crisis has led to an acceleration in drug overdose deaths, including deaths related to opioids (National Center for Health Statistics, 2021). Drug overdose deaths increased by nearly 30 percent from 2019 to 2020, and opioid-related deaths drove these increases, with opioids accounting for approximately 75 percent of all overdose deaths during the start of the COVID-19 pandemic (Baumgartner & Radley, 2021a; National Center for Health Statistics, 2021). During the pandemic, approximately 4 in 10 U.S. adults reported symptoms of anxiety or depression, representing a stark increase from the 1 in 10 individuals self-reporting anxiety or depression in 2019 (Panchal et al, 2021). This has had an even greater impact on communities of color and vulnerable populations, with non-Hispanic Black adults and Hispanic and Latino adults being more likely to report symptoms of anxiety or depressive disorder during the pandemic than their non-Hispanic White counterparts (Panchal et al, 2021). Additionally, individuals with SUD are considered to be at a greater risk for contracting COVID-19, and individuals with COVID-19 and SUD were more likely to experience severe outcomes (e.g., hospitalization or death) compared with those without SUD (National Institute on Drug Abuse, 2021). Increased social distancing and restrictions led to social isolation and loneliness, and the impacts on employment left many individuals unemployed or fearing for their job security. These circumstances can serve as a trigger to initiate or continue drug use and can leave individuals who were seeking support unable to find it (Sweeney, 2021). This unfortunate combination leaves individuals at an increased risk for setbacks in pursuing and maintaining recovery.

In response to the ongoing evolution of the opioid crisis, NQF convened the Opioids and Behavioral Health Committee to develop a quality measurement framework, a strategic approach to measuring overdose and mortality resulting from polysubstance use involving synthetic and semisynthetic opioids (SSSOs) among individuals with co-occurring behavioral health conditions. The goal of the framework is to guide measurement to improve the prevention and monitoring of SUDs/opioid use disorder (OUD), opioid-related overdoses, and opioid-related mortality among individuals with co-occurring behavioral health conditions who use opioids with other legal and/or illegal drugs; to apprise stakeholders of opportunities for coordination and partnerships across care settings; and to enable stakeholders to quickly adapt and improve their readiness in a rapidly changing landscape. The final report and framework identified measures and measure concepts that could be utilized by all payers and include concepts related to collaboration between medical- and community-based entities that care for the population of interest, such as medical providers and the criminal justice system or social workers.

Recognizing the intersection between SUD, mental illness, and health equity, the Committee made health equity foundational to its charge. The Committee agreed that equity and access to care are foundational components of addressing overdose and mortality resulting from polysubstance use among individuals with co-occurring behavioral health conditions. Equity is a critical area of focus, given that mortality associated with opioid intake in individuals with behavioral health conditions increases when SDOH-related factors are present (Compton & Shim, 2015; National Quality Forum, 2021b). As a result, the final Opioids and Behavioral Health Measurement Framework features Equitable Access as one of the three domains and the first step in addressing overdose and morbidity. This domain focuses on ensuring the existence of services and the financial coverage of services with an emphasis on access for vulnerable populations, such as individuals with poor SDOH or with criminal justice involvement.

As showcased above, the Committee addressed many of the MM 2.0 Framework goals and areas, given the impact of OUD, SUD, and behavioral health on public health. The measurement framework aims to help with chronic conditions, equity, wellness and prevention, and behavioral health. The emphasis and focus on measures and measure concepts that payers can use help to address the needs of measures for population-based payment through alternative payment models (APMs). The framework aims to increase the recovery services and existing supports that can lead to better health outcomes and a reduction in overdoses by ensuring that this population has access to community-based services that can help them begin and maintain recovery (Bailey et al, 2021).

Priority Initiative III: Leveraging Quality Measurement to Improve Rural Health, Telehealth, and Healthcare System Readiness

Over the past year, the U.S. has continued to grapple with the healthcare challenges related to and exacerbated by the COVID-19 global pandemic. The effects of the pandemic are severely felt within rural communities, which compose the nation's most vulnerable population (Mueller et al, 2021). Rural residents account for 20 percent of the U.S. population, or approximately 63 million Americans (U.S. Census Bureau, 2020), and tend to be older and sicker than their urban counterparts. For example, rural populations have greater health risks, including higher rates of chronic disease (e.g., obesity and diabetes), riskier behaviors (e.g., smoking and substance use), poorer diets, and lower health literacy, and are at greater risk of poor health outcomes (Health Resources & Services Administration [HRSA], 2017). These differences are driven by rural disparities in access to care (e.g., fewer healthcare providers, long travel distances to specialty and emergency care coupled with longer travel times for in-person care) as well as health education (CDC, 2020).

The COVID-19 pandemic has evidenced racial and ethnic health inequalities, which continue to exacerbate poor health outcomes in rural communities. Telehealth, when clinically appropriate, presents an opportunity to improve access to care and reduce the health disparities between rural and urban communities. In response, NQF convened a multistakeholder Committee to create a conceptual measurement framework that guides quality and performance improvement for care delivered via telehealth in rural areas in response to disasters. The Final Recommendations Report describes five domains for measurement: Access to Care and Technology; Costs, Business Models, and Logistics; Experience; Effectiveness; and Equity. The report emphasizes consideration of rural-specific measurement issues and outlines potential solutions to the challenges that are specific to rural communities.

To help ensure health equity among rural residents, the Equity domain recommends considering the following points: (1) how quality of care and outcomes differ by factors such as, but not limited to, age, race, gender identity, and disability; (2) SDOH such as transportation and living conditions; and (3) the impact of telehealth on existing inequalities (e.g., patients without access to broadband still being unable to receive care). The Final Recommendations Report also includes a list of measures that are available for use, as well as a list of measure gaps and measure concepts, in encouraging the development of measures that will address the gaps in a way that is patient centered and meaningful to the patient (e.g., promoting effective communication and care coordination, transfer of health information, and interoperability). Additionally, the report highlighted the promotion of the identified measures to assess the impact of telehealth on healthcare system readiness and health outcomes in rural areas affected by disasters such as pandemics, natural disasters, mass violence, and other public health events.

The Rural Telehealth and Healthcare System Readiness work aligns with multiple CMS MM 2.0 Framework areas. Notably, the framework emphasizes person-centered care and seamless care coordination in providing effective telehealth services. Telehealth services also have the potential to provide more affordable care.

IV. Quality and Efficiency Measurement Initiatives (Performance Measurement)

Section 1890(b)(2) and (3) of the Social Security Act requires the consensus-based entity (CBE) to endorse standardized healthcare performance measures. The endorsement process must consider whether measures are evidence-based, reliable, valid, verifiable, relevant to enhanced health outcomes, actionable at the caregiver level, feasible for collecting and reporting, responsive to variations in patient characteristics, such as health status, language capabilities, race or ethnicity, and income level; and consistent across types of healthcare providers. In addition, the CBE must establish and implement a process to ensure that measures endorsed are updated (or retired if obsolete) as new evidence is developed. The CBE is required to describe these duties in this report pursuant to section 1890(b)(5)(A)(i)(III) of the Act.

NQF convenes multistakeholder Committees to review and endorse measures that can support the move to value-based, high quality, and cost-efficient care. NQF also supports the field by providing guidance on the science of measurement and methodological issues. This guidance supports the development of high quality, innovative measures as well as the use and implementation of performance measures. An overview of NQF's work to endorse measures and support measurement science follows.

Cross-Cutting Projects to Improve the Measurement Process

With funding from CMS, NQF conducted several projects that enhanced the science of quality measurement. Most of the measurement activities described in these cross-cutting projects span care settings and providers. This broad approach yields useful information to a wide variety of patients, providers, and payers. This year's cross-cutting topic areas include risk adjustment, attribution, care coordination, and PROs.

Best Practices for Developing and Testing Risk Adjustment Models

As part of NQF's COVID-19 response, assessing risk factors continues to be of high importance when considering social risk adjustment. Risk adjustment (also known as case-mix adjustment) refers to the inclusion of risk factors associated with a measure score in a statistical model of measured entity performance captured at the person, facility, or community levels and others (CMS, 2021a). With respect to the patient-related factors, these can be clinical (e.g., comorbidities), functional (e.g., activities of daily living [ADLs]), or social (e.g., income, education, and place of residence) in nature. Currently, risk adjustment is used to ensure that a number of stakeholders (e.g., patients, providers, facilities, provider groups, etc.) all have access to accurate and reliable information about the quality of care provided. Unadjusted measures may lead to inappropriate financial penalties among providers (e.g., safety-net providers) who care for patients with a high proportion of social risk and who are unable to mitigate the subsequent increased risk of the measured outcome. These financial penalties may leave some providers who care for disadvantaged populations with fewer resources for quality improvement activities.

Through statistical methods, risk adjustment increases a measure's ability to report unbiased and accurate results by reporting measure results that account for factors outside of a provider's "locus of

control" but are known to have a significant impact on achieving health outcomes. Risk-adjusting measures to account for differences in patient health status and clinical factors (e.g., comorbidities, severity of illness) that are present at the start of care has been widely accepted and implemented (Blum et al, 2014; Franks & Fiscella, 2002). However, the increased use of outcome and resource use measures in payment models and public reporting programs has raised concerns regarding the adequacy and fairness of the risk adjustment methodologies used in these measures, especially as it relates to functional status and social risk factors, such as income, education, social support, neighborhood deprivation, and rurality.

Measure developers have long expressed a need for technical guidance on developing and testing social and/or clinical risk adjustment models for endorsement and maintenance and the appropriateness of a standardized risk adjustment framework. Furthermore, NQF recognizes that addressing SDOH is fundamental to all quality improvement efforts. Quality measurement should contribute to closing the health equity gap and not inadvertently institutionalize it. NQF applies an SDOH lens to every aspect of its work, with the goal of empowering healthcare stakeholders to take meaningful and measurable action to achieve health equity. This includes addressing quality and measurement gaps in key national health priorities, including the endorsement of performance measures that can identify and potentially reduce health disparities.

Addressing the wide spectrum of disparities must be considered a key component for successful health outcomes across the nation. As social risks become increasingly recognized for having a tremendous impact on health and healthcare outcomes, NQF recognizes that fully addressing inequities associated with race/ethnicity and social risks requires a holistic policy approach and a private-public sector partnership that goes well beyond the purview of quality measurement. There is a clear distinction between directly adjusting payment rates with social risk factors and adjusting quality measures that may be tied to financial bonuses and incentives. Quality measure adjustment alone cannot and should not be used to achieve resource (re)allocations.

NQF seeks to advance measurement science in this important area through the development of technical guidance for measure developers that includes emerging best practices for functional and social risk factor adjustment in measure development. NQF convened a multistakeholder TEP in the fall of 2020 to develop the Technical Guidance based on the emerging best practices, as minimum standards, for risk adjustment models. These minimum standards apply to both outcome and cost/resource use performance measures and some process performance measures as well at any level of analysis (e.g., health plans, facilities, individual clinicians, and accountable care organizations [ACOs]).

NQF will continue to broaden stakeholder engagement efforts to garner input on the utility of the Technical Guidance and to make updates to it based on stakeholder feedback and TEP input. Systematically consulting all stakeholders (e.g., patients, providers, health plans, policymakers, etc.) to finalize this guidance will ensure that a proper conclusion can be drawn and will increase the value of the recommendations and standards within the guidance.

Attribution for Critical Illness and Injury

Attribution is the methodology used to assign patients, and the quality or costs of their healthcare, to specific organizations or providers. Quality measurement is more straightforward when a measure is used to assess a single entity (e.g., a hospital). It can be more complicated during public health emergencies (PHEs), such as the COVID-19 pandemic. These situations involve many providers and

organizations, and care for these scenarios is frequently driven by proximity (Carr et al, 2017; Tung et al, 2019) or system factors, such as Emergency Medical Services (EMS) destination protocols or post-acute care referral patterns (Hsia et al, 2017). These events often involve multiple providers and entities that span different healthcare systems and organizations. If only one organization is being held accountable, then assessment and any associated implications could be viewed as unfair. This may reduce stakeholder buy-in and limit the incentive for providers to change their behaviors to improve quality of care across settings. The COVID-19 pandemic underscores the importance of using a population-/geographical-based attribution approach in quality measurement.

PHEs are also by nature unpredictable and require a timely, coordinated response among entities that often do not have advanced knowledge of patient care needs. Healthcare organizations across a region also have different capabilities for patient care, may not share standardized protocols, and are commonly in direct business competition with one another. Therefore, organizations must work together before disasters occur and organize systems (e.g., trauma or stroke systems) to deliver care effectively. In such cases, a population-/geographical-based attribution approach that is fair and accurate and assigns patients to a provider/entity based on patient location may be preferred. This approach may incentivize "co-opetition," which is the concept of care coordination at the system or regional level as opposed to the individual-provider level, which therefore encourages disparate healthcare systems to coordinate as a single entity to save lives, especially in a PHE, such as the COVID-19 pandemic. Additionally, the current financial arrangement of healthcare providers (i.e., based on affiliation with specific systems or insurance types) is not conducive to care delivery during mass casualty incidents (MCIs).

In 2021, NQF convened a multistakeholder Committee to make recommendations for developing geographical-/population-based quality measurement attribution models applicable to MCIs, PHEs, and high-acuity emergency care-sensitive conditions (ECSCs). NQF, along with the input of the Attribution for Critical Illness and Injury Committee, advanced measurement science in this important area by producing an Environmental Scan Report and Final Recommendations Report.

Leveraging Electronic Health Record (EHR)-Sourced Measures to Improve Care Communication and Coordination

The goal of care communication and care coordination efforts is to ensure that patient care, delivered across multidisciplinary settings, is both synchronized and efficient. Effective care communication and care coordination involve seamless communication between the clinician and patient, as well as their families and caregivers, and between clinicians caring for the same patient to harmonize the care received throughout the healthcare system. To deliver coordinated care across clinicians and settings, it is vital that clinicians and patients have interoperable access to patient healthcare data. The concept of being interoperable means that data from multiple EHR systems (either from the same EHR vendor or another EHR vendor) can be shared across settings such as between hospitals or clinicians. Without interoperable access, there is a lack of effective health information transfer, which can result in suboptimal care, such as providing care that is discordant with a patient's overall goals of care, unnecessarily duplicative (e.g., repeat imaging or laboratory testing) (Abbaszade et al, 2021), or directly conflicting with current treatments (e.g., unrecognized potentially harmful medication interactions). It may also lead to missed opportunities to diagnose or treat a patient if the information is not communicated across longitudinal clinicians caring for a patient across settings (e.g., a need for follow-up imaging or follow-up treatment as a patient transitions from the hospital to outpatient care).

Leveraging EHR-sourced measures will drive quality improvement efforts to enhance care communication and care coordination, two processes that are essential to achieving the aim of enhancing the patient experience, improving population health, improving the work life of healthcare providers, and reducing costs. EHRs provide a richer data set that can directly measure components of care communication and care coordination that are not captured in claims data. These data are also available for real-time, or near-real time quality measurement. In addition, SDOH data have the potential to reduce disparities as they become increasingly available in EHRs. In addition to collecting patient race, ethnicity, and language data, collecting other variables, such as housing or food insecurity, in structured and unstructured fields may be useful in coordinating care with community services as well as in measure development.

During the base year, NQF performed an environmental scan to define care communication and care coordination, discuss the impact of care communication and care coordination on health outcomes, define SDOH and discuss how they can affect care coordination, and highlight the opportunities and challenges associated with leveraging EHR-sourced data to improve care communication and coordination. Utilizing the information from the scan, the EHR Care Coordination and Care Communication Committee will advance the science of quality measurement by developing two reports of final recommendations that will outline how EHRs could better facilitate care communication and coordination and how EHR-sourced measures can be used to improve care communication and coordination, as well as possible EHR-sourced care communication and coordination measure concepts or specific areas of measurement within care communication and coordination.

Building a Roadmap From Patient-Reported Outcome Measures to Patient-Reported Outcome Performance Measures

Patient-reported outcome performance measures (PRO-PMs) are recognized by CMS, NQF, and numerous healthcare stakeholders as an important opportunity to amplify the patient's voice through quality measurement. The development and endorsement of PRO-PMs have not been as widespread as other quality measures, as evidenced by the presence of approximately 200 process measures and 320 outcome measures that are currently endorsed by NQF, compared with 29 NQF-endorsed PRO-PMs as of April 1, 2021. Part of this difference may be due to the classification of PRO-PMs as "complex measures," meaning the PRO-PM as well as any underlying patient-reported outcome measures (PROMs) that are used as data collection instruments must be evaluated by NQF's Scientific Methods Panel (SMP) for scientific acceptability. Additionally, the development of digital PRO-PMs is limited, not only due to the interoperability challenges that all quality measures face but also due to the data collection challenges that must be overcome to electronically collect data through PROMs.

The Building a Roadmap From Patient-Reported Outcome Measures to Patient-Reported Outcome Performance Measures project (henceforth referred to as *Building a Roadmap*) recognizes the measure development community's need for straightforward guidance to help a diverse range of developers (e.g., those with different levels of experience or at different stages in their careers) navigate the unique challenges of developing digital PRO-PMs. The Interim Report offers guidance to measure developers on selecting PROMs that are high quality data collection instruments for digital PRO-PMs that can be used in CMS' value-based purchasing (VBP) programs or APMs; this guidance builds on a body of collaborative work between CMS and NQF that has existed for more than a decade and adds novel guidance that specifically focuses on digital measurement. In addition, the Technical Guidance Report from this project offers high-level guidance to measure developers on a set of four stages and 16 tasks that must be

considered and documented during the PRO-PM development process. The Technical Guidance Report is not intended to replace fundamental measure development guidance from CMS or NQF; rather, it is a tool to help measure developers better understand the nuances that are unique to digital PRO-PMs. This project advances the science of quality measurement by supporting the development of digital measures and incorporating patient perspectives into quality measurement.

Patient and Caregiver Engagement (PACE) Advisory Group

Incorporating patient and caregiver perspectives is critical for quality measurement—not only during development, but also during the endorsement process. In 2021, NQF convened the Patient and Caregiver Engagement (PACE) Advisory Group to provide guidance on enhancing patient and caregiver engagement on NQF's Standing Committees. Over the course of eight web meetings, the PACE Advisory Group, which is composed of 14 patient and caregiver representatives, provided feedback on the following items:

- The Standing Committee nomination process (i.e., the content for an outreach email template to help recruit patient and caregiver vacancies on the Standing Committees and methods to engage patients and caregivers not selected to serve on the Standing Committees)
- Tips for how co-chairs can engage patients and caregivers throughout the evaluation cycle, as mentioned in the *Current State of the NQF Measure Portfolio* section below
- Definitions of patients, caregivers, and advocates and establishing a comprehensive term to encompass the role of Patient Advisor
- Input on potential content for a future Patient Advisor resource webpage
- Approaches for patients and caregivers to be engaged throughout the measure development process

Additionally, NQF built on the PACE Advisory Group's insights to establish an orientation session specifically for patients and caregivers on Standing Committees and a pilot mentorship program. The pilot program paired five experienced Patient Advisors (i.e., patients, caregivers, and patient advocates) with five new Patient Advisors to make connections, encourage participation, and provide support to those unfamiliar with the endorsement process. The pilot mentorship program received positive feedback from participants and may continue in the future. NQF also continued to offer an honorarium to mitigate the financial barriers that could hinder the participation of patients and caregivers in Standing Committees.

Current State of the NQF Measure Portfolio

Standardized performance measures help different stakeholders to more easily assess and address healthcare performance. For example, measures help clinicians and providers understand whether the care they are providing is both optimal and appropriate and help to focus efforts to improve care. Payers use measures for a variety of accountability purposes. Measures also allow for comparison across clinicians, hospitals, health plans, and other providers.

NQF uses a standard Consensus Development Process (CDP) consisting of six major steps to assess performance measures for NQF endorsement. The steps include a call for candidate measures; a call for nominations to NQF's Standing Committees; a Standing Committee review of newly submitted measures; a public commenting period; an endorsement decision made by the Consensus Standards Approval Committee (CSAC), the governing body; and an Appeals period. The CDP offers two opportunities each year for measure submission and evaluation—one cycle in the fall and one in the

spring. To keep the endorsed measure portfolio relevant, Standing Committees also conduct "maintenance" activities, reviewing previously endorsed measures to determine whether the measure has been appropriately used and maintained or whether it will lose endorsement. Maintenance review takes place approximately every three years.

The CDP is designed to consider and engage stakeholders from across the healthcare industry. NQF's multistakeholder Committees review both previously endorsed and newly submitted measures using NQF's measure evaluation criteria:

- Importance to Measure and Report
- Reliability and Validity—Scientific Acceptability of Measure Properties
- Feasibility
- Usability and Use
- Comparison to Related or Competing Measures

As the quality measurement landscape has evolved, NQF has supported and encouraged the submission and review of measures that can drive meaningful improvements in care (e.g., PROMs and digital measures), fill known measure gaps, and align with healthcare improvement priorities. NQF's current measure portfolio includes measures from 14 clinical and cross-cutting topic areas. In 2021, NQF reviewed 78 measures across a variety of topics, such as hospitalizations, behavioral health and substance use, cost and efficiency, patient experience and safety, and women's health. Many of the measures address areas that have been exacerbated by the COVID-19 pandemic through delays and disruptions in care, increased health risks, and the impacts of SDOH.

Figure 3. CDP Fall 2020/Spring 2021 New and Maintenance Measure Review

Measure Cycle	Number of New Measures	Number of Maintenance Measures	Total Number of Measures Reviewed
Fall 2020	13	35	78
Spring 2021	10	20	-

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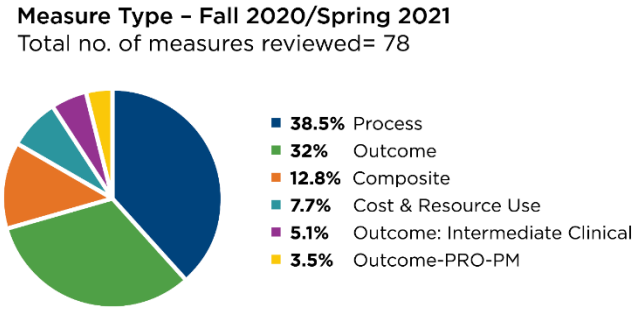
Figure 4. CDP Measure Types Reviewed During Fall 2020 and Spring 2021



Measure Endorsement and Maintenance Accomplishments

The results of the endorsement process during the spring and fall cycles follow below.

All-Cause Admissions and Readmissions

Avoidable admissions or readmissions are hospitalizations that could have been prevented with appropriate care. Inadequate discharge planning, patient follow-up, and coordination of care between the inpatient and outpatient settings (Patterson & Lindsey, 2009) often result in avoidable admissions or readmissions. Unnecessary hospitalizations can prolong the illness of patients, increase their time away from home and family, expose them to potential harms, and add to their costs. Avoidable admissions and readmissions also significantly contribute to the high rate of healthcare spending in the U.S. The AHRQ Healthcare Cost and Utilization Project (HCUP) estimated that approximately 3.5 million potentially preventable adult inpatient stays with Medicare patients occurred in 2017, accounting for approximately two-thirds of potentially preventable stays and related costs (McDermott & Jiang, 2020). Furthermore, an estimated 1 in 5 Medicare beneficiaries are readmitted within 30 days of discharge (Jencks et al, 2009). HCUP also estimated that the hospital costs associated with potentially preventable adult stays totaled $33.7 billion (McDermott & Jiang, 2020). Many of the potentially preventable stays and associated costs were for chronic conditions, representing 81 percent ($27.3 billion) of hospital costs associated with potentially preventable adult admissions (McDermott & Jiang, 2020). Additionally, the cost of hospital readmissions is estimated to be in the vicinity of $26 billion annually (Center for Health Information Analysis, 2015). Measurement in this area will help the field to better understand the relationship between readmissions and COVID-19. Improving measurement and health outcomes related to hospitalizations is also an important component of achieving health equity. The measures reviewed by the Standing Committee for this portfolio align with the MM 2.0 Framework's focus on seamless care coordination and equity.

Current Portfolio

There are 37 NQF-endorsed measures in the portfolio, including hospital-wide and condition-specific measures, such as renal, cardiovascular, and surgery, as well as measures for various care settings, including hospital, home health, skilled nursing facility, long-term care facility, inpatient rehabilitation facility, inpatient psychiatric facility, and hospital outpatient/ambulatory surgery center.

Fall 2020 Cycle

The Standing Committee evaluated one new measure and six measures undergoing maintenance review that focused on admissions and readmissions for patients with chronic disease. The one new measure was endorsed, and the six maintenance measures retained NQF endorsement.

Spring 2021 Cycle

The Standing Committee evaluated one newly submitted measure and three measures for maintenance review. Two measures focused on unplanned readmissions following psychiatric hospitalization and admission rates for patients with heart failure (HF), and two measures focused on excess days in acute care (EDAC) for patients with HF and pneumonia (PN). The Standing Committee recommended all four measures for endorsement.

Fall 2021 Cycle

No measures were submitted for review.

Behavioral Health and Substance Use

Behavioral health looks at how human behaviors and choices affect mental and physical health. Behavioral health comprises not only mental health but also SUDs. Behavioral health illnesses are typically cycling, chronic, and serious. The complexity and uncertainty of the underlying pathology of behavioral health illnesses along with the stigma surrounding these illnesses make treatment challenging and often negatively affect social functioning (*Mental Health Myths and Facts | MentalHealth.Gov*, 2017; National Alliance on Mental Illness, n.d.; Schaefer et al, 2005; Tanenbaum, 2005). While the data do show an increase in the prevalence of behavioral health disorders in the U.S., they also demonstrate that many Americans are not pursuing treatment for these disorders. A comprehensive annual report of behavioral health prevalence data is found in SAMHSA's National Survey on Drug Use and Health (NSDUH). Results from the 2019 NSDUH indicated that 19.2 million persons in the U.S. 18 years of age or older suffered from an apparent SUD (not including tobacco dependence), and 51.5 million persons 18 years of age or older suffered from a mental illness. Furthermore, 9.5 million persons 18 years of age or older suffered from both an SUD and a mental illness. These numbers jointly suggest that substantive behavioral health disease was evident in at least 61.2 million adult Americans in 2019, or roughly 24 percent of the adult population (SAMHSA, 2020). This rate is consistent with other epidemiologic studies that have previously revealed the prevalence of behavioral health conditions in the U.S. (Kamal, 2017). Improving measurement and health outcomes is particularly urgent, given the convergence of the ongoing COVID-19 pandemic and behavioral health challenges, such as the opioid epidemic. The pandemic has also led to exacerbations of health disparities related to behavioral health. The measures reviewed by the Standing Committee for this portfolio align with the MM 2.0 Framework's focus on wellness and prevention, behavioral health, chronic conditions, and equity.

Current Portfolio

There are 43 NQF-endorsed behavioral health measures, including measures for alcohol and drug use, care coordination, depression, medication use, experience of care, tobacco, and physical health.

Fall 2020 Cycle

The Standing Committee evaluated two new measures and two measures undergoing maintenance review that focused on psychiatric discharge and treatment for SUDs. Three measures were either endorsed or retained endorsement, and one measure lost endorsement due to concerns about the validity and feasibility of the measure.

Spring 2021 Cycle

The Standing Committee evaluated one measure undergoing maintenance review regarding the treatment of SUDs. The Standing Committee recommended this measure for endorsement.

Fall 2021 Cycle

No measures were submitted for review.

Cancer

Cancer is a category of various diseases that are associated with the uncontrolled growth and spread of abnormal cells in the body. If not treated, cancer can result in death (*Cancer Facts & Figures 2021 | American Cancer Society*, n.d.). Currently, cancer is the second most common cause of death in the U.S.,

exceeded only by heart disease (National Cancer Institute, 2020). According to the National Cancer Institute (NCI), an estimated 16.3 million people live with cancer in the U.S. (Howlader et al, 2020). In 2021 alone, more than 1.9 million new cancer cases are expected to be diagnosed in the U.S., and more than 600,000 people will die from the disease. Furthermore, the NCI estimated that cancer-related direct medical costs in the U.S. were $183 billion in 2015, and costs are projected to increase to $246 billion by 2025. Cancer care is complex and provided in multiple settings (e.g., hospitals, outpatient clinics, ambulatory infusion centers, radiation oncology treatment centers, radiology departments, and palliative and hospice care facilities) and by multiple providers; cancer care teams include surgeons, oncologists, nurses, pain management specialists, and social workers. Improving measurement and health outcomes in cancer is important, given the disruptions and delays in care due to the COVID-19 pandemic, which may also disproportionately affect historically disadvantaged communities. The measures in this portfolio align with the MM 2.0 Framework's focus on areas such as person-centered care, seamless care coordination, and equity.

Current Portfolio

There are 18 NQF-endorsed measures that address cancer screening and appropriate cancer treatment (including surgery, chemotherapy, and radiation therapy). They include measures for rheumatology, breast cancer, colon cancer, prostate cancer, and other cancers.

Fall 2020 Cycle

The Standing Committee did not review any measures. In place of evaluation meetings, the Standing Committee discussed the role of the CQMC, received an overview of the current NQF Cancer measure portfolio, and provided input on potential gaps in cancer quality performance measurement.

Spring 2021 Cycle

The Standing Committee did not review any measures. In place of evaluation meetings, the Standing Committee attended a topical webinar and discussed NQF's past and current health equity work, CMS' use of quality measurement to address health equity, and HealthCare Dynamics International's (HCDI) health equity work in cancer screening measurement.

Fall 2021 Cycle

No measures were submitted for review.

Cardiovascular

Cardiovascular disease, also known as heart disease, is a group of disorders of the heart and blood vessels (World Health Organization [WHO], 2021c). Heart disease is the leading cause of death in the U.S., with approximately 1 in 4 deaths per year. Heart disease affects all Americans because it affects both men and women across all racial and ethnic groups . Key risk factors for heart disease are obesity, high blood pressure, high blood cholesterol, and smoking. In addition to being the leading cause of death in the U.S., heart disease is the country's highest direct health expenditure (Virani et al, 2021). For example, from 2016 to 2017, heart disease costed the U.S. about $363 billion. The ongoing pandemic has heightened already existing health inequities related to cardiovascular disease. The COVID-19 health environment adds importance and urgency to the measures in this portfolio. This work aligns with the MM 2.0 Framework's focus on the management of chronic conditions and equity.

Current Portfolio

There are 39 NQF-endorsed measures grouped into various topic areas related to cardiovascular health. These topic areas include primary prevention and screening, coronary artery disease (CAD), ischemic vascular disease (IVD), acute myocardial infarction (AMI), cardiac catheterization, percutaneous catheterization intervention (PCI), HF, rhythm disorders, implantable cardioverter-defibrillators (ICDs), cardiac imaging, cardiac rehabilitation, and high blood pressure.

Fall 2020 Cycle

The Standing Committee evaluated two measures undergoing maintenance review that focused on risk-standardized mortality rate (RSMR) for HF and AMI. Both measures retained NQF endorsement.

Spring 2021 Cycle

The Standing Committee evaluated two new measures undergoing review regarding readmissions related to transcatheter aortic valve replacement (TAVR) and treatment for ST-segment elevation myocardial infarction (STEMI). The Standing Committee recommended both measures for endorsement.

Fall 2021 Cycle

No measures were submitted for review.

Cost and Efficiency

The high cost of receiving and providing care continues to be one of the major issues in U.S. healthcare. Healthcare spending in the country reached $3.8 trillion, or approximately $11,582 per person, in 2019. This total accounted for 17.7 percent of the Gross Domestic Product (GDP) and represented a 4.7 percent increase above 2018 spending levels (*NHE Fact Sheet | CMS*, 2020). Despite this high level of spending, the U.S. continues to rank below other developed countries for health outcomes, including lower life expectancy and greater prevalence of chronic diseases. Healthcare quality is also an issue in which the U.S. falls behind other developed countries, specifically in the quality domains of effective, safe, coordinated, and patient-centered care (Medicare Payment Advisory Commission [MedPAC], 2021). The factors contributing to these concerning trends are as complex as the healthcare system itself (e.g., physician practice patterns, regional market influences, and access to care). Improving U.S. health system efficiency has the potential to simultaneously reduce cost growth and improve the quality of care provided (*NHE Fact Sheet | CMS*, 2020). As reducing costs continues to be a focus of healthcare reform, it is important to understand the current use of resources in the healthcare system as it relates to quality, especially how resource use relates to health outcomes. Improving the measurement of cost and efficiency is critical, given the impact of the ongoing pandemic on the economy and the exacerbation of health disparities. The work on measures in this portfolio aligns with the MM 2.0 Framework's focus on affordability, efficiency, and equity.

Current Portfolio

There are 13 NQF-endorsed measures, which include both condition-specific and non-condition-specific measures, cost and resource measures, and efficiency more broadly.

Fall 2020 Cycle

The Standing Committee evaluated one measure undergoing maintenance review that focused on Medicare spending per beneficiary. This measure retained NQF endorsement.

Spring 2021 Cycle

The Standing Committee evaluated five measures undergoing maintenance review regarding the per member per month (PMPM) index and payment for episode-based care for AMI, HF, and PN. The Standing Committee recommended the measures retain endorsement.

Fall 2021 Cycle

No measures were submitted for review.

Geriatrics and Palliative Care

Palliative care is patient- and family-centered care that optimizes quality of life by anticipating, preventing, and alleviating suffering throughout the continuum of a person's illness by addressing physical, intellectual, emotional, social, and spiritual needs and facilitating patient autonomy, access to information, and choice (NQF, 2006). For those persons with a terminal illness, high quality end-of-life care is comprehensive care that addresses medical, emotional, spiritual, and social needs during the last stages of illness. In 2018, the 65-and-older population numbered 50.9 million individuals (i.e., 15.6 percent of the U.S. population), and this figure is expected to increase to 94.7 million by 2060. As many as 35 percent of older Americans have some type of disability (e.g., vision, hearing, ambulation, or cognition), while 46 percent of the 75-and-older population report limitations in physical functioning (Administration for Community Living, 2021). Additionally, data indicate that 46 percent of the 65-and-older noninstitutionalized U.S. population have two or three chronic conditions, and 15 percent have four or more (Ward & Schiller, 2013). Improving the quality of both palliative and end-of-life care, and geriatric care more generally, is becoming increasingly important due to factors that have intensified the need for individualized, person-centered care. Some of these factors include the aging U.S. population; projected increases in the number of Americans with chronic illnesses, disabilities, and functional limitations; and increases in ethnic and cultural diversity (*Dying in America*, 2015). COVID-19 has also intensified the need for measurement in this area due to the increased challenges in providing palliative care and widened health disparities. The measures reviewed by the Standing Committee for this portfolio align with the MM 2.0 Framework's focus on person-centered care, chronic conditions, and equity.

Current Portfolio

There are 35 NQF-endorsed measures that address geriatric care, palliative care, and end-of-life care. These measures address physical, spiritual, and legal aspects of care, as well as the care of patients nearing the end of life.

Fall 2020 Cycle

The Standing Committee evaluated four measures undergoing maintenance review. The CSAC upheld the Standing Committee's recommendation to endorse two measures and not endorse one measure due to a lack of data tracking and analysis. The CSAC did not uphold the Standing Committee's recommendation to endorse one measure and has sent this measure back to the Standing Committee for reconsideration in a future cycle. This measure will retain endorsement until its review is complete.

Spring 2021 Cycle

The Standing Committee did not review any measures. In place of evaluation meetings, the Standing Committee attended a topical webinar and discussed the existing palliative care measurement framework, received an overview of the current NQF Geriatric and Palliative Care measure portfolio, and provided input on potential gaps in Geriatric and Palliative Care quality measurement.

Fall 2021 Cycle

Three measures were submitted for review.

Neurology

Neurological conditions are disorders that affect the brain and the nerves found throughout the body and spinal cord. In 2017, the Global Burden of Disease study found the three most burdensome neurological conditions in the U.S. related to absolute numbers of disability-adjusted life years (DALYs): (1) stroke (3.58 million DALYs), (2) Alzheimer's and other dementias (2.55 million DALYs), and (3) migraine headache (2.40 million DALYs) (GBD 2017 US Neurological Disorders Collaborators et al, 2021). Additionally, stroke is the fifth leading cause of death in the U.S., leading to 146,383 deaths in 2017 (American Academy of Neurology, n.d.). It is a condition that has historically had few treatments; yet today, treatments including intravenous and intra-arterial thrombolysis, clot retrieval, and other technologies have revolutionized care (Albers et al, 2018; Messas et al, 2020). Improving neurology-related measurement remains important during an ongoing pandemic that has heightened health disparities in this group of conditions and disorders. The work on this portfolio aligns with the MM 2.0 Framework's focus on chronic conditions and equity.

Current Portfolio

There are 14 NQF-endorsed measures, including measures for stroke, subarachnoid and intracerebral hemorrhage, dementia, and carotid stenosis.

Fall 2020 Cycle

The Standing Committee evaluated one new measure undergoing review that focused on stroke. This measure was not endorsed due to concerns with the provided evidence.

Spring 2021 Cycle

The Standing Committee evaluated one new measure and one measure undergoing maintenance review that focused on stroke and carotid stenosis, respectively. One measure was recommended for endorsement, and the other measure was withdrawn from consideration following the post-comment meeting.

Fall 2021 Cycle

No measures were submitted for review.

Patient Experience and Function

Patient Experience and Function (PEF) is a critical topic area that includes quality metrics associated with patient satisfaction and experience of care, PROMs, and care coordination. The U.S. is increasingly ensuring that each person and family is engaged within a care partnership because it is critical to

achieving better patient outcomes (Majid, 2020). In addition, the U.S. healthcare system has increasingly embraced the idea that patient experience of care delivery is not simply important because it is associated with positive clinical outcomes, but also because it is a desirable endpoint unto itself (Doyle et al, 2013; Manary et al, 2013). Care coordination measures are also an important element for the success of this integrated approach. Care coordination spans the continuum of care and promotes quality care delivery, better patient experiences, and more meaningful outcomes (Council on Children with Disabilities and Medical Home Implementation Project Advisory Committee, 2014; Pronovost et al, 2003; Tricco et al, 2014). The measures in this portfolio align with the MM 2.0 Framework's focus on person-centered care and seamless care coordination.

Current Portfolio

There are 50 NQF-endorsed measures addressing patient assessments of care, mobility and self-care, shared decision making, patient activation, and care coordination. Most of the measures within this portfolio are PRO-PMs, including measures of patient experience, patient satisfaction, and functional status.

Fall 2020 Cycle

The Standing Committee evaluated two newly submitted Functional Assessment Standardized Items (FASI) measures undergoing review. One measure was endorsed, and the other measure was withdrawn from consideration by the developer after the Standing Committee expressed concerns with the evidence.

Spring 2021 Cycle

The Standing Committee evaluated one new home and community-based services measure and recommended it for endorsement.

Fall 2021 Cycle

No measures were submitted for review.

Patient Safety

Patient safety is the elimination of preventable errors or harm to a patient during the process of receiving medical care (AHRQ, n.d.). The 1999 Institute of Medicine (IOM) report titled *To Err Is Human* described the morbidity and mortality associated with preventable harms from medical errors. The report estimated that nearly 100,000 U.S. deaths per year were attributable to medical errors (Institute of Medicine & Committee on Quality of Health Care in America, 2000). More recent evidence has estimated that errors may account for as many as 251,000 deaths annually in the U.S., making medical errors the third leading cause of death (Anderson & Abrahamson, 2017; Makary & Daniel, 2016). These sobering figures have sparked a national focus on identifying, studying, and improving patient safety across settings. The ongoing COVID-19 pandemic has compounded existing risks and introduced new patient safety risks. The measures reviewed by this Standing Committee will support improvement in patient safety, which is more necessary and complex than ever. This work aligns with the MM 2.0 Framework's focus on safety.

Current Portfolio

There are 58 NQF-endorsed measures, including measures on medication safety, healthcare-associated infections, perioperative safety, falls, mortality, venous thromboembolism, pressure ulcers, workforce, and radiation safety.

Fall 2020 Cycle

The Patient Safety Standing Committee evaluated six patient safety process and outcome measures undergoing maintenance review against NQF's measure evaluation criteria. All six measures retained NQF endorsement.

Spring 2021 Cycle

The Standing Committee evaluated one new measure and four measures undergoing maintenance review that focused on sepsis, pressure ulcers, falls, radiology, and medication use. The Standing Committee recommended the five measures for endorsement.

Fall 2021 Cycle

Five measures were submitted for review.

Perinatal and Women's Health

Perinatal and women's health is an assessment of an array of topics that are vital to the health and well-being of mothers and babies. WHO categorizes both maternal and infant mortality as key global health statistics, critical measures of healthy life expectancy, and indicators of a nation's health and healthcare quality (WHO, 2021a). Yet the U.S. continues to have high rates of maternal morbidity and mortality (Tikkanen et al, 2020). According to the CDC's National Vital Statistics System (NVSS), the 2018 maternal mortality rate was 17.4 maternal deaths per 100,000 live births, and it increases with age. Women ages 40 and older die at a rate of 81.9 per 100,000 live births (National Vital Statistics Reports, 2020), and women of this age group are 7.7 times more likely to die compared with women under the age of 25 (CDC, 2021). Additionally, the maternal death rate for African American women was more than double that of White women and three times the rate for Hispanic women (Hoyert L, 2021). Birth-related events are among the best measures for assessing healthcare quality (Pileggi et al, 2019). For women of reproductive age in the U.S., access to high quality care, before and between pregnancies, can reduce the risk of pregnancy-related complications, including maternal and infant morbidity and mortality (Johnson et al, 2006). The health disparities in maternal health outcomes have only increased during the COVID-19 pandemic. Focusing on measurement in this area is critical to driving better maternal health. The measures in this portfolio align with the MM 2.0 Framework's focus on wellness and prevention, person-centered care, seamless care coordination, behavioral health, and equity.

Current Portfolio

There are 15 NQF-endorsed measures for reproductive health; pregnancy and labor and delivery; high-risk pregnancy; newborn, premature, or low-birth-weight newborns; and postpartum patients.

Fall 2020 Cycle

The Standing Committee evaluated one episiotomy measure undergoing maintenance review. This measure retained NQF endorsement.

Spring 2021 Cycle

The Standing Committee evaluated four measures undergoing maintenance review that focused on contraceptive care and chlamydia screening. The Standing Committee recommended the measures retain NQF endorsement.

Fall 2021 Cycle

No measures were submitted for review.

Prevention and Population Health

Population health describes the "health outcomes of a group of individuals, including the distribution of such outcomes within the group" (D. Kindig & Stoddart, 2003). The designation of population health indicates the ongoing priority of identifying and assessing population- and community-level strategies that target disease prevention, cross-sector collaboration, health promotion, SDOH, and outcomes improvement (D. A. Kindig et al, 2008). Disease prevention remains a focal component of healthcare delivery, policy development, and the assessment of care quality, access, and outcomes. Advances in population and public health measure implementation have resulted in substantial reductions in the effects of infectious disease, occupational safety, and chronic illness; yet significant gaps remain among and between populations (Tikkanen & Abrams, 2020). Traditionally, medical care has been the primary focus of efforts to improve the health and well-being of individuals and populations. As a result, nearly all national health expenditures have been attributed to healthcare services for the treatment of injury, illness, and disease. However, medical care has a relatively small influence on health outcomes when compared to interventions that address SDOH, such as smoking, lower educational attainment, poverty, poor diet, and physical environmental hazards (e.g., unsafe housing, polluted air, and contaminated water). There is growing recognition of the role of SDOH or social risks in influencing health outcomes. The COVID-19 pandemic has compounded the impact of social risk on health, thus heightening the urgency to advance measurement in this area. This work aligns with the MM 2.0 Framework's focus on wellness and prevention and care.

Current Portfolio

There are 34 NQF-endorsed measures, including measures for health-related behaviors to promote healthy living; community-level indicators of health and disease; social, economic, and environmental determinants of health; primary prevention and/or screening; and oral health.

Fall 2020 Cycle

The Standing Committee evaluated one composite electronic clinical quality measure (eCQM) undergoing maintenance review that focused on global malnutrition. This measure retained NQF endorsement.

Spring 2021 Cycle

The Standing Committee evaluated one newly submitted adult immunization measure. The Standing Committee recommended this measure for endorsement.

Fall 2021 Cycle

No measures were submitted for review.

Primary Care and Chronic Illness

Primary care comprises a variety of services provided to patients that cover a wide span of practice domains. This includes not only primary care clinicians but also other clinicians who provide primary care services. The central idea of primary care is based on comprehensive first contact and continuing care for biological and behavioral conditions affecting any organ system (American Academy of Family Physicians, n.d.). Beyond the diagnosis and treatment of acute and chronic illnesses in a variety of healthcare settings, primary care also addresses issues associated with health promotion, disease prevention, health maintenance, counseling, and patient education. The CDC's National Center for Chronic Disease Prevention and Health Promotion (NCCDPHP) found that 6 in 10 adults in the U.S. have a chronic disease, and 4 in 10 have multiple diseases. These illnesses have a profound impact not only on health, but also the economy (e.g., chronic and mental health conditions represent 90 percent of the U.S. annual healthcare expenditure). Primary care is considered the most inclusive, equitable, cost-effective, and efficient method for improving and maintaining physical, mental, and social well-being (WHO, 2021b). COVID-19 has forced changes in the delivery of primary care, such as exacerbating underlying disrupting visits and moving to the use of telemedicine and virtual healthcare. Measurement will be critical as the primary care system continues to evolve following the appearance of and response to COVID-19. The measures reviewed by the Standing Committee align with the MM 2.0 Framework's focus on equity, wellness and prevention, chronic conditions, person-centered care, seamless care coordination, and behavioral health.

Current Portfolio

There are 48 NQF-endorsed measures that focus on nonsurgical eyes or ears, nose, and throat conditions; diabetes care; osteoporosis; human immunodeficiency virus (HIV); rheumatoid arthritis; gout; back pain; asthma; chronic obstructive pulmonary disease (COPD); and acute bronchitis. Chronic illnesses are long-lasting or persistent health conditions or diseases that patients and providers must manage on an ongoing basis.

Fall 2020 Cycle

The Standing Committee evaluated four newly submitted measures and three measures undergoing maintenance review that focused on sickle cell anemia, respiratory issues, overuse, and person-centered primary care. All measures were either endorsed or retained endorsement.

Spring 2021 Cycle

The Standing Committee evaluated one newly submitted measure on continuity of care and recommended it for endorsement.

Fall 2021 Cycle

Three measures were submitted for review.

Renal

Kidney disease has long been a leading cause of morbidity and mortality in the U.S. More than 37 million adults—representing 15 percent of the adult population—have chronic kidney disease (CKD) (Gupta et al, 2021). Left untreated, CKD can progress to end-stage renal disease (ESRD) and a host of other health complications, such as cardiovascular disease, hyperlipidemia, anemia, and metabolic bone disease.

There are over 700,000 people in the U.S. diagnosed with ESRD (Schoenberg et al, 2020). Medicare coverage is extended to all individuals regardless of their age if their kidneys are no longer functioning, if they need regular dialysis, or if they have had a kidney transplant (Powers et al, 2020). The U.S. continues to spend significant resources on care and treatment of CKD and ESRD. According to the most recent United States Renal Data System (USRDS) Annual Data Report from 2020, the total Medicare spending associated with CKD and ESRD in 2018 exceeded $130 billion (United States Renal Data System, 2019). Kidney disease reflects underlying health disparities that increased during the pandemic due to decreased access to care and a decline in necessary care. Measurement presents an opportunity to improve health outcomes in response to the intertwined challenges of health disparities and COVID-19. The measures in this portfolio align with the MM 2.0 Framework's focus on areas such as equity, chronic conditions, and seamless care coordination.

Current Portfolio

There are 16 NQF-endorsed measures associated with CKD and ESRD.

Fall 2020 Cycle

The Standing Committee evaluated one newly submitted measure and one measure undergoing maintenance review that focused on vascular access and dialysis ultrafiltration rate, respectively. One measure retained NQF endorsement, and one measure was not endorsed due to a low performance gap in care.

Spring 2021 Cycle

The Standing Committee evaluated two newly submitted measures on unsafe opioid prescriptions but did not recommend the two measures for endorsement.

Fall 2021 Cycle

No measures were submitted for review.

Surgery

Given the increasing rates and costs associated with inpatient and outpatient surgeries in the U.S., both performance measurement and reporting provide an opportunity to improve the safety and quality of care received by patients undergoing surgery and surgical procedures. In 2010, 28.6 million ambulatory surgery visits to hospitals and ambulatory surgical centers (ASCs) occurred, representing 48.3 million surgical and nonsurgical procedures (Hall et al, 2017). In 2014, 17.2 million hospital visits included at least one surgery. Of these surgeries, over half of them occurred in a hospital-owned ASC (Steiner et al, 2006). Over time, less invasive surgical techniques, patient conveniences (e.g., less time spent undergoing a procedure), and lower costs have led to an increased volume of ambulatory surgeries (Farrell et al, 2008; Munnich & Parente, 2014). However, there are risks associated with ambulatory surgeries, including increased pain, longer time than anticipated to return to daily activities, and unplanned subsequent hospital visits following surgery (Fox et al, 2014; Manohar et al, 2014). The disruptions to surgeries during the COVID-19 pandemic have led to additional risks to manage and heighten the need for measurement to drive improvements in the safety and quality of surgical care. This work aligns with the MM 2.0 Framework's focus on seamless care coordination, person-centered care, behavioral health, and equity.

Current Portfolio

There are 57 NQF-endorsed measures that address surgical care, including perioperative safety; general surgery; and a range of specialties, including cardiac, cardiothoracic, colorectal, ocular, orthopedic, urogynecology, and vascular surgery.

Fall 2020 Cycle

The Standing Committee evaluated eight measures undergoing maintenance review that focused on beta blockers, coronary artery bypass grafts (CABGs), elective primary total hip arthroplasty and/or total knee arthroplasty (THA/TKA), and mitral valve repair/replacement. Seven measures retained NQF endorsement. The CSAC deferred the endorsement decision for the remaining measure until further review of NQF's reserve status policy. This measure will retain endorsement until a decision is made.

Spring 2021 Cycle

The Standing Committee did not review any measures. In place of an evaluation meeting, the Standing Committee attended a topical webinar and discussed gaps in surgery performance measurement and the current state of social risk adjustment in performance measurement.

Fall 2021 Cycle

One measure was submitted for review.

V. Stakeholder Recommendations on Quality and Efficiency Measures and National Priorities

Section 1890(b)(7)(A)(i) of the Social Security Act (the Act) requires the CBE convene "multistakeholder groups to provide input on the selection of certain quality and efficiency measures from among: (i) such measures that have been endorsed by the entity; and (ii) such measures that have not been considered for endorsement by the CBE but are used or proposed to be used by the Secretary for the collection or reporting of quality and efficiency measures". Additionally, the CBE must convene multistakeholder groups to provide input on national priorities for improvement in population health and in delivery of health care services for consideration under the National Quality Strategy. The CBE is required to describe these duties in this report pursuant to section 1890(b)(5)(A)(i)(VI) of the Act.

Measure Applications Partnership

Under section 1890A(a) of the Act, HHS is required to establish a pre-rulemaking process under which a consensus-based entity (currently NQF) would convene multistakeholder groups to provide input to the Secretary on the selection of quality and efficiency measures for use in certain federal programs. The list of quality and efficiency measures HHS is considering for selection is to be publicly published no later than December 1 of each year. No later than February 1 of each year, the consensus-based entity is to report the input of the multistakeholder groups, which will be considered by HHS in the selection of quality and efficiency measures.

NQF plays a unique role in the identification of measures for use in federal healthcare programs. NQF does so by convening multistakeholder groups that review and provide recommendations on which measures to use. The MAP is a public-private partnership that provides consensus-based input to HHS on the selection of performance measures for federal healthcare quality programs. The MAP brings

together a variety of stakeholders from both public and private sectors, such as consumers, clinicians, purchasers, providers, researchers, health plans, and suppliers. The MAP's aim is to provide input to CMS that ensures the measures used in federal programs address national healthcare priorities, fill critical measurement gaps, and increase public-private payer alignment. The MAP strives to achieve performance improvement, transparency, and value for all.

The work of the MAP brings value to the field in several ways: It brings together the input of many stakeholders in the healthcare industry; supports transparency by convening meetings that are open to the public; ensures that measures are meaningful to patients, clinicians, and providers; and supports CMS' MM 2.0 Framework. The MAP's work has also been part of the ongoing efforts to ensure the safety and health of Americans during the ongoing pandemic through the review of COVID-19 vaccination measures. These efforts are critical to remaining current with the evolving measurement environment and the changing needs brought about by the pandemic. The MAP's recommendations also support CMS' efforts to use the highest value and highest-impact measures, incorporate patient voices in performance measures, coordinate care, and align measures across public and private entities.

The MAP is composed of a Coordinating Committee, three setting-specific Workgroups (i.e., Clinician, Hospital, and Post-Acute Care/Long-Term Care [PAC/LTC]), and two Advisory Groups (i.e., Rural Health and—new this year—Health Equity). The Coordinating Committee provides strategic direction and is responsible for the final approval of the recommendations and guidance developed by the Workgroups and Advisory Groups. The three Workgroups advise the Coordinating Committee on measures for specific care settings, care providers, and patient populations. The two Advisory Groups provide feedback on specific cross-cutting priorities, such as rural health and health equity.

The MAP conducts its work as part of CMS' pre-rulemaking process. This includes a public call for measures, CMS' development and public release of the annual Measures Under Consideration (MUC) list, MAP meetings to review and discuss the measures on the MUC list, and the publication of the MAP's recommendations. The Workgroups use MAP-developed Measure Selection Criteria (MSC) to assess how well each measure fits the need of a specified program. The MSC are designed to demonstrate the characteristics of an ideal set of performance measures. The MAP makes a determination for each candidate measure: support, do not support, conditionally support, or refine and resubmit. The MAP's recommendations inform HHS' decisions about measures to use in their public healthcare quality programs, which they put forth in a notice of proposed rulemaking in the *Federal Register*.

Within this section of the report, NQF will reference the MAP activities that have taken place in two cycles—the 2020-2021 and the 2021-2022 cycles. NQF will describe the resulting recommendations from the completed 2020-2021 cycle. The summaries below also include details about the 2021-2022 cycle to reflect two changes to the process that NQF implemented in 2021. The modifications include the following: (1) a trial of how the MAP might make recommendations about the removal of measures (in addition to making its typical recommendations about what measures should be included in CMS' quality programs) and (2) the creation of a new Advisory Group focused on measurement issues that affect health disparities.

2021-2022 Enhancements to the MAP Process

Measure Set Review Pilot

Omnibus appropriations legislation in December 2020 (Section 102 of Division CC of the Consolidated Appropriations Act, 2021) included language granting the CBE the ability to provide input on the removal of quality and efficiency measures. Initiated by CMS, NQF and CMS collaborated with the MAP Coordinating Committee to develop a process for a measure set review (MSR) as part of the 2021-2022 MAP cycle. The MSR group is charged with conducting a holistic review of measures with multistakeholder input, easing the burden of an increased number of performance measures, and continuing to educate and inform those who are interested in advancing measurement science.

During the 2021-2022 cycle, NQF piloted this process, incorporating a sample set of measures that only the MAP Coordinating Committee reviewed. NQF focused on developing a review process and criteria for evaluating measures within federal programs. During the 2022-2023 MAP cycle, NQF will expand the process to include the Workgroups and Advisory Groups. At the end of that cycle, NQF's final report will incorporate feedback from the Workgroups and Advisory Groups in the recommendations for measures' removal.

The MAP Coordinating Committee reviewed 22 measures from five federal programs: the Inpatient Psychiatric Facility Quality Reporting (IPFQR) Program, the Ambulatory Surgical Center Quality Reporting (ASCQR) Program, the Hospital Readmissions Reduction Program (HRRP), the Hospital VBP Program, and the Hospital Inpatient Quality Reporting (IQR) Program. The Coordinating Committee also provided feedback on the MSR pilot and suggested modifications to the criteria and processes for future iterations. It selected three miscellaneous measures for removal from the IPFQR Program: (1) CMS Measures Inventory Tool (CMIT) 2584 – Transition Record With Specified Elements Received by Discharged Patients (Discharges From an Inpatient Facility to Home/Self-Care or Any Other Site of Care), (2) CMIT 1645 – Patients Discharged on Multiple Antipsychotic Medications With Appropriate Justification, and (3) CMIT 2725 – Screening for Metabolic Disorders. The Committee also selected four Tobacco and Alcohol measures for removal from the IPFQR Program: (1) CMIT 1677 – Tobacco Use Treatment Provided or Offered, (2) CMIT 2588 – Tobacco Use Treatment, (3) CMIT 2591 – Alcohol Use Brief Intervention, and (4) CMIT 2592 – Alcohol Use Brief Intervention Provided or Offered. Additional details on all of the measures selected for removal can be found in the MSR 2021-2022 Final Report.

MAP Health Equity Advisory Group

NQF convened a new Advisory Group during the 2021-2022 MAP cycle: the MAP Health Equity Advisory Group. This new group will provide input on the MUCs, with measurement issues related to health disparities and critical access hospitals in mind. The aim of the Health Equity Advisory Group is to reduce health disparities closely linked with SDOH, such as social, economic, or environmental disadvantages.

NQF received over 150 nominations for a seat on this Advisory Group. Of those nominations received, NQF selected 27 organizations and individuals, as well as five federal liaisons. This group is composed of stakeholders with expertise in heath disparities and quality measurement. This includes experience with topics such as quality of care related to age, sex, income, race, ethnicity, disability, literacy, sexual orientation, gender identity, geographic location, and the intersection of these factors.

MAP 2020-2021 Pre-Rulemaking Recommendations

The MAP published the results of its 2020-2021 pre-rulemaking deliberations in a series of reports released in February and March of 2021. The MAP made recommendations on 20 MUCs for eight CMS quality reporting and VBP programs covering ambulatory, acute, and PAC/LTC settings. The measures

reviewed included five process measures (including three COVID-19 vaccination measures), five cost/resource use measures, five outcome measures, three composite measures, and two PRO-PMs. The measures reviewed by the MAP also addressed critical national priorities, including the response to COVID-19, rural health-related measurement issues, incorporation of the patient voice into performance measures, safeguarding of public health, and care coordination. A summary of this work is found below. In addition, the MAP began its 2021-2022 pre-rulemaking efforts in December 2021 to provide input on 44 MUCs for 13 CMS programs. NQF will post the MAP's final recommendations along with a detailed report in February 2022.

MAP Rural Health Advisory Group Recommendations

NQF works with the Rural Health Advisory Group to provide input on CMS' annual pre-rulemaking process. This Advisory Group provides input on issues that are particularly relevant in the rural population (e.g., access, costs, or quality issues encountered by rural residents; data collection and/or reporting challenges; and potential unintended consequences for rural providers). This Advisory Group consists of experts in rural health; frontline healthcare providers who serve in rural and frontier areas, including tribal areas; and patients from these areas. The aim of the Rural Health Advisory Group is to bring the rural health perspective to the annual pre-rulemaking process; identify rural-relevant gaps in measurement; and make recommendations on priority issues in rural health, such as low case-volume and access.

The Rural Health Advisory Group reviewed and discussed the 2020-2021 MUCs for various CMS quality programs. NQF provided a written summary of the Advisory Group's feedback to the Hospital, Clinician, and PAC/LTC Workgroups to aid in their review of the measures.

Key themes from the Advisory Group's discussion include the following:

- Elevated cost of care exists in rural areas due to limited availability of certain tools and treatments (e.g., specialized teams, home health services, and early intervention programs). There is also a tendency to identify disease at later stages (e.g., initial cancer diagnoses at more advanced stages). Cost measures should be paired with quality measures in the same topic area to prevent underutilization.
- Rural facilities with limited resources may need to transfer patients to an appropriate facility instead of performing all procedures on-site. Measures should account for transfers and different treatment modalities (e.g., measures that are scored on time-to-treatment OR time-to-transfer).
- Shifts in care settings present measurement challenges in rural areas. Some procedures (e.g., THA/TKA) are increasingly likely to be handled via outpatient/ambulatory services; therefore, measures limited to inpatient care may be subject to low case-volume challenges. Nonetheless, rural areas are still unlikely to have standalone ASCs.
- To better capture attribution of care in rural settings, measures should include nonphysician practitioners (e.g., physician assistants, nurse specialists), who play a more prominent role in rural areas.

The Rural Health Advisory Group also discussed rural-specific considerations for COVID-19 measures (e.g., high degree of vaccine hesitancy in rural areas), as well as the continued challenge of low case-volumes for many performance measures used in rural areas.

MAP Clinician Workgroup Recommendations

The MAP Clinician Workgroup reviews measures within three programs: the Merit-Based Incentive Payment System (MIPS), the Medicare Shared Savings Program, and the Medicare Part C and Part D Star Ratings. During this cycle, the MAP Clinician Workgroup reviewed 11 MUCs from the 2020 list in two of the three programs: the MIPS and the Medicare Shared Savings Program. A summary of the Workgroup's recommendations follows below.

Recommendations for the Merit-Based Incentive Payment System (MIPS)

Established by section 101(c) of the Medicare Access and CHIP Reauthorization Act of 2015 (MACRA), MIPS is a pay-for-performance program that affects payment to Eligible Clinicians (ECs). MIPS makes positive, neutral, and negative Part B payment adjustments to ECs based on four performance categories: quality, cost, promoting interoperability, and improvement activities. Each MIPS performance category is scored independently and has a specified weight. MIPS is one of two ways clinicians can participate in the Quality Payment Program incentive program.

The Clinician Workgroup reviewed 10 measures in the cost and quality categories for MIPS:

Conditional Support for Rulemaking (four measures):

- Cost category (two measures):
    - Colon and Rectal Resection (Episode-Based Cost Measure) – contingent on NQF endorsement
    - Melanoma Resection (Episode-Based Cost Measure) – contingent on NQF endorsement
- Quality category (two measures):
    - Person-Centered Primary Care (PRO-PM) – contingent on NQF endorsement
    - CoV-2 Vaccination by Clinicians – contingent on CMS bringing the measure back to the MAP once specifications were further refined

Do Not Support for Rulemaking With Potential for Mitigation (six measures):

- Cost category (three measures):
    - Asthma-Chronic Obstructive Pulmonary Disease (COPD) (Episode-Based Cost Measure) – contingent on NQF endorsement and further evaluation of actionability demonstrating the connection between upstream medical interventions and downstream costs
    - Diabetes (Episode-Based Cost Measure) – contingent on NQF endorsement and further evaluation of actionability demonstrating the connection between upstream medical interventions and downstream costs
    - Sepsis (Episode-Based Cost Measure) – contingent on NQF endorsement, an analysis of the potential for overdiagnosis of sepsis, and further evaluation of the correlation with clinical quality measures (CQMs)
- Quality category (three measures):
    - Risk-Standardized Acute Unplanned Cardiovascular-Related Admission Rates for Patients With Heart Failure – contingent on NQF endorsement and an analysis of the appropriateness of the risk adjustment for clinicians with higher caseloads of patients with more complicated or severe HF

- Intervention for Prediabetes – contingent on respecifying the measure to include an adequate range of interventions for prediabetes available to the clinician beyond the prescription of metformin or referring the patient to an external service, along with NQF endorsement
- Preventive Care and Wellness (Composite) – contingent on NQF endorsement and CMS ensuring the components of the measure are appropriately weighted

Recommendations for the Medicare Shared Savings Program (Shared Savings Program)

Established by section 3022 of the Affordable Care Act (ACA), the Shared Savings Program allows voluntary participation of eligible providers, hospitals, and suppliers to create or participate in an ACO. An ACO is responsible for the cost, quality, and experience of care for a designated population of Medicare fee-for-service (FFS) beneficiaries. Performance is assessed annually based on quality standards and financial performance to determine shared savings and losses. The Shared Savings Program offers multiple options (or tracks) for participation, allowing for varied risk levels for participating ACOs.

The MAP Clinician Workgroup reviewed a single measure for the Shared Savings Program:

Conditional Support for Rulemaking (one measure):

- **ACO-Level Days at Home for Patients With Complex, Chronic Conditions** – contingent on NQF endorsement

Key Themes From the Clinician Workgroup Review

Themes that emerged within the MAP Clinician Workgroup related to COVID-19, cost measures, and the burden of measures include the following:

- The proposed Coronavirus 2 (CoV-2) Vaccination measure represents a promising effort to advance measurement for an evolving national pandemic. Collecting information on severe acute respiratory syndrome (SARS)-CoV-2 vaccination coverage and providing feedback to clinicians would facilitate benchmarking and quality improvement.
- While CMS is required by the MACRA of 2015 to implement cost measures within the MIPS program, there is concern related to explicit connections between cost and quality for measures that CMS is considering for MIPS. While the need to use appropriately correlated cost and quality measures together to assess health system efficiency is well established, there is currently no clear consensus among stakeholders on precisely how to do so.
- The move toward public-private payer alignment to decrease burden needs to be balanced with allowing for pockets of measurement innovation moving the quality enterprise forward. There is some resistance to PRO-PMs because they are more burdensome to collect. The MAP encouraged CMS to provide support and infrastructure to ease the burden of data collection for PRO-PMs.

The measures reviewed by the Clinician Workgroup and their discussions support CMS' efforts to use outcome measures and PROs and align measures across private and public entities. In addition, deliberations about the COVID-19 measures are critical to remaining current with the evolving

environment and changing needs brought about by the pandemic. This continues to remain relevant as the pandemic has continued and as vaccines have become more available to clinicians and the public.

MAP Hospital Workgroup Recommendations

The Hospital Workgroup provides input to the Coordinating Committee on matters related to the selection and coordination of measures for hospitals, including inpatient acute, outpatient, cancer, and psychiatric hospitals. The Hospital Workgroup provides annual pre-rulemaking input on the following programs: Hospital IQR Program, Hospital VBP, Hospital Outpatient Quality Reporting (OQR) Program, Prospective Payment System (PPS)-Exempt Cancer Hospital Quality Reporting (PCHQR), IPFQR, HRRP, Hospital-Acquired Conditions Reduction Program (HACRP), ASCQR Program, and ESRD Quality Incentive Program (QIP).

The Hospital Workgroup reviewed two specific COVID-19 measures submitted for consideration under several Hospital programs.

Vaccination against vaccine-preventable diseases can protect Healthcare Personnel (HCP) from acquiring and directly or indirectly transmitting potentially fatal illnesses to patients. Since 2005, the National Healthcare Safety Network (NHSN) has served as a web-based system for monitoring healthcare-associated adverse events, healthcare worker vaccinations, and other prevention practices. Priority areas for the measurement of vaccine uptake among HCP include ASCs, hospital inpatient areas, hospital outpatient areas, IPFs, and PPS-exempt cancer hospitals.

Conditional Support for Rulemaking (two measures):

- **SARS-CoV-2 Vaccination Coverage Among Healthcare Personnel** – conditional support for each program it was considered for, including Hospital OQR, Hospital IQR, ASCQR Program, Hospital IPFQR, Hospital PCHQR, and Hospital ESRD QIP, and contingent on CMS bringing the measures back to the MAP once the specifications are further refined
- **SARS-CoV-2 Vaccination Coverage for Patients in End-Stage Renal Disease** – conditional support for the ESRD QIP contingent on CMS bringing the measures back to the MAP once the specifications are further refined

Recommendations for the End-Stage Renal Disease Quality Incentive Program (ESRD QIP)

This pay-for-performance and public reporting program aims to improve the quality of dialysis care and produce better outcomes for Medicare beneficiaries. Dialysis facilities that do not meet or exceed the required total performance score are subject to reduced payments.

The MAP Hospital Workgroup reviewed a single measure for the ESRD QIP:

Support for Rulemaking:

- **Standardized Hospitalization Ratio for Dialysis Facilities** – support for rulemaking

Recommendations for the Medicare and Medicaid Promoting Interoperability Program for Eligible Hospitals and Critical Access Hospitals

This pay-for-reporting and public reporting program aims to promote interoperability and the meaningful use of certified EHR technology. Eligible hospitals that fail to meet CQM and other requirements are subject to a reduction in the annual payment update.

The MAP Hospital Workgroup reviewed a single measure for the Medicare and Medicaid Promoting Interoperability Program for Eligible Hospitals and Critical Access Hospitals Program:

Conditional Support for Rulemaking:

- **Global Malnutrition (Composite Score)** – conditional support for rulemaking pending NQF endorsement of this measure

Recommendations for the Hospital Inpatient Quality Reporting (Hospital IQR) Program

This pay-for-reporting and public reporting program aims to move towards paying providers based on the quality of care rather than the quantity and to provide consumers information about hospital quality to make informed choices about their care. Hospitals that do not participate, or that participate but fail to meet program requirements, are subject to a reduction in the annual payment update.

The MAP Hospital Workgroup reviewed two measures for the Hospital IQR Program:

Conditional Support for Rulemaking:

- **Global Malnutrition (Composite Score)** – conditional support pending NQF endorsement

Support for Rulemaking:

- **Hospital-Level, Risk-Standardized Patient-Reported Outcomes Following Elective Primary Total Hip and/or Total Knee Arthroplasty (THA/TKA)** – supported for rulemaking

Recommendations for the Hospital Outpatient Quality Reporting (Hospital OQR) Program

This pay-for-reporting and public reporting program aims to provide consumers with quality-of-care information to make more informed decisions about healthcare options and establish a system for collecting and providing quality data to hospitals providing outpatient services, such as emergency department (ED) visits, outpatient surgery, and radiology services. Hospitals that do not report data on required measures are subject to a reduction in the annual payment update.

The MAP Hospital Workgroup reviewed two measures for the Hospital OQR Program:

Conditional Support for Rulemaking (two measures):

- **Appropriate Treatment for ST-Segment Elevation Myocardial Infarction (STEMI) Patients in the Emergency Department (ED)** – conditional support pending NQF endorsement and evaluation of the EHR feasibility, reliability, and validity testing by the developer
- **Breast Screening Recall Rates** – conditional support pending NQF endorsement

Key Themes From the Hospital Workgroup Review

Key themes from the Hospital Workgroup pre-rulemaking review process related to COVID-19 vaccination monitoring for healthcare personnel, the use of composite measures, and care coordination include the following:

- COVID-19 measures can help patients understand the extent to which healthcare systems at the facility level are vaccinating their personnel and extending a measure of protection for their safety as well.
- Composite measures provide a comprehensive view of how a given provider is performing on a series of measures. Individual components of certain measures should not always be equally weighted.
- Care coordination across and among all providers helps enable the most effective team-based care for patients. The ability to manage care and services has a direct impact on patient and caregiver burden and on patient readmissions.

The Hospital Workgroup's activities align with objectives to achieve seamless care coordination, wellness, and prevention and to use the highest value and highest-impact measures. The inclusion of COVID-19 measures is also critical to maintaining a timely response to a still-evolving pandemic.

MAP PAC/LTC Workgroup Recommendations

The PAC/LTC Workgroup is charged with reviewing measures within six programs: the Skilled Nursing Facility Quality Reporting Program (SNF QRP), Inpatient Rehabilitation Facility QRP, LTC Hospital QRP, Home Health QRP (HH QRP), Hospice Quality Reporting Program (HQRP), and SNF VBP Program. The PAC/LTC Workgroup reviewed three MUCs from the 2020 list, which is composed of four programs with the following summary and recommendations.

Recommendations for the Hospice Quality Reporting Program (HQRP)

Established under section 1814(i)(5) of the SSA, the HQRP is a pay-for-reporting and public reporting program that applies to all hospice organizations regardless of the care setting. Data in this program comprise the Hospice Item Set (HIS), Medicare hospice claims, and the Hospice Consumer Assessment of Healthcare Providers and Systems (CAHPS®) survey. Hospice providers are required to submit quality data or be subject to a reduction in the annual payment update.

The MAP PAC/LTC Workgroup reviewed one measure for the HQRP:

Conditional Support for Rulemaking:

- **Hospice Care Index** – conditional support contingent on NQF endorsement

Recommendations for the Skilled Nursing Facility Quality Reporting Program (SNF QRP)

As mandated by the Improving Medicare Post-Acute Care Transformation Act of 2014 (IMPACT Act), the SNF QRP is a pay-for-reporting and public reporting program that requires annual public reporting. Data requirements include quality measures, resource use, and other domains. The SNFs that do not submit the required data are subject to a reduction in their annual payment update.

The MAP PAC/LTC Workgroup reviewed two measures for the SNF QRP:

Conditional Support for Rulemaking:

- **Skilled Nursing Facility Healthcare-Associated Infections Requiring Hospitalization** – contingent on NQF endorsement
- **SARS-CoV-2 Vaccination Coverage Among Healthcare Personnel** – contingent on CMS bringing the measure back to the MAP once the specifications are further refined

Recommendations for the Inpatient Rehabilitation Facility Quality Reporting Program (IRF QRP)

As mandated by section 3004(b) of the ACA of 2010 and the IMPACT Act, the IRF QRP is a pay-for-reporting and public reporting program that requires annual public reporting. Data requirements include quality measures, resource use, and other domains. IRFs that do not submit the required data are subject to a reduction in their annual payment update.

The MAP PAC/LTC Workgroup reviewed one measure for the IRF QRP:

Conditional Support for Rulemaking:

- **SARS-CoV-2 Vaccination Coverage Among Healthcare Personnel** – contingent on CMS bringing the measure back to the MAP once the specifications are further refined

Recommendations for the Long-Term Care Hospital Quality Reporting Program (LTCH QRP)

As mandated by section 3004(a) of the ACA of 2010 and the IMPACT Act, the LTCH QRP is a pay-for-reporting and public reporting program that requires annual public reporting. Data requirements include quality measures, resource use, and other domains. LTCHs that do not submit the required data are subject to a reduction in their annual payment update.

The MAP PAC/LTC Workgroup reviewed one measure for the LTCH QRP:

Conditional Support for Rulemaking:

- **SARS-CoV-2 Vaccination Coverage Among Healthcare Personnel** – contingent on CMS bringing the measure back to the MAP once the specifications are further refined

Key Themes From the PAC/LTC Workgroup Review

During the pre-rulemaking process, themes that emerged within the PAC/LTC Workgroup related to COVID-19 and care coordination include the following:

- Collecting recognized information on SARS-CoV-2 vaccination coverage among healthcare personnel and providing feedback to SNFs will allow facilities to benchmark coverage rates and improve coverage in their respective facilities. Reducing rates of COVID-19 in healthcare personnel will reduce transmission among patients and reduce instances of staff shortages due to illness.
- Sharing information across care settings and throughout the entire care team promotes shared accountability for the quality of patient care. This sharing ensures that all clinicians on the care team have up-to-date and accurate information. Moreover, this information is necessary to provide safe, high quality care.
- Care coordination is vital to safe and effective care transitions for all patients. Coordination across and among all providers helps to enable the most effective team-based care for patients.

Measuring care coordination beyond facility stays, including referral to effective services after the stay, is important. Managing care and all the services after discharge has a direct impact on patient and caregiver burden and on patient readmissions.

The high-impact measures reviewed during the MAP pre-rulemaking cycle and the emerging themes both align with the objective to create alignment across several programs. Specifically, these measures address the following CMS' MM 2.0 Framework areas: safety and seamless care coordination.

VI. Gaps in Endorsed Quality and Efficiency Measures

Under section 1890(b)(5)(A)(i)(IV) of the Act, the entity is required to describe in the annual report gaps in endorsed quality and efficiency measures, including measures within priority areas identified by HHS under the agency's National Quality Strategy, and where quality and efficiency measures are unavailable or inadequate to identify or address such gaps.

Part of driving better health outcomes through measurement depends on knowing where gaps exist in performance measures. By highlighting these areas, NQF encourages the development of measures on these topics.

Gaps Identified in Endorsement Projects

During their deliberations, NQF's endorsement Committees discussed and identified gaps in current measure portfolios. These gaps represent areas in which too few or no measures exist to drive quality improvement. Many of these areas align with CMS' MM 2.0 Framework areas and national priorities. By highlighting these areas, NQF encourages the development of measures on these topics. The Committees highlighted the need for performance measures in areas including opioid use, behavioral health, PROs, and digital measures. A list of the gaps identified by these Committees in 2021 can be found in Appendix G.

Gaps Identified in the Measure Applications Partnership

Not only did the MAP recommend measures for potential inclusion (and removal in the future) into federal healthcare quality programs, but it also identified topics with too few or no measures at the individual federal program level. This year, the MAP identified measure gaps related to PROs, health equity, telehealth, and care coordination. The list of measure gaps discussed by the MAP and arranged by each individual Workgroup can be found in Appendix H.

VII. Gaps in Evidence and Targeted Research Needs (i.e., Framework Projects)

Under section 1890(b)(5)(A)(i)(V) of the Act, the entity is required to describe areas in which evidence is insufficient to support endorsement of quality and efficiency measures in priority areas identified by the Secretary under the National Quality Strategy and where targeted research may address such gaps.

NQF undertook several projects in 2021 to provide national guidance on key healthcare issues that are also measurement gap areas. Providing guidance on how to address gap areas is the next step toward performance improvement and better outcomes through measurement. These NQF projects led to strategic blueprints, or frameworks, that map a path forward that reflects current science and evidence to improve care. A measurement framework organizes ideas that are important to measure for a topic area and describes how measurement should take place (i.e., whose performance should be measured, care settings where measurement is needed, when measurement should occur, or which individuals should be included in measurement).

In 2021, NQF continued its efforts on several projects to identify and address measurement gaps in important healthcare areas that are focused on maternal morbidity and mortality, attribution, rural telehealth and healthcare system readiness, opioids and behavioral health conditions, EHR-sourced measures for care coordination, social risk, risk adjustment, and PRO-PMs.

Maternal Morbidity and Mortality

Since 2000, maternal morbidity and mortality indicators have both steadily increased in the U.S., with the maternal mortality ratio reaching 17.4 maternal deaths per 100,000 live births in 2018. This is more than twice the ratio of other developed nations, such as France, the United Kingdom, and the Netherlands (Tikkanen et al, 2020). Maternal mortality encompasses the death of a woman during pregnancy, childbirth, or up to one year after the pregnancy ends, whereas maternal morbidity refers to unexpected short- or long-term negative outcomes that result from pregnancy or childbirth (Howell, 2018). Additionally, severe maternal morbidity (SMM) affects more than 60,000 women annually in the U.S. (Howell, 2018), with similarly rising trends over the last two decades. SMM is defined by the CDC using 21 health indicators and International Classification of Diseases (ICD) codes.

The risk of maternal morbidity and mortality is not shared equally among U.S. women. Maternal health outcomes in the U.S. are subject to persistent racial, ethnic, socioeconomic, and geographic disparities. Non-Hispanic Black women experience maternal mortality more frequently than the population as a whole (37.3 deaths per 100,000 live births) (National Center for Health Statistics, 2020). Women living in rural areas are also at greater risk for maternal mortality or SMM (Heck et al, 2021; Kozhimannil, 2020; Lisonkova et al, 2016). Although modest improvements in maternal mortality measurement have been attempted over the last two decades, researchers have pointed to the need for enhancements in quality measurement to address these inequities and identify opportunities for care improvement.

In 2021, NQF and the Maternal Morbidity and Mortality Committee finalized two measurement frameworks (one for maternal morbidity and one for maternal mortality), developed a set of measurement recommendations, and identified a measure concept for maternal mortality. NQF staff, with guidance from the Committee, incorporated this information into the Final Recommendations Report. The frameworks can be used by stakeholders to prioritize the development of measures and to prompt research in specific areas of maternal morbidity and mortality measurement. The frameworks capture the impacts of social, interpersonal, and systemic realities on an individual's maternal health experience. The maternal morbidity framework encompasses four domains for maternity care during an individual's life course: (1) Preconception/Well-Woman Care, (2) Prenatal Care, (3) Intrapartum Care, and (4) Postpartum Care. The final three also compose the following maternal mortality framework domains: (1) Prenatal Care, (2) Intrapartum Care, and (3) Postpartum Care. The domains of each framework are further categorized into 16 subdomains (i.e., comorbidities, discrimination, gaps in provider education, health behaviors, health equity, healthcare access, implicit bias, lived environment, mental health, patient experience, person-centered care, quality care, racism, risk-appropriate care, support, and unequal treatment), which capture areas of opportunity for improving maternal care within a population and community through enhanced measurement.

The subsequent set of measurement recommendations detailed in the report includes clear approaches and tangible steps to guide future maternal morbidity and mortality measurement. The recommendations were divided into short- and long-term time frames based on the Committee's expertise on perceived feasibility and intended impact. The Committee also recommended a measure

concept to improve maternal mortality measurement that focused on incorporating maternal mortality ratios from both pregnancy-related deaths and pregnancy-associated deaths in order to create a broader picture of maternal mortality within one measure.

This work aligns with CMS' MM 2.0 Framework by promoting measurement recommendations that largely focus on person-centered care, safety, equity, and wellness and prevention, as well as recommendations that promote seamless care coordination. The Committee emphasized the need for a patient's lived experience to be accounted for at every stage, as well as the importance of ensuring the patient has access to the appropriate care settings for any eventuality and each step of their care. The recommendations focus on outcome measures, including PROs, and emphasize the importance of measures that reflect social and economic determinants, particularly those identified within the 16 subdomains.

Measurement Framework for Addressing Opioids-Related Outcomes Among Individuals With Co-occurring Behavioral Health Conditions

With estimates of over 255 individuals dying each day from a drug overdose, the U.S. continues to grapple with a devastating opioid and substance use disorder crisis (Baumgartner & Radley, 2021b; National Vital Statistics System, 2021). These overdose deaths have been attributed to several distinct opioid waves, beginning with expanded opioid-prescribing in the late 1990s; increased overdose deaths involving heroin in 2010; and the rise of synthetic opioids, specifically involving illegally produced fentanyl and related high-potency analogues in 2013 (CDC, 2011; Rudd et al, n.d.). Today, the U.S. faces its fourth wave of the opioid crisis due to a rise in polysubstance use, such as the co-use of opioids and psychostimulants (e.g., methamphetamine, cocaine) (Gladden, et al, 2019).

In 2020, drug overdose-related deaths in the U.S. reached an all-time high with an estimated 93,331 deaths and over 69,700 deaths involving opioids (Ahmad, et al, 2021; Baumgartner, et al, 2021). Given the nature of the fourth wave of the opioid and substance use disorder crisis, individuals with SUDs/OUD and co-occurring behavioral health conditions are particularly vulnerable to overdose and mortality resulting from polysubstance use. Quality measures can help identify opportunities to improve the prevention and monitoring of SUDs/OUD, opioid-related overdoses, and opioid-related mortality among individuals with co-occurring behavioral health conditions who use SSSOs with other legal and/or illegal drugs. Measurement can also apprise providers, payers, and policymakers of opportunities for coordination and partnership across care settings and enable stakeholders to quickly adapt and improve their readiness in a rapidly changing landscape.

From 2020-2021, NQF convened the Opioids and Behavioral Health Committee through a series of seven web meetings to help inform an environmental scan of existing measures and measure concepts and to help develop a final report and quality measurement framework to address overdose and mortality resulting from polysubstance use involving SSSOs among individuals with co-occurring behavioral health conditions. The environmental scan identified over 180 measures and measure concepts, as well as critical measurement gaps and priorities. The scan also identified emerging best practices to inform quality measurement in this field. The findings of the environmental scan served as a foundation to further inform the Committee's discussions and the development of the final report and measurement framework to achieve the ultimate goal of reducing mortality and morbidity in this critical population.

The final report and measurement framework identify essential categories (i.e., domains) and subcategories (i.e., subdomains) to ensure comprehensive measurement of opioid-related outcomes

among individuals with co-occurring behavioral health conditions. The framework highlights three domains that the Committee identified as being important to providing quality care for this population: (1) Equitable Access, (2) Clinical Interventions, and (3) Integrates and Comprehensive Care for Concurrent Behavioral Health Conditions. The Equitable Access domain focuses on ensuring the existence of services and the financial coverage of services with an emphasis on access for vulnerable populations, such as individuals with poor SDOH or with criminal justice involvement; the subdomain focuses on the existence of services, financial coverage of services, and vulnerable populations. The Clinical Interventions domain builds on the foundation of equitable and accessible services. It comprises three subdomains: measurement-based care (MBC) for mental health and SUDs/OUD treatment, availability of medications for opioid use disorder (MOUD), and adequate pain management care. The Integrated and Comprehensive Care for Concurrent Behavioral Health Conditions subdomains focus on the coordination of the care pathways across clinical and community-based services, harm reduction services, and person-centered care.

In 2021, the Opioids and Behavioral Health Committee reconvened for an Option Year to develop guiding principles and use cases to help users implement the measurement framework. This initiative addresses multiple MM areas due to its cross-cutting focus on individuals with OUD/SUD and mental health conditions. This work aligns closely with the overall priority of chronic conditions, wellness and prevention, and behavioral health. In addition, the Opioids and Behavioral Health Committee's work aligns with the MM 2.0 Framework priorities related to promoting seamless care coordination across the care continuum and making care safer.

Social Risk Trial

In 2014, NQF initiated a Social Risk Trial journey that culminated in July 2021 with the publishing of the Social Risk Trial Final Report. The purpose of the two consecutive projects was to determine whether all applicable risk factors should be considered to advance measurement science and to ensure that performance measurement is fair, accurate, and unbiased. During the second trial period, which included all NQF endorsement cycles between the fall of 2017 and the spring of 2020, measure developers were asked to consider a rationale for the social risk adjustment of measures submitted for endorsement. This process resulted in data on conceptual models and a rationale for social risk adjustment for 120 performance measures submitted for endorsement. Of the 120 measures, 38 included at least one social risk factor in the final risk adjustment approach. The most common social risk factors used for risk adjustment were insurance status and type, race and ethnicity, education, and language (NQF: *Social Risk Trial Final Report*, 2020).

While the trial was indeed underway before the COVID-19 pandemic began, the pandemic has unmasked and exacerbated striking and long-standing societal, health, and healthcare inequities. Black, Hispanic, and Native Americans have experienced much higher rates of COVID-19 infections, hospitalizations, and deaths than White Americans (CDC, 2021c), thus bringing greater awareness and urgency to improve health equity in the U.S. This urgency for improved equity, along with a growing body of evidence that non-healthcare-related individual and community factors of care also affect outcomes and should be considered within measure evaluation, payment models, and reimbursement methods (Alberti et al, n.d.).

In 2021, the Disparities Standing Committee concluded that clear performance measures should be used for high-stakes incentives, value-based care delivery, and accountability purposes. The Committee

emphasized that performance stratification and adjustment for social risks should be considered, tested, and evaluated for each measure. The Committee made recommendations in the report for the U.S. government and healthcare community to establish and consistently collect a standardized set of demographic and stable social risk factors (e.g., race and ethnicity, education, and language) in order to facilitate the stratification and risk adjustment of performance measures; developers and users assess all performance measures individually to determine the appropriateness of adjustment for social risk factors. Additionally, the Committee requested that the NQF Risk Adjustment TEP update the measure evaluation guidance and set clear expectations for the inclusion of social risk factors in risk adjustment, the use of stratification, and the reporting of disparities in care across population groups *(NQF: Social Risk Trial Final Report*, 2020).

The Social Risk Trial and its resulting recommendations further CMS' MM 2.0 Framework goals of equity, affordability, and efficiency by identifying ways to improve performance measurement processes. The use of social risk adjustment in performance measurement may help to address systemic inequities related to access to care by equalizing reimbursement rates in alternative and VBP models instead of penalizing providers for factors outside of their control.

Best Practices for Developing and Testing Risk Adjustment Models

The quality measurement enterprise seeks to link payment to quality of care, generally known as VBP. For VBP to be successful, patients need accurate and reliable information on provider performance to make informed decisions. In addition, providers need comprehensive, reliable, and timely information to make quality care decisions that result in improved outcomes for patients while being held accountable for those outcomes in a fair and comparable manner. To level the playing field, risk adjustment methods have been applied to many measures, but not all, and not in a standardized method across measures.

Risk-adjusting measures to account for differences in patient health status and clinical factors (e.g., comorbidities, severity of illness) that are present at the start of care has been widely accepted and implemented. However, the increased use of outcome and resource use measures in payment models and public reporting programs has raised concerns regarding the adequacy and fairness of the risk adjustment methodologies used in these measures, especially as it relates to functional status and social risk factors (e.g., income, education, social support, neighborhood deprivation, and rurality). Functional risk factors are important to examine since they may mediate the relationship between social risk, quality outcomes, and resource use. Measure developers have long expressed a need for technical guidance on developing and testing social and/or clinical risk adjustment models for endorsement and maintenance and the appropriateness of a standardized risk adjustment framework. Moreover, risk adjustment of functional status-related factors within quality measurement is underexplored and underutilized for comparing provider performance on health outcomes and resource use.

Prior to 2015, NQF's guidance prohibited the inclusion of social risk factors in the risk adjustment models of measures submitted for NQF review and endorsement due to concerns of masking disparities in care. NQF convened a Risk Adjustment Expert Panel and implemented a 24-month trial period between April 2015 and April 2017, during which the adjustment of measures for social risk factors was no longer prohibited. By the end of the trial, NQF Committees and measure developers noted the importance of addressing all factors (both clinical and social) that can influence the result and validity of a performance measure in truly reflecting care quality. However, these efforts have demonstrated that while social risk adjustment may be feasible and appropriate, it remains challenging for many measure

developers. Limited availability of adequate social risk factor data and significant heterogeneity of social risk data and modeling approaches suggest that the exploration of electronic data sources to support functional and social risk adjustment is a critical next step.

During the base year, NQF conducted an environmental scan to identify current uses of functional and social risk factors in measurement. The TEP provided input on the environmental scan using relevant elements of the CDP to receive and review comments. NQF and the TEP also worked to develop the Technical Guidance on emerging good and best practices, as minimum standards, for risk adjustment models. These minimum standards apply to both outcome and cost/resource use performance measures and some process performance measures at any level of analysis (e.g., health plans, facilities, individual clinicians, and ACOs). During the next phase of this work, NQF will broaden stakeholder engagement efforts to garner input on the utility of the Technical Guidance and to make refinements based on stakeholder feedback and TEP input. This work aligns with CMS' MM 2.0 Framework areas of affordability, efficiency, and equity so that providers can be accurately assessed and not inappropriately penalized financially simply because their patient populations are sicker or have special healthcare needs.

Leveraging Quality Measurement to Improve Rural Health, Telehealth, and Healthcare Systems Readiness

Nearly 1 in 5, or 63 million Americans, are estimated to live in rural areas (U.S. Census Bureau, 2020). Rural Americans are at greater risk for poor health outcomes compared with those living in urban areas, including higher mortality related to heart disease, cancer, unintentional injury, chronic lower respiratory disease, and stroke (CDC, 2020). This gap in health outcomes is exacerbated by challenges such as lower access to healthcare (e.g., long distances to providers, limited local availability of specialists) (NQF, 2018). Telehealth, or the provision of healthcare services via information and telecommunication technologies, may offer a potential solution to these challenges. While telehealth may be an important part of the solution, there has been a lack of empirical evidence in the literature related to the experience of using telehealth to support surge capacity or to strengthen system readiness in times of pandemics, natural disasters, mass violence, or other public emergencies. This moment provides an excellent opportunity to use telehealth to improve healthcare system readiness and to reduce disruption in access during emergencies such as the COVID-19 pandemic. In these emergencies during which local healthcare providers are overwhelmed or unavailable, telehealth may allow for the provision of care that otherwise may not have been available at all.

In 2021, NQF convened a multistakeholder Rural Telehealth and Healthcare System Readiness Committee and performed an environmental scan summarizing literature related to barriers and facilitators of rural telehealth for healthcare system readiness, policies and practices related to telehealth, and relevant quality measures. Building on this environmental scan, as well as NQF's prior work on rural health, telehealth, and healthcare system readiness, the Committee created a conceptual measurement framework to guide quality and performance improvement for care delivered via telehealth in rural areas in response to disasters. The framework identifies five major domains for measurement: (1) Access to Care and Technology; (2) Costs, Business Models, and Logistics; (3) Experience; (4) Effectiveness; and (5) Equity, as well as 26 quality measures and 14 high-priority measure concepts relevant to measurement in this area.

Over the course of this project, the Committee also discussed major themes, including improved infrastructure and technology, comfort with telehealth, sustainability of telehealth needs, considerations for equity, comparison of in-person and telehealth services, measurement in emergencies, and existing quality measures. Telehealth use is limited in rural communities due to barriers such as broadband access and hardware; therefore, local institutions (e.g., libraries) may help provide access to internet and technology in a central location. Patients and providers may be uncomfortable with new technology platforms and devices; therefore, it is important to provide guidance and technical assistance for telehealth services and collect feedback from patients to help improve the patient experience. The use of telehealth expanded rapidly during the COVID-19 pandemic and increased access to care; however, providers and systems could be hesitant to make permanent investments in telehealth if expanded reimbursement and licensure policies that were enacted during the PHE are ended. While telehealth may increase access to culturally appropriate care and for patients in remote areas, it also has the potential to increase disparities if implemented poorly (e.g., low-income patients without internet-enabled devices remain without access to care). For conditions in which telehealth is an appropriate delivery method, the quality of care should be comparable across all modalities of care.

Quality measurement is important to inform opportunities for improvement during emergencies; however, stakeholders should acknowledge that clinicians have reduced control over outcomes during emergencies. The Committee highlighted relevant measures that exist in the areas of access to care, acute care, admissions/readmissions, behavioral health, care coordination, and patient experience. Relevant quality measures also differ by length of emergency (e.g., during the extended COVID-19 emergency, measures related to chronic care are relevant in addition to acute care measures). The Committee noted that existing quality measures may be helpful to track during emergencies but also encouraged the development of new measures specific to telehealth and readiness in rural areas for future use.

The Rural Telehealth and Healthcare System Readiness work aligns with multiple CMS MM areas. Notably, the final framework emphasizes person-centered care and seamless care coordination in providing effective telehealth services. Telehealth services also have the potential to provide more affordable care.

Building a Roadmap From Patient-Reported Outcome Measures to Patient-Reported Outcome Performance Measures

Diverse healthcare stakeholders increasingly view PRO-PMs as an important opportunity to ensure that the patient's voice is used to inform clinical decision making, improve quality of care, modify provider payment, and evaluate the value of medical technologies (Discern Health, 2017). The use of patient-reported measures is essential to improve transparency and to foster care that meets the needs of all patients. NQF and CMS have a long-standing partnership to advance PROs. Despite this shared commitment, progress towards the widespread development and use of PROMs and PRO-PMs has been slow: As of April 1, 2021, only 29 PRO-PMs have been endorsed by NQF, compared with more than 200 NQF-endorsed process measures and 320 NQF-endorsed outcome measures (NQF, 2021a). Despite CMS' commitment to digital measurement by 2025, little guidance exists to assist measure developers with the development of digital PRO-PMs (CMS, 2021b).

The Building a Roadmap project provides guidance to measure developers on developing digital PRO-PMs for use in CMS' VBP programs and APMs. It supports measure developers by identifying key

attributes of high quality PROMs that are well suited as data collection tools for PRO-PMs and by creating guidance for measure developers that offers an overview of the key stages and tasks related to developing and testing digital PRO-PMs. In 2021, NQF convened a TEP through a series of eight web meetings from January to September 2021. During these meetings, the TEP informed the development of three major reports: (1) Environmental Scan Report, (2) Interim Report, and (3) Technical Guidance Report.

The Environmental Scan Report assesses the current state of PRO-PM development and includes a systematic literature review, an overview of NQF's endorsement process for PRO-PMs, and a discussion of challenges and barriers that measure developers face. The report reviews CMS' MM 2.0 Framework goals, including the goal to amplify patients' voices through the use of PROMs and CMS' aim to have 100 percent of digital measures fully interoperable by 2025. The Environmental Scan Report will assist in the creation of guidance for measurement experts who are developing new PRO-PMs. The Interim Report builds on the current-state findings of the Environmental Scan Report by analyzing the attributes of PROMs that are used for CMS' APMs, VBP programs, and/or Medicare coverage determinations and assessing how those attributes have an impact on the effectiveness of related PRO-PMs. The purpose of this report is to help measure developers understand what defines a high quality PROM, and which attributes of a high quality PROM are most conducive to the development of a digital PRO-PM that is appropriate for regulatory purposes. The Technical Guidance Report will be published by the end of November 2021 and will include a "roadmap" for measure developers to use when developing digital PRO-PMs. The report will provide expert input on how best to address the challenges of collecting PRO data and developing high-impact PRO-PMs and is intended for novice and advanced measure developers alike. While the guidance in this report is generally applicable to all PRO-PMs, it specifically focuses on digital PRO-PMs that are intended for use in CMS' VBP programs and APMs.

This project aligns with CMS' multiple MM 2.0 Framework goals, including the prioritization of patient-reported measures. Measuring high quality clinical care will increasingly depend upon information that comes directly from patients, including reports about symptoms, ADLs, and quality of life. The use of PRO-PMs will help make advancements towards measures that are patient centered and meaningful to patients while also creating significant opportunities for improvement. Additionally, the use of digital PRO-PMs can help to alleviate and minimize measurement burden for providers. The Building a Roadmap initiative aligns with CMS' commitment to align measures across value-based programs and to transform to digital measurement by 2025.

Leveraging Electronic Health Record (EHR)-Sourced Measures to Improve Care Communication and Coordination

It is increasingly common for patients to have multiple healthcare providers and to receive care across multiple healthcare settings. Therefore, effective care communication and care coordination are vital to ensure treatment recommendations are aligned with and centered on the patient's goals. Care communication and care coordination are particularly relevant as clinicians collaborate over time and across settings to care for the same patient as well as during transitions in care between clinicians and settings. In addition, care communication and care coordination are also essential when healthcare providers interact with social service professionals and/or entities to address SDOH for vulnerable populations. Ineffective care communication and care coordination can result in fragmented care that compromises the quality of care patients receive and increases opportunities for negative outcomes (Rigby et al, 2015).

Measuring care communication and care coordination is essential to ensure that outcomes of the highest healthcare quality are equitably achieved since these activities are complex, involving multiple steps and a wide range of providers. Care communication and care coordination measure development is a challenge due to the difficulty of linking specific care communication and care coordination processes to outcomes. These outcomes can often be attributed to numerous factors, some of which are outside of the control of an individual clinician or hospital and some of which are intrinsic to the patient and their condition and comorbidities. Such complexity makes it difficult to meaningfully measure and compare outcomes across entities without robust risk adjustment, which can be challenging to accomplish (Al-Hashar et al, 2018).

EHRs have emerged as an important data source for quality measure development. While EHRs were initially designed for clinical documentation, test ordering and displaying results, and billing insurance companies, they can also be used as tools to facilitate care communication and care coordination between patients and caregivers and serve as a central location to document care communication and care coordination activities. This allows EHRs to serve as a way to improve care communication and care coordination and how both are measured. EHRs can capture both structured and unstructured data through the regular delivery of care. EHR data are also much richer with many more data fields and have little to no lag time between collecting data and calculating measures. NQF is convening a multistakeholder Committee to identify best practices to leverage EHR-sourced measures to improve care communication and care coordination quality measurement in an all-payer, cross-setting, and fully electronic manner.

During the base year, NQF convened a multistakeholder Committee and developed an Environmental Scan Report that identifies the current state of using EHRs to measure and improve care communication and coordination. The Committee developed consensus definitions for care communication and care coordination and explored the relationships between care communication and care coordination, EHRs, and improved outcomes. It also discussed the impact of SDOH on care communication, care coordination, and measurement as well as the advantages and challenges of measuring care communication and care coordination in EHRs. Additionally, nine expert interviews were conducted to further characterize the current state of this topic. In this project's Option Year, NQF began to collaborate with the Committee to develop consensus-based recommendations for how EHRs can better facilitate care communication and care coordination, how existing EHR-sourced measures and their future development can be leveraged to improve care communication and care coordination, addressing SDOH data collection via EHRs as it relates to care communication and care coordination, and possible EHR-sourced measure concepts related to care communication and care coordination.

This project aligns with CMS' multiple MM 2.0 Framework goals. The use of EHR-sourced measures to measure and improve care communication and care coordination minimizes the burden for providers because the data for these measures are less time consuming to collect. Additionally, improving care communication and care coordination creates a significant opportunity to improve health outcomes by making care safer (e.g., diagnostic errors, repeat testing) and affordable by increasing the communication and coordination of patient care; it also creates an opportunity for a multidisciplinary team by ensuring that treatment decisions are made with the patient's goals in mind.

Attribution for Critical Illness and Injury

As the U.S. healthcare system moves toward more advanced value-based models, quality measurement and reimbursement approaches that attribute patients are becoming increasingly important. Attribution is the methodology used to assign patients and their quality and cost outcomes to providers or entities (*NQF: Attribution - Principles and Approaches*, 2016). Most attribution approaches in use today assign patients to a single, central unit (e.g., primary care provider) for outcomes related to chronic conditions. Care for large-scale emergencies, however, is often based on regional response models, and patients may receive care or services from multiple entities (e.g., EMS, hospitals, public health agencies, and local clinics). Effective care delivery during and after MCIs (e.g., mass shootings), PHEs (e.g., COVID-19), and for high-acuity ECSCs (e.g., trauma and burns) involves multiple teams that must collaborate over time and across specialties, institutions, and geography. These events are unpredictable and require a timely, coordinated response from various entities within a community or region.

The method used for patient attribution is important because evidence indicates that the model used influences measure performance results and reimbursement (e.g., shared savings, rewards, or penalties) (Mehrotra et al, 2017). In the context of VBP, attribution approaches determine which provider or group of providers is assigned the responsibility for observed care processes, outcomes, and costs. Sound quality measurement attribution methodologies that can accurately reflect entity performance are essential to building value-based care models. Attribution models can also be used to incentivize desirable behavior and promote team-based models of care delivery.

In 2021, NQF convened a multistakeholder Committee to make recommendations for developing geographical-/population-based quality measurement attribution models applicable to MCIs, PHEs, and high-acuity ECSCs. NQF, along with the input of the Attribution for Critical Illness and Injury Committee, produced an Environmental Scan Report and a Final Recommendations Report. Although there is limited evidence to support the best quality measurement attribution method for MCIs and emergencies, the environmental scan highlights findings to advance dialogue on appropriate approaches. The scan identified 128 existing quality measures that could be used to assess the provision of emergency care and outlines key themes for building attribution models for emergencies. These themes center on the prevailing finding that novel attribution approaches should recognize the unpredictability of large-scale emergencies and encourage all entities in a region to proactively plan together for these events. In addition, NQF gathered additional feedback from key informant interviews (KIIs) to supplement both the literature and the Committee's discussion and expanded on key themes. The findings from the environmental scan and KIIs were used to develop the Final Recommendations Report.

The Final Recommendations Report outlines the elements of attribution approaches for large-scale emergencies and discusses approaches and recommendations for developing quality measurement attribution models for high-acuity ECSCs and MCIs. Key considerations that include attribution approaches for MCIs should encourage coordination between all entities and appropriate resource allocation to promote the collaborative provision of care, employ a shared accountability model in which patients are assigned to all entities providing care, define regions prospectively based on geography and/or patterns of healthcare use, use process and structure readiness measures to align incentives, and support greater data sharing and development of a coordinated data infrastructure for MCI data. The Recommendations Report includes six use cases representing the application of these attribution considerations to various high-acuity emergency scenarios. Furthermore, the report identifies the current state of quality measurement for MCIs and high-acuity ECSCs, prioritizes quality measures for

potential use, and identifies concepts for new measures relevant to building a cohesive measurement system for MCIs and PHEs.

This project aligns with CMS' multiple MM 2.0 Framework goals because it promotes seamless care coordination, as well as the transfer of health information and interoperability between various entities that are responsible for the care of patients. Additionally, this project focuses on reducing disparities through its focus on health system readiness and the stance that regional coordination should support building community resilience with special attention on equity.

VIII. Coordination With Measurement Initiatives By Other Payers

Section 1890(b)(5)(A)(i)(I) of the Social Security Act (the Act) mandates that the Annual Report to Congress and the Secretary include a description of the implementation of quality and efficiency measurement initiatives under the Act and the coordination of such initiatives with quality and efficiency initiatives implemented by other payers.

Using performance measurement to drive better health outcomes requires alignment across payers to achieve the highest impact. In 2021, NQF continued using its unique convening power to bring together public and private payers to coordinate their quality measures and improvement strategies.

Core Quality Measures Collaborative (CQMC)

Both public and private payers use value-based programs to incentivize high quality, cost-efficient care. However, they often use different measures and large numbers of measures, resulting in higher burden and complexity for providers. The CQMC was created to address these challenges by forging alignment in the measures used and reducing measurement burden in these public- and private-sector value-based payment programs. The CQMC is a public-private partnership between AHIP and CMS and is housed at NQF. It includes over 300 Workgroup members spanning across over 70 member organizations, including health insurance providers, primary care and specialty societies, and consumer and employer groups. This broad-based coalition of healthcare leaders is working to reduce measurement burden and align measures among public and private payers. Measure alignment is frequently identified as a key success factor for VBP programs (Chien et al, 2019). Through the development of core measure sets, each Workgroup identifies high value, evidence-based measure sets that promote better patient outcomes and can inform the decisions of consumers, providers, and policymakers.

In 2021, NQF convened the CQMC to maintain its 10 existing core sets so that they continue to reflect the changing measurement landscape, including but not limited to changes in clinical practice guidelines, performance, data sources, or risk adjustment. The core sets that underwent ad hoc maintenance in 2021 include the following: (1) ACOs, Patient-Centered Medical Homes (PCMHs), and Primary Care; (2) Cardiology; (3) Gastroenterology; (4) HIV and Hepatitis C; (5) Medical Oncology; (6) Obstetrics and Gynecology; (7) Orthopedics; (8) Pediatrics; (9) Behavioral Health; and (10) Neurology. The CQMC also created a cross-cutting core set, which is applicable across multiple clinical conditions, settings, or procedures/services. The CQMC also develops materials to support the implementation and expanded use of the core sets by updating the Implementation Guide to include key insights and promising practices shared by regional collaboratives, purchasers, and health plans, as well as approaches for using data to identify and address disparities. In addition, the CQMC developed a Digital Measurement Guide, which outlines a shared understanding of digital measures and the data flow process, identifies the stakeholders involved in digital measurement, and highlights implementation barriers and opportunities to increase the use of digital measures in the CQMC's core sets.

The CQMC developed a communications plan to increase CQMC awareness, promote core set adoption, and create a new Health Equity Workgroup to help inform the Health Equity Measure Report. The report will present and prioritize health equity measures and identify disparities-sensitive measures in the core sets. In addition, NQF updated the core set measure selection principles (MSP) that inform measure addition and removal. The MSP are essential to ensuring consistent decision making and stakeholder acceptance of the measures in the core sets. NQF has also begun updating the previously published Gaps and Variation Analysis Report to include new recommendations for filling measurement gaps and promoting greater harmonization.

This work aligns closely with the goals of and enhancements to the MAP this year through recommending the removal of measures from value-based programs and convening stakeholders to bring a focus on health equity to the work. The CQMC also aligns with CMS' multiple MM 2.0 Framework goals due to the scope of its multistakeholder activities, which are aimed at advancing the quality measurement and value-based care landscape. Specifically, this project addresses the goals of affordability and efficiency, equity, chronic conditions, and behavioral health. In addition, the CQMC aims to make care affordable and efficient by ensuring healthcare services are being appropriately used.

IX. Other Activities Under Contract With HHS

Common Formats for Patient Safety

NQF is committed to supporting patient safety in partnership with AHRQ. The Common Formats for the Patient Safety project began in 2013, supported by AHRQ through CMS. Common Formats is a set of standardized definitions and formats for providers to collect and exchange information for any patient safety event. They apply to all patient safety concerns, including incidents, near misses or close calls, and unsafe conditions. AHRQ develops and maintains the Common Formats to facilitate and support standardized data collection. To allow for greater participation in this process from the private sector, AHRQ and CMS engaged NQF to solicit comments and advice to guide refinement of the Common Formats.

NQF coordinates the process to obtain comments from stakeholders about the Common Formats and facilitates feedback on those comments with an Expert Panel. The public has an opportunity to comment on all elements of the Common Formats modules using commenting tools developed and maintained by NQF. In 2021, NQF gathered public comments and feedback for the Common Formats for Event Reporting – Diagnostic Safety Version 0.1 (CFER-DS). During the commenting period, NQF received 142 distinct comments for the Diagnostic Safety documents. To address these comments, NQF held four Common Formats Expert Panel meetings. NQF and the Expert Panel recommended responses to the public comments and shared those with AHRQ for review. The focus on patient safety has been critical during the ongoing pandemic. COVID-19 increased the possibility of patient safety concerns and events, thus requiring an increased focus on this important area. This work aligns with CMS' MM 2.0 Framework area of safety.

X. Conclusion

The ongoing convergence of COVID-19 with social risk factors that can cause health disparities is a critical national priority and has increased the urgency to drive better health outcomes through measurement. NQF's unique ability to bring stakeholders together on quality measurement and

improvement strategies reinforces efforts to tackle the nation's most pressing health challenges, strengthen patient and caregiver engagement, eliminate disparities, reduce burden, and improve quality for all.

NQF's work in 2021 addressed the nation's health and healthcare challenges in many ways. First and foremost, NQF developed measurement recommendations for some of the most critical gaps that the pandemic highlighted: health outcomes and disparities in maternity care, overdose and mortality from opioid use and behavioral health conditions, and telehealth in rural areas. NQF's work also led to recommendations on accounting for social risk factors in measurement and capturing patient voices in digital measures.

In addition, NQF helped to shape the use of performance measures in the field by convening stakeholders from across the healthcare industry to review 78 measures across a variety of topics, such as hospitalizations, behavioral health and substance use, cost and efficiency, patient experience and safety, and women's health. The MAP reviewed measures for CMS' VBP and quality reporting programs, including COVID-19-specific measures. The MAP also reviewed measures centered on incorporating the patient voice into performance measures, safeguarding public health, and facilitating care coordination. Furthermore, the MAP began piloting the recommendation to remove measures from federal healthcare quality programs and created a new Advisory Group focused on health equity. The MAP aligns with another one of NQF's efforts to harmonize public- and private-payer value-based programs and reduce burden: the CQMC. The CQMC updated 10 core sets of measures for reliable use by public and private payers. It also began early efforts toward creating a new health equity group and updating criteria for adding and removing measures.

NQF's work this year made significant contributions to advance measurement science and support the MM 2.0 Framework by providing technical guidance on how to adjust measurement to reflect social and other factors, assign accountability to specific organizations or providers, use EHRs to facilitate care communication and coordination, develop digital measures that incorporate the patient voice, and better incorporate patient and caregiver perspectives into NQF's work. The CQMC also supported the field by releasing promising practices for implementing measures in value-based programs and approaches to increase the use of digital measures. Furthermore, NQF gathered public comments and provided feedback on a set of definitions and formats that allows providers and clinicians to collect and exchange information for any patient safety event. Through these efforts, NQF has provided the quality measurement community tangible guidance to strengthen healthcare quality measures.

In 2021, NQF identified measurement gaps to spur the development of performance measures and research. Gaps in NQF's measure portfolio relate to opioid use, behavioral health, PROs, and digital measures. The MAP also identified gaps at the individual federal program level regarding PROs, health equity, telehealth, and care coordination.

The projects summarized above and described in detail in this report demonstrate how NQF has continued to target the most pressing healthcare quality and safety issues, such as the effects of COVID-19 and health disparities, in close strategic alignment with HHS and CMS. The ongoing pandemic has led to delays and disruptions in care, reduced access to care, increased health and patient safety risks, increased behavioral health challenges, and more severe health disparities for vulnerable populations. These effects exacerbated and increased the need to address existing and new healthcare challenges. NQF's work is a necessary part of the nation's response to these challenges and progress toward a high

quality, value-based, and cost-efficient healthcare system. NQF and CMS will continue to lead by gathering stakeholders from across the healthcare arena to collectively use measurement to drive better health outcomes and ensure the best use of the nation's healthcare dollars.

XI. References

Abbaszade, A., Assarroudi, A., Armat, M. R., Stewart, J. J., Rakhshani, M. H., Sefidi, N., & Sahebkar, M. (2021). Evaluation of the Impact of Handoff Based on the SBAR Technique on Quality of Nursing Care. *Journal of Nursing Care Quality*, *36*(3), E38–E43. https://doi.org/10.1097/NCQ.0000000000000498

Administration for Community Living. (2021, May 27). *Profile of Older Americans | ACL Administration for Community Living*. Profile of Older Americans. https://acl.gov/aging-and-disability-in-america/data-and-research/profile-older-americans

Agency for Healthcare Research and Quality. (n.d.). *Patient Safety | Agency for Healthcare Research and Quality*. Retrieved November 17, 2021, from https://www.ahrq.gov/topics/patient-safety.html

Ahmad, F., Rossen, L., & Sutton, P. (2021, November 4). *Products—Vital Statistics Rapid Release—Provisional Drug Overdose Data*. https://www.cdc.gov/nchs/nvss/vsrr/drug-overdose-data.htm

Albers, G. W., Marks, M. P., & Lansberg, M. G. (2018). Thrombectomy for Stroke with Selection by Perfusion Imaging. *The New England Journal of Medicine*, *378*(19), 1849–1850. https://doi.org/10.1056/NEJMc1803856

Alberti, P. M., Teigland, C., & Nerenz, D. (n.d.). *To Design Equitable Value-Based Payment Systems, We Must Adjust For Social Risk | Health Affairs Blog*. Retrieved November 15, 2021, from https://www.healthaffairs.org/do/10.1377/hblog20200911.279192/full/

Al-Hashar, A., Al-Zakwani, I., Eriksson, T., Sarakbi, A., Al-Zadjali, B., Al Mubaihsi, S., & Al Za'abi, M. (2018). Impact of medication reconciliation and review and counselling, on adverse drug events and healthcare resource use. *International Journal of Clinical Pharmacy*, *40*(5), 1154–1164. https://doi.org/10.1007/s11096-018-0650-8

American Academy of Family Physicians. (n.d.). *Primary Care*. Primary Care. Retrieved November 17, 2021, from https://www.aafp.org/about/policies/all/primary-care.html

American Academy of Neurology. (n.d.). *Quality Measures*. Quality Measures. https://www.aan.com/practice/quality-measures/

Anderson, J. G., & Abrahamson, K. (2017). Your Health Care May Kill You: Medical Errors. *Studies in Health Technology and Informatics*, *234*, 13–17.

Bailey, A., Hayes, K., Katch, H., & Solomon, J. (2021, March 18). *Medicaid Is Key to Building a System of Comprehensive Substance Use Care for Low-Income People*. Center on Budget and Policy Priorities. https://www.cbpp.org/research/health/medicaid-is-key-to-building-a-system-of-comprehensive-substance-use-care-for-low

Baumgartner, J. C., & Radley, D. C. (2021a, March 25). *The Spike in Drug Overdose Deaths During the COVID-19 Pandemic and Policy Options to Move Forward*. https://doi.org/10.26099/gyf5-3z49

Baumgartner, J. C., & Radley, D. C. (2021b, August 16). *The Drug Overdose Toll in 2020 and Near-Term Actions for Addressing It*. https://doi.org/10.26099/gb4y-r129

Blum, A. B., Egorova, N. N., Sosunov, E. A., Gelijns, A. C., DuPree, E., Moskowitz, A. J., Federman, A. D., Ascheim, D. D., & Keyhani, S. (2014). Impact of Socioeconomic Status Measures on Hospital Profiling in New York City. *Circulation: Cardiovascular Quality and Outcomes*, *7*(3), 391–397. https://doi.org/10.1161/CIRCOUTCOMES.113.000520

Cancer Facts & Figures 2021 | American Cancer Society. (n.d.). Retrieved November 15, 2021, from https://www.cancer.org/research/cancer-facts-statistics/all-cancer-facts-figures/cancer-facts-figures-2021.html

Carr, B., Bowman, A., Wolff, C., Mullen, M. T., Holena, D., Branas, C. C., & Wiebe, D. (2017). Disparities in Access to Trauma Care in the United States: A Population-Based Analysis. *Injury*, *48*(2), 332–338. https://doi.org/10.1016/j.injury.2017.01.008

CDC. (2021, June 10). *NVSS - Maternal Mortality—Homepage*. Maternal Mortality. https://www.cdc.gov/nchs/maternal-mortality/index.htm

Center for Health Information Analysis. (2015). *Annual Report Series- Performance of the Massasschussett Healthcare System: A Focus on Provider Quality*. https://www.chiamass.gov/assets/docs/r/pubs/15/2015-Focus-on-Provider-Quality-Full-Report.pdf

Centers for Disease Control and Prevention. (2011, November 4). *Vital Signs: Overdoses of Prescription Opioid Pain Relievers --- United States, 1999--2008*. https://www.cdc.gov/mmwr/preview/mmwrhtml/mm6043a4.htm

Centers for Disease Control and Prevention. (2018, November 27). *More than a mental health problem*. Centers for Disease Control and Prevention. https://www.cdc.gov/vitalsigns/suicide/index.html

Centers for Disease Control and Prevention. (2020, March 25). *About Rural Health | CSELS | OPHSS | CDC*. https://www.cdc.gov/ruralhealth/about.html

Centers for Disease Control and Prevention. (2021a, February 8). *How Does CDC Identify Severe Maternal Morbidity? | CDC*. https://www.cdc.gov/reproductivehealth/maternalinfanthealth/smm/severe-morbidity-ICD.htm

Centers for Disease Control and Prevention. (2021b, April 28). *About Chronic Diseases | CDC*. https://www.cdc.gov/chronicdisease/about/index.htm

Centers for Disease Control and Prevention. (2021c, September 1). *Cases, Data, and Surveillance*. Centers for Disease Control and Prevention. https://www.cdc.gov/coronavirus/2019-ncov/covid-data/investigations-discovery/hospitalization-death-by-race-ethnicity.html

Centers for Disease Control and Prevention. (2021d, September 27). *Heart Disease Facts | cdc.gov*. Heart Disease Facts. https://www.cdc.gov/heartdisease/facts.htm

Centers for Medicare & Medicaid Services. (2021a). *Risk Adjustment in Quality Measurement* (p. 19). https://www.cms.gov/files/document/blueprint-risk-adjustment.pdf

Centers for Medicare & Medicaid Services. (2021b, March 31). *Meaningful Measures 2.0: Moving from Measure Reduction to Modernization | CMS*. https://www.cms.gov/meaningful-measures-20-moving-measure-reduction-modernization

Chien, A., Rosenthal, M. B., & United Healthcare. (2019). *A 3D Model for value-based care: The next frontier in financial incentives and relationship support*. https://newsroom.uhc.com/content/dam/newsroom/Harvard%20Report_FINAL_0923.pdf

Compton, M. T., & Shim, R. S. (2015). The Social Determinants of Mental Health. *FOCUS*, *13*(4), 419–425. https://doi.org/10.1176/appi.focus.20150017

Contract with a Consensus-Based Entity Regarding Performance Measurement. 42 U.S.C. 1395aaa(b)(1) (2014). (n.d.).

Council on Children with Disabilities and Medical Home Implementation Project Advisory Committee. (2014). Patient- and family-centered care coordination: A framework for integrating care for children and youth across multiple systems. *Pediatrics*, *133*(5), e1451-1460. https://doi.org/10.1542/peds.2014-0318

Discern Health. (2017). *Patient-Reported Outcome Performance Measures*. 23.

Doyle, C., Lennox, L., & Bell, D. (2013). A systematic review of evidence on the links between patient experience and clinical safety and effectiveness. *BMJ Open*, *3*(1), e001570. https://doi.org/10.1136/bmjopen-2012-001570

Dying in America: Improving Quality and Honoring Individual Preferences Near the End of Life. (2015). https://doi.org/10.17226/18748

Farrell, D., Jensen, E., Kocher, B., Lovegrove, N., Melhem, F., Mendonca, L., & Parish, B. (2008, December 1). *Accounting for the cost of US health care: A new look at why Americans spend more | McKinsey*. https://www.mckinsey.com/industries/healthcare-systems-and-services/our-insights/accounting-for-the-cost-of-us-health-care

Fox, J. P., Vashi, A. A., Ross, J. S., & Gross, C. P. (2014). Hospital-based, acute care after ambulatory surgery center discharge. *Surgery*, *155*(5), 743–753. https://doi.org/10.1016/j.surg.2013.12.008

Franks, P., & Fiscella, K. (2002). Effect of patient socioeconomic status on physician profiles for prevention, disease management, and diagnostic testing costs. *Medical Care*, *40*(8), 717–724. https://doi.org/10.1097/00005650-200208000-00011

GBD 2017 US Neurological Disorders Collaborators, Feigin, V. L., Vos, T., Alahdab, F., Amit, A. M. L., Bärnighausen, T. W., Beghi, E., Beheshti, M., Chavan, P. P., Criqui, M. H., Desai, R., Dhamminda Dharmaratne, S., Dorsey, E. R., Wilder Eagan, A., Elgendy, I. Y., Filip, I., Giampaoli, S., Giussani, G., Hafezi-Nejad, N., … Murray, C. J. L. (2021). Burden of Neurological Disorders Across the US From 1990-2017: A Global Burden of Disease Study. *JAMA Neurology*, *78*(2), 165–176. https://doi.org/10.1001/jamaneurol.2020.4152

Gupta, R., Woo, K., & Yi, J. A. (2021). Epidemiology of end-stage kidney disease. *Seminars in Vascular Surgery*, *34*(1), 71–78. https://doi.org/10.1053/j.semvascsurg.2021.02.010

Hall, M. J., Schwartzman, A., Zhang, J., & Liu, X. (2017). Ambulatory Surgery Data From Hospitals and Ambulatory Surgery Centers: United States, 2010. *National Health Statistics Reports*, *102*, 1–15.

Health Resources & Services Administration. (2017, April 28). *Office for the Advancement of Telehealth*. Official Web Site of the U.S. Health Resources & Services Administration.

Heck, J. L., Jones, E. J., Bohn, D., McCage, S., Parker, J. G., Parker, M., Pierce, S. L., & Campbell, J. (2021). Maternal Mortality Among American Indian/Alaska Native Women: A Scoping Review. *Journal of Women's Health (2002)*, *30*(2), 220–229.

Howell, E. A. (2018). Reducing Disparities in Severe Maternal Morbidity and Mortality. *Clinical Obstetrics and Gynecology*, *61*(2), 387–399.

Howell, E. A., Brown, H., Brumley, J., Bryant, A. S., Caughey, A. B., Cornell, A. M., Grant, J. H., Gregory, K. D., Gullo, S. M., Kozhimannil, K. B., Mhyre, J. M., Toledo, P., D'Oria, R., Ngoh, M., & Grobman, W. A. (2018). Reduction of Peripartum Racial and Ethnic Disparities: A Conceptual Framework and Maternal Safety Consensus Bundle. *Obstetrics & Gynecology*, *131*(5), 770–782.

Howlader, N., Noone, A., Krapcho, M., Miller, D., Brest, A., Yu, M., Ruhl, J., Tatalovich, Z., Mariotto, A., Lewis, D., Chen, H., Feuer, E., & Cronin, K. (2020, April 15). *SEER Cancer Statistics Review, 1975-2017*. SEER.

Hoyert L., D. (2021). *Maternal Mortality Rates in the United States, 2019*. National Center for Health Statistics. https://doi.org/10.15620/cdc:103855

Hsia, R. Y., Dai, M., Wei, R., Sabbagh, S., & Mann, N. C. (2017). Geographic Discordance Between Patient Residence and Incident Location in Emergency Medical Services Responses. *Annals of Emergency Medicine*, *69*(1), 44-51.e3. https://doi.org/10.1016/j.annemergmed.2016.05.025

Institute of Medicine & Committee on Quality of Health Care in America. (2000). *To Err Is Human: Building a Safer Health System*. https://doi.org/10.17226/9728

Jencks, S. F., Williams, M. V., & Coleman, E. A. (2009). Rehospitalizations among patients in the Medicare fee-for-service program. *The New England Journal of Medicine*, *360*(14), 1418–1428. https://doi.org/10.1056/NEJMsa0803563

Johnson, K., Posner, S. F., Biermann, J., Cordero, J. F., Atrash, H. K., Parker, C. S., Boulet, S., Curtis, M. G., CDC/ATSDR Preconception Care Work Group, & Select Panel on Preconception Care. (2006). Recommendations to improve preconception health and health care—United States. A report of the CDC/ATSDR Preconception Care Work Group and the Select Panel on Preconception Care. *MMWR. Recommendations and Reports: Morbidity and Mortality Weekly Report. Recommendations and Reports*, *55*(RR-6), 1–23.

Kamal, R. (2017, July 31). What are the current costs and outcomes related to mental health and substance use disorders? *Peterson-KFF Health System Tracker*. https://www.healthsystemtracker.org/chart-collection/current-costs-outcomes-related-mental-health-substance-abuse-disorders/

Kindig, D. A., Asada, Y., & Booske, B. (2008). A population health framework for setting national and state health goals. *JAMA*, *299*(17), 2081–2083. https://doi.org/10.1001/jama.299.17.2081

Kindig, D., & Stoddart, G. (2003). What Is Population Health? *American Journal of Public Health*, *93*(3), 380–383.

Kozhimannil, K. B. (2020). Indigenous Maternal Health—A Crisis Demanding Attention. *JAMA Health Forum*, *1*(5), e200517. https://doi.org/10.1001/jamahealthforum.2020.0517

Lisonkova, S., Haslam, M. D., Dahlgren, L., Chen, I., Synnes, A. R., & Lim, K. I. (2016). Maternal morbidity and perinatal outcomes among women in rural versus urban areas. *CMAJ: Canadian Medical Association Journal*, *188*(17–18), E456–E465. https://doi.org/10.1503/cmaj.151382

MacDorman, M. F., Declercq, E., Cabral, H., & Morton, C. (2016). Is the United States Maternal Mortality Rate Increasing? Disentangling trends from measurement issues Short title: U.S. Maternal Mortality Trends. *Obstetrics and Gynecology*, *128*(3), 447–455. https://doi.org/10.1097/AOG.0000000000001556

Majid, U. (2020). The Dimensions of Tokenism in Patient and Family Engagement: A Concept Analysis of the Literature. *Journal of Patient Experience*, *7*(6), 1610–1620. https://doi.org/10.1177/2374373520925268

Makary, M. A., & Daniel, M. (2016). Medical error-the third leading cause of death in the US. *BMJ (Clinical Research Ed.)*, *353*, i2139. https://doi.org/10.1136/bmj.i2139

Manary, M. P., Boulding, W., Staelin, R., & Glickman, S. W. (2013). The patient experience and health outcomes. *The New England Journal of Medicine*, *368*(3), 201–203. https://doi.org/10.1056/NEJMp1211775

Manohar, A., Cheung, K., Wu, C. L., & Stierer, T. S. (2014). Burden Incurred by Patients and Their Caregivers After Outpatient Surgery: A Prospective Observational Study. *Clinical Orthopaedics and Related Research*, *472*(5), 1416–1426. https://doi.org/10.1007/s11999-013-3270-6

McDermott, K., & Jiang, J. (2020, June). *Characteristics and Costs of Potentially Preventable Inpatient Stays, 2017 #259*. https://www.hcup-us.ahrq.gov/reports/statbriefs/sb259-Potentially-Preventable-Hospitalizations-2017.jsp

Medicare Payment Advisory Commission. (2021). *Report To Congress: Medicare Payment Policy*. https://www.medpac.gov/wp-content/uploads/import_data/scrape_files/docs/default-source/reports/mar21_medpac_report_to_the_congress_sec.pdf

Mehrotra, A., Burstin, H., & Raphael, C. (2017). Raising the Bar in Attribution. *Annals of Internal Medicine*, *167*(6), 434–435. https://doi.org/10.7326/M17-0655

Mental Health Myths and Facts | MentalHealth.gov. (2017, August 29). https://www.mentalhealth.gov/basics/mental-health-myths-facts

Messas, E., Goudot, G., Halliday, A., Sitruk, J., Mirault, T., Khider, L., Saldmann, F., Mazzolai, L., & Aboyans, V. (2020). Management of carotid stenosis for primary and secondary prevention of stroke: State-of-the-art 2020: a critical review. *European Heart Journal Supplements : Journal of the European Society of Cardiology*, *22*(Suppl M), M35–M42. https://doi.org/10.1093/eurheartj/suaa162

Mueller, J. T., McConnell, K., Burow, P. B., Pofahl, K., Merdjanoff, A. A., & Farrell, J. (2021). Impacts of the COVID-19 pandemic on rural America. *Proceedings of the National Academy of Sciences*, *118*(1). https://doi.org/10.1073/pnas.2019378118

Munnich, E. L., & Parente, S. T. (2014). Procedures take less time at ambulatory surgery centers, keeping costs down and ability to meet demand up. *Health Affairs (Project Hope)*, *33*(5), 764–769. https://doi.org/10.1377/hlthaff.2013.1281

National Alliance on Mental Illness. (n.d.). *Learn more about mental health | NAMI: National Alliance on Mental Illness*. Retrieved November 15, 2021, from https://www.nami.org/About-Mental-Illness/Research/Advancing-Discovery-Summit-Series

National Cancer Institute. (2020, September 25). *Cancer Statistics—National Cancer Institute* (nciglobal,ncienterprise) [CgvArticle]. Cancer Statistics. https://www.cancer.gov/about-cancer/understanding/statistics

National Center for Health Statistics. (2020, January 30). *First Data Released on Maternal Mortality in Over a Decade*. https://www.cdc.gov/nchs/pressroom/nchs_press_releases/2020/202001_MMR.htm

National Center for Health Statistics. (2021, July 14). Drug Overdose Deaths in the U.S. Up Nearly 30% in 2020. *NCHStats*. https://nchstats.com/2021/07/14/drug-overdose-deaths-in-the-u-s-up-nearly-30-in-2020/

National Institute on Drug Abuse. (2021, November 1). *COVID-19 & Substance Use*. National Institute on Drug Abuse. https://www.drugabuse.gov/drug-topics/comorbidity/covid-19-substance-use

National Quality Forum. (2006, December). *NQF: A National Framework and Preferred Practices for Palliative and Hospice Care Quality*. https://www.qualityforum.org/Publications/2006/12/A_National_Framework_and_Preferred_Practices_for_Palliative_and_Hospice_Care_Quality.aspx

National Quality Forum. (2018, August). *NQF: MAP Rural Health Final Report—2018*. https://www.qualityforum.org/Publications/2018/08/MAP_Rural_Health_Final_Report_-_2018.aspx

National Quality Forum. (2021a). *NQF: Quality Positioning System ™*. NQF Quality Positioning System. Reference from PRO-PM Technical Guidance Report: NQF. NQF: Quality Positioning System.; 2021. https://www.qualityforum.org/QPS.

National Quality Forum. (2021b, April). *NQF: Addressing Opioid-Related Outcomes Among Individuals With Co-Occurring Behavioral Health Conditions—An Environmental Scan of Quality Measures*. https://www.qualityforum.org/Publications/2021/04/Addressing_Opioid-

Related_Outcomes_Among_Individuals_With_Co-Occurring_Behavioral_Health_Conditions_-_An_Environmental_Scan_of_Quality_Measures.aspx

National Vital Statistics Reports. (2020). *Maternal Mortality in the United States:Changes in Coding, Publication, and Data Release,*. https://www.cdc.gov/nchs/data/nvsr/nvsr69/nvsr69-02-508.pdf

National Vital Statistics System. (2021, October 6). *Products—Vital Statistics Rapid Release—Provisional Drug Overdose Data*. https://www.cdc.gov/nchs/nvss/vsrr/drug-overdose-data.htm

NHE Fact Sheet | CMS. (2020, December 16). https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/NHE-Fact-Sheet

NQF: Attribution—Principles and Approaches. (2016, December). https://www.qualityforum.org/Publications/2016/12/Attribution_-_Principles_and_Approaches.aspx

NQF: Social Risk Trial Final Report. (2020, July). https://www.qualityforum.org/Publications/2021/07/Social_Risk_Trial_Final_Report.aspx

Panchal, N., Kamal, R., & 2021. (2021, February 10). The Implications of COVID-19 for Mental Health and Substance Use. *KFF*. https://www.kff.org/coronavirus-covid-19/issue-brief/the-implications-of-covid-19-for-mental-health-and-substance-use/

Patterson, W., & Lindsey, M. (2009). *Potentially Avoidable Hospitalizations: New York State medicaid Program, 2009*. 4.

Petersen, E. E., Davis, N. L., Goodman, D., & Cox, S. (2019). Pregnancy-Related Deaths, United States, 2011–2015, and Strategies for Prevention, 13 States, 2013–2017. *MMWR. Morbidity and Mortality Weekly Report*, *68*. https://doi.org/10.15585/mmwr.mm6818e1

Pileggi, C., Squillace, L., Giordano, M., Papadopoli, R., Bianco, A., & Pavia, M. (2019). Quality in perinatal care: Applying performance measurement using joint commission on accreditation of healthcare organizations indicators in Italy. *BMC Medical Research Methodology*, *19*(1), 83. https://doi.org/10.1186/s12874-019-0722-z

Powers, B. W., Yan, J., Zhu, J., Linn, K. A., Jain, S. H., Kowalski, J., & Navathe, A. S. (2020). The Beneficial Effects Of Medicare Advantage Special Needs Plans For Patients With End-Stage Renal Disease. *Health Affairs (Project Hope)*, *39*(9), 1486–1494. https://doi.org/10.1377/hlthaff.2019.01793

Pronovost, P., Weast, B., Schwarz, M., Wyskiel, R. M., Prow, D., Milanovich, S. N., Berenholtz, S., Dorman, T., & Lipsett, P. (2003). Medication reconciliation: A practical tool to reduce the risk of medication errors. *Journal of Critical Care*, *18*(4), 201–205. https://doi.org/10.1016/j.jcrc.2003.10.001

Rigby, M., Georgiou, A., Hyppönen, H., Ammenwerth, E., de Keizer, N., Magrabi, F., & Scott, P. (2015). Patient Portals as a Means of Information and Communication Technology Support to Patient-Centric Care Coordination—The Missing Evidence and the Challenges of Evaluation. A joint contribution of IMIA WG EVAL and EFMI WG EVAL. *Yearbook of Medical Informatics*, *10*(1), 148–159. https://doi.org/10.15265/IY-2015-007

Rossen, L. M., Womack, L. S., Hoyert, D. L., Anderson, R. N., & Uddin, S. F. G. (2020). The Impact of the Pregnancy Checkbox and Misclassification on Maternal Mortality Trends in the United States, 1999-2017. *Vital & Health Statistics. Series 3, Analytical and Epidemiological Studies*, *44*, 1–61.

Rudd, R. A., Paulozzi, L. J., Bauer, M. J., Burleson, R. W., & Carlson, R. E. (n.d.). *Increases in Heroin Overdose Deaths—28 States, 2010 to 2012*. Retrieved November 15, 2021, from https://www.cdc.gov/mmwr/preview/mmwrhtml/mm6339a1.htm

Schaefer, J. A., Ingudomnukul, E., Harris, A. H. S., & Cronkite, R. C. (2005). Continuity of care practices and substance use disorder patients' engagement in continuing care. *Medical Care*, *43*(12), 1234–1241. https://doi.org/10.1097/01.mlr.0000185736.45129.95

Schoenberg, N. C., Argula, R. G., Klings, E. S., Wilson, K. C., & Farber, H. W. (2020). Prevalence and Mortality of Pulmonary Hypertension in ESRD: A Systematic Review and Meta-analysis. *Lung*, *198*(3), 535–545. https://doi.org/10.1007/s00408-020-00355-0

Steiner, C. A., Karaca, Z., Moore, B. J., Imshaug, M. C., & Pickens, G. (2006). Surgeries in Hospital-Based Ambulatory Surgery and Hospital Inpatient Settings, 2014: Statistical Brief #223. In *Healthcare Cost and Utilization Project (HCUP) Statistical Briefs*. Agency for Healthcare Research and Quality (US). http://www.ncbi.nlm.nih.gov/books/NBK442035/

Substance Abuse and Mental Health Services Administration. (2020, September). *Key Substance Use and Mental Health Indicators in the United States: Results from the 2019 National Survey on Drug Use and Health*. CLOUD. https://www.opioidlibrary.org/document/key-substance-use-and-mental-health-indicators-in-the-united-states-results-from-the-2019-national-survey-on-drug-use-and-health/

Sweeney, C. (2021, February 16). *A crisis on top of a crisis: COVID-19 and the opioid epidemic*. News. https://www.hsph.harvard.edu/news/features/a-crisis-on-top-of-a-crisis-covid-19-and-the-opioid-epidemic/

Tanenbaum, S. J. (2005). Evidence-based practice as mental health policy: Three controversies and a caveat. *Health Affairs (Project Hope)*, *24*(1), 163–173. https://doi.org/10.1377/hlthaff.24.1.163

Throughout this report, the relevant statutory language appears in italicized text. (n.d.).

Tikkanen, R., & Abrams, M. (2020, January 30). *U.S. Health Care from a Global Perspective, 2019 | Commonwealth Fund*. https://www.commonwealthfund.org/publications/issue-briefs/2020/jan/us-health-care-global-perspective-2019

Tikkanen, R., Gunja, M., FitzGerald, M., & Zephyrin, L. (2020, November 18). *Maternal Mortality and Maternity Care in the United States Compared to 10 Other Developed Countries*. https://doi.org/10.26099/411v-9255

Tricco, A. C., Antony, J., Ivers, N. M., Ashoor, H. M., Khan, P. A., Blondal, E., Ghassemi, M., MacDonald, H., Chen, M. H., Ezer, L. K., & Straus, S. E. (2014). Effectiveness of quality improvement strategies for coordination of care to reduce use of health care services: A systematic review and meta-analysis. *CMAJ : Canadian Medical Association Journal*, *186*(15), E568–E578. https://doi.org/10.1503/cmaj.140289

Tung, E. L., Hampton, D. A., Kolak, M., Rogers, S. O., Yang, J. P., & Peek, M. E. (2019). Race/Ethnicity and Geographic Access to Urban Trauma Care. *JAMA Network Open*, *2*(3), e190138. https://doi.org/10.1001/jamanetworkopen.2019.0138

United States Renal Data System. (2019). *Annual Data Report*. USRDS. https://www.usrds.org/annual-data-report/

U.S. Census Bureau. (2020). *DEFINING "RURAL" AREAS*. https://www.census.gov/content/dam/Census/library/publications/2020/acs/acs_rural_handbook_2020_ch01.pdf

Virani, S. S., Alonso, A., Aparicio, H. J., Benjamin, E. J., Bittencourt, M. S., Callaway, C. W., Carson, A. P., Chamberlain, A. M., & Cheng, S. (2021, January 27). *Heart Disease and Stroke Statistics—2021 Update | Circulation*. https://www.ahajournals.org/doi/10.1161/CIR.0000000000000950

Ward, B. W., & Schiller, J. S. (2013). Prevalence of multiple chronic conditions among US adults: Estimates from the National Health Interview Survey, 2010. *Preventing Chronic Disease*, *10*, E65. https://doi.org/10.5888/pcd10.120203

World Health Organization. (2021a). *World health statistics 2021: Monitoring health for the SDGs, sustainable development goals*. World Health Organization. https://apps.who.int/iris/handle/10665/342703

World Health Organization. (2021b, April 1). *Primary health care*. https://www.who.int/news-room/fact-sheets/detail/primary-health-care

World Health Organization. (2021c, June 11). *Cardiovascular diseases*. Cardiovascular Diseases (Heart Attack, Stroke). https://www.who.int/westernpacific/health-topics/cardiovascular-diseases

Appendix A: 2021 Activities Performed Under Contract With HHS

1. Federally Funded Contracts Awarded in FY 2021 Under IDIQ Contract HHSM-500-2017-0060I

Contract Number	Task Order Name	Description	Period of Performance	Negotiated Contract Amount for FY 2021
75FCMC18F0010	Common Formats	Standardize definitions and formats for providers to collect and exchange information for any patient safety event.	9/14/2021-9/13/2022 (Option Year 3)	$138,032.00
75FCMC20F0001	Best Practices for Developing and Testing Risk Adjustment Models	Support Medicare's VBP accountability programs and address knowledge gaps by developing technical guidance for social and functional status-related risk adjustment and the appropriateness of a standard risk adjustment framework.	9/15/2021-9/14/2022 (Option Year 1)	$874,893.00
75FCMC20F0002	Measurement Framework for Addressing Opioid-Related Outcomes Among Individuals With Co-occurring Behavioral Health Conditions	The project will use a standardized, multistakeholder approach to update the measurement framework to address overdose and mortality resulting from polysubstance use involving SSSOs among individuals with co-occurring behavioral health conditions developed during the Base Year.	9/30/2021-9/29/2022 (Option Year 1)	$578,974.00
75FCMC20F0004	Leveraging Electronic Health Record (EHR)-Sourced Measures	Identify the causes, nature, and extent of the EHR data quality issues, and recommend best practices for addressing these issues to increase the scientific acceptability (i.e., reliability, validity), use and usability, and feasibility of eCQMs.	9/25/2021-9/24/2022 (Option Year 1)	$781,502.00
75FCMC21F0002	Measure Additional, Removal, and Prioritization for Expansion of the CQMC	Identify and align high value, high-impact, and evidence-based measures across public and private payers that promote better patient outcomes and provide useful information for improvement, decision making, and payment.	9/17/2021-9/16/2022	$499,571.00
HHSM500T0001	Endorsement & Maintenance	Endorsement and maintenance of endorsement of standardized healthcare performance measures	9/27/2021-9/26/2022 (Option Year 4)	$8,046,209.00
HHSM500T0002	Annual Report to Congress and HHS	Report to Congress and the Secretary that highlights the implementation of quality and efficiency measurement initiatives under the SSA	9/27/2021-9/26/2022 (Option Year 4)	$133,836.00
HHSM500T0003	Measure Applications Partnership	Provide recommendations related to multistakeholder group input on the selection of quality and efficiency measures for payment and public-reported programs.	3/27/2021-9/26/2022 (Option Year 3)	$2,984,211.00

TOTAL AWARD	-	**$14,037,228.00**

Cells marked by a dash (-) are intentionally left blank.

2. NQF Financial Information for FY 2021 *(unaudited)*

Contributions and Grants	**$21,319,969.00**
Program Service Revenue	$331,352.00
Investment Income	$526,491.00
Other Revenue	$477,705.00
TOTAL REVENUE	$22,655,517.00
Grants and Similar Amounts Paid	0.00
Benefits Paid to or for Members	0.00
Salaries, Other Compensation, Employee Benefits	$13,813,167.00
Other Expenses[1]	$7,340,170.00
TOTAL EXPENSES	$21,153,337.00

[1] "Other Expenses" may include operating and overhead costs.

Appendix B: Multistakeholder Group Rosters: Committee, Workgroups, Task Forces, and Advisory Panels

As a consensus-based entity, National Quality Forum (NQF) ensures that there is comprehensive representation from the healthcare sector across all its convened Committees, Workgroups, Task Forces, and Advisory Panels. As a consensus-based entity, NQF requires all multistakeholder representatives to undergo a disclosure of interest (DOI) process prior to being appointed. This allows for a fair, open, and transparent process. During this time, NQF did not identify any known conflicts of interest that would undermine the objectivity of the deliberations mentioned above.

Per the NQF Conflict of Interest Policy for Committees, all nominees are asked to complete a general DOI form for each Committee to which they have applied prior to being seated on the Committee. The DOI form for each nominee is reviewed holistically and in the context of the topic area in which the Committee will be reviewing measures, if applicable. This general DOI form must be completed annually through NQF's website in order to participate in a Committee. Specific to CDP Standing Committees, once nominees have been selected to serve on a Committee, a measure-specific DOI form is distributed near the beginning of each evaluation cycle. This measure-specific DOI form is used to determine whether any members will be required to recuse themselves from the discussion of one or more measures under review based on prior involvement or relationships to entities relevant to the topic area. Because Standing Committee members are asked to review various types of measures throughout their term of service, NQF asks members to complete the measure-specific DOI form for all measures being evaluated in each cycle, as well as any measures that are related to, or competing with, measures being evaluated to ensure any potential conflicts or biases have been identified. Committee members who fail to return a completed measure-specific DOI form prior to the measure evaluation meetings will not be allowed to participate in the discussion or submit votes on the measures being evaluated.

In 2021, NQF collected DOI forms from 42 Committees. No conflicts that impacted their participation on Committees were disclosed. A copy of NQF's DOI forms can be found here.

In 2021, NQF convened 609 volunteers across 48 multistakeholder groups. Of these groups, it included the following:

Healthcare Sector	Percentage
Provider	30%
Consumer	7%
Health Professional	15%
Supplier	4%
Health Plan	10%
Quality Measurement Research & Improvement	11%
Purchaser	9%
Public Community Health Agency Council	6%
Patient/Caregiver	8%

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All-Cause Admissions and Readmissions

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Mayo Clinic
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Vice Chancellor for Healthcare Measurement and Evaluation, UC Irvine School of Medicine
Joseph Kunisch, PhD, RN-BC, CPHQ
Memorial Hermann Health System
Paul Kurlansky, MD
Center for Innovation and Outcomes Research / Director of Research, Recruitment and CQI, Columbia University, College of Physicians and Surgeons / Columbia HeartSource
Zhenqiu Lin, PhD
Yale-New Haven Hospital
Jack Needleman, PhD
University of California Los Angeles
Eugene Nuccio, PhD
University of Colorado, Anschutz Medical Campus
Ronald Copeland, MD, FACS
Kaiser Permanente
José Escarce, MD, PhD
David Geffen School of Medicine, University of California at Los Angeles
(UCLA) Fielding School of Public Health
Traci Ferguson, MD, MBA, CPE
WellCare Health Plans, Inc.

Sean O'Brien
Duke University Medical Center
Jennifer Perloff, PhD
Brandeis University
Patrick Romano
University of California Davis Davis, CA
Sam Simon, PhD
Mathematica Policy Research
Alex Sox-Harris
Department of Surgery, Stanford University
Ronald Walters, MD, MBA, MHA, MS
University of Texas MD Anderson Cancer Center
Terri Warholak
University of Arizona, College of Pharmacy
Eric Weinhandl
Epidemiology and Biostatistics, Fresenius Medical Care North America
Susan White, PhD, RHIA, CHDA
The James Cancer Hospital at The Ohio State University Wexner Medical Center

Appendix C: MAP Measure Selection Criteria

The MAP uses its MSC to guide its review of MUCs. The MSC are intended to assist the MAP with identifying characteristics that are associated with ideal measure sets used for public reporting and payment programs. The MSC are not absolute rules; rather, they are meant to provide general guidance on measure selection decisions and to complement program-specific statutory and regulatory requirements. The central focus should be on the selection of high quality measures that address key national healthcare priorities. Preferences for measure selection include evaluating the relative strengths and weaknesses of a program measure set and how the addition of an individual measure would contribute to the set.

To determine whether a measure should be considered for a specified program, the MAP evaluates the MUCs against the MSC. Additionally, the MSC serve as the basis for the preliminary analysis algorithm. MAP members are expected to familiarize themselves with the criteria and use them to indicate their support for an MUC.

1. NQF-endorsed measures are required for program measure sets, unless no relevant endorsed measures are available to achieve a critical program objective. Measures are based on scientific evidence and meet the requirements for validity, feasibility, reliability, and use.

Demonstrated by a program measure set that contains measures that meet the NQF endorsement criteria, including importance to measure and report, scientific acceptability of measure properties, feasibility, usability and use, and harmonization of competing and related measures.

Subcriterion 1.1 Measures that are not NQF-endorsed should be submitted for endorsement if selected to meet a specific program need.

Subcriterion 1.2 Measures that have had endorsement removed or have been submitted for endorsement and were not endorsed should be removed from programs.

Subcriterion 1.3 Measures that are in reserve status (i.e., topped out) should be considered for removal from programs.

2. Program measure set uses impactful measures, which significantly advance healthcare outcomes for high-priority areas in which there is a demonstrated performance gap or variation.

Demonstrated by a program measure set that promotes improvement in key national healthcare priorities, such as CMS' MM 2.0 Framework, emerging public health concerns, and ensuring that the set addresses key improvement priorities for all providers.

3. Program measure set is responsive to specific program goals and requirements, including all statutory requirements.

Demonstrated by a program measure set that is "fit for purpose" for the particular program.

Subcriterion 3.1 Program measure set includes measures that are applicable to and appropriately tested for the program's intended care setting(s), level(s) of analysis, and population(s).

Subcriterion 3.2 Measure sets for public reporting programs should be meaningful for consumers and purchasers.

Subcriterion 3.3 Measure sets for payment incentive programs should contain measures for which there is broad experience demonstrating usability and usefulness (Note: For some Medicare payment programs, statute requires that measures must first be implemented in a public reporting program for a designated period).

Subcriterion 3.4 Avoid selection of measures that are likely to create significant adverse consequences when used in a specific program.

Subcriterion 3.5 Emphasize inclusion of endorsed measures that have eMeasure specifications available.

4. Program measure set may include a mix of measure types; however, the highest priority is given to measures that are digital, or patient centered/PROs, and/or support equity. Process measures must have a direct and proven relationship to improved outcomes in a high-impact area in which there are no outcome, or intermediate outcome, measures.

Demonstrated by a program measure set that includes an appropriate mix of process, outcome, experience of care, cost/resource use/appropriateness, composite, and structural measures necessary for the specific program.

Subcriterion 4.1 In general, preference should be given to measure types that address specific program needs.

Subcriterion 4.2 Public reporting program measure sets should emphasize outcomes that matter to patients, including patient- and caregiver-reported outcomes.

Subcriterion 4.3 Payment program measure sets should include outcome and cost measures to capture value.

5. Program measure set enables measurement of person- and family-centered care and services AND are meaningful to patients and useful in making best-care choices.

Demonstrated by a program measure set that addresses access, choice, self-determination, and community integration.

Subcriterion 5.1 Measure set addresses patient/family/caregiver experience, including aspects of communication and care coordination.

Subcriterion 5.2 Measure set addresses shared decision making, such as for care and service planning and establishing advance directives.

Subcriterion 5.3 Measure set enables assessment of the person's care and services across providers, settings, and time.

6. Program measure set supports healthcare equity; helps identify gaps and disparities in care; and promotes accessible, culturally sensitive, and unbiased care for all.

Demonstrated by a program measure set that promotes equitable access and treatment by considering healthcare disparities. Factors include addressing race, ethnicity, socioeconomic status, language, gender, sexual orientation, age, or geographical considerations (e.g., urban versus rural). Program measure set can also address populations at risk for healthcare disparities (e.g., people with behavioral/mental illness).

Subcriterion 6.1 Program measure set includes measures that directly assess healthcare disparities (e.g., interpreter services).

Subcriterion 6.2 Program measure set includes measures that are sensitive to disparities measurement (e.g., beta blocker treatment after a heart attack) and that facilitate stratification of results to better understand differences among vulnerable populations.

7. Program measure sets are aligned across programs and settings as appropriate and possible.

Demonstrated by a program measure set that supports efficient use of resources for data collection and reporting and supports alignment across programs. The program measure set should balance the degree of effort associated with measurement and its opportunity to improve quality.

Subcriterion 7.1 Program measure set demonstrates parsimony and efficiency (i.e., minimum number of measures and the least burdensome measures that achieve program goals).

Subcriterion 7.2 Program measure set places strong emphasis on measures that promote alignment and can be used across multiple programs or applications.

8. (NEW) Program measure sets reflect a balance of accountability yet efficiency, which minimizes burden to providers/facilities while maintaining accountability for the achievement of excellence.

Appendix D: MAP Structure, Members, Criteria for Service, and Rosters

The MAP operates through a two-tiered structure. Guided by the priorities and goals of the Department of Health and Human Services' (HHS) NQS, the MAP Coordinating Committee provides direction and direct input to HHS. The MAP Workgroups and Advisory Groups counsel the Coordinating Committee on measures needed for specific care settings, care providers, and patient populations. Each multistakeholder group includes individuals with content expertise and organizations particularly affected by the work.

MAP members are selected based on National Quality Forum (NQF) Board-adopted selection criteria through an annual nominations process and an open public commenting period. Balance among stakeholder groups is paramount. Due to the complexity of the MAP's tasks, individual subject-matter experts are included in the groups. Federal government ex officio members are nonvoting because federal officials cannot advise themselves. MAP members serve staggered three-year terms.

MAP Coordinating Committee

COMMITTEE CO-CHAIRS (VOTING)

Charles Kahn, III, MPH
Federation of American Hospitals

Misty Roberts, MSN
Humana

ORGANIZATIONAL MEMBERS (VOTING)

America's Health Insurance Plans

American Academy of Hospice and Palliative Medicine

American College of Physicians

American Health Care Association

American Medical Association

American Nurses Association

AmeriHealth Caritas

BlueCross BlueShield Association

Covered Californica

HCA Healthcare

National Committee for Quality Assurance

National Patient Advocate Foundation

Network for Regional Healthcare Improvement

Patient & Family Centered Care Partners

Purchaser Business Group on Health

The Joint Commission

The Leapfrog Group

INDIVIDUAL SUBJECT-MATTER EXPERTS (VOTING)

Dan Culica, MD, PhD

Janice Tufte

Ron Walters, MD, MBA, MHA

FEDERAL LIAISONS (NON-VOTING)

Agency for Healthcare Research and Quality (AHRQ)

Centers for Disease Control and Prevention (CDC)

Centers for Medicare & Medicaid Services (CMS)

Office of the National Coordinator for Health Information Technology (ONC)

MAP Clinician Workgroup Members

COMMITTEE CO-CHAIRS (VOTING)

Rob Fields, MD

National Association of ACOs

Diane Padden, PhD, CRNP, FAANP

American Association of Nurse Practitioners

ORGANIZATIONAL MEMBERS (VOTING)

American Academy of Family Physicians

American College of Cardiology

American College of Radiology

Blue Cross Blue Shield of Massachusetts

Consumers' Checkbook/Center for the Study of Services

Council of Medical Specialty Societies

Genentech, Inc.

HealthPartners, Inc.

Kaiser Permanente

Louise Batz Patient Safety Foundation

Magellan Health, Inc.

OCHIN, Inc.

Patient Safety Action Network

Pharmacy Quality Alliance

St. Louis Area Business Health Coalition

INDIVIDUAL SUBJECT-MATTER EXPERTS (VOTING)

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William Fleischman, MD, MHS

Stephanie Fry, MHS

Amy Nguyen Howell, MD, MBA, FAAFP

FEDERAL LIAISONS (NON-VOTING)

Centers for Disease Control and Prevention (CDC)

Centers for Medicare & Medicaid Services (CMS)

Health Resources and Services Administration (HRSA)

MAP Hospital Workgroup Members

COMMITTEE CO-CHAIRS (VOTING)

R. Sean Morrison, MD
National Coalition for Hospice and Palliative Care

Akin Demehin, MPH
American Hospital Association

ORGANIZATIONAL MEMBERS (VOTING)

American Case Management Association

American Society of Anesthesiologists

American Society of Health-System Pharmacists

America's Essential Hospitals

Association of American Medical Colleges

American Association of Kidney

City of Hope

Dialysis Patient Citizens

Greater New York Hospital Association

Henry Ford Health Systems

Henry Ford Health System

Medtronic

Memphis Business Group on Health

National Association for Behavioral Healthcare

Premier Healthcare Alliance

Press Ganey

Project Patient Care

Service Employees International Union

Society for Maternal-Fetal Medicine

Stratis Health

UPMC Health Plan

INDIVIDUAL SUBJECT-MATTER EXPERTS (VOTING)

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FEDERAL LIAISONS (NON-VOTING)

Agency for Healthcare Research and Quality

Centers for Disease Control and Prevention

Centers for Medicare & Medicaid Services

MAP Post-Acute Care/Long-Term Care Workgroup Members

COMMITTEE CO-CHAIRS (VOTING)

Gerri Lamb, PhD, RN, FAAN
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Kurt Merkelz, MD
Compassus

ORGANIZATIONAL MEMBERS (VOTING)

American Academy of Physical Medicine and Rehabilitation

American Geriatrics Society

AMDA-The Society for Post-Acute and Long-Term Care Medicine

American Occupational Therapy Association

American Physical Therapy Association

ATW Health Solutions

Encompass Health Corporation

Kindred Healthcare

LeadingAge

National Pressure Injury Advisory Panel

National Partnership for Healthcare and Hospice Innovation

National Transitions of Care Coalition

National Hospice and Palliative Care Organization

SNP Alliance

INDIVIDUAL SUBJECT-MATTER EXPERTS (VOTING)

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David Andrews, PhD

Terrie Black, DNP

Sarah Livesay, DNP, RN, ACNP-BC, CNS-BC

Paul Mulhausen, MD, MHS

FEDERAL LIAISONS (NON-VOTING)

Centers for Disease Control and Prevention

Centers for Medicare & Medicaid Services

Office of the National Coordinator for Health Information Technology (ONC)

MAP Rural Health Advisory Group Members

COMMITTEE CO-CHAIRS (VOTING)

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Kimberlyy Rask, MD, PhD, FACP
Alliant Health Solutions

ORGANIZATIONAL MEMBERS (VOTING)

American Academy of Family Physicians (AAFP)

American Academy of Physician Assistants

American College of Emergency Physicians

American Hospital Association

American Society of Health-System Pharmacists

Michigan Center for Rural Health

Minnesota Community Measurement

National Association of Rural Health Clinics

National Rural Health Association

National Rural Letter Carriers' Association (NRLCA)

UnitedHealth Groupe

INDIVIDUAL SUBJECT-MATTER EXPERTS (VOTING)

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Rev. Bruce Hanson

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Jessica Schumacher, PhD

Karen James, PhD,MS

Ana Verzone, MS, APRN, FNP, CNM

Holly Wolff, MHA

FEDERAL LIAISONS (NON-VOTING)

Federal Office of Rural Health Policy, DHHS/HRSA

Center for Medicare and Medicaid Innovation, Centers for Medicare & Medicaid Services

Indian Health Services, DHHS

MAP Health Equity Advisory Group Members

COMMITTEE CO-CHAIRS (VOTING)

Rebekah Angove, PhD
Patient Advocate Foundation

Laurie Zephyrin, MD, MPH, MBA
Commonwealth Fund

ORGANIZATIONAL MEMBERS (VOTING)

Aetna

American Medical Association

American Nurses Association

American Society of Health-System Pharmacists

America's Essential Hospitals

Beth Israel Lahey Health

Fenway Health

IBM Watson

Kentuckiana

National Committee for Quality Assurance

National Health Law Program

Patient Safety Action Network

Planned Parenthood Federation of America

The SCAN Foundation

Vizient

INDIVIDUAL SUBJECT-MATTER EXPERTS (VOTING)

Emily Almeda-Lopez, MPP

Susannah Bernheim, MD, MHS

Damien Cabezas, MPH, MSW

Mark Friedberg MD, MPP

Jeff Huebner, MD

Gerald Nebeker, PhD, FAAIDD

J. Nwando Olayiwola, MD, MPH, FAAFP

Nneka Sederstrom, PhD, MPH, MA, FCCP, FCCM

Cardinale Smith, MD, PhD

Melony Sorbero, PhD, MPH

Jason Suh, Doctor

FEDERAL LIAISONS (NON-VOTING)

Centers for Medicare & Medicaid Services (CMS)

Health Resources & Services Administration (HRSA)

Office of Minority Health (OMH)

Office of National Coordinator for Health Information Technology (ONC)

Veterans Health Administration

Appendix E: CQMC Measure Selection Principles

The selection principles guide the development and revision of the CQMC core sets and serve as a reference when determining whether a measure should be included in a core set. The principles for core measure sets are intended to balance concepts valued across the membership and outline the CQMC's vision for a comprehensive core set.

Principles for the CQMC core measure sets

1. Provide a holistic view of quality that assesses whether care is safe, effective, person centered, timely, efficient, and equitable.
2. Provide meaningful and usable information to all CQMC constituencies (i.e., consumers, providers, payers, purchasers, and regional collaboratives).
3. Include measures relevant to the medical condition of focus (i.e., "specialty-specific"), but also promote care that is coordinated across care settings and/or integrated across specialties.
4. Seek parsimony, alignment, and efficiency of measurement (i.e., minimum number of measures and the least burdensome measures).
5. Include an appropriate mix of measure types:
    - **a.** Allow for structural and process measures as needed, particularly for emerging areas of measurement
    - **b.** Emphasize outcome measures
    - **c.** Exclude cost and resource use measures because such aspects are encompassed in value-based care payment programs.
6. Highlight the value of consumer engagement in healthcare, including through the incorporation of PRO-PMs.
7. Encourage the use of solely standardized digital measurement to harness new data sources and reduce reporting burden.
8. Encourage continuous improvement by seeking out novel measures that address identified clinical quality gaps.
9. Pursue measures that go beyond clinical care and are intended to address health equity and social determinants of health (SDOH).

Principles for measures included in the CQMC core measure sets

1. Align with the CQMC's values, goals, and measure set selection principles
2. Support the advancement of health and healthcare improvement goals
    a. Prioritize measures addressing clinical areas with significant impacts on health.
    b. Emphasize measure concepts that have a strong tie to outcomes.
    c. Address areas in which change would be consequential (i.e., where there is variation in clinical care or an opportunity for overall improvement).
3. Are unlikely to promote unintended adverse consequences
4. Promote health equity by adopting measures that measure access to care, stratify clinical care measures to identify disparities, or measure progress toward addressing social needs.
5. Are scientifically sound (e.g., NQF-endorsed or otherwise proven to be evidence based, reliable, and valid in diverse populations)
    a. Articulate the source of the evidence used to form the basis of the measure clearly.
    b. Demonstrate high quality and sufficient quantity and consistency of evidence that acting on the measure result will reduce variation and improve health outcomes.
    c. Define the measure specifications clearly and transparently.
    d. Are tested at the applicable level of care
6. Represent a meaningful balance between measurement burden and innovation.

    a. Minimize data collection and reporting burden while maintaining clinical credibility (i.e., measures that fit into existing workflows, are feasible, and do not duplicate efforts)
    b. Are ambitious, yet providers being measured can meaningfully influence the results and are implemented at the intended level of attribution
    c. Are appropriately risk-adjusted and account for factors beyond control of providers, as necessary
7. Encourage the use of digital quality measures, including eCQMs, to take advantage of the opportunities provided by digital data sources.

Appendix F: CQMC Workgroup Rosters

The CQMC Full Collaborative comprises multistakeholder representatives (e.g., public and private payers, national medical associations, consumers/patient representatives, purchasers, and regional collaboratives). Organizations join the CQMC as voting and nonvoting participants; however, only voting participants may vote on Workgroup business.

ACO/PCMH/PC Workgroup

COMMITTEE CO-CHAIRS (VOTING)

American Academy of Family Physicians (AAFP), Co-Chair

Horizon Blue Cross Blue Shield of New Jersey, Co-Chair

ORGANIZATIONAL MEMBERS (VOTING)

Aetna

American Academy of Family Physicians (AAFP)

American Academy of Hospice and Palliative Medicine (AAHPM)

American Association on Health and Disability (AAHD)

American Benefits Council

American Board of Family Medicine Foundation (ABFM Foundation)

American College of Emergency Physicians (ACEP)

American College of Obstetricians and Gynecologists (ACOG)

American College of Physicians (ACP)

American Geriatrics Society (AGS)

American Heart Association

American Medical Association (AMA)

American Occupational Therapy Association

America's Health Insurance Plans (AHIP)

AmeriHealth Caritas

Anthem

Arkansas Blue Cross Blue Shield

Blue Cross and Blue Shield of Kansas City

Blue Cross and Blue Shield of North Carolina (BCBSNC)

Blue Cross Blue Shield Association

Business Group on Health

CareFirst Blue Cross Blue Shield

Centers for Medicare & Medicaid Services (CMS)

Consumers' Checkbook/Center for the Study of Services

Health Care Service Corporation (HCSC)

Horizon Blue Cross Blue Shield of New Jersey

Humana

Integrated Healthcare Association (IHA)

Kentuckiana Health Collaborative

Memphis Business Group on Health (MBGH)

National Association of ACOs (NAACOS)

National Kidney Foundation

Purchaser Business Group on Health (PBGH)

U.S. Department of Veterans Affairs (VA)

UnitedHealth Group

Wisconsin Collaborative for Healthcare Quality (WCHQ)

(NON-VOTING)

Apervita

Children's Hospital Association (CHA)

Health Care Transformation Task Force (HCTTF)

IMPAQ International

Mercer

National Committee for Quality Assurance (NCQA)

Nuna

Pharmacy Quality Alliance (PQA)

Rise, Inc.

Texas Medical Association (TMA)

Behavioral Health Workgroup

COMMITTEE CO-CHAIRS (VOTING)

American Psychiatric Association, Co-Chair

ORGANIZATIONAL MEMBERS (VOTING)

American Academy of Family Physicians (AAFP)

American Academy of Neurology (AAN)

American Association on Health and Disability (AAHD)

American College of Emergency Physicians (ACEP)

American College of Physicians (ACP)

American Heart Association

American Medical Association (AMA)

American Occupational Therapy Association

American Psychiatric Association

America's Health Insurance Plans (AHIP)

Arkansas Blue Cross Blue Shield

Blue Cross and Blue Shield of North Carolina (BCBSNC)

Blue Cross Blue Shield Association

Cambia Health Solutions

CareFirst Blue Cross Blue Shield

Centers for Medicare & Medicaid Services (CMS)

Cigna Healthcare

Health Resources and Services Administration (HRSA)

Humana

Kentuckiana Health Collaborative

Magellan Health

Memphis Business Group on Health (MBGH)

Mental Health America

Purchaser Business Group on Health (PBGH)

Shatterproof

U.S. Department of Veterans Affairs (VA)

UPMC Health Plan

Wisconsin Collaborative for Healthcare Quality (WCHQ)

(NON-VOTING)

American Hospital Association (AHA)

Apervita

Children's Hospital Association (CHA)

National Committee for Quality Assurance (NCQA)

Pharmacy Quality Alliance (PQA)

Rise, Inc

Texas Medical Association (TMA)

Cardiology Workgroup

COMMITTEE CO-CHAIRS (VOTING)

American College of Cardiology (ACC)

Cigna Healthcare

ORGANIZATIONAL MEMBERS (VOTING)

Blue Cross and Blue Shield of North Carolina (BCBSNC)

American College of Cardiology (ACC)

American College of Emergency Physicians (ACEP)

American College of Physicians (ACP)

American Heart Association

American Medical Association (AMA)

Anthem

America's Health Insurance Plans (AHIP)

Blue Cross Blue Shield Association

CareFirst Blue Cross Blue Shield

Centers for Medicare & Medicaid Services (CMS)

Cigna Healthcare

Humana

Magellan Health

National Kidney Foundation

National Patient Advocate Foundation (NPAF)

U.S. Department of Veterans Affairs (VA)

Wisconsin Collaborative for Healthcare Quality (WCHQ)

(NON-VOTING)

Ambulatory Surgery Center (ASC) Quality Collaboration

Apervita

Children's Hospital Association (CHA)

Memorial Hermann Health System

Pharmacy Quality Alliance (PQA)

Texas Medical Association (TMA)

Cross-Cutting Workgroup

COMMITTEE CO-CHAIRS (VOTING)

CareFirst Blue Cross Blue Shield

American College of Physicians (ACP)

ORGANIZATIONAL MEMBERS (VOTING)

Aetna

American Academy of Family Physicians (AAFP)

American Academy of Hospice and Palliative Medicine (AAHPM)

American Association on Health and Disability (AAHD)

American College of Emergency Physicians (ACEP)

American College of Obstetricians and Gynecologists (ACOG)

American College of Physicians (ACP)

American Gastroenterological Association (AGA)

American Occupational Therapy Association

America's Health Insurance Plans (AHIP)

Blue Cross Blue Shield Association

CareFirst Blue Cross Blue Shield

CareFirst Blue Cross Blue Shield

Centers for Medicare & Medicaid Services (CMS)

College of American Pathologists (CAP)

Health Resources and Services Administration (HRSA)

Magellan Health

Minnesota Community Measurement

National Patient Advocate Foundation (NPAF)

Purchaser Business Group on Health (PBGH)

(NON-VOTING)

Apervita

Cerner

IMPAQ International

National Committee for Quality Assurance (NCQA)

Pharmacy Quality Alliance (PQA)

Rise, Inc

Texas Medical Association (TMA)

Digital Measurement Workgroup

COMMITTEE CO-CHAIRS (VOTING)

Anthem

Council of Medical Specialty Societies (CMSS)

ORGANIZATIONAL MEMBERS (VOTING)

American Academy of Family Physicians (AAFP)

American Board of Family Medicine Foundation (ABFM Foundation)

American College of Physicians (ACP)

American Heart Association

American Society of Clinical Oncology (ASCO)

America's Health Insurance Plans (AHIP)

Arkansas Blue Cross Blue Shield

Blue Cross Blue Shield Association

Cambia Health Solutions

Centers for Medicare & Medicaid Services (CMS)

College of American Pathologists (CAP)

Health Resources and Services Administration (HRSA)

Minnesota Community Measurement

National Association of ACOs (NAACOS)

U.S. Department of Veterans Affairs (VA)

(NON-VOTING)

Apervita

Cerner

IMPAQ International

National Committee for Quality Assurance (NCQA)

Nuna

Pharmacy Quality Alliance (PQA)

Rise, Inc

Strategic Health Information Exchange Collaborative (SHIEC)

Texas Medical Association (TMA)

Gastroenterology Workgroup

COMMITTEE CO-CHAIRS (VOTING)

Aetna

American Gastroenterological Association (AGA)

ORGANIZATIONAL MEMBERS

(VOTING)

American College of Emergency Physicians (ACEP)

American College of Physicians (ACP)

American Gastroenterological Association (AGA)

Blue Cross and Blue Shield of North Carolina (BCBSNC)

Centers for Medicare & Medicaid Services (CMS)

U.S. Department of Veterans Affairs (VA)

(NON-VOTING)

Ambulatory Surgery Center (ASC) Quality Collaboration

Memorial Hermann Health System

Texas Medical Association (TMA)

HIV and Hepatitis C Workgroup

COMMITTEE CO-CHAIRS (VOTING)

HIV Medicine Association of the Infectious Diseases Society of America

Kaiser Permanente

ORGANIZATIONAL MEMBERS

(VOTING)

American College of Emergency Physicians (ACEP)

American College of Physicians (ACP)

Anthem

Blue Cross and Blue Shield of North Carolina (BCBSNC)

Blue Cross Blue Shield Association

CareFirst Blue Cross Blue Shield

Centers for Medicare & Medicaid Services (CMS)

Health Resources and Services Administration (HRSA)

National Patient Advocate Foundation (NPAF)

U.S. Department of Veterans Affairs (VA)

(non-voting)

Pharmacy Quality Alliance (PQA)

Texas Medical Association (TMA)

American Gastroenterological Association (AGA)

America's Health Insurance Plans (AHIP)

AmeriHealth Caritas

Implementation Workgroup

ORGANIZATIONAL MEMBERS

American Academy of Family Physicians (AAFP)

America's Health Insurance Plans (AHIP)

Centers for Medicare & Medicaid Services (CMS)

Cigna Healthcare

Kaiser Permanente

Kentuckiana Health Collaborative

Minnesota Community Measurement

UPMC Health Plan

Medical Oncology Workgroup

ORGANIZATIONAL MEMBERS

(VOTING)

Aetna

American Academy of Hospice and Palliative Medicine (AAHPM)

American College of Emergency Physicians (ACEP)

American College of Obstetricians and Gynecologists (ACOG)

American College of Physicians (ACP)

American Medical Association (AMA)

American Occupational Therapy Association

American Society of Clinical Oncology (ASCO)

America's Health Insurance Plans (AHIP)

Anthem

Blue Cross and Blue Shield of North Carolina (BCBSNC)

Blue Cross Blue Shield Association

CareFirst Blue Cross Blue Shield

Centers for Medicare & Medicaid Services (CMS)

College of American Pathologists (CAP)

Humana

Minnesota Community Measurement

National Patient Advocate Foundation (NPAF)

U.S. Department of Veterans Affairs (VA)

UnitedHealth Group

(NON-VOTING)

Apervita

Pharmacy Quality Alliance (PQA)

Texas Medical Association (TMA)

Obstetrics and Gynecology Workgroup

COMMITTEE CO-CHAIRS (VOTING**)**

Cigna Healthcare

Society for Maternal-Fetal Medicine (SMFM)

ORGANIZATIONAL MEMBERS

(VOTING)

American College of Emergency Physicians (ACEP)

American College of Obstetricians and Gynecologists (ACOG)

American College of Physicians (ACP)

America's Health Insurance Plans (AHIP)

AmeriHealth Caritas

Anthem

Blue Cross and Blue Shield of North Carolina (BCBSNC)

Blue Cross Blue Shield Association

CareFirst Blue Cross Blue Shield

Centers for Medicare & Medicaid Services (CMS)

Magellan Health

National Osteoporosis Foundation

Society for Maternal-Fetal Medicine (SMFM)

Wisconsin Collaborative for Healthcare Quality (WCHQ)

(NON-VOTING)

Ambulatory Surgery Center (ASC) Quality Collaboration

American Hospital Association (AHA)

Memorial Hermann Health System

Texas Medical Association (TMA)

Orthopedics Workgroup

COMMITTEE CO-CHAIRS

(VOTING)

American Academy of Orthopaedic Surgeons (AAOS)

Organizational Members

(VOTING)

American College of Emergency Physicians (ACEP)

American College of Physicians (ACP)

American Medical Association (AMA)

American Occupational Therapy Association

American Specialty Health (ASH)

America's Health Insurance Plans (AHIP)

Anthem

Blue Cross and Blue Shield of North Carolina (BCBSNC)

Blue Cross Blue Shield Association

CareFirst Blue Cross Blue Shield

Centers for Medicare & Medicaid Services (CMS)

Minnesota Community Measurement

National Osteoporosis Foundation

U.S. Department of Veterans Affairs (VA)

(NON-VOTING)

AAOS Registry Program

Ambulatory Surgery Center (ASC) Quality Collaboration

Memorial Hermann Health System

Texas Medical Association (TMA)

Pediatrics Workgroup

COMMITTEE CO-CHAIRS

(VOTING)

Aetna

American Academy of Pediatrics (AAP)

ORGANIZATIONAL MEMBERS

(VOTING)

American Academy of Family Physicians (AAFP)

Blue Cross and Blue Shield of North Carolina (BCBSNC)

American College of Emergency Physicians (ACEP)

American College of Physicians (ACP)

AmeriHealth Caritas

Anthem

America's Health Insurance Plans (AHIP)

Blue Cross and Blue Shield of North Carolina (BCBSNC)

Blue Cross Blue Shield Association

CareFirst Blue Cross Blue Shield

Centers for Medicare & Medicaid Services (CMS)

Health Resources and Services Administration (HRSA)

Horizon Blue Cross Blue Shield of New Jersey

Kentuckiana Health Collaborative

Magellan Health

Minnesota Community Measurement

UnitedHealth Group

(NON-VOTING)

Children's Hospital Association (CHA)

Health Care Transformation Task Force (HCTTF)

Memorial Hermann Health System

Texas Medical Association (TMA)

Appendix G: Identified Gaps by NQF Measure Portfolio

In 2020, National Quality Forum (NQF) Standing Committees identified the following measure gaps—in which high value measures are too few or nonexistent to drive improvement—across topic areas for which measures were reviewed for endorsement.

All-Cause Admissions and Readmissions

No measure gaps were identified.

Behavioral Health and Substance Use

No measure gaps were identified.

Cancer

- Access the benefits of rehabilitation services (e.g., orthopedic rehabilitation services and postsurgical services), such as quality of life, the prevention of resource use (e.g., readmission to the hospital), and associated costs.
- Evaluate psychological and physical long-term effects after surviving cancer (e.g., appropriate screening for long-term cardiac toxicities, chest wall radiation, cancer prevention, and cancer genetic screening).
- Develop digital measures to improve data accessibility and accuracy.

Cardiovascular

No measure gaps were identified.

Cost and Efficiency

No measure gaps were identified.

Geriatrics and Palliative Care

- Taka a holistic view of palliative care, and focus on all the domains of an individual, including psychological and psychiatric, cultural, spiritual, religious, existential, and social aspects of care.
- Use functional status measurement to predict where resources should be allocated and the areas in which individuals need additional support.
- Evaluate communication as part of experience of care.

Neurology

No measure gaps were identified.

Patient Experience and Function

No measure gaps were identified.

Patient Safety

No measure gaps were identified.

Perinatal and Women's Health

No measure gaps were identified.

Prevention and Population Health
No measure gaps were identified.

Primary Care and Chronic Illness
No measure gaps were identified.

Renal
No measure gaps were identified.

Surgery
- Focus on areas/procedures that are high volume and high risk.
- Assess opioid use and multimodal pain management systems.
- Calculate the value of care by dividing quality by cost in order to identify and set de-implementation targets for suboptimal interventions.
- Capture “never events,” such as putting the wrong implant in a patient or operating on the wrong side of the body.
- Expand existing surgery measures, such as mortality, complications, and infections, to general surgery and other specialties that have yet to develop measures in these areas.
- Evaluate patient experience through a review of the full episode of care, including change in function over time, communication, decision making, pain management, patient education, and patient-focused pre- and postoperative care.

Appendix H: Medicare Measure Gaps Identified by NQF's Measure Applications Partnership

MAP Clinician Workgroup

Within the MIPS measure set, the MAP emphasized the need for measures associated with racism and equity rather than simply stratifying existing measures.

The MAP identified measure gaps within the Shared Savings Program, namely the shift in quality measures disagreed with the choice to move to eCQMs, and suggested that an over-reduction has occurred in the number of measures within the program. The MAP's suggestions also included the need for Shared Savings Program measures to consider racism and equity rather than simply stratifying existing measures.

MAP Hospital Workgroup

During the ESRD QIP Program gaps discussion, the MAP suggested that the Centers for Medicare & Medicaid Services (CMS) identify opportunities to measure cultural obstacles to quality improvement that can further promote a commitment to doing quality improvement and a culture of knowledge sharing. The MAP also suggested that CMS identify ways to make larger leaps to improving quality of care and patient safety rather than using an incremental approach.

During the Hospital IQR Program gaps discussion, MAP members encouraged CMS to be mindful of the transition of services being offered within the inpatient setting to the ambulatory setting and the relevance of these measures due to this shift.

Within the Hospital OQR Program gaps discussion, the MAP encouraged CMS to explore measures of effective use and shared decision making. The MAP also recommended the implementation of a composite measure for breast cancer screening. The MAP further emphasized that CMS should be sensitive to the changes in healthcare and the migration of services to the ambulatory setting. Lastly, the MAP suggested that CMS explore the major groupings of the types of services and procedures offered in the outpatient setting to identify gaps for measure development.

MAP PAC/LTC Workgroup

The MAP identified several measure gaps within the HQRP, including safety (particularly polypharmacy and medication reconciliation); PROs regarding symptom management; care aligned with and meeting patient goals; communication of patient goals to the next site of care if patient leaves hospice; coordination of care, especially with primary care and hospital staff; patient and family education; perceived caregiver burden and how caregiver burden is managed/affected through hospice care; and capturing the quality of care provided for those who contribute to hospice care but may not be represented in claims data. The MAP also encouraged ongoing work to maintain a portfolio of measures that show variation in performance across providers and to incorporate telehealth into the program

measures. The MAP also noted that hospice is an area in which the patient voice is not currently captured.

Within the SNF QRP measure set, the MAP identified several gaps, including care aligned with and meeting patient goals, care coordination and patient and caregiver involvement in care design, bidirectional transfer of information, quality and safety of care transitions, and patient and family engagement.

Within the LTCH QRP measure set, the MAP identified several gaps, including care aligned with and meeting patient goals, care coordination and patient and caregiver involvement in care design, and availability of palliative care.

Within the IRF QRP measure set, the MAP identified several gaps, including care aligned with and meeting patient goals, care coordination and patient and caregiver involvement in care design, and pain management and impact on patient function. The MAP also called on CMS to review how the measures in the program currently align with the CMS Quality Measurement Action Plan and MM 2.0 Framework.

During the SNF VBP Program gaps discussion, the MAP strongly encouraged CMS to engage patients and caregivers in a discussion of what concepts or measures they would find most valuable. With a 10-measure limit, the MAP discussed priorities and methodology. Some Workgroup members encouraged CMS to pursue a composite measure, similar to the Hospice Care Index, that would encompass the quality of care across the continuum of the patient stay. Other Workgroup members expressed concern that a composite could dilute the impact of any one measure. The MAP expressed support for continued work in infection control, which they identified as one of the highest stake areas for patients. The MAP also felt there was a need to assess value that may not be represented in claims data, including direct costs to patients and families, such as co-pays, out-of-pocket costs, and parking. Lastly, the MAP reaffirmed the importance of measuring beyond the SNF stay, including referral to effective services after the stay; caregiver burden; and care coordination after the stay, noting that the ability to manage care and all the services after discharge have a direct impact on patient readmissions.

The MAP identified several measure gaps within the HH QRP, including care aligned with and meeting patient goals, care coordination and patient and caregiver involvement in care design, long-term tracking of functional status, healthcare-acquired infections, telehealth, vaccination status (i.e., patient and HCP), and capturing wound care holistically. Holistic wound care specifically relates to measures addressing whether all appropriate services and supplies were provided for patients with wounds. The gap related to long-term tracking of functional status recognized that current measures in the HH QRP address short-term improvements in ADLs, such as bathing and dressing. The MAP noted that for longer home health episodes, patients may have different functional goals, such as the ability to shop independently or to walk to the mailbox.

Appendix I: Statutory Requirement of Annual Report Components

The Social Security Act (the Act)—specifically section 1890(b)(5)(A)— mandates that the entity report to Congress and the Secretary of the Department of Health and Human Services (HHS) no later than March 1st of each year.

The report must include descriptions of:

- *how the entity has implemented quality and efficiency measurement initiatives under the Act and coordinated these initiatives with those implemented by other payers;*
- *the entity's recommendations with respect to an integrated national strategy and priorities for healthcare performance measurement in all applicable settings;*
- *the entity's performance of the duties required under its contract with HHS (Appendix A);*
- *gaps in endorsed quality and efficiency measures, including measures that are within priority areas identified by the Secretary under HHS' national strategy, and where quality and efficiency measures are unavailable or inadequate to identify or address such gaps;*
- *areas in which evidence is insufficient to support endorsement of measures in priority areas identified by the Secretary under the* [National Quality Strategy], *and where targeted research may address such gaps;*
- *matters related to convening multistakeholder groups to provide input on: a) the selection of certain quality and efficiency measures, and b) national priorities for improvement in population health and in the delivery of healthcare services for consideration under the National Quality Strategy;.*(*Throughout This Report, the Relevant Statutory Language Appears in Italicized Text.*, n.d.)
- *an itemization of financial information for the fiscal year ending September 30 of the preceding year, including: (I) annual revenues of the entity (including any government funding, private sector contributions, grants, membership revenues, and investment revenue); (II) annual expenses of the entity (including grants paid, benefits paid, salaries or other compensation, fundraising expenses, and overhead costs); and (III) a breakdown of the amount awarded per contracted task order and the specific projects funded in each task order assigned to the entity; and*
- *any updates or modifications of internal policies and procedures of the entity as they relate to the duties of the entity under this section, including: (I) specifically identifying any modifications to the disclosure of interests and conflicts of interests for committees, work groups, task forces, and advisory panels of the entity; and (II) information on external stakeholder participation in the duties of the entity under this section (including complete rosters for all committees, work groups, task forces, and advisory panels funded through government contracts, descriptions of relevant interests and any conflicts of interest for members of all committees, work groups, task forces, and advisory panels, and the total percentage by health care sector of all convened committees, work groups, task forces, and advisory panels.*