NCCN Policy Summit: Defining, Measuring, and Applying Quality in an Evolving Health Policy Landscape and the Implications for Cancer Care

Lindsey A.M. Bandini, MPH1; Leigh Gallo, JD1; Terrell Johnson, MPA1; Kara Martin, MPH1; Alyssa A. Schatz, MSW1; Kerin Adelson, MD2; Bryan A. Loy, MD, MBA3; Ronald S. Walters, MD, MBA, MHA, MS4; Tracy Wong, MBA5; and Robert W. Carlson, MD1

ABSTRACT

Quality measurement is a critical component of advancing a health system that pays for performance over volume. Although there has been significant attention paid to quality measurement within health systems in recent years, significant challenges to meaningful measurement of quality care outcomes remain. Defining cost can be challenging, but is arguably not as elusive as quality, which lacks standard measurement methods and units. To identify industry standards and recommendations for the future, NCCN recently hosted the NCCN Oncology Policy Summit: Defining, Measuring, and Applying Quality in an Evolving Health Policy Landscape and the Implications for Cancer Care. Key stakeholders including physicians, payers, policymakers, patient advocates, and technology partners reviewed current quality measurement programs to identify success and challenges, including the Oncology Care Model. Speakers and panelists identified gaps in quality measurement and provided insights and suggestions for further advancing quality measurement in oncology. This article provides insights and recommendations; however, the goal of this program was to highlight key issues and not to obtain consensus.

1National Comprehensive Cancer Network, Plymouth Meeting, Pennsylvania; 2Yale Cancer Center/Smilow Cancer Hospital, New Haven, Connecticut; 3Humana, Louisville, Kentucky; 4The University of Texas MD Anderson Cancer Center, Dallas, Texas; and 5Seattle Cancer Care Alliance, Seattle, Washington.

Quality measurement is a critical component of advancing a health system that pays for performance over volume. The Centers for Medicare & Medicaid Services (CMS) has solicited recommendations for quality measures to include within value-based programs like the Merit-Based Incentive Payment System (MIPS) Value Pathways, the next step in the MIPS program,1 and the new Oncology Care First proposal.2 Commercial payers have shown equal interest in determining which existing metrics are of high value and where gaps in available high-value measures exist.3 Although there has been significant attention paid to quality measurement within the health systems in recent years, significant challenges to meaningful measurement of quality care and care outcomes remain.

As we move toward value-based models, quality is much more difficult to quantify than cost. Health-care providers and payers often collect and analyze data in an attempt to monitor and improve patient care and to maximize the value of the care delivered, but standards and best practices are evolving. As different stakeholders collect and analyze that data, it is increasingly important that the data collected are appropriate, actionable, and standardized across stakeholders. The recent NCCN Oncology Policy Summit: Defining, Measuring, and Applying Quality in an Evolving Health Policy Landscape and the Implications for Cancer Care brought together physicians, payers, policymakers, patient advocates, and technology partners to explore the possibilities and implications of measuring quality. Discussions focused on the current state of quality measurement in oncology, its utility in clinical-decision making, and, ultimately, the impact of quality measurement on patients. Panelists provided insights and recommendations; however, the goal of this program was to highlight key issues and not to obtain consensus.
Defining and Measuring Quality Under Current Value-Based Care Models

With the cost of cancer care expected to reach $173 billion by this year, stakeholders have expressed an increased sense of urgency to evaluate spending and identify opportunities for efficiency. Over the past several years, the CMS Oncology Care Model (OCM) has provided a diverse set of practices to expand services for oncology patients, while measuring and ultimately evaluating care delivery. Keynote speakers, Dr. Kerin Adelson of Yale Cancer Center/Smilow Cancer Hospital and Diana Verrilli of McKesson Specialty Health, representing US Oncology practices, provided insight into how the OCM has impacted both academic and community practices.

A key component of the OCM is the Monthly Enhanced Oncology Service (MEOS) payment, which provides OCM practices per capita payments with the flexibility to apply those funds toward historically nonreimbursable services. Yale Cancer Center has directed MEOS payments toward efforts to reduce acute care utilization, including building a care management program, increasing access to palliative care in the outpatient setting, opening an oncology-specific urgent care center, and implementing electronic clinical decision support to ensure evidence-based, cost-effective use of cancer treatments. Similarly, US Oncology focused additional payments toward reducing avoidable hospitalizations, initiating palliative care, and ensuring patients and practices are communicating effectively, along with examining the use of supportive care drugs. A newly established navigating center, or special triage for those participating in the OCM at US Oncology practices, is one particularly successful patient-centered approach to oncology care resulting from the MEOS payments.

Another key feature of the OCM is enhanced data sharing, as participating practices receive semianual Performance Period data from the CMS. These reports link various sources, including Medicare claims data, to provide practices insight into utilization trends and actual costs compared with predetermined targets. Although some practices have found the amount of data sharing overwhelming, both US Oncology and Yale Cancer Center have enhanced their data collection and analysis, finding ways to harness the additional information to produce positive changes. Both practices report that the availability of data has led to successful changes at the systemic level and physician level despite initial challenges obtaining buy-in from individual practitioners. At Yale Cancer Center, best practices for sharing physician-level data have emerged, including ensuring the data tells a story, is actionable, makes sense, and is reviewed in person.

The investment of both time and resources should not be understated, as the transformation took a minimum of 2 years at practices in the US Oncology network. Successes highlighted included improved communication between patients and providers, decreased utilization of the Emergency Department postacute care, and improved utilization of appropriate supportive care drugs. However, due to escalating drug costs in oncology, which are not addressed in the OCM, overall spending throughout the implementation period has increased and consumed a larger portion of the overall cost to care for patients with cancer, cited by Dr. Adelson at 60% of total cost of care for patients at Yale. Both Dr. Adelson and Ms. Verrilli cited the program as a success, and one that can be replicated by commercial payers. Both Yale and US Oncology have found real value in the OCM in terms of supporting transformative infrastructure that helps reduce costs associated with acute care. However, as overall prices continue to increase, many believe it will be necessary to tackle the pharmaceutical costs at the policy level.

Application and Measurement of Quality in Cancer Care Delivery Systems

Regardless of participation in a value-based model, oncology practices are increasingly driven by data. Stakeholders and health systems continuously collect information through medical records, insurance claims, and traditional surveys. These data have been used to inform and validate many oncology-specific quality measures; however, most are limited to process of care measures and do not adequately assess patient outcomes, either in quality or quantity of life. Although process measures do provide important data, many stakeholders view them as a first step toward a system that reports on outcome measures. Outcome measures are complex and challenging to quantify without adequately adjusting for each individual patient’s characteristics, preferences, cancer type, and treatment modality. For example, patients receiving immunotherapy present a unique challenge. The impact of immunotherapy toxicities may influence a patient’s quality of life 3 to 5 years later, and therefore it is not feasible to include that data in performance-based payments.

Furthermore, to measure the outcome of survival effectively, systems must be able to adjust for both clinical and nonclinical determinants and should adjust for variables such as patient age, cancer stage, tumor biology, and socioeconomic status.

Unlike overall survival, quality of life cannot be quantified with a simple equation. According to Alan Balch, PhD, of the National Patient Advocate Foundation, “one thing that does seem to cut across the grain,
that does seem to make for a really good quality patient experience, is that they feel respected, they feel listened to, and they feel like the care is personalized to them. And the mechanisms of action through which to deliver those types of experiences are really shared decision-making and goal-concordant care planning.” Moving forward, providers and payers should continue to emphasize shared decision-making, care coordination, and focus on the patient. To do so, physicians and health systems must focus on metrics that go beyond pain and depression to incorporate individual patient preferences. Studies have shown that many patients value quality-of-life issues, such as minimizing work disruption and reducing caregiver burden, transportation burden, and financial toxicity. However, implementation of validated tools capable of collecting this information remains limited. As the OCM and other value-based models evolve, payers and policymakers should consider measurement requirements for financial toxicity and other quality-of-life issues.

Health systems can also lead efforts to develop innovative solutions to collect and maximize the utility of patient data through investment in data infrastructure. For example, practices are beginning to implement patient portals that allow patients to communicate directly with their care team and allow the practice to track how treatment affects a patient’s daily life. If patients can report what is important to them, at a time that is convenient for them, the data collected will arguably be more robust, valuable, and actionable. Another approach is to ensure all of the data for a specific patient communicates and works together. Investing in technology such as digitization of records and data warehouses that integrate electronic health records (EHRs), cancer registry data, patient satisfaction surveying data, and laboratory data can provide a more complete picture of the patient experience and related outcomes. Equally as important to data collection and interoperability tools are the accessibility and timeliness of data sharing. Systems that allow for real-time (or near real-time) reporting offer greater opportunities to identify and correct patient care issues, which the panelists offered as an opportunity for enhancement of the OCM.

With an increase in data collection, panelists also warned of survey fatigue, or physician and patient burnout resulting from extensive surveying. Relying on sick patients to complete many surveys and on overburdened physicians to act on these survey responses calls into question the accuracy and completeness of data. One way to minimize this hardship is through ensuring that the data collected are valuable to all key stakeholders, including individual physicians and patients. This would require physician and patient input on what practices track and measure. For example, patients may be interested tracking how and when treatment side effects disrupt daily life, whereas physicians may be more interested in measuring how their processes can influence outcomes. Some practices have begun combating survey fatigue through practice-specific processes, such as maximizing data available from alternative sources, or providing patients options for completing surveys while they wait or from the comfort of their own homes.

**Role of Standardized Performance Measures in Ensuring Quality in Cancer Care**

The harmonization of existing and emerging measures is essential to achieving the intention of value-based care. Although many quality- or value-based programs have been working to resolve the misalignment of quality measures, considerable barriers persist. Stakeholders concur that current measures remain disjointed, administratively demanding, and lack meaning for payers or patients. To discuss the challenges and opportunities present in oncology for better quality measures, Dr. Shantanu Agrawal, President and Chief Executive Officer of the National Quality Forum (NQF), presented on efforts in standardizing measures and the barriers to standardized, scientifically rigorous, measures.

In 1999, the Institute of Medicine released the report *To Err Is Human: Building a Safer Health System.* The decades-old report was a pivotal moment for quality measures in the United States, highlighting the considerable loss of patient life due to preventable medical errors and requesting a national effort to maintain, and standardize, reporting measures. NQF and similar organizations continue to face significant barriers in meeting the recommendations for oncology measures. To date, quality measurement in oncology has been mostly limited to process measures, due to difficulty developing, collecting, and standardizing more informative outcome or patient reported outcome (PRO) measures. Of NQF’s 28 identified oncology measures, most are structural or process-based. The dimensions of a measure also make harmonizing similar measures difficult if the data source, population, and ratio specification are not comparable. Finally, standardization of quality measures is hampered by the heterogeneity of payers’ patient populations.

In the face of these challenges, NQF has developed innovative approaches to improve the rigor of measures and overcome entrenched obstacles to harmonization. In 2017, NQF launched the NQF Measure Incubator program, which seeks to resolve issues of PRO and outcomes measure scarcity by strategically identifying measure gaps, using committees to design measure concepts, and connecting groups interested in developing measures with measure concepts developed
in the NQF incubator. To resolve issues of divergence among similar measures, NQF’s multistakeholder committees, comprised of clinicians, patients, employers, and representatives from the payer community, brings together the developers of similar measures to work through measure dimension dissimilarities. This work has since expanded, because the NQF is partnering with America’s Health Insurance Plans and the CMS to create universal, pan-disease measures and reduce the data collection burden. The program, known as the Core Quality Measure Collaborative (CQMC), has disseminated 16 measure sets to date and is working to ensure measures can be implemented across payer populations.

Although significant work lies ahead for measure developers and reviewers, progress is being made. PROs have been identified as a substantial measure gap, and developers have taken notice. In the NQF Measure Incubator, >50% of the concepts being developed are PROs, and NQF recently endorsed a new PRO measure focused on hospital admission and emergency department visits among patients receiving outpatient chemotherapy. The measure developer is also expanding this work to resolve issues concerning the chronically and seriously ill population through care delivery systems.

### The Future of Defining, Standardizing, and Reporting Quality in Cancer Care

In recent years, PROs have increasingly demonstrated utility as indicators for both quality and quantity of life. PROs are now widely used by practices to assess and ultimately improve patient care; however, wide variation exists in implementation. Some institutions focus data collection around a certain time points, such as a procedure or study, whereas others attempt to collect data from all patients at all visits. Heterogeneity also exists in technology capabilities and interoperability with EHRs. Most basic EHRs lack the ability to seamlessly collect and store PROs; however, add-on solutions exist for a fee in a variety of formats for practices with available resources. Panelists highlighted the challenges such discrepancies create, but were optimistic that these various systems could be viewed as pilot projects, allowing best practices to emerge.

Quality measure collection requires a broad range of resources, including administrative resources and physician buy-in. Successful practices in programs such as the OCM have demonstrated an institutional commitment to quality through allocation of time and money. Panelists stressed that although these advancements should be applauded, measurement standards should not be universally applied to all cancer centers and physician practices. Feasibility of quality measurement is often dependent on financial, technical, and administrative resources, and the burden may outweigh the benefit for lower-resourced practices. This is particularly true of PROs, which involve data points collected outside of regular workflows, requiring collection tools to seamlessly interface with patients, physicians, and administrators.

A unique challenge to PROs is variation among patients, including demographics, comorbidities, health literacy, access to technology, and social support, that may inform individual preferences and treatment goals. Patients with early-stage disease may view care differently from those with metastatic disease, and this is similarly true for younger patients versus the geriatric population. Ideally, measurement tools would not only capture these differences but also track and score measures according to the variables of value to the patient. Dynamic measurement tools utilizing shared decision-making techniques do exist, but practice uptake is limited, creating further opportunities for exploration.

Panelists agreed that technology provides potential solutions to overcome many of the barriers to implementing and maintaining high-quality measurement programs. Concerns regarding physician and administrative burnout can be addressed through thoughtful streamlined workflows supported by seamless integration with EHRs. Additionally, the expanded availability of real-world data provides opportunities for ongoing evaluation of quality measures to ensure alignment with outcomes of interest. However, as EHRs become more sophisticated and costly, the panelists underscored the importance of interoperability to drive meaningful linking of data across practices.

### Conclusions

Quality measurement in cancer care continues to evolve, and current challenges demonstrate the importance of establishing best practices in data collection and analysis. Each panelist represented an important voice in establishing patient-centered quality measurement programs that can provide value to all invested parties. In many ways, the OCM provided the first comprehensive opportunity for practices to expand quality measurement, and can serve to inform future models in oncology.

However, as patients and practices are increasingly asked to complete surveys and share data, it is imperative that stakeholders continue to collaborate to optimize the value of these data. The diverse group of stakeholders represented at the summit agree that data need to provide the appropriate information to the correct stakeholders at the right time. Improved metrics, streamlined collection techniques, and greater technical interoperability are needed to ensure that stakeholders, including patients,
payers, policymakers, and providers, are measuring and reporting on true quality of care.

Interest in value-based payment models has accelerated the field of quality measurement in oncology. Future value-based models have the opportunity to further advance metrics and strategies by encouraging the development and use of novel tools. These models should continue to seek best practices from previous models and encourage the use of new and existing measures with proven value in measuring outcomes of value to patients, providers, and payers. Stakeholders should remain highly engaged in this process as cancer care evolves in order to ensure value-based programs and others are effectively and efficiently measuring meaningful outcomes.

Submitted March 11, 2020; accepted for publication May 28 2020.

Disclosures: Dr. Adelson has disclosed that she has received grant/research support from Genentech. Dr. Loy has disclosed that he is an employee of Humana. Ms. Bandini, Ms. Gallo, Mr. Johnson, Ms. Martín, Ms. Schatz, and Dr. Carlson are employees of NCCN. The remaining authors have disclosed that they have no financial interests, arrangements, affiliations, or commercial interests with the manufacturers of any products discussed in this article or their competitors

Correspondence: Lindsey A.M. Bandini, MPH, National Comprehensive Cancer Network, 3025 Chemical Road, Suite 100, Plymouth Meeting, PA 19462. Email: bandini@nccn.org

References

6. Adelson K. Defining and measuring quality under current value-based care models and implications for the delivery of cancer care. NCCN Policy Summit: Defining, Measuring, and Applying Quality in an Evolving Health Policy Landscape and the Implications for Cancer Care; September 12, 2019; Washington, DC.
7. Verrilli D. Defining and measuring quality under current value-based care models and implications for the delivery of cancer care. NCCN Policy Summit: Defining, Measuring, and Applying Quality in an Evolving Health Policy Landscape and the Implications for Cancer Care; September 12, 2019; Washington, DC.
18. Shantanu A. The role of standardized performance measures in ensuring quality in cancer care. NCCN Policy Summit: Defining, Measuring, and Applying Quality in an Evolving Health Policy Landscape and the Implications for Cancer Care; September 12, 2019; Washington, DC.