

# Duke

---

**MARGOLIS CENTER**  
*for Health Policy*

## **Measurement For Value-based Payment: Harnessing Patient-Centered Outcomes to Define Quality**

A Concept Paper from the Duke-Margolis Center for Health  
Policy

## Authors

**Aparna Higgins**, Policy Fellow, Duke-Margolis Center for Health Policy, Duke University

**Mark B. McClellan, MD, PhD**, Robert J. Margolis Professor of Business, Medicine and Policy; Director, Duke-Margolis Center for Health Policy, Duke University

**Dana Gelb Safran, Sc.D.**, Formerly: Chief Performance Measurement and Improvement Officer and Senior Vice President, Enterprise Analytics, Blue Cross Blue Shield of Massachusetts; current: Head of Measurement, Haven

**Nick Fiore**, Senior Research Assistant, Duke-Margolis Center for Health Policy, Duke University

**Elizabeth Murphy**, Project Coordinator, Duke-Margolis Center for Health Policy, Duke University

## Meeting Participants

**Shantanu Agrawal**, President and Chief Executive Officer, National Quality Forum

**Helen Burstin**, Executive Vice President and CEO, Council of Medical Specialty Societies

**Timothy Day**, Vice Chair of the Quality Innovation Council, Centers for Medicare & Medicaid Innovation

**Kate Goodrich**, Director of the Center for Clinical Standards and Quality and CMS Chief Medical Officer

**Patrice Holtz**, Chair of the Quality Innovation Council and Senior Advisor in the Policy and Program Group, Center for Medicare & Medicaid Innovation

**David Lansky**, President and Chief Executive Officer, Pacific Business Group on Health

**Marianne Hamilton Lopez**, Research Director, Duke-Margolis Center for Health Policy, Duke University

**Katie Martin**, Vice President for Health Policy and Programs, National Partnership for Women & Families

**Jeff Micklos**, Executive Director, Health Care Transformation Task Force

**Debra Ness**, President, National Partnership for Women & Families

**Frank Opelka**, Medical Director, Quality and Health Policy, American College of Surgeons

**Lewis Sandy**, Executive Vice President, Clinical Advancement, UnitedHealth Group

**Rob Saunders**, Research Director, Duke-Margolis Center for Health Policy, Duke University

**Anand Shah**, Chief Medical Officer, Center for Medicare & Medicaid Innovation

**Wei Ying**, Senior Director, Data Science and Population Health Analytics, Blue Cross Blue Shield of Massachusetts

## Introduction

On June 24, 2019, President Trump released an Executive Order<sup>1</sup> (EO) seeking to empower patient decision-making by promoting transparency on price and quality. The EO dovetails congressional efforts to pass an omnibus legislative bill, the Lower Health Care Costs Act of 2019<sup>2</sup>, which includes bipartisan provisions aimed specifically at enabling greater transparency in healthcare. In addition to price transparency, the EO directs the Secretaries of Health and Human Services, Defense, and Veterans Affairs to rapidly create a Health Quality Roadmap that aims to align measures reported in federal healthcare programs and “include a strategy for establishing, adopting, and publishing common quality measurements; aligning inpatient and outpatient measures; and eliminating low-value or counterproductive measures.”<sup>1</sup>

The Administration’s call for a Roadmap to be rapidly developed is consistent with a broad consensus among health care stakeholders that existing measures, largely developed within a fee for service (FFS) system, and focused on clinical processes of care are not a good fit for Alternative Payment Models (APMs) that emphasize accountability for cost and outcomes across the care continuum. Many of the measures currently in use in APMs suffer from numerous widely recognized limitations including:

- Lack of outcomes measures that adequately assess delivery system performance,
- Undue provider burden,
- Lack of a systematic approach to retirement of low-value measures, and
- A focus on point-in-time estimates as opposed to a longitudinal assessment of performance.

These limitations are widely viewed as a constraint on the long-term ability of APMs to deliver on their promise of value. Consequently, there is a broad consensus on the need for a systematic and concerted effort to develop, test, and adopt the Patient-Centered Outcome Measures (PCOMs) – the next generation of measures - that are better suited for accountability, and that articulate the quadruple aim: better care, better health, lower cost, and reduced provider burden. But despite calls for concerted action, the availability of guiding frameworks, and a better data infrastructure<sup>3</sup>, progress in the development and adoption of PCOMs has been anemic.

To help catalyze the implementation of PCOMs, The Duke-Margolis Center for Health Policy and leaders formerly with Blue Cross Blue Shield of Massachusetts (BCBSMA) undertook an effort to develop a vision and strategy for the adoption of PCOMS. This effort was informed by a set of convenings of a multi-stakeholder group of experts representing payers, providers, employers, and patients. The convenings focused on a set of important topics including developing a shared vision for PCOMs, discussing key considerations for achieving PCOMs, and a set of specific practical steps to developing/implementing PCOMs. Prior to the convenings, Duke-Margolis conducted interviews with meeting participants to solicit initial feedback on PCOMs and conducted a scan of existing measurement frameworks including the National Academy of Medicine Vital Signs Report and the Healthcare Payment Learning and Action Network (LAN) population-based payment model (PBP) measurement framework, and the Centers for Medicare and Medicaid Services (CMS) Meaningful Measures framework (see Appendix).

Building on these existing frameworks and the perspectives of the meeting participants, this concept paper describes the principles of patient-centered outcome (PCO) measurement and a set of practical steps that can lead to the development, testing, and widespread adoption of PCOMs.

## **Patient-Centered Outcome Measures**

### *Primary Focus of PCOMs*

The primary focus of the PCOMs should be provider and health system accountability. Specifically, PCOMs should serve as the basis for the following applications: (1) adequate, reliable, and parsimonious assessment of provider performance in APMs and (2) informing the selection of providers by consumers/patients and by clinicians seeking to make referrals; the latter playing a critical role in managing outcomes and cost. Purchasers should also continue to advance initiatives focused on the use of PCOMs to drive value and provide better information to their employees for provider selection and, where applicable, for use in direct contracting.

The emphasis on use of PCOMs for accountability in this paper does not discount the importance of measures used for quality improvement (QI). Currently, health systems routinely collect more specific, detailed, and process-oriented measures to help achieve their broader QI goals. However, duplicative versions of these measures required for performance reporting in value-based payment arrangements significantly increase provider burden. By focusing on use of PCOMs for accountability, health systems will have increased autonomy and flexibility to select and implement clinical process of care and structural measures that they view as being more relevant and useful for their QI programs.

## **Principles of Patient-Centered Outcomes Measures (PCOMs)**

Building on the existing frameworks and the perspectives of meeting participants, we propose a set of principles that can help guide the development and implementation of PCOMs. Irrespective of whether they are culled from existing measures or are newly developed, the principles of PCOMs are consistent: outcome-oriented, patient-centered, sourced from different types of data, longitudinal, and incorporate appropriateness.

### *Outcomes-Oriented*

Given that the emphasis in the next evolutionary stage of measurement is accountability, PCOMs should be focused on outcomes or be primarily outcomes-oriented versus structure or process. These outcomes measures should be sourced from different types of data (to capture different measure concepts) – administrative, clinical- EHRs, and patient reported. The priority should be on the development and implementation of condition-specific, procedure-specific, or cross-cutting (e.g. ambulatory care sensitive conditions) outcome measures (e.g. level 2 in the LAN PBP measurement framework) that assess performance of both primary care and specialists. These outcomes measures can subsequently be used to construct composite measures, i.e., the “big dot” measures of better care and better health. While some process measures, e.g. cancer screenings or immunization rates, still have utility in PCOM sets, their use should be deliberately limited in exchange for increased adoption of outcomes measures.

*New Emphasis on Patient-Reported Measures with Data from Different Sources*

As the name suggests, PCOMs should incorporate new approaches to assessing patient experience and patient health status through data collected directly from patients. As care transformation efforts place patients and their preferences at the forefront, PCOMs will need to mirror this shift. There are multiple valuable dimensions of patient care experiences and patient health status that need to be measured for different purposes. We recognize that not all patient-reported or generated data are appropriate for use in accountability models. For example, patient-centered care involves shared-decision making and the incorporation of patient preferences into the development of a treatment plan. Stand-alone measures that assess if shared-decision making tools were used are akin to assessments of clinical process of care and therefore not best suited for accountability. The next frontier in developing measures using patient-reported data can be divided into two categories: Patient-Reported Outcome Performance Measures (PRO-PMs) and Patient-Reported Experience Measures (PREMs).

Initially, the PCO measurement effort should be focused on the development of PRO-PMs because they can play an important role in assessing delivery system performance in both episode-based and population-based payment models and can be valuable in clinical decision-making.<sup>4</sup> The development and use of PRO-PMs for accountability will require widespread collection of patient-reported outcome measure data using validated instruments (patient reported outcome measures or PROMs), a standardized definition of patient population, and clearly specified mode and timeframes for data collection and appropriate risk adjustment. Examples of PROMs include PROMIS Global, PROMIS Pain, Patient Health Questionnaire-9 (PHQ-9), and Hip Disability and Osteoarthritis Outcome Score-Knee Injury Osteoarthritis Outcome Score (HOOS-KOOS). PROMs have been widely used in clinical trials to generate patient reported outcomes that assess the effectiveness of new treatments or devices at improving patient functioning, reducing pain or improving emotional wellbeing. The development of PRO-PMs can be accelerated through selection from among the many validated global or condition-specific PROMs that have historically been used in clinical trials and other research, and establishing their suitability for use as performance measures.

By contrast, PREMs are measures of the patient care experience, evaluating domains such as access to care, clinician communication quality, integration of care and interpersonal treatment. Unlike PRO-PMs, which have been largely absent from accountability uses such as payment or performance assessment, a large number of nationally accepted PREMs (e.g. CAHPS surveys) are used for both payment and public reporting of provider performance.

Despite the availability and use of CAHPS to assess patient experience, we believe that PREM measurement will benefit from further refinement including minimizing data collection burden on patients, a better reflection of evolving care delivery models, and the types of experience information that patients themselves seek. Estimates suggest that 42% of Americans use social media for health-related reviews.<sup>5</sup> One approach to the evolution of PREM measurement is the development and testing of measures akin to Yelp-style reviews or the Net Promoter Score (NPS).<sup>6</sup> Another approach might be to test a “CAHPS Jr version” similar to HOOS/KOOS Jr that could assess important elements of patients’ interactions with their providers while minimizing the data collection burden on patients. These new

measure concepts will require further development and testing. These types of measures could be incorporated into the PCO measures portfolio over the longer-term.

It is important to underscore that this new emphasis on measures using patient-reported data does not minimize the need for outcomes measures that are sourced from either administrative or EHR data. For example, performance measurement in osteoarthritis could include use of HOOS/KOOS Jr. to assess patient functional status but also include measures of readmissions and complications post-surgery for patients undergoing surgical interventions.

### *Longitudinal and Appropriate Measures*

PCOMs should be longitudinal, i.e., assess performance of the delivery system over time and across different care settings. Such an assessment is critical because with broader implementation of APMs, providers are increasingly held accountable for patients' care over time and across settings. Although site agnostic measures are desirable, some site-specific measures such as measures of hospital performance may be needed to enable consumer/patient selection of providers. Finally, the development of longitudinal measures will require a nested approach to measurement that reconciles population-based and episode-based measurement frameworks.

### *Verification Programs and PCO Measurement*

As stated previously, the focus of PCOMs as the name indicates is on outcomes measures. We recognize that PCOMs could be supplemented with verification programs that certify adoption of clinical care processes, where appropriate. For example, the American College of Surgeons (ACS) has developed standards of care and an associated verification program for surgery to improve surgical outcomes. It is critical for these standards of care and verification programs to demonstrate strong links to improvements of outcomes measures in the context of PCOMs. Additionally, these verification programs could be used in circumstances where it might be challenging to pursue a pure outcomes-based measurement strategy because of small sample sizes.

One potential option for using verification programs in conjunction with PCOMs is a "gating" mechanism, i.e., meeting the standards that are included in these verification programs allows a provider to be rewarded when achieving meaningful performance on outcomes measures. Demonstrating adoption of these standards in bariatric surgery is the "gate" for incentive payments and contributes to the broader goal of PCOMs. This "gating" approach is substantively different than current standard network strategies pursued by health plans. When building networks, plans generally employ standards providers need to meet to join their network; however, once they have joined, there is not a subsequent outcome measure improvement standard that incentivizes better care. This new "gating" strategy goes beyond current practices by tying additional payments to providers based on their performance across a set of outcome measures.

The focus of the PCO measures work, however, will not be in either developing such standards or establishing links between these standards and outcomes. The approach would be to rely on the work of the medical specialty societies who will need to develop meaningful verification programs and establishing causal links between the adoption of these programs to outcomes.

**Data Infrastructure**

We recognize that a wide variety of data sources is needed to enable the types of PCOMs described in this paper. The ability to tap into these data sources necessitates the availability of a flexible and scalable data infrastructure that emphasizes data liquidity. Data liquidity and access will be impacted by data ownership and approaches to using different data sources for measurement will need to be adjusted accordingly. Finally, the data infrastructure should be designed to collect both clinical and non-clinical data to allow incorporation of data on social determinants of health (SDOH) in PCOMS. We do recognize that payers face limitations in the commercial market in terms of tracking patient outcomes over longer time horizons because of member turnover. The data infrastructure that is developed to support longitudinal measurement of outcomes will need to address this issue. However, public and private payers that serve Medicare beneficiaries have the unique opportunity to develop, test, and scale better longitudinal measurement strategies at least initially.<sup>7</sup>

**PCOM Implementation**

During the convenings, participants discussed practical approaches to making the vision of PCOMs a reality. Identifying a few priority clinical conditions or areas where work on PCOMs represented the best option for making progress. An initial set of criteria was proposed to identify these conditions/areas, although future measurement work may include other criteria such as health equity. These initial criteria include:

- The priority area’s significantly impacts the healthcare system either in terms of cost or prevalence of condition.
- There is an existing structure or effort related to the priority area where work can be harmonized (e.g. PHQ9 measure for depression or ability to link to ongoing payment reform).
- Variation in quality of care

Using this criteria, participants identified an initial set of clinical conditions or potential priority areas for piloting the PCOMs. The table below includes this list of areas, available outcomes measures sourced from different types of data – administrative, EHRs, or patient-reported, and any ongoing or prior work in this area that could help accelerate the implementation of PCOMs. Information included in Table 1 is illustrative and not designed to be an exhaustive curation of relevant work. Additional efforts will need to be undertaken to create a comprehensive list.

Condition	Sample of Ongoing work/Available Measures
Depression	<ul style="list-style-type: none"> <li>• September 2018 CMS Cooperative agreement grants on measure development that include improvement or maintenance of mental health symptoms, particularly within the context of a mental health diagnosis, patients at high-risk of suicide, and with a comorbid substance use diagnosis.</li> <li>• Examples of outcome measures sourced from PHQ-9 include depression remission at six or 12 months.</li> </ul>

	<ul style="list-style-type: none"> <li>Existing efforts at BCBSMA on adoption of PHQ-9 as well as efforts led by Pacific Business Group on Health (PBGH) for broader adoption of PHQ-9 which forms the basis for the depression remission PRO-PMs endorsed by the NQF.</li> </ul>
Osteoarthritis	<ul style="list-style-type: none"> <li>Existing efforts with BCBSMA on measuring HOOS-KOOS Jr as well as Duke-Margolis efforts on designing new OA payment models that incorporate performance measurement for the OA episode.</li> <li>CMS Cooperative agreements have also funded further implementation of PROMs by measuring functional status pre/post total hip and knee replacement.</li> <li>Examples of outcomes sourced from alternative data sources include hospital-level 30-day risk-standardized readmission rate following elective primary total hip arthroplasty and/or total knee arthroplasty.</li> </ul>
Multiple chronic conditions	<ul style="list-style-type: none"> <li>Ongoing work at Duke-Margolis' and NQF on seriously ill patients and others such as Camden Coalition working on how SDOHs impact these populations; RTI working on hospice/post-acute care.</li> <li>Examples of outcome measures sourced from clinical data include improvement in ambulation and locomotion, discharge to a community setting, and percent of residents with urinary tract infections, excessive weight loss, or pressure ulcers in long-term care settings.</li> </ul>
Maternity Care	<ul style="list-style-type: none"> <li>CMS has not expanded any of the child core measure set voluntarily submitted by state Medicaid agencies.</li> <li>Existing measures include: early elective delivery, potential transmission of infectious disease, number of Cesarean sections, postpartum contraceptive care and exclusive breastfeeding.</li> <li>Gaps in assessment of maternity care have been identified and additional measure development may need to be undertaken.<sup>8</sup></li> </ul>
Acute care (e.g. trauma, stroke, AMI)	<ul style="list-style-type: none"> <li>There are no examples of endorsed PROMs for this category and a few measures of outcomes sourced from clinical or administrative data such as all-cause mortality following AMI and hospital-wide all-cause readmissions.</li> </ul>
General Surgical Care (emphasis on frail and elderly)	<ul style="list-style-type: none"> <li>ACS developing surgery risk scores for geriatric and frail elderly; PROMIS global/PROMIS pain</li> <li>One of the only EHR measures is improvement in status of surgical wounds.</li> </ul>
Pediatric care	<ul style="list-style-type: none"> <li>Existing measures for voluntary state reporting in CHIP and Medicaid include: early pediatric vaccination, well-child visits and all-condition all-cause readmission.</li> </ul>



	<ul style="list-style-type: none"> <li>• Some of the only EHR outcome measures are: standardized mortality ratios for neonates undergoing non-cardiac surgery, perioperative temperature management, and ventriculoperitoneal (VP) shunt malfunction rate in children.</li> <li>• Additional work is needed to better define a comprehensive measure set for pediatric care although some condition specific measures for asthma (e.g. HEDIS measures) exist.</li> </ul>
--	--

Participants were subsequently asked to rank the above conditions based on their preferred order of priority. Osteoarthritis, depression, maternity care, and multiple chronic conditions were ranked in the top four by a majority of participants. We recommend that these four areas be the focus for PCOM pilots in the future. Below is a description of existing work in these areas as well as a set of key considerations.

### *Depression*

For depression specifically, existing measures such as depression remission at six and twelve months derived from the PHQ-9 act can serve as a starting point for PCO measurement. While PHQ9 properly connects patients with the level of care needed based on the intensity of their depression, many clinicians do not administer the PHQ9 when performing wellness exams. Currently, CMMI pays for the reporting of PHQ9 in their ACO models to help increase adoption in clinical settings. Private payers can consider analogous pay for reporting strategies to incentivize use of PHQ-9. Additional questions include the adequacy of depression remission as the sole PCO measure to assess quality of care and if other measures that meet the principles of PCO measurement are needed.

### *Osteoarthritis*

There is existing work in osteoarthritis that can serve as a springboard for the PCO measure pilot. Both CMS and the private payers are currently implementing bundled payments for hip and knee surgery through programs like Comprehensive Joint Replacement (CJR). These programs collect patient reported data through use of either HOOS-KOOS or HOOS-KOOS Jr. and also measure outcomes sourced from other data such as complications after surgery. As stated earlier the Duke University Health System and the Duke-Margolis Center are currently working with a multi-stakeholder Collaborative to design a payment model for osteoarthritis (OA). This effort provides an opportunity to define and pilot test as part of the payment model design, the PCO measure set for OA. That includes PROMs as well as outcomes measures sourced from administrative and clinical data.

### *Patients with Multiple Chronic Conditions*

Of the four priority areas, measurement for patients with multiple chronic conditions is the least developed and requires a greater level of foundational effort. Currently PROMs and other outcomes measures are not well-developed for this population. Defining PCO measures for multiple chronic conditions and specifically for the seriously ill is difficult because the population is complex, heterogeneous and further impacted by social determinants of health. These populations are at high risk

for acute exacerbations and may suffer from a highly diminished quality of life. This is further compounded by lack of access to care and other factors, such as affordable housing.

There are, however, existing efforts focused on seriously ill patients, a subset of the population with multiple chronic conditions that represents an initial starting point for PCO measures. These efforts are currently being undertaken by the Duke-Margolis Center, as well as by NQF. Importantly, CMMI recently announced a new primary care initiative centered around high needs patients that can also help catalyze measurement efforts for these populations.<sup>9</sup> Much early work will need to be focused on how best to define individuals with multiple chronic conditions and are seriously ill, followed by measures that can be tested for this population. Additionally, cross-cutting issues like risk adjustment and an infrastructure that collects information from caregivers will need to be addressed as part of this effort.

### *Maternity Care*

Measures focused on delivery and post-partum care (e.g. number of early elective deliveries, Cesarean section rate, mothers who exclusively breastfeed, and the transmission of infectious disease from mother to child) are currently in use. However, these measures are not sufficient and do not incorporate vital patient-reported elements specific to this population. There is an important opportunity to consider broader maternal and child public health measures, such as maternal mortality, severe maternal morbidity, pregnancy with a comorbid substance use disorder, as well as anxiety and depression, both prenatally and after birth. Many of these measures are reported for certain federal programs or by select states, but could be better incentivized to be adopted by a larger group of stakeholders. As the PCO measures work in this area continues, it is critical to address the limited capacity that state Medicaid and CHIP programs, often the primary payer for this population, have to implement more holistic maternal health measurement strategies. There are challenges—as well as opportunities—relating to the longitudinal tracking of outcome measures in this population.

## **Next Steps – Development of a PCOM Roadmap and Pilots**

Acceleration of PCOM adoption requires a practical approach that specifies a set of well-defined steps for implementation, a process for how these steps are developed, and ultimately an engaged group of implementers who can adopt these steps and help make PCOMs a reality. The next phase towards piloting PCOMs in the four selected priority areas described above involves the development of a roadmap that addresses these issues in greater detail through broader stakeholder engagement. For each of the four priority areas, the roadmap will need to include a detailed description of the topic areas listed below including highlighting any ongoing work on measure development and implementation and specifying how the PCOM can build upon such work. The roadmap should also include a series of well-defined steps for implementation which can lead to widespread adoption of PCOMs for accountability. There are ongoing measurement development efforts in these areas, particularly on PROMs<sup>10</sup>, and the intent is for the pilots proposed here to be complimentary to that work. Specifically, we hope to build on and complement efforts like those undertaken by NQF and Pacific Business Group on Health in PROM adoption in oncology and depression. Across these four priority areas, we envision the following common set of steps:

- *Defining the population for the condition* – For each of the priority areas described below, an important first step is to define the population and the clinical episode associated with a particular condition. An examination of the clinical episode of a given condition will help define the set of outcomes measures that can be used to assess delivery system performance for that condition. In three out of the four prioritized areas existing efforts should help advance the task of defining the population. For example, Duke University Health System in conjunction with the Duke-Margolis Center for Health Policy have been engaged in an effort to develop an APM for degenerative joint disease. As part of this effort patient populations and triggers for degenerative joint disease episodes have been identified first by using diagnosis and procedure codes, with a view to using patient-reported functional status and shared decision-making aids in the population definitions in the future.
- *Identifying outcomes measures* – Each of the areas require defining the PCOM measures that adequately and reliably assess quality of care for that population and across a longitudinal episode. This includes identifying existing measures that require widespread adoption as well as measure concepts that require further measure development. Efforts here vary depending on the condition or priority topic area. For instance, little is known about the “right” set of measures for patients with multiple chronic conditions, the set of outcomes currently available, and what new measures need to be developed. For areas like depression, there is need for broader adoption of depression remission PRO-PMs but additional efforts will be needed to identify the set of outcome measures that adequately and reliably assess provider performance in an episode of depression. In each priority area, the goal is to identify the appropriate set of outcomes measures and next steps – either promoting adoption of existing measures or developing new measures. The development of the roadmap will therefore involve an environmental scan to ascertain ongoing efforts in each of the four priority areas and areas of focus for future work. From the beginning and throughout this process, it will be essential to engage patients to articulate their priorities as it relates to care delivery and their experience with the healthcare system.
- *Creation of a Measure Innovation Network* - Testing of PCOMs requires the involvement of payers and providers willing to adopt these measures, implement data collection mechanisms, and build an infrastructure to support measurement. There is therefore a need to recruit payers and providers who can participate in a measure innovation network that will implement these PCOMs. Accelerating adoption may initially require pay for reporting before incorporating PCOMs into payment models. In testing these measures, attention is needed to build a scalable data infrastructure that can ultimately be used nationwide.
- *Addressing cross-cutting issues* – A set of cross-cutting issues will need to be addressed to ensure consistency across the piloted areas. These issues include how social determinants of health are incorporated into or affect measurement, risk-adjustment methodology and best practices, and better infrastructure for collecting measures from different data sources. A common approach across the different conditions will help create efficiencies and ensure consistency and, ultimately, scalability.

The successful development and execution of the roadmap in these four pilot areas and ultimate wide-scale adoption of PCO measures requires an effective public-private partnership. We envision a steering committee that provides strategic direction for the development and implementation of the roadmap. The Steering Committee will need to be augmented with workgroups focused on these four pilot areas and that can tackle the specific technical topics described in this section in greater detail. Existing public-private partnerships such as the Measure Applications Partnership, Core Quality Measures Collaborative, and the Health Care Transformation Task Force can serve as forums for socializing and soliciting participation in the PCO measures effort. Finally, we anticipate that new measures will need to be developed in these priority areas and coordinated measure development and testing with an emphasis on real-world implementation would help accelerate the movement towards PCO measures.

## **Conclusion**

The US health system cannot continue to rely on legacy, fee for service measures as a means for payers and patients to select providers and hold them accountable for better outcomes. Both Congress and the Administration recognize this urgent need and the Administration has called for a roadmap to enable rapid transition to a better, more comprehensive measurement strategy for federal programs. The concepts and the practical next steps suggested in this paper can help develop a roadmap that results in PCOMs implementation that are aligned across public and private sectors. We believe that a strong and committed public-private partnership is needed to help make this vision a reality and we look forward to further collaboration on this critical endeavor.

**Appendix**

**Appendix 1: Prior Measure Initiatives**

Much of the performance measurement work to date has sought to establish broad frameworks for organizing measure development work and defining means by which measures can be more systemically used and collected. Although not exhaustive, the below list details the strategic priorities of different measurement initiatives and what each aims to highlight:

**National Academy of Medicine Core Metrics Report Measurement Domains/Core Measures:**

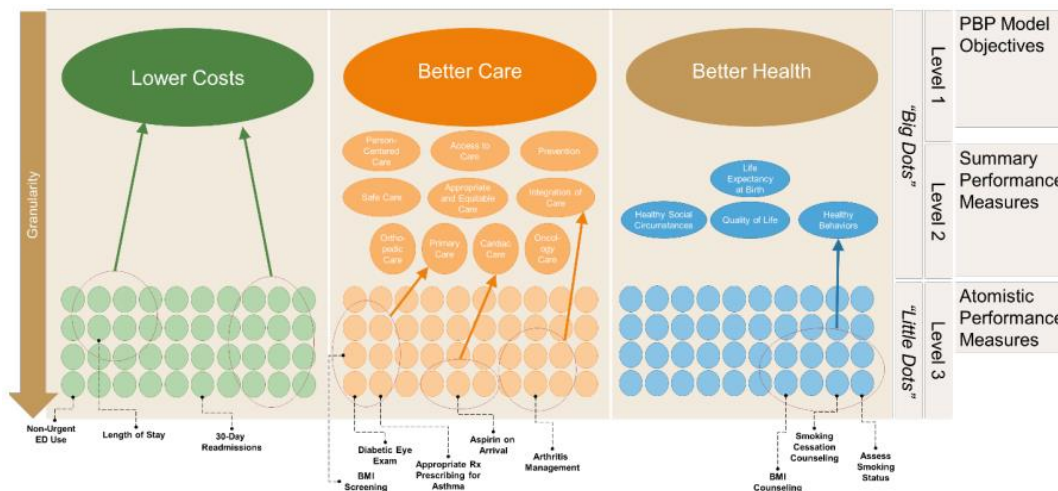
- Healthy people, care quality, lower cost, and engaged people
- NAM recommended 15 core measures

**Health Care Payment-Learning Action Network PBP Principles for Measurement:**

- Foundational: Performance measurement is at the heart of PBP models’ potential to advance the Triple Aim of better care, better health, and lower costs.
- Continuum of Care: Measures for PBP models must cover the full continuum of care across time, providers, and settings.
- Different from Fee-for-Service: Measures for PBP models must be more outcome-based than prevailing FFS measures, which have focused largely on evaluation of specific care processes for individual conditions or care settings.
- Incentivizing Improvement: PBP models must create meaningful incentives to improve health care quality, health outcomes, patient care experiences, and cost.

The LAN paper articulates different levels of measurement – Levels 1, 2, and 3. “Big dot measures which include Level 1 & 2 measures assess the overall system performance based largely on the outcomes produced, rather than on the processes used to produce them.”<sup>11</sup> Level 3 measures are more atomistic and similar to measures currently used in FFS.

*Figure 1: LAN Taxonomy of performance measures*



**CMS Strategic Areas in Meaningful Measures Initiative:**

- Improve the CMS customer experience
- Usher in an era of state flexibility and local leadership
- Support innovative approaches to improve quality, accessibility, and affordability
- Empower patients and doctors to make decisions about their health care

The CMS Meaningful Measures initiative identifies six quality categories for measurement: promoting effective communication and coordination of care, promote effective prevention and treatment of chronic disease, work with communities to promote best practices of healthy living, make care affordable, make care safer by reducing harm caused in the delivery of care, strengthen person and family centered engagement as partners in their care. Found below is CMS’ framework for making progress in these domains.

*Figure 2: CMS Meaningful Measures Six Priority Domains*



CMS is operationalizing their Meaningful Measures Initiative by evaluating the usefulness of their current stock of measures, continuing to pay for the reporting of new, potentially valuable outcome measures until they can be better implemented, and developing new outcome measures in areas where critical gaps exist.

**ICHOM:**

The focus for ICHOM is measuring outcomes to reduce costs, inform decisions and improve quality. ICHOM has identified standard sets for 23 conditions that cover 54% of the global disease burden.

<sup>1</sup> President Donald J. Trump. Executive Order on Improving Price and Quality Transparency in American Healthcare to Put Patients First. June 24, 2019. <https://www.whitehouse.gov/presidential-actions/executive-order-improving-price-quality-transparency-american-healthcare-put-patients-first/> Accessed June 29, 2019.

<sup>2</sup> Senate Health, Education, Labor and Pensions Committee. Press Release: Senate Health Committee Leaders Introduce Bipartisan Legislation to Reduce Health Care Costs. <https://www.help.senate.gov/chair/newsroom/press/senate-health-committee-leaders-introduce-bipartisan-legislation-to-reduce-health-care-costs> Accessed June 27, 2019.

<sup>3</sup> Health Care Payment Learning and Action Network. Data Sharing Requirements Initiative: Collaborative Approaches to Advance Data-Sharing <http://hcp-lan.org/workproducts/dsri-report.pdf> Accessed January 1, 2019.

<sup>4</sup> Getting To The Next Generation Of Performance Measures For Value-Based Payment | Health Affairs. <https://www.healthaffairs.org/doi/10.1377/hblog20190128.477681/full/>. Accessed July 9, 2019.

<sup>5</sup> <https://www.pwc.com/us/en/industries/health-industries/library/health-care-social-media.html>

<sup>6</sup> What Is Net Promoter? Net Promoter Network. <https://www.netpromoter.com/know/>. Accessed July 9, 2019.

<sup>7</sup> "Achieving Meaningful Measurement In Medicare, " Health Affairs Blog, August 15, 2018.DOI: 10.1377/hblog20180810.433339

<sup>8</sup> National Partnership for Women and Families. Blueprint for Advancing High-Value Maternity Care Through Physiologic Childbearing <http://www.nationalpartnership.org/our-work/resources/health-care/maternity/blueprint-for-advancing-high-value-maternity-care.pdf> Accessed February 27, 2019

<sup>9</sup> HHS NEWS: HHS To Deliver Value-Based Transformation in Primary Care | CMS.

<https://www.cms.gov/newsroom/press-releases/hhs-news-hhs-deliver-value-based-transformation-primary-care>. Accessed July 9, 2019.

<sup>10</sup> NQF: Patient-Reported Outcomes. [https://www.qualityforum.org/Projects/n-r/Patient-Reported\\_Outcomes/Patient-Reported\\_Outcomes.aspx](https://www.qualityforum.org/Projects/n-r/Patient-Reported_Outcomes/Patient-Reported_Outcomes.aspx). Accessed July 9, 2019.

<sup>11</sup> Health Care Payment Learning and Action Network. Accelerating and Aligning Population-Based Payment Models: Performance Measurement <http://hcp-lan.org/workproducts/pm-whitepaper-final.pdf> Accessed January 10, 2019