Physician-Focused Payment Model Technical Advisory Committee

September 25, 2025

Robert F. Kennedy Jr., Secretary
U.S. Department of Health and Human Services
200 Independence Avenue, SW
Washington, DC 20201

Dear Secretary Kennedy:

On behalf of the Physician-Focused Payment Model Technical Advisory Committee (PTAC), we are pleased to submit PTAC's 2024 reports on:

- Developing and Implementing Performance Measures for Population-Based Total Cost of Care (PB-TCOC) Models (March 2024)
- Addressing the Needs of Patients with Complex Chronic Conditions or Serious Illnesses in PB-TCOC Models (June 2024)
- Identifying a Pathway Toward Maximizing Participation in PB-TCOC Models (September 2024)

Section 1868(c) of the Social Security Act directs PTAC to: 1) review physician-focused payment models (PFPMs) submitted to PTAC by individuals and stakeholder entities; 2) prepare comments and recommendations regarding whether such models meet criteria established by the Secretary of Health and Human Services (HHS); and 3) submit these comments and recommendations to the Secretary.

Within this context, from time to time, it may be beneficial for PTAC to reflect on proposed PFPMs that have been submitted to the Committee to provide further advisement on pertinent issues regarding effective payment model innovation in Alternative Payment Models (APMs) and PFPMs. In some cases, the importance of an emerging topic may lead PTAC to consider how proposals the Committee has reviewed in the past may inform that emerging topic. For example, PTAC may wish to assess information in previously submitted proposals and other sources that could serve to further inform the Secretary, as well as PTAC itself on these topics. This is the case regarding the topics explored by PTAC in 2024.

From 2016 to 2020, PTAC received 35 proposals for PFPMs and voted on the extent to which 28 of these proposals meet the Secretary's 10 regulatory criteria. Nearly all of the 35 proposals that were submitted to PTAC addressed the proposed model's impact on quality and costs to some degree. Since 2022, PTAC has been conducting a series of theme-based discussions to explore care delivery and payment issues related to developing and implementing PB-TCOC models. Key themes that emerged from these meetings have included how best to measure the desired outcomes and develop performance measures for PB-TCOC models; identifying and caring for the high-cost, high-needs patient population with complex chronic conditions and/or serious illnesses; and increasing provider participation in PB-TCOC models. Additionally, nearly all of the proposals that have been submitted to PTAC included components related to one or more of these themes.

For this reason, PTAC now sees value in further exploring elements in previously submitted proposals related to these topics, along with current information. To ensure that the Committee was fully informed, the Committee conducted theme-based discussions on these topics during three two-day public meetings in 2024: developing and implementing performance measures in PB-TCOC models (March 2024); addressing the needs of patients with complex chronic conditions or serious illnesses in PB-TCOC models (June 2024); and identifying a pathway toward maximizing participation in PB-TCOC models (September 2024). Each theme-based discussion included an overview presentation by PTAC members and sessions involving presentations and discussion with previous submitters and other subject matter experts (SMEs). PTAC also requested public input during the meeting and through a Request for Input (RFI).

This consolidated three-part report provides PTAC's findings and valuable information on best practices for developing and implementing performance measures for PB-TCOC models; addressing the needs of patients with complex chronic conditions or serious illnesses in PB-TCOC models; and identifying a pathway toward maximizing participation in PB-TCOC models. The information that PTAC has gleaned from a review of previous PFPM proposals and other literature that addressed these important topics, as well as input received during the theme-based discussions, will help to inform PTAC in its review of future proposals. This material has informed the Committee's comments, which are summarized in the following broad topic areas in this three-part report:

March 2024 Report: ***Developing and Implementing Performance Measures for Population-Based Total Cost of Care (PB-TCOC) Models***

- Topic 1: Developing a Balanced Measure Portfolio;
- Topic 2: Focusing on Patient-Centered Measures;
- Topic 3: Need for Reduction in Measure Complexity; and
- Topic 4: Considerations in Linking Performance Measures to Payment.

June 2024 Report: ***Addressing the Needs of Patients with Complex Chronic Conditions or Serious Illnesses in Population-Based Total Cost of Care (PB-TCOC) Models***

- Topic 1: Optimizing Data for Identifying and Managing Patients with Complex Chronic Conditions or Serious Illnesses in PB-TCOC Models;
- Topic 2: Importance of Primary Care;
- Topic 3: Ensuring a Role for Palliative and Hospice Care;
- Topic 4: Addressing the Needs of Patients and Caregivers; and
- Topic 5: Performance Measures and Financial Incentives for Patients with Complex Chronic Conditions or Serious Illnesses in PB-TCOC Models.

September 2024 Report: ***Identifying a Pathway Toward Maximizing Participation in Population-Based Total Cost of Care (PB-TCOC) Models***

- Topic 1: Simplification of Alternative Payment Model (APM) Design;
- Topic 2: Ensuring that Financial Incentives Align with the Business Success of Providers;
- Topic 3: Improving the Accessibility and Usability of Data;
- Topic 4: Implications of Model Design on Provider Capacity and Workforce;
- Topic 5: Need for Payment Methodology Reform; and
- Topic 6: Consideration of the Role of Beneficiaries in APMs.

In addition to summarizing the Committee's findings and comments related to these topics, the report also identifies areas where additional research is needed, issues for policy makers, and some potential next steps.

The members of PTAC appreciate your support of our shared goal of improving the Medicare program for both beneficiaries and the physicians who care for them. PTAC members would be happy to discuss any of these observations with you. However, the Committee appreciates that there is no statutory requirement for the Secretary to respond to these comments.

Sincerely,

//Terry Mills//

Terry L. Mills Jr., MD, MMM
Co-Chair

//Soujanya Pulluru//

Soujanya R. Pulluru, MD
Co-Chair

Attachment

Physician-Focused Payment Model Technical Advisory Committee

REPORT TO THE SECRETARY OF HEALTH AND HUMAN SERVICES

March 2024 Public Meeting

Developing and Implementing Performance Measures for Population-Based Total Cost of Care (PB-TCOC) Models

September 25, 2025

About This Report

The Physician-Focused Payment Model Technical Advisory Committee (PTAC) was established by the Medicare Access and CHIP Reauthorization Act of 2015 (MACRA) to: 1) review physician-focused payment models (PFPMs) submitted by individuals and stakeholder entities; 2) prepare comments and recommendations regarding whether such models meet criteria established by the Secretary of Health and Human Services (HHS); and 3) submit these comments and recommendations to the Secretary. PTAC reviews submitted proposals using criteria established by the Secretary in regulations at 42 CFR §414.1465.

Within this context, from time to time, it may be beneficial for PTAC to reflect on proposed PFPMs that have been submitted to the Committee to provide further advisement on pertinent issues regarding effective payment model innovation in Alternative Payment Models (APMs) and PFPMs. Given that, in the past, nearly all of the proposals that have been submitted to PTAC address issues related to developing and implementing performance measures for PB-TCOC models, PTAC now sees value in reviewing these elements in previously submitted proposals related to this topic, along with current information on developing and implementing performance measures for PB-TCOC models. To ensure that the Committee was fully informed, PTAC's March 2024 public meeting included a theme-based discussion on developing and implementing performance measures for PB-TCOC models.

This report summarizes PTAC's findings and comments regarding developing and implementing performance measures for PB-TCOC models. This report also includes: 1) areas where additional research is needed and some potential next steps; 2) a summary of the characteristics related to developing and implementing performance measures for PB-TCOC models from proposals that have previously been submitted to PTAC; 3) an overview of key issues relating to developing and implementing performance measures and value-based care transformation; and 4) a list of additional resources related to this theme-based discussion that are available on the Assistant Secretary for Planning and Evaluation (ASPE) PTAC website.

Table of Contents

SUMMARY STATEMENT

From 2016 to 2020, PTAC received 35 proposals for PFPMs and voted on the extent to which 28 of these proposals meet the Secretary's 10 regulatory criteria. Nearly all of the 35 proposals that were submitted to PTAC addressed the proposed model's impact on quality and costs to some degree. Since 2022, PTAC has been conducting a series of theme-based discussions to explore care delivery and payment issues related to developing and implementing population-based total cost of care (PB-TCOC) models, including issues related to rural participation in PB-TCOC models and care transition management. Key themes that emerged from these meetings related to how best to measure the desired outcomes and develop performance measures for PB-TCOC models, and approaches for linking performance measures with payment and financial incentives in PB-TCOC models. Nearly all of the 35 proposals that were submitted to PTAC between 2016 and 2020 included information about proposed performance measures to some degree. Additionally, at least 16 of the proposed models met both Criterion 2 (Quality and Cost) and Criterion 4 (Value over Volume).

For this reason, PTAC now sees value in further exploring elements in previously submitted proposals related to this topic, along with current information on developing and implementing performance measures for PB-TCOC models. To ensure that the Committee was fully informed, the Committee conducted a theme-based discussion on this topic during PTAC's two-day March 2024 public meeting. The theme-based discussion included an overview presentation by PTAC members, listening session presentations by previous submitters and other subject matter experts (SMEs), as well as panel discussions with other SMEs related to developing and implementing performance measures for PB-TCOC models. PTAC also requested public input during the meeting and through a Request for Input (RFI).

This report provides PTAC's findings and valuable information on best practices for developing and implementing performance measures for PB-TCOC models. The information that PTAC has gleaned from a review of previous PFPM proposals and other literature that addressed this important topic, as well as input received during the theme-based discussion, will help to inform PTAC in its review of future proposals. This material has informed the Committee's comments, which are summarized in the following broad topic areas in this report:

- Topic 1: Developing a Balanced Measure Portfolio;
- Topic 2: Focusing on Patient-Centered Measures;
- Topic 3: Need for Reduction in Measure Complexity; and
- Topic 4: Considerations in Linking Performance Measures to Payment.

Key highlights include:

- The current performance measurement system is complex. There are too many measures and different measure specifications for the same concept, measures take too long to develop (years), and there is high administrative burden on providers to collect and report measurement data.
- Measures should be standardized, and unnecessary measures should be eliminated.
    - Investment in health care data infrastructure and provider training is needed to support measure data collection and data sharing and to reduce administrative burden.
- A balanced measure portfolio is needed.
    - Broad (macro), system-level, and long-term measures such as total cost of care (TCOC) are critical to drive and monitor overall health system change.
    - Outcome measures should be emphasized, but structure, process, and short-term measures also may be useful to ensure that the appropriate outcomes can be achieved and to monitor progress to broader health system change over time.
    - Outcome measures should be those that are meaningful and matter to patients and their providers, including access, timeliness, and appropriateness of care; patient safety; team-based care, including collaboration and communication; and care improvement.
- Obtaining information directly from patients and caregivers is important.
    - Patient-reported outcome measures (PROMs) are a critical tool to collect patient-reported information about their health status and quality of life.
    - Attention is needed when administering PROMs to ensure that patients can understand and complete these surveys.
    - PROMs may need to be tailored for certain patient populations, such as those with high health-related social needs and/or low education levels.
- Performance measurement should occur at both the organization and physician levels.
    - Organization-level measurement should be used as the basis for financial incentives associated with financial risk in PB-TCOC models occurring for the organization rather than individual providers.
    - Physician-level measurement should be used to help providers understand their progress in meeting performance targets. These measures also are important to prevent providers from gaming the system, such as by stinting on patient care or cherry-picking the healthiest patients.
- Strategic use of performance measures can facilitate development of a glide path to support providers' transition to TCOC models: standardizing and aligning measures across payers, determining mandatory elements of performance measurement, and

developing a plan for measures to be used to transition providers from fee-for-service (FFS) to TCOC payments.

In addition to summarizing the Committee's findings and comments related to these topics, the report also identifies areas where additional research is needed, issues for policy makers, and some potential next steps.

I. PTAC REVIEW OF DEVELOPING AND IMPLEMENTING PERFORMANCE MEASURES FOR PB-TCOC MODELS

In developing the comments in this report, PTAC considered information from the theme-based discussion during the March 2024 public meeting and an environmental scan developed to provide information on developing and implementing performance measures for PB-TCOC models. PTAC also considered an analysis that was conducted to provide an overview of current performance measures included in selected Medicare payment programs.

PTAC formed a Preliminary Comments Development Team (PCDT) for the March 2024 theme-based discussion, which was comprised of Jennifer Wiler, MD, MBA (Lead); Lawrence Kosinski, MD, MBA; Soujanya Pulluru, MD; and James Walton, DO, MBA (see Appendix 1 for a list of the Committee members). The PCDT reviewed the environmental scan and delivered a summary presentation to the full Committee during the theme-based discussion. The theme-based discussion included panel discussions with stakeholders from organizations that previously submitted PFPM proposals that involved performance measures. The theme-based discussion also featured perspectives from a diverse group of SMEs, and an opportunity for public comments. At the end of the theme-based discussion, Committee members identified comments to be included in this Report to the Secretary (RTS).[i]

The Committee synthesized information from PTAC proposals, the environmental scan, performance measures analysis, and panel discussions with a previous submitter and other SMEs during the March 2024 public meeting on developing and implementing performance measures in PB-TCOC models. This RTS summarizes PTAC's comments from its findings, which are organized in four topics:

- Topic 1: Developing a Balanced Measure Portfolio;
- Topic 2: Focusing on Patient-Centered Outcome Measures;
- Topic 3: Need for Reduction in Measure Complexity; and

[i] Jay Feldstein, DO and Soujanya Pulluru, MD were not in attendance at the March 25-26, 2024 public meeting. Joshua Liao, MD, MSc was not in attendance for day one (of the public meeting (March 25, 2024). Henish Bhansali, MD, FACP and Krishna Ramachandran, MBA, MS were not in attendance at the March 25-26, 2024 public meeting because the terms for both PTAC members did not start until October 2024. Angelo Sinopoli, MD and Jennifer Wiler, MD, MBA were in attendance at the March 25-26, 2024 public meeting; the terms for both PTAC members expired in October 2024 before delivery of this report.

- Topic 4: Considerations in Linking Performance Measures to Payment.

For each topic, relevant issues are highlighted, followed by a summary of PTAC's comments. Appendix 2 includes information about proposals that were previously submitted to PTAC which addressed issues related to developing and implementing performance measures in PB-TCOC models. Appendix 3 provides a list of additional resources related to PTAC's performance measures theme-based discussion that are available on the Assistant Secretary for Planning and Evaluation (ASPE) PTAC website. Appendix 4 includes a complete list of the Committee's comments.

II. BACKGROUND: DEFINITIONS AND CONTEXT RELATED TO DEVELOPING AND IMPLEMENTING PERFORMANCE MEASURES FOR PB-TCOC MODELS

There are several definitions of performance measurement and different approaches to measuring quality and performance. PTAC has developed the following working definition of performance measures as they relate to PB-TCOC models:

- Performance measures **assess and monitor all aspects of a provider's performance in models,** including quality (e.g., process and structure), outcomes, cost, and utilization.

PTAC has developed the following working definitions for the different types of performance measures as they are used in PB-TCOC models:

- **Quality Measures** assess the safety, timeliness, effectiveness, efficiency, and patient-centeredness of models. Quality measures may capture structures, processes, and patient experiences with health care. [1,2,3,4]
- **Outcome Measures** focus on the change in health status of a patient resulting from health care.
- **Cost Measures** quantify the cost of health care services provided. Cost measures can measure total cost of care or specific costs.
- **Utilization Measures** address the volume of health care services provided.

PTAC views quality measures as including both structure and process. Additionally, PTAC views outcome measures as including clinical, utilization and cost outcomes. **Exhibits 1 and 2** include examples of different types of quality and outcome measures.

Exhibit 1. Types of Quality Measures

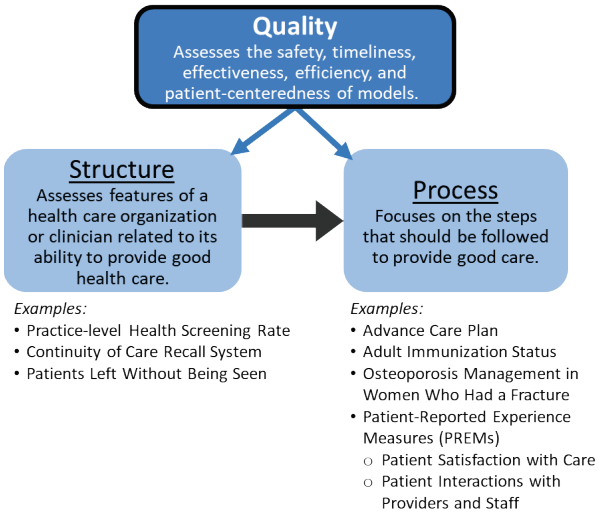
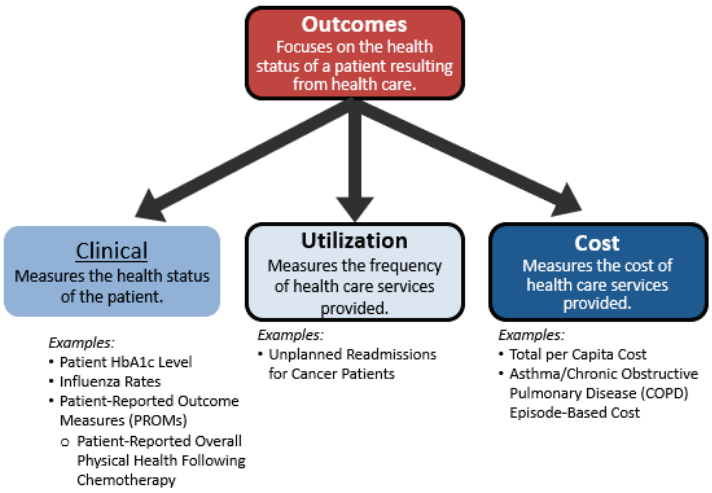


Exhibit 2. Types of Outcome Measures

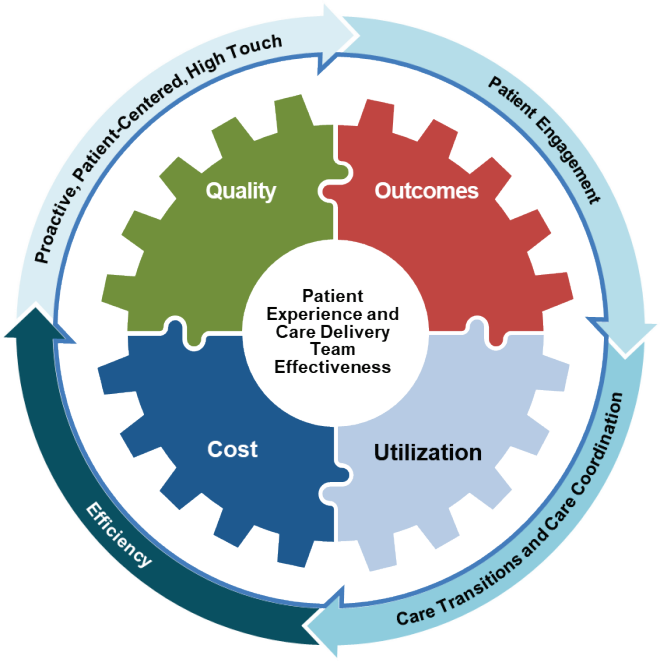


When identifying appropriate performance measures for PB-TCOC models, PTAC believes it is important to consider several guiding principles, including:

- Providing proactive, patient-centered, high-touch care;
- Encouraging and seeking patient engagement;
- Managing care transitions and care coordination; and
- Improving efficiency.[5]

The guiding principles can be used to identify appropriate types of performance measures that can be used to evaluate participating PB-TCOC organizations, and ultimately improve patient experience and care delivery team effectiveness. **Exhibit 3** shows the relationship between the guiding principles and the types of quality, outcome, utilization, and cost measure that can be used to evaluate performance related to the guiding principles.

Exhibit 3. Relationship Between Guiding Principles and the Types of Performance Measures for PB-TCOC Models



Quality
- Patient Experience
- Timeliness of Access to Care
- Preventive Care Screening Rates
- Health-Related Social Needs Measures

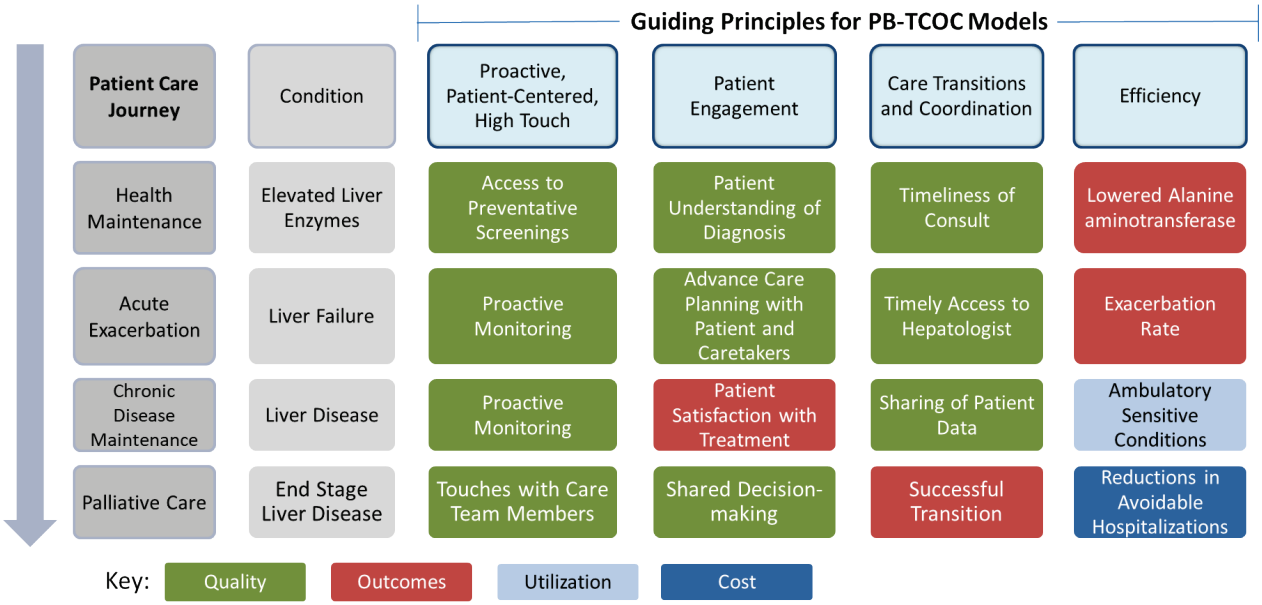
Outcomes
- Mortality/ Morbidity Rates
- Chronic Condition Control Rates
- Health Status Outcomes
- Patient-Reported Outcomes

Utilization
- Inpatient vs Outpatient Services
- Avoidable Utilization

Cost
- Total Costs
- Disease-Based Costs

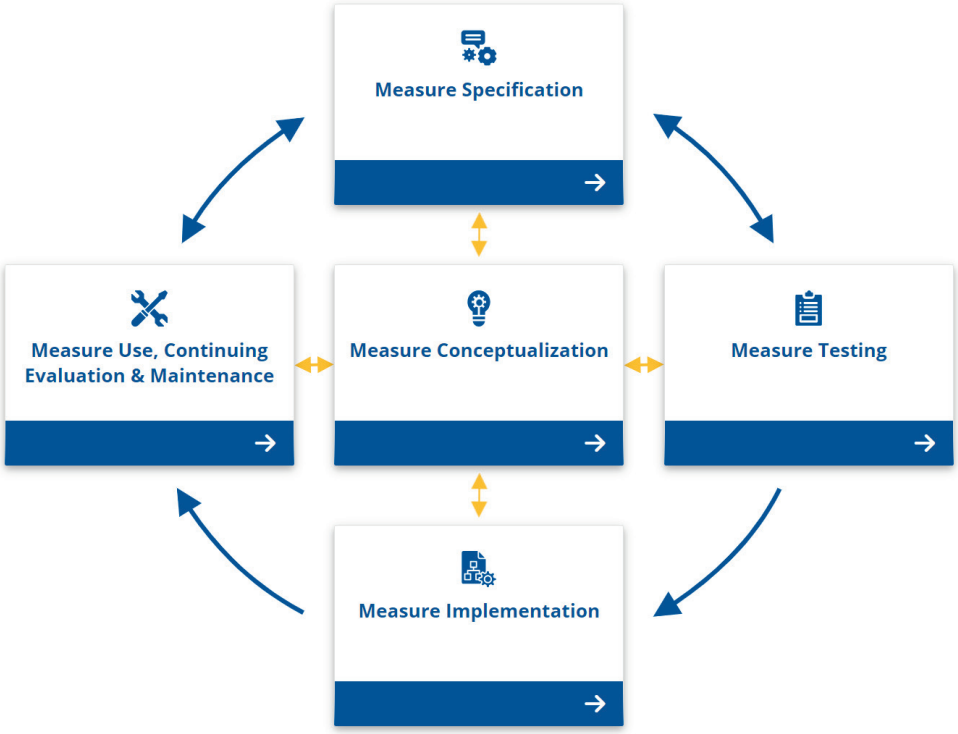
Additionally, PB-TCOC models and providers participating in these models need meaningful performance measures that are related to the various stages of a patient's health care journey. **Exhibit 4** provides an example of how the guiding principles of PB-TCOC models can be used to identify meaningful performance measures at various stages in the health care journey for a patient with liver disease.

Exhibit 4. Identifying Meaningful Performance Measures For PB-TCOC Models at Each Stage of the Patient's Care Journey – Example: Liver Disease



Measurement development involves several tasks and stages, which include measure conceptualization; specification; testing; implementation; and use, continuing evaluation, and maintenance.[6] **Exhibit 5** provides an example of the measure development process used by the Centers for Medicare & Medicaid Services (CMS).[7]

Exhibit 5. CMS Measure Life Cycle



Performance measures are used to ensure high-quality patient care and reduce unnecessary expenditures. [8,9,10] Different health care settings and programs may set specific goals for implementing performance measures, such as reducing patient mortality rates, improving patient satisfaction with care, and increasing the use of electronic health records (EHRs). Programs/models should aim to select measures that address program goals while being mindful of the number of performance measures selected.[11] Requiring too many measures could result in staff burden and the collection of unnecessary data, while too few measures may omit reporting of important data related to the goals.

III. CHARACTERISTICS OF PTAC PROPOSALS RELEVANT TO DEVELOPING AND IMPLEMENTING PERFORMANCE MEASURES FOR PB-TCOC MODELS

Between 2016 to 2020, PTAC received 35 proposed PFPMs submitted by stakeholders and voted on the extent to which 28 of these proposals meet the Secretary's 10 regulatory criteria.[ii] Nearly all of the 35 proposals that were submitted to PTAC between 2016 and 2020 included information about proposed performance measures to some degree. Additionally, at least 16 of the proposed models met both Criterion 2 (Quality and Cost) and Criterion 4 (Value over Volume).

[ii] The remaining seven proposals were withdrawn prior to the Committee's deliberation.

Proposals were grouped into four categories based on Criterion 2 (Quality and Cost: ability to maintain/improve health care quality while decreasing costs or improve health care quality at no additional cost) and Criterion 4 (Value over Volume: provision of incentives for delivery of high-quality health care). The four categories of PTAC proposals for the purposes of this analysis included the following:

1. Proposals that met both Criterion 2 and Criterion 4 (N=19)
2. Proposals that met Criterion 2 but did not meet Criterion 4 (N=5)
3. Proposals that met Criterion 4 but did not meet Criterion 2 (N=1)
4. Proposals that did not meet Criterion 2 or Criterion 4, were withdrawn, or were determined to be out of scope by PTAC (N=9)

Proposals included a variety of performance measures related to utilization, spending, quality, and patient experience. Twenty-eight proposals included utilization measures (82 percent), 32 included quality measures (94 percent), 31 included spending measures (91 percent), and 31 included patient experience measures (91 percent).

Further, PTAC proposals included a variety of approaches to link payment to performance. There were differences among the proposal categories on whether payment was linked to performance. Most proposals in the first three categories included approaches that linked payment to performance. In contrast, among the nine proposals that did not meet Criterion 2 or Criterion 4, were withdrawn, or were determined to be out of scope, five proposals included approaches that tie payment to performance.

Twenty-six proposals (76 percent) mentioned establishing target prices or benchmarks for comparison. Most proposals indicated that historical performance data would be used to set benchmarks. Eight proposals (24 percent) did not specify if or how benchmarks would be established; these were dispersed across the four proposal categories.

Twenty-six proposals (76 percent) also included risk-adjustment methodologies to adjust target prices based on patients' risk. For example, six proposals planned to adjust target prices based on hierarchical condition categories (HCCs); five of these six were proposals that met both Criterion 2 and Criterion 4. Eight of the 35 proposals (23 percent) did not apply risk adjustment; these were distributed across the four proposal categories.

Proposals generally recommended a set of utilization, quality, spending, and/or patient experience measures aimed at achieving the specific goals of the model proposed.

See Appendix 2 for additional information on performance measures and how payment is adjusted for performance among PTAC proposals.

IV. COMMENTS FOR CONSIDERATION BY THE SECRETARY

Based on findings from the Committee's analysis of PTAC proposals, information in the literature, and information from listening session presentations and panel discussions involving previous submitters and additional SMEs during the March 2024 public meeting, this section summarizes PTAC's comments regarding developing and implementing performance measures for PB-TCOC models. PTAC's comments are organized in four topics:

- Topic 1: Developing a Balanced Measure Portfolio;
- Topic 2: Focusing on Patient-Centered Measures;
- Topic 3: Need for Reduction in Measure Complexity; and
- Topic 4: Considerations in Linking Performance Measures to Payment.

For each topic, relevant issues are highlighted, followed by a summary of PTAC's comments. Additionally, the Committee has identified areas where additional research is needed, as well as some potential next steps related to each topic. Appendix 4 includes a complete list of the Committee's comments.

IV.A. Topic 1: Developing a Balanced Measure Portfolio

PTAC discussed several important considerations for developing a balanced performance measure portfolio:

- Different types of measures should be included;
- Need to identify measure gaps; and
- Simplify the measure development and reporting process.

PTAC's comments on developing a balanced measure portfolio are listed in Exhibit IV.1.

Different types of measures should be included. Committee members identified that a balanced measure portfolio that includes different types of performance measures is needed. SMEs shared varied perspectives on the types of measures that should be included for PB-TCOC models.

Several SMEs discussed the importance of focusing on broader, system-level, and long-term measures. Measuring the performance of the system rather than individual providers can help to transform the health care system rather than just improve specific health care experiences. Similarly, utilizing measures that capture change in the health status of a population over time is important because meaningful change in population health will take years to occur. Macro-level measures, such as TCOC, compared with more granular or micro-level measures, may be particularly important in helping to drive system transformation and achieve the goals of value-

based payment. Macro-level measures offer the benefit of focusing on monitoring and improving performance of the broader health system and doing so in a parsimonious way that relies on fewer measures. This macro-focused approach emphasizes reliance on outcome measures over process measures, enabling providers to determine the best processes needed to achieve the measured outcomes.

Other SMEs emphasized the importance of including a balance of measures in PB-TCOC models. For example, process measures may be important to mitigate providers' avoidance of high-risk or high-cost patients who may have poorer outcomes. Inclusion of structure, process, and outcome measures can present a pathway to improved care.[12] However, structure and process measures should have a clear tie to outcomes; for instance, measuring the extent to which providers follow clinical guidelines (process) is linked to improved outcomes that should occur by patients receiving care according to those guidelines. Short-term measures, such as patients' current health status, also may be important to include to measure that providers are making progress in the movement to broader health system change.

Committee members and experts discussed that a balanced measure portfolio should cover broad domains of population health management, including clinical quality, population health outcomes, and patient experience. SMEs noted that customizing measures may be important to account for particular provider specialties, patient population, and life stage. For example, measures of hypertension and diabetes may be more appropriate among younger and healthier adults, whereas measures of frailty and functional status may be more suited for older adults.

SMEs indicated that appropriate performance measures are those that are meaningful to physicians and that measure outcomes that matter to patients. Among the specific measures to include are those focused on access, timeliness, and appropriateness of care; patient safety; team-based care, including collaboration and communication; and care improvement. SMEs emphasized that patient-reported measures are particularly important. These measures are discussed in more detail under Topic 2 (Focusing on Patient-Centered Measures).

Finally, SMEs suggested that a balanced portfolio should also include measures beyond patient care to capture a broader understanding of health system performance. Examples of these types of measures include provider workforce staff burnout, turnover, and data collection burden.

Need to identify measure gaps. PTAC and experts called attention to gaps in non-clinical performance measures. For example, gaps exist with broader health system effectiveness measures such as patient time spent at home, outcomes among patients who transition out of care, system retention of vulnerable patient populations, and provider relationships (such as with patients, payers, and other providers) within the health care system. Other gaps may exist for measures that may be more meaningful from a patient's perspective, such as whether the patient's goals of care were met during a visit.

Specialty care measures, in particular, represent one of the most significant gap areas across the performance measure spectrum. Experts noted that it is essential to incorporate specialty care in TCOC models, and identifying appropriate specialty measures is key to integrating primary and specialty care. One option is to attempt to develop measures for different specialties; however, this can be challenging with many different specialties and subspecialties. Moreover, for many episodes of care, there is confusion related to whom to assign responsibility for a bundle of care. A more viable option may be to measure quality more broadly at the system level rather than at the level of individual providers, for example, measuring the TCOC involved in treating a hip fracture, irrespective of the primary care providers or specialists who delivered specific care throughout the episode.

Simplify the measure development and reporting process. PTAC and SMEs identified the need to simplify the measure development process, noting that the process is currently expensive and time-consuming. It can take on average five to six years to develop a measure, with additional time required for measure endorsement and adaptation for use in value-based care programs. Experts noted the importance of including clinicians in the measure development process to ensure that the providers who will be assessed against the measures think that they are fair, feasible, and valuable.

Exhibit IV.1: PTAC Comments

Topic 1: Developing a Balanced Measure Portfolio

Comment 1A. Existing measures do not capture all of the important metrics for TCOC models. Emergency room and inpatient admission rates should be included but are not comprehensive. Other measures that should be considered relate to access to care, population health, and mental health.

Comment 1B. A balanced scorecard approach must occur at the system level. Focus on measures related to quality, safety, and patient experience, rather than cost and efficiency.

Comment 1C. In addition to measures of improvement, measures of accountability (e.g., safety, appropriateness, reporting) and measures for payment also should be considered. All measures will likely be different.

Comment 1D. Timeliness and access to care are metrics for both quality and safety. A list of timeliness metrics may be made available, including metrics such as specialist visits after a cancer diagnosis. Even if timeliness metrics cannot be used within the Center for Medicare and Medicaid Innovation (the Innovation Center) or CMS models yet, other payer programs could utilize them.

Comment 1E. The portfolio of measures will likely not be the same across localities. However, all portfolios will include outcome measures, appropriateness of care measures, and access to care measures with decreasing emphasis on process measures.

Comment 1F. Gaps still exist in measures designed for specialty care, particularly measures that link specialty care to primary care.

Comment 1G. Developing and implementing measures is expensive.

IV.B. Topic 2: Focusing on Patient-Centered Measures

PTAC identified the importance of having patient-centered measures:

- Need for more patient-reported outcomes measures (PROMs); and
- Collecting patient-oriented measures can be challenging.

PTAC's comments on focusing on patient-centered measures are listed in Exhibit IV.2.

Need for more patient-reported outcomes measures (PROMs). PTAC indicated the need to develop more PROMs. PROMs are tools that collect information directly from patients about their health-related outcomes, such as a patient's health status (e.g., health symptoms or health behaviors) and quality of life (e.g., functional status).[13] Experts noted the importance of PROMs to provide key insights to the outcomes of care. PROMs can provide important information on the benefits and risks of a particular treatment and identify unmet needs or gaps in patients' health. For example, for a patient undergoing a knee replacement, traditional outcome measures not reported directly by a patient have included hospital infection or readmission rates. However, these clinical measures do not necessarily reveal the outcome of the surgery from the patient's perspective, whose goal was to be able to climb the stairs. This type of patient outcome could be captured via PROMs through questions related to improvements in the patient's mobility and functional status.

PTAC and SMEs expressed the importance of obtaining measures from both patients and caregivers, as well as the need to provide feedback to them on the action that will be taken based on their responses (e.g., to address reports of poor patient health outcomes or poor provider interactions). PROMs should include ascertaining perceptions of provider trust, communication, coordination, shared decision-making, and empathy. Experts also noted that it is best that measurement focus on specific care activities (e.g., asking if medications were explained at discharge) rather than general provider ratings (e.g., inquiring how well a physician communicates).

Collecting patient-oriented measures can be challenging. Committee members noted that collecting PROMs can be challenging. PROMs are expensive and resource-intensive to administer as they require coordinating with patients to complete them. To increase the likelihood that patients (and caregivers) will provide feedback, the survey tool needs to be easy to complete. Content and delivery challenges exist with PROMs. The survey should be at a comprehension level that patients can understand. Delivery modality is also an issue as surveys

are frequently administered electronically, which can pose technological difficulties for some patients. Patients in rural or lower socioeconomic areas may not have access to the technology (e.g., smartphones, computers, or internet access) to be able to complete electronic surveys. Moreover, not all patients may be technologically literate.

Obtaining patient feedback in a timely way is essential to ensuring it is actionable. One expert noted that the Agency for Healthcare Research and Quality's (AHRQ's) Consumer Assessment of Healthcare Providers and Systems (CAHPS) survey is useful but is not necessarily timely or specific enough to sufficiently understand patient and caregiver experiences at a level that can drive a practice's action. PROMs are often administered after an office visit is completed (e.g., by the patient at home) rather than at the office. Minimizing the time between the visit and survey administration may be most useful for obtaining actionable information that can allow providers to better meet patient and caregiver expectations.

PTAC and experts also noted that special challenges may exist with obtaining patient feedback from high-needs patient populations (e.g., those patients with multiple physical and/or mental conditions). PROMs may need to be tailored for this population, both in terms of the nature of the questions asked, as well as the model of delivery (e.g., for patients with cognitive impairment). For example, it may be necessary to utilize shorter surveys, administer surveys in person or by telephone, or use proxies and caregivers to answer questions rather than rely on the patient to self-complete.

Lastly, there are challenges with integrating PROMs into the EHR. SMEs mentioned that PROMs implementation is a significant pain point for providers and practices. EHR vendors are slowly starting to incorporate PROMs; however, integration may progress faster if payers demanded the use of PROMs. One expert shared that an EHR vendor is making efforts to facilitate easier collection and integration of PROMs into patients' clinical records using solutions that motivate clinicians to use PROMs (e.g., creation of data displays and advanced analytics).

Exhibit IV.2: PTAC Comments

Topic 2: Focusing on Patient-Centered Measures

Comment 2A. Development of person-centered outcomes and patient-reported outcomes is needed.

Comment 2B. To avoid assuming that something is wrong with a patient who lacks trust in the health care system, a measure of trust could be developed.

Comment 2C. The quality of life of caregivers also should be considered.

Commend 2D. The collection of patient-oriented measures can be challenging because they must be collected at the individual level rather than the practice level.

Comment 2E. Existing patient-reported measures and surveys may not meet the needs of high-needs populations.

IV.C. Topic 3: Need for Reduction in Measure Complexity

Committee members identified the importance of reducing measure complexity:

- Eliminate unnecessary measures and standardize measures;
- Ensure that a solid data infrastructure exists; and
- Assist providers with implementation.

PTAC's comments on the need for reduction in measure complexity are listed in Exhibit IV.3.

Eliminate unnecessary measures and standardize measures. PTAC indicated that providers have experienced challenges with performance measurement due to the complexity, inconsistency, and large number of measures. There is a need to eliminate unnecessary measures and standardize remaining measures. Committee members conveyed that quality reporting places an administrative burden on providers, and the inconsistency in measures used across programs can place an additional burden on providers.

Experts supported the call for standardized measures. CMS's Center for Clinical Standards and Quality (CCSQ) is focused on aligning and standardizing measures due to the challenges and increased burden providers have experienced in having inconsistent and/or similar but not identical measures. CCSQ has worked closely within CMS and across the federal government with the Centers for Disease Control and Prevention (CDC), AHRQ, the Substance Abuse and Mental Health Services Administration (SAMHSA), the Health Resources and Services Administration (HRSA), and Veterans Affairs (VA) to standardize and collaboratively develop measures across programs. Additionally, CMS developed the Universal Foundation to provide a universal set of quality measures that can be used across many programs/models. The Universal Foundation includes measures that meaningfully impact patient outcomes, are digital or would become digital in the future, and have no unintended adverse effects. Currently, this universal measure set includes measures for cancer, behavioral health, preventive care, chronic disease management, coordination of care, and patent experience.

SMEs indicated that the lack of standardized measures across models is also a challenge to accurate and timely data collection and sharing. For example, slight differences between the use of clinical quality measures versus electronic clinical quality measures (eCQMs) across programs can create additional work for providers and data systems.

CMS is committed to the transformation of measures into electronic formats. To move toward Fast Healthcare Interoperability Resources (FHIR)—a standard for electronically exchanging health care information—and widespread use of electronic formats, data elements need to be

standardized. CMS uses the United States Core Data for Interoperability (USCDI) and the USCDI+ standards developed by the Office of the National Coordinator for Health Information Technology (ONC) to identify standardized data elements that can be used in eCQMs or other digital measures. eCQMs have several advantages, such as the ability to capture large amounts of data, reduce burden, and provide real-time results. eCQMs are also cost-effective, more efficient, and less burdensome compared with chart-abstracted and claims-based measures, and they are the only measures that can capture the rich information in electronic medical records (EMRs). PTAC emphasized that the continued reliance on claims-based measures will not drive change; it will be necessary to shift to digital quality measures.

Ensure that a solid data infrastructure exists. Committee members identified the need for organizations to have a solid data infrastructure in place to simplify the process of data integration and data sharing. Several SMEs emphasized the importance of investing in health data infrastructures to support the development of metrics that can be applied across all patients to better understand their clinical needs and goals. One SME elaborated that the current health data exchange infrastructure cannot support the ideal measurement system.

SMEs discussed strategies to encourage health systems to build their own measurement infrastructure, such as working with advanced health technologies to establish health data standards and data exchange capabilities. For example, the Trusted Exchange Framework and Common Agreement (TEFCA) allows organizations to use cloud computing power for health data exchange without investing in their own data exchange systems. One SME described an effort to develop a qualified health information network (QHIN)—a network of organizations that share data—that encourages users to join TEFCA and can help improve nationwide exchange of electronic health information (EHI).

To promote interoperability, CMS has been committed to participating in efforts to create a government-wide approach to data sharing (internally coined the Evidence Generation [EvGen] working group). CMS also has recently allowed external stakeholders to have access to Innovation Center model data, including identification of providers participating in models. One SME noted that CMS, ONC, and other organizations have been working to promote interoperability by building the necessary infrastructure to allow for the exchange of data between providers and patients (e.g., exchange of information requirements and information blocking rules).

SMEs indicated that smaller practices, in particular rural practices or providers, have struggled more than other organizations to undertake building a solid data infrastructure due to lack of funds or resources. It is difficult for some rural providers to achieve basic infrastructure needs, such as WiFi, as well as infrastructure that would account for the unique accountability and attribution structures for performance measures that would be needed for the rural population. More investment in rural infrastructure is needed.

Assist providers with implementation. Committee members stressed that providers need to be trained and educated on using digital quality measures. It is important that clinicians know how to succeed. One Committee member described that these efforts could include building a payer-provided dashboard with actionable data for providers, establishing a learning community, and implementing incentive-based outcome measures to encourage providers to invest in digital quality measures and to learn how to use these measures.

Additionally, CMS's commitment to transitioning to all digital quality measures and data collection by 2030 includes its support of learning health systems and incorporation of evidence-based approaches to increase data sharing and advance learning.

Exhibit IV.3: PTAC Comments

Topic 3: Need for Reduction in Measure Complexity

Comment 3A. Providers experience challenges with performance measurement due to the complexity of measures, challenges with implementing measures, and using data. Providers need a clear, multi-year road map.

Comment 3B. Performance measures need a clearly specified purpose. For example, process measures can be used for the purpose of testing theories about the link between process and outcomes instead of demonstrating a clear link between process and outcomes.

Comment 3C. There are a large number of measures that overburden providers.

Comment 3D. All-payer participation and simplification of measures can help moderate risk.

Comment 3E. Investments must be made in performance measurement.

Comment 3F. Use of claims-based measures will not drive change. It is necessary to decrease the cost of reporting, decrease the cost of measure development, and rely on digital quality measures.

Comment 3G. It is important to consider use of artificial intelligence (AI), Natural Language Processing (NLP), and FHIR, and help EHR vendors to collaborate.

Comment 3H. It is difficult for federal agencies to create a data infrastructure that simplifies the process of data sharing and aggregation. However, a digital platform that treats data as a utility and technology as a commodity is critical to the success of quality measurement and improvement.

Comment 3I. Although there have been improvements, the data infrastructure in the United States remains archaic and siloed. The data burden falls primarily on physicians and practices. A health data utility approach and routine data aggregation for quality measures could reduce the burden of data collection on physicians.

Comment 3J. It is important to capture data from publicly available sources to help drive change.

Comment 3K. Data and information can be used to change performance and outcomes. Data must be actionable, specific, and at the individual level; thus, it is important to encourage data sharing. Whoever has the data should be required to share them; the accountable entity should not be solely responsible for pulling them. Having insights into the data is also important. Incentives, such as paying for consultation notes or hospital discharge summaries, should be explored as a way to encourage data sharing.

Comment 3L. Dashboards and other data visualization can help providers and systems better understand data.

Comment 3M. It is important not to assume that clinicians will know how to succeed using digital quality measures. Education on how to use these measures should be provided to clinicians.

Comment 3N. One framework that encouraged providers to invest, learn, and change included a payer-provided dashboard with actionable data for providers, a learning community, and implementation of incentive-based outcome measures.

IV.D. Topic 4: Considerations in Linking Performance Measures to Payment

PTAC discussed several important elements to consider in linking performance measures to payment:

- Financial risk should be at the entity level;
- Ensure appropriate risk adjustment;
- Avoid unintended consequences; and
- Develop a glide path to transitioning to TCOC models.

PTAC's comments on considerations in linking performance measures to payment are listed in Exhibit IV.4.

Financial risk should be at the entity level. Committee members and experts indicated that the entity or organization should be responsible for bearing financial risk; providers within the organization should not be at financial risk but should be incentivized to meet the performance measures set at the organization level. Organizations should have one approach to quality measurement allowing for providers within the organization to understand how they are being incentivized to improve care. Conversely, when providers can self-select their measures, it may provide opportunities for them to game the system. PB-TCOC models have the potential to offer a less siloed approach to performance measurement than programs that are condition or disease-specific.

Ensure appropriate risk adjustment. Committee members urged that risk-adjustment methods used to help determine financial rewards in PB-TCOC models need careful consideration. Risk adjustment is inherently linked with performance measurement whereby providers' measured scores (e.g., on health outcomes measures) and/or the associated financial payment based on performance scores are adjusted to account for underlying risk characteristics (such as age or social risk factors) in the patient population served by the provider. Risk-adjustment methods need to be fair to promote provider improvements in care. One SME expressed the need to have risk-adjustment methods that reduce the ability of providers to cherry-pick, that is to attempt to increase performance scores by preferentially treating healthier patients rather than those who are sicker and more costly. For example, funds could be reallocated among insurers based on their population risk (e.g., the health status of a group of patients), which is currently a practice used in the Netherlands.

Committee members recommended moving from prospective to concurrent risk-adjustment methods. Prospective risk adjustment predicts patient risk scores at the start of each year, whereas concurrent risk adjustment assesses patient risk scores in real time and allows for increased accuracy.

PTAC members suggested that future public meetings could further explore risk-adjustment methods for PB-TCOC models.

Avoid unintended consequences. PTAC expressed that linking performance measurement with financial risk in PB-TCOC models may lead to stinting on patient care (e.g., limiting the care delivered to a patient) or cherry-picking patients to reap larger financial rewards or savings. This may result in worsening of patient health outcomes. One expert elaborated that while PB-TCOC models have the potential to reduce costs while improving the health of the population, there are concerns that stinting on care, and subpar health outcomes could occur if providers focus primarily on financial risk. For organizations to take on PB-TCOC payments, they should be empowered to have responsibility for all attributed members and be able to coordinate care effectively across primary care, specialty care, behavioral health, and community-based organizations.

Develop a glide path to transitioning to TCOC models. Committee members discussed three main ideas related to developing a glide path to transitioning to TCOC models: 1) creating a plan for measures to transition providers to TCOC payments; 2) encouraging multi-payer alignment of measures across payers; and 3) suggesting mandatory participation in TCOC models, including mandates for performance measurement.

Committee members suggested that organizations could offer providers a transitional plan to encourage providers to shift to value-based care. For example, financial incentives based on performance on PROMS could initially offer 25 percent prospective population-based per-member-per-month (PMPM) payments and 75 percent payments based on the current FFS

system. After four to six years, providers would fully transition to 100 percent prospective population-based PMPM payments.

Additionally, Committee members suggested that multi-payer alignment is critical to enable organizations and providers to transition to PB-TCOC models. In particular, aligning performance measurement across payers helps simplify measures and reduce administrative burden for providers. One expert noted that EHRs create the capability to participate in multi-payer environments. A trusted exchange framework among payers could support performance measurement and reduce administrative burden. Another SME added that multi-payer participation would align providers across several different areas, including performance measurement and system interoperability, and could facilitate care coordination across settings. One PTAC member emphasized that achieving harmonization requires provider collaboration and multi-payer solutions. Another Committee member added that multi-payer participation and simplification of measures can help moderate risk.

Finally, mandatory participation in TCOC models may be necessary to move organizations and providers to transition to PB-TCOC models. Making participation mandatory would require a deliberate glide path with an appropriate timeline for engagement and performance evaluation. One SME noted that mandatory glide paths toward TCOC models could facilitate the transition away from the FFS system. SMEs also discussed mandates for specific aspects of performance measurement and how mandates should aim to increase relevancy and decrease burden. For example, it may be worthwhile to mandate the elimination of certain measures that do not add value and to require more consistent measure collection methods.

Exhibit IV.4: PTAC Comments

Topic 4: Considerations in Linking Performance Measures to Payment

Comment 4A. There are opportunities to develop CMS-level measures that could cascade to an entity-level, and then specific measures that can cascade to individual physicians depending on their specialty.

Comment 4B. The entity should bear the risk and create the measures. Providers should not be at financial risk and instead be incentivized to meet the measures.

Comment 4C. Presenters called for "winnable" measures and the ability to have input into these measures.

Comment 4D. Risk adjustment needs further attention. To improve care and outcomes, providers need concurrent risk adjustment, which differs from prospective risk adjustment.

Comment 4E. The downward pressure of financial risk has led to unintended consequences, including eroded outcomes and trust.

Comment 4F. As new measures are developed, the "quality industrial complex" should be guarded against. It is important to consider potential adverse financial incentives among companies that develop measures and how to ensure that data do not become proprietary.

Comment 4G. "Gaming the system" is a prevalent issue in performance measurement.

Comment 4H. A transitional plan could be created, beginning with 25 percent prospective population-based per-member-per-month (PMPM) payments and 75 percent payments based on the current system, and then fully transitioning over four to six years (re: glidepath for PROMs).

Comment 4I. Multi-payer alignment and mandatory participation in programs may be necessary for success. Making program participation mandatory would require a deliberate glide path with an appropriate timeline for engagement and performance evaluation and improvement.

Comment 4J. The business case for transitioning to TCOC models differs when participation is voluntary versus mandatory. Voluntary programs require high incentives and moderated risk. All-payer participation and simplification of measures can help moderate risk.

Comment 4K. Achieving harmonization requires collaboration and multi-payer solutions.

Comment 4L. Private health plans benefit from CMS' leadership and efforts related to performance measurement without contributing investments. Many health systems and practices cannot afford to operate differently for different payers. To improve population health, more investment across all payers is needed.

APPENDIX 1. COMMITTEE MEMBERS AND TERMS

Terry L. Mills Jr., MD, MMM, *Co-Chair*
Soujanya R. Pulluru, MD, *Co-Chair*

Term Expires October 2025

Lindsay K. Botsford, MD, MBA
One Medical
Houston, TX

James Walton, DO, MBA
JWalton, LLC
Dallas, TX

Term Expires October 2026

Jay S. Feldstein, DO
Philadelphia College of Osteopathic Medicine
Philadelphia, PA

Lauran Hardin, MSN, FAAN
HC^2 Strategies
Maysville, KY

Joshua M. Liao, MD, MSc
The University of Texas Southwestern Medical Center
Dallas, TX

Walter Lin, MD, MBA
Generation Clinical Partners
Saint Louis, MO

Terry L. Mills Jr., MD, MMM
Aetna Better Health of Oklahoma,
Strategic Health LLC
Tulsa, OK

Term Expires October 2027

Henish Bhansali, MD, FACP
Medical Home Network
Chicago, IL

Lawrence R. Kosinski, MD, MBA
Independent Consultant
Scottsdale, AZ

Soujanya R. Pulluru, MD
CP Advisory Services, My Precious Genes
Sarasota, FL

Krishna Ramachandran, MBA, MS
UnitedHealth Group
Piedmont, CA

APPENDIX 2. CHARACTERISTICS OF SELECTED PTAC PFPM PROPOSALS IDENTIFIED AS BEING RELEVANT TO DEVELOPING AND IMPLEMENTING PERFORMANCE MEASURES FOR PB-TCOC MODELS

Proposal Name	Clinical Focus, Providers, Setting, Patient Population	Components Relevant to Performance Measurement	Technical Issues Related to Performance Measurement
Proposals that Meet Criterion 2 and Criterion 4 (n=19)			
American Academy of Family Physicians (AAFP) *(Provider association and specialty society)* **Advanced Primary Care: A Foundational Alternative Payment Model (APC-APM) for Delivering Patient-Centered, Longitudinal, and Coordinated Care** Recommended for limited-scale testing, 12/19/2017	**Clinical Focus:** Primary Care **Providers:** All physicians with a primary specialty of family medicine, general practice, geriatric medicine, pediatric medicine, or internal medicine **Setting:** Primary care practices **Patient Population:** PCPs' patient panels	**Utilization measure(s):** Inpatient Hospitalization Utilization; Emergency Department Utilization; HEDIS Non-recommended Cervical Cancer Screening in Adolescent Females; Use of Imaging Studies for Low Back Pain **Quality measure(s):** Diabetes: Hemoglobin A1c (HbA1c) Poor Control (> 9%); Medication Reconciliation Post-Discharge; Colorectal Cancer Screening; Diabetes Eye Exam; Diabetes Medical Attention for Nephropathy; Body Mass Index (BMI) Screening and Follow-Up Plan; Diabetes Foot Exam; Use of Antithrombotic for Ischemic Vascular Disease; Tobacco Use Screening and Intervention; HEDIS Controlling High Blood Pressure; Cervical Cancer Screening; Depression Remission at 12 Months; Persistent Beta-Blocker Treatment After a Heart Attack; Medication Management for People with Asthma; Avoidance of Inappropriate Use of Antibiotic Treatment **Spending measure(s):** Not specified. **Patient experience measure(s):** CAHPS	**How payment is adjusted for performance**: If a provider does not meet performance benchmarks, the provider will have to repay all or part of their incentive payments (depending on level of performance) or may be expelled from the APM and forced to return to traditional FFS. **Requirements:** To be eligible for performance-based incentives, providers must meet or exceed "agreed upon" benchmarks for performance measures. **Attribution:** Prospective, hierarchical process based on patient choice, wellness visits, evaluation & management (E&M) visits, and primary care prescription and order events **Volume:** N/A **Risk stratification or adjustment:** Uses the Minnesota Complexity Assessment Method to risk stratify the primary care global payment and the population-based payment on an annual basis. **Benchmarking:** Benchmarking is based on historical performance and reassessed after two or more years.
American College of Emergency Physicians (ACEP) (*Provider association/ specialty society*) Acute Unscheduled Care Model (AUCM): Enhancing Appropriate Admissions Recommended for implementation, 09/06/2018	**Clinical Focus:** Emergency department (ED) services **Providers:** ED physicians **Setting:** ED **Patient Population:** Patients with qualifying ED visits	**Utilization measure(s):** N/A **Quality measure(s):** Safe Discharge Assessment (patient engagement); Shared Decision-Making (process of care coordination); Event-Free Post-Discharge Rate (post-discharge outcomes) **Spending measure(s):** ED costs per episode **Patient experience measure(s):** N/A	**How payment is adjusted for performance:** If spending for eligible and attributed episodes is less than the bundled payment target price, the participant is eligible for a positive reconciliation payment; if it is more, the participant will have to reimburse CMS. Performance on a set of quality measures determines eligibility for reconciliation payments and the size of discount built into each episode's target price. **Requirements:** To be eligible for reconciliation payments, providers must be in the acceptable, good, or excellent quality performance category. **Attribution:** Episodes are attributed to the ED physician based on a qualifying ED visit. All Medicare services (except those identified in BPCI Advanced) that occur in 30-days post ED visit are included. **Volume:** N/A

Proposal Name	Clinical Focus, Providers, Setting, Patient Population	Components Relevant to Performance Measurement	Technical Issues Related to Performance Measurement
			Risk stratification or adjustment: Uses CMS hierarchical condition category (CMS-HCC) methodology to adjust target prices annually. **Benchmarking:** Benchmarking is based on participants' historical performance, risk-adjusted for factors that impact the admission decision.
American College of Physicians-National Committee for Quality Assurance (ACP-NCQA) *(Provider association and specialty society/other*) The "Medical Neighborhood" Advanced Alternative Payment Model (AAPM) (Revised Version) Recommended for testing to inform payment model development, 09/15/2020	Clinical Focus: Coordination between specialists and PCPs Providers: Primary Care Practices in Comprehensive Primary Care Plus (CPC+) and Primary Care First (PCF), specialty practices meeting clinical transformation and care coordination criteria for Medicare Access and Children's Health Insurance Program (CHIP) Reauthorization Act of 2015 (MACRA)-recognized Patient Centered Specialty Practices (PCSPs) Setting: Primary care and specialty practices Patient Population: Patients with multiple chronic conditions	Utilization measure(s): Two readmission measures based on administrative claims data: 1) Hospital Wide All-cause Readmission Rate Measure; 2) SNF 30-day All-cause Readmission Measure Quality measure(s): Core: Revised Care Plan Measure and Revised All-cause unplanned admissions for patients with multiple chronic conditions measure. Three relevant measures from following list: Atrial Fibrillation and Atrial Flutter: Chronic Anticoagulation Therapy; Cardiac Rehabilitation: Patient Referral from Outpatient Setting; Chronic Stable Coronary Artery Disease: Antiplatelet Therapy; CAD: Beta-Blocker Therapy-Prior MI or LVEF<40%; Statin Therapy for the Prevention and Treatment of CVD; Persistence of Beta-Blocker Treatment after Heart Attack; IVD: Use of Aspiring or Another Antiplatelet; HF: ACE or ARB; Therapy for LVSD; HF: LVSD; Use of Imaging for Low Back Pain; Documentation of Signed Opioid Treatment Agreement; Stroke and Stroke Rehab: Discharged on Antithrombotic Therapy; Overuse of Neuroimaging for Patients with Primary Headache and a Normal Neurological Evaluation; Measures Included in NCQA List; Adult MDD: Suicide Risk Assessment; Evaluation or Interview for Risk of Opioid Misuse; Avoidance of Antibiotic Treatment in Adults with Acute Bronchitis; Annual HCV Screening for Patients who are Active Injections Users; One-Time Screening for HCV for Patients at Risk; HIV: Viral Load Suppression, HIV/AIDS: CD4 Cell Count or Percentage Performed; HIV/AIDS Pneumocystis Jiroveci Pneumonia Prophylaxis; Annual Cervical Screening or Follow-up in High-Risk Women; National Healthcare Safety Network Facility-Wide Inpatient Hospital-Onset MRSA Bacteremia Outcome; National Healthcare Safety Network CLBSI Outcome Measure; Adult Sinusitis: CT for Acute Sinusitis Spending measure(s): Medicare spending Patient experience measure(s): CAHPS questions 6, 8, 10-15, 17-18, 20.	**How payment is adjusted for performance:** Performance-Based Payment Adjustments (PBPA). Retrospective positive or negative payment adjustment made based on actual spending compared with a financial benchmark. **Requirements:** Meet minimum standards for all quality and utilization performance measures. PBPA retained is continuously adjusted based on how well practice performs (up to 100%). **Attribution:** Monthly Care Coordination Fees (CCFs) triggered when at least one office visit billed by PCSP and a specialist is designated in Care Coordination Agreement as managing or co-managing a patient's condition, based on services billed under practice's TIN. Patients must be appropriately referred by CPC+ participating primary care clinicians and have an office visit billed through the participating Medical Neighborhood Model (MNM) specialist; attribution is conducted on quarterly basis. **Volume:** At least 100 patients must be attributed and trigger monthly CCFs over course of year. **Risk stratification or adjustment:** Based on hierarchical condition categories (HCC) risk scoring methodology. CCF is varied based on risk tier. **Benchmarking:** Recalibrated annually; based on practice's historical spending and trended forward based on regional growth rates

Proposal Name	Clinical Focus, Providers, Setting, Patient Population	Components Relevant to Performance Measurement	Technical Issues Related to Performance Measurement
		PCMH3: Provider always informed and up to date about care patient received; PCMH4: Someone in provider's office discussed specific health goals; PCMH5: someone in provider's office asked about things making it hard to take care of health.	
The American College of Surgeons (ACS) *(Provider association/specialty society)* The ACS–Brandeis Advanced Alternative Payment Model Recommended for limited-scale testing, 4/11/2017	Clinical Focus: Cross-clinical focus Providers: Single/ multispecialty practices; groups of small provider practices Setting: Inpatient, outpatient, ambulatory Patient Population: Broad (includes 100+ conditions or procedures)	Utilization measure(s): Unplanned hospital readmission within 30 days of principal procedure Quality measure(s): Surgical Plan and Goals of Care; Identification of Major Comorbid Medical Conditions; Preventive Care and Screening: Tobacco Screening and Cessation Intervention; Preoperative Key Medications Review for Anticoagulation Medication; Patient-Centered Surgical Risk Assessment and Communication; Patient Frailty Evaluation; Perioperative Composite; Intraoperative Timeout Safety Checklist; Intraoperative Surgical Debriefing; Postoperative Care Plan; Postoperative Review of Patient Goals of Care; Postoperative Care Coordination and Follow-up; Postoperative Plan Communication with Patient and Family; Post-Discharge Review of Patient Goals of Care; Resumption Protocol Spending measure(s): Quarterly Expenditures Patient experience measure(s): Patient experience with surgical care based on CAHPS Surgical Care Survey (S-CAHPS)	How **payment is adjusted for performance:** Payment is adjusted based on quality measures, incorporating two-sided risk. The model incorporates shared savings and losses. **Requirements:** Entities are assigned cost targets (based on CMS episode grouper); entities share in savings if costs are under the target and are required to repay losses if their costs are over the expected target. **Attribution:** Algorithms will be used to identify all clinicians who contribute to the care for each patient for each type of episode. Only qualifying providers who are in the APM entity and involved in the patient's care are included in the payment model. **Volume:** N/A **Risk stratification or adjustment:** The episode grouper risk adjusts each patient based on the patient's historical claims data related to each episode, as well as selected indicators, such as dual-eligible status, disability status, and rural/urban location. **Benchmarking:** Authors propose to use an updated CMS episode grouper to generate patient-specific, risk-adjusted cost targets (episode benchmarks) using Medicare Parts A and B claims data. Target prices are compared with actual cost.
Avera Health (Avera Health) (*Regional/local multispecialty practice or health system*) Intensive Care Management in Skilled Nursing Facility Alternative Payment Model (ICM SNF APM) Recommended for implementation, 3/27/2018	Clinical Focus: Primary care (geriatricians) in skilled nursing facilities (SNFs) Providers: Geriatrician Care Teams (GCTs) Setting: SNFs and NFs Patient Population: SNF Residents	Utilization measure(s): N/A Quality measure(s): Percentage of short-stay residents who have had an outpatient emergency department visit; SNF 30-day All-Cause Readmission Measure; percentage of short-stay residents given seasonal influenza vaccine; percentage of short-stay residents given pneumococcal vaccine; percentage of short-stay residents new administered antipsychotic medication; percentage of long stay residents with UTI; percentage of long stay residents administered antipsychotic medications; percentage of long-stay residents with depressive symptoms; percentage of long-stay residents who received antianxiety or hypnotic medication; percentage of long-stay residents given influenza vaccines;	How **payment is adjusted for performance:** Two options: 1) Performance-Based Payment- Based on performance on scored quality metrics, payment adjustments will be made at 100% (receive full payment), 50% (receive half payment), and 0% (receive no payment). 2) Shared Savings Model- Annual financial reconciliation to determine if savings were generated. If necessary, additional shared savings will be given to model participant, but in later years, repayment may be due to CMS when savings are not achieved. **Requirements:** High Quality Performance (meet performance criteria on 8 or more of 11 metrics); Average Quality Performance (meet performance criteria on 4-8 of 11 metrics); Low Quality Performance (meet performance criteria on 4 or less of 11 metrics).

Proposal Name	Clinical Focus, Providers, Setting, Patient Population	Components Relevant to Performance Measurement	Technical Issues Related to Performance Measurement
		percentage of long-stay residents given pneumococcal vaccine Spending measure(s): PBPM payments Patient experience measure(s): Beneficiary satisfaction, but there are no metrics related to outcomes due to there being no standardized CMS measures.	**Attribution:** For the Performance-Based Payment option, all Medicare FFS beneficiaries that offer model services are used to calculate regular payments. For Shared Savings Model, all Medicare beneficiaries in facilities which offer model services but are not attributed to another shared savings program are attributed. Based on trigger event being the beneficiary's admission to a participating SNF/NF; beneficiaries are aligned to the facility throughout their stay, and the alignment period ends 30 days following facility discharge. **Volume:** N/A **Risk stratification or adjustment:** The Performance-Based Payments option does not require risk adjustment. The Shared Savings Model will use CMS' prospective hierarchical condition category risk score to adjust the Target Bundle Price to reflect underlying risk. **Benchmarking:** Yes, with measure-specific performance criteria for achievement and improvement; use of the Scored Quality Metrics (SQM) will allow programs to benchmark themselves against the LTC population as a whole.
Coalition to Transform Advanced Care (C-TAC) (*Coalition*) Advanced Care Model (ACM) Service Delivery and Advanced Alternative Payment Model Recommended for limited-scale testing, 3/26/2018	Clinical Focus: Serious illness and palliative care Providers: ACM care team; other ancillary collaborator organizations Setting: Patient home Patient Population: Patients with serious illness	Utilization measure(s): Not specified Quality measure(s): ACM Team Visit within 48 hours of hospital discharge; timeliness of advance care planning, medication reconciliation post-discharge, proportion of patients who died and who were admitted to the ICU in the last 30 days of life, proportion of patients who died who were admitted to hospice for three days or more; ACM provider attestation that patient's care plan is consistent with preferences Spending measure(s): Total cost of care for the last 12 months of life Patient experience measure(s): Timeliness of care; getting help for symptoms (pain, anxiety and sadness, trouble breathing); effective communication composite; care coordination; patient overall satisfaction; patient engagement composite; shared decision-making; caregiver support composite; quality of care transitions from ACM to hospice composite	Ho**w payment is adjusted for performance:** The proposed model provides an upside bonus for quality funded by shared savings and downside risk (beginning in year 3). **Requirements:** Not specified **Attribution:** Based on the participating entity's full Medicare population or only those that are ACM-eligible (those with advanced illness[iii]) **Volume:** The entity must have a defined network of participating physicians and other eligible professionals with a reasonable projected advanced illness patient volume to operate the ACM services. **Risk stratification or adjustment:** Episode-based regression analysis modeling; percentile scoring adjusted at the regional level. **Benchmarking:** Yes, quality performance based on historical trends; financial performance based on risk-adjusted[iv] historical trends, adjusted at the regional level and weighted toward more recent episodes

[iii] Identification of advanced illness is based on *International Classification of Diseases, 10th Revision* (ICD-10) primary diagnosis codes in the diagnosis category that appeared on the majority of a patient's claims in their last 12 months of life.
[iv] Risk adjustment factors include clinical risk, prior utilization, and Medicare-Medicaid dual-eligibility.

Proposal Name	Clinical Focus, Providers, Setting, Patient Population	Components Relevant to Performance Measurement	Technical Issues Related to Performance Measurement
Hackensack Meridian Health and Cota, Inc. (HMH/Cota) *(Regional/ local multispecialty practice or health system; Device/ technology company)* Oncology Bundled Payment Program Using CNA-Guided Care Recommended for limited-scale testing, 9/8/2017	Clinical Focus: Oncology Providers: Eligible professionals in HMH health system with attributed Medicare cancer patients Setting: Inpatient and outpatient care Patient Population: Cancer (breast, colon, rectal, and lung)	Utilization measure(s): Visits Quality measure(s): Surgery, oncology, and genetics measures for breast cancer; surgery and oncology measures for colorectal cancer; surgery and oncology for lung cancer; oncology, infection monitoring, COTA analytics, risk management for all disease groups Spending measure(s): Total cost of care Patient experience measure(s): Patient-reported outcomes from Press Ganey, College of Surgeons, OCM, GPRO, and national guidelines concerning pain management and guidelines	How **payment is adjusted for performance:** The costs of each certified nursing assistant (can) will be aggregated up to the bundle level using a weighted average approach. These average costs would be used to compute a prospective 12-month price for each of the 27 bundles that cover all the CNAs in the four cancer types. HMH will receive these prospective payments and use them to compensate providers and pay for care coordination and other uncovered services. The submitter states that physicians will not assume downside risk. Physicians will receive higher compensation through the bundle if performance metrics are achieved. **Requirements:** Not specified; the submitter noted the importance of investment in analytics, seamless physician communication. **Attribution:** N/A **Volume:** On average, each oncologist has approximately 36 patients in the program. **Risk stratification or adjustment:** The CNA's precision is leveraged to adjust the bundle price for relative patient risk. **Benchmarking:** Yes, based on data-driven classification system for cancer patient risk and treatment pathways
Johns Hopkins School of Nursing and the Stanford Clinical Excellence Research Center (Hopkins/Stanford) *(Academic institution)* CAPABLE Provider Focused Model Recommended for testing as specified in PTAC comments, 9/6/19	Clinical Focus: Home health, functional care for elders Providers: Registered nurses, occupational therapists Setting: Home Patient population: Patients living at home and reporting difficulty in at least one activity of daily living or at least two instrumental activities of daily living, income	Utilization measure(s): Patient-centered visits Quality measure(s): Number of activities of daily living (ADLs) and instrumental ADLs (IADLs) considered "difficult" before and after intervention, depressive symptoms (eight or nine item Patient Health Questionnaire [PHQ-8, PHQ-9]) before and after intervention, home hazard or fall risk Spending measure(s): Not specified Patient experience measure(s): Patient satisfaction via post-intervention qualitative interview of HCAHPS survey	How **payment is adjusted for performance:** The submitter recommended implementing a partial bundled payment with partial upside risk and moving toward a fully capitated model. Pre-defined quality/cost metrics and achievement/improvement thresholds were not specified. **Requirements:** N/A **Attribution:** N/A; intended patients include Medicare beneficiaries with at least two chronic conditions and difficulty with at least one ADL. Ideally, any patient identified as high-risk could be enrolled by a health plan or have a provider "prescribe" CAPABLE services. **Volume:** Not specified **Risk stratification or adjustment:** Not specified **Benchmarking:** Not specified
Illinois Gastroenterology Group and SonarMD, LLC (IGG/SonarMD) *(Regional/local single specialty practice; Device/technology company)* Project Sonar	Clinical Focus: Crohn's disease Providers: Gastroenterology practices; community-based physicians; nurse care manager; community-based specialists Setting: Patient home	Utilization measure(s): ED visits, inpatient admissions Quality measure(s): Risk assessment tool including 26 biopsychosocial risk metrics in three categories (inflammation risk, disease burden risk, and comorbidity risk); MIPS measures; potentially avoidable complications Spending measure(s): Crohn's related cost of care	How **payment is adjusted for performance:** Payment adjustments are based on quality and financial performance. In the case of cost savings, the shared savings component of the payment would be paid to the physician entity. In a situation where the physician's attributed costs overrun the expected target, the physician would be required to repay losses up to the agreed upon limit in its contract with CMS. To protect against catastrophic losses, the model will build in stop-loss provisions and outlier protections. **Requirements:** Not specified

Proposal Name	Clinical Focus, Providers, Setting, Patient Population	Components Relevant to Performance Measurement	Technical Issues Related to Performance Measurement
Recommended for limited-scale testing, 4/10/2017	Patient Population: Patients with Crohn's disease	Patient experience measure(s): SonarMD patient survey	**Attribution:** Patients with Crohn's Disease; methodology not specified. **Volume:** N/A; Project Sonar was initially deployed in 2012 by the Illinois Gastroenterology Group (IGG), a 50-physician practice. **Risk stratification or adjustment:** The PMPM payment is additional to the fee-for-service payment and varies on an annual basis, adjusted based upon mutually agreed upon goals for the clinical and financial performance of the patients enrolled. **Benchmarking:** Not specified
Innovative Oncology Business Solutions, Inc. (IOBS) *(For-profit corporation)* Making Accountable Sustainable Oncology Networks (MASON) Referred for further development and Implementation, 12/10/2018	Clinical Focus: Cancer Providers: National Cancer Care Alliance (NCCA) oncology physicians Setting: Patient home Patient Population: NCAA patients with cancer	Utilization measure(s): Hospitalization rates, diversion from ED to office, ED visits Quality measure(s): Compliance with evidence-based pathways, outcomes of chemotherapy regimens, infrastructure certification (e.g., American College of Radiology certification of imaging and radiation therapy) Spending measure(s): Total cost of care Patient experience measure(s): Patient satisfaction via survey	How **payment is adjusted for performance:** Two percent of the oncology payment category (OPC), which includes all expenses related to cancer care except drugs, is reserved for a quality pool. If quality measures are not met, that money is returned to CMS. At the end of an episode of care, the actual costs are compared with the OPC. If the practice spends less caring for the patient, and all the quality parameters are met, the practice shares in the savings. **Requirements:** N/A **Attribution:** N/A **Volume:** N/A; NCCA currently manages approximately 250,000 cancer patients. Practices will add patients at an average of 300 new patients per oncologist per year. The submitter noted that a major barrier is the need to spend at least a year with large volumes of patients to develop accurate OPCs. **Risk stratification or adjustment:** MASON target prices in the OPCs are adjusted for comorbidities and the clinical situation of each individual cancer patient. **Benchmarking:** Yes, based on distribution of expenditures, as opposed to a point estimate
Large Urology Group Practice Association (LUGPA) *(Provider association and specialty society)* LUGPA Advanced Payment Model for Initial Therapy of	Clinical Focus: Urology/Oncology (treatment of prostate cancer) Providers: Eligible professionals (including urologists) at large and small urology and	Utilization measure(s): Avoidance of overuse of bone scan for staging low-risk prostate cancer Quality measure(s): Time on active surveillance, biopsy follow-up Spending measure(s): All Medicare Parts A and B payments in initial episodes	How **payment is adjusted for performance:** Practice performance on all quality measures would be tied to the performance-based payment calculation. The performance-based payment would retrospectively compare actual initial episode spending against a target amount. Beneficiaries who are diagnosed with localized prostate cancer after biopsy would begin 12-month initial total cost of care episodes, including all Parts A and B services starting with the prostate biopsy. The episode would be

Proposal Name	Clinical Focus, Providers, Setting, Patient Population	Components Relevant to Performance Measurement	Technical Issues Related to Performance Measurement
Newly Diagnosed Patients with Organ Confined Prostate Cancer Not recommended, 2/28/18	multispecialty practices Setting: Large and small urology and multispecialty practice Patient population: Newly diagnosed prostate cancer patients with localized disease	Patient experience measure(s): Prostate cancer shared decision-making process	classified into one of 12 proposed subcategories. Participants earn performance-based payments or owe performance-based repayments based on the number of quality performance targets achieved/exceeded. **Requirements:** Not specified **Attribution:** Initial 12-month episodes of care, beginning with prostate biopsy and a diagnosis of prostate cancer, for both beneficiaries receiving active surveillance and those receiving active intervention; subsequent 12-month episodes of care for beneficiaries who remain on active surveillance at the end of an initial 12-month active surveillance episode. All episodes would be attributed prospectively to the TIN that bills the professional claim for the prostate biopsy. **Volume:** The submitter estimated total episode volume of 62,640 episodes. Because certain episode subcategories have low volume, the submitter proposed pooling episode spending across episode subcategories when blending practice and regional historical episode expenditures. Additionally, the submitter noted that while small or rural practices with low episode volume might expect more variation in episode expenditures, such practices can mitigate their financial risk by applying for an alternative risk track with lower stop-loss/stop-gain limits. **Risk stratification or adjustment:** Risk adjustment for initial episodes will incorporate the CMS-HCC scores of beneficiaries in initial active surveillance episodes, as well as the type of active intervention for beneficiaries receiving active intervention. The submitter noted that time on active surveillance could be risk-adjusted by weighting the distribution of beneficiaries across the low-, medium-, and high-risk active surveillance categories. **Benchmarking:** Although each category will have a component benchmark price for the performance year, each APM entity would ultimately receive a single composite benchmark price calculated based on 1) practice-specific and regional historical utilization of active surveillance; and 2) practice-specific performance year composition of episodes in subcategories within active surveillance and active intervention episode categories. Benchmarking approach varies for each measure. Avoidance of overuse of bone scan for staging low-risk prostate cancer – 85% target (i.e., at least 85% do not receive bone scan) Biopsy follow-up – 80% target Time on active surveillance – improvement relative to historical baseline Prostate cancer shared decision-making process – improvement relative to previously submitted data

Proposal Name	Clinical Focus, Providers, Setting, Patient Population	Components Relevant to Performance Measurement	Technical Issues Related to Performance Measurement
Icahn School of Medicine at Mount Sinai (Mount Sinai) (*Academic institution*) "HaH-Plus" (Hospital at Home-Plus): Provider-Focused Payment Model Recommended for implementation, 9/17/2017	Clinical Focus: Inpatient services in home setting Providers: Physicians; HaH Plus providers Setting: Patient home Patient Population: Eligible patients in one of 44 diagnosis-related groups (DRGs) for acute conditions	Utilization measure(s): Post-acute emergency department (ED) visits Quality measure(s): Propose to use existing measures adapted for the home setting: Measures of Care Plan, Documentation of Current Medications in the Medical Record, Medication Reconciliation Post-Discharge, rate of combined adverse events (falls and pressure sores); and the Activity Measure for Post-Acute Care (AM-PAC) Inpatient Basic Mobility Short Form and Inpatient Daily Activity Short Form. Plus, the following: Adverse Events (e.g., hospital-acquired infections, complications); Outcomes (e.g., mortality, readmissions); Process Measures of Quality; Clinical Process; Program Process. Spending measure(s): Total spending in HaH-Plus episodes. Patient experience measure(s): Patient-reported outcomes and experiences with care. Use of adapted version of the HCAHPS. Five measures are most applicable: Communication with doctors; communication with nurses; communication about medications; care transitions; and overall rating of care experience.	Ho**w payment is adjusted for performance:** If APM entity spending is less than benchmark, entity could earn performance-based payment of up to 100% of difference between benchmark and cost up to cap of 10% of benchmark. If APM entity spending is more than benchmark, entity could be liable for up to 100% of losses up to cap of 10% of benchmark **Requirements:** APM entity's spending should be less than the benchmark. Pro-ration available based on number of quality metrics attained, shared savings, or repayment. **Attribution:** Patients are offered the option of HaH-Plus if they are clinically appropriate and meet home and patient safety criteria. Claims with qualifying diagnosis-related groups (DRGs) are aligned to the furnishing provider. **Volume:** Not specified; the submitter estimated that 1.7 million discharges could be clinically appropriate nationwide across all payers. The submitter noted that requirements for participation may be beyond the scope of typical solo small independent practices, but that it may be possible to offer modifications to the payment methodology. **Risk stratification or adjustment:** A comparison group of patients admitted in the same calendar year quarter to non-participating hospitals in the same region will be used to find a spending target for the amount Medicare would have spent without the HaH-Plus program. **Benchmarking:** Yes, separate achievement thresholds for each of 10 quality metrics linked to payment. HaH-Plus total Medicare spending per beneficiary for the HaH-Plus episode should be compared with that for a weighted sample of FFS discharges from the region with matching DRGs.
New York City Department of Health and Mental Hygiene (NYC DOHMH) *(Public health department)* Multi-provider, bundled episode of care payment model for treatment of chronic hepatitis C virus (HCV) using care coordination by employed physicians in hospital outpatient clinics	Clinical Focus: Hepatitis C virus (HCV) Providers: Primary care physicians (trained by hepatologists/ gastroenterologists); specialists; nurse practitioners; physician assistants; and non-clinician staff Setting: Primary care and specialty	Utilization measure(s): ED visit rate Quality measure(s): Risk-adjusted facility-based HCV Sustained Virological Response (SVR) rate Spending measure(s): Part B payments Patient experience measure(s): N/A	Ho**w payment is adjusted for performance:** The payment model includes the opportunity for shared savings. Providers that meet the HCV SVR benchmark are eligible to receive shared savings and an annual bonus. Providers achieving a score below the benchmark must pay back losses, corresponding to a proportion of the per patient expected savings missed summed across all patients with undocumented SVR. **Requirements:** All employed physicians treating patients with HCV at a participating facility would be required to participate in the model. To earn shared savings, providers must be designated as "high-performers" (i.e., those that meet or exceed the HCV SVR benchmark). **Attribution:** Qualifying episodes are identified using International Classification of Diseases, 10th Revision (ICD-10) codes, Current Procedural Terminology (CPT) codes, and HCPCS codes.

Proposal Name	Clinical Focus, Providers, Setting, Patient Population	Components Relevant to Performance Measurement	Technical Issues Related to Performance Measurement
Not recommended, 12/18/2018	Patient Population: Patients with chronic condition (HCV)		Medicare beneficiaries with HCV are eligible to participate in this model. **Volume:** N/A **Risk stratification or adjustment:** SVR rates are adjusted for patient-level influences on SVR likelihood, including disease stage and patient age. Patients with HCV are nested within hospitals, as patients receiving care in the same facility may have similar outcomes. The submitter planned to stabilize rates for clinics in which the number of patients achieving SVR is small by including facility-specific random effects in risk-adjusted SVR rates. **Benchmarking:** Based on risk-adjusted facility-based HCV SVR rate, compared with other model participants (e.g., compared with the average among all participants)
Pulmonary Medicine, Infectious Disease and Critical Care Consultants Medical Group (PMA) (*Regional/local single specialty practice*) The COPD and Asthma Monitoring Project Not Recommended, 4/11/2017	Clinical Focus: COPD and/or asthma Providers: Pulmonary physicians Setting: Patient home Patient Population: COPD and asthma patients	Utilization measure(s): ED visits, hospital admissions Quality measure(s): Mortality, well-controlled patient conditions, "optimal" COPD and asthma care (including assessment and classification of COPD and asthma control using a validated instrument; stepwise approach to identify treatment options and adjust medication and other therapies, written patient self-management asthma action plan customized to take advantage of real time monitoring and early detection/intervention protocols; stepwise approach to identify treatment options and adjust medication and other therapies; patients over four years of age with flu shot (or flu shot recommendation); smoking cessation and advise where appropriate Spending measure(s): Medicare Part A and Part B spending Patient experience measure(s): Patient experience survey at the end of each encounter	How **payment is adjusted for performance:** The proposed two-sided risk arrangement would permit CMS to recoup up-front costs first, use number of chronic conditions as a risk-adjuster to find the target spending level, and then remaining savings from total Part A and B costs of care above the cost to CMS of the technology and of the PBPM payments would be shared, as well as would losses up to a stop loss percentage amount. The proposal does not specify how quality measures would affect payment. **Requirements:** N/A; model participation is restricted to physicians board-certified in pulmonary medicine. **Attribution:** Enrollment offered to all Medicare beneficiaries with a diagnosis of asthma or COPD at participating providers. **Volume:** N/A; initial target pilot enrollment of 2,000 patients, with the intention of scaling the service locally once the pilot is validated. **Risk stratification or adjustment:** Total cost of care benchmark is risk-adjusted for chronic conditions. Patients are grouped into three risk categories (low, medium, and high) based on their disease control. **Benchmarking:** National, chronic condition-adjusted benchmark developed in risk pool of patients with COPD
Personalized Recovery Care (PRC) (*Regional/local single specialty practice*)	Clinical Focus: Inpatient services in home setting Providers: Admitting physician at facility receiving PRC payments; On-Call	Utilization measure(s): Utilization of resources, ED visits Quality measure(s): Percentage of Episodes with Follow-Up PCP Appointment Scheduled Within 7 Days; Percentage of Episodes with Medication Reconciliation; Patient Safety – Percentage of Episodes	How **payment is adjusted for performance:** The program utilizes a retrospective bundled payment model. The bundled payment consists of two primary components: 1) a risk payment for delivering high-quality care as compared with the target cost of care (i.e., the "Target Bundled Rate"); and 2) a per episode payment made for the care being provided in lieu of an acute care

Proposal Name	Clinical Focus, Providers, Setting, Patient Population	Components Relevant to Performance Measurement	Technical Issues Related to Performance Measurement
Home Hospitalization: An Alternative Payment Model for Delivering Acute Care in the Home Recommended for implementation, 3/26/2018	Physician; Recovery Care Coordinators Setting: Patient home Patient Population: Commercial and Medicare Advantage patients with acute conditions, based on approximately 150 DRGs	with Adverse Events (Deep Vein Thrombosis [DVT], Pressure Ulcer, Fall with Injury); Functional Status Assessments (Using the Patient-Reported Outcomes Measurement Information System [PROMIS]) – Percentage of Episodes with Functional Status Assessments Completed for Each Patient; Hospital Readmissions Spending measure(s): Total cost of care Patient experience measure(s): Patient Experience – Percentage of Questions Answered with Top Box Response	hospitalization ("Home Hospitalization Payment"). If the total related costs are more than the Target Bundled Rate, the PRC Operators will be liable for 100% of the difference, up to 10% of the Benchmark Rate. Each metric for which PRC Operators satisfy requirements will result in the PRC Operators receiving 20% of the savings. If all five metrics are satisfied, the PRC Operators would receive 100% of the savings, whereas meeting none of the metrics would result in zero savings payments received by the PRC Operators in the reporting time frame. **Requirements:** To be eligible for shared savings, providers must meet or exceed benchmarks for performance measures tracking clinical quality, patient engagement, and program personalization on an episode basis. **Attribution:** Claims with qualifying DRGs are aligned to the furnishing provider **Volume:** N/A; a network approach, which involves the PRC Operators contracting with existing ancillary providers in the local market, is intended to increase program viability, especially for smaller practices, and mitigate the need to unnecessarily admit patients who do not qualify in order to meet a volume threshold. **Risk stratification or adjustment:** Yes, for patient clinical characteristics. The PRC Operators also propose excluding beneficiaries who have the following clinical characteristics: end-stage renal disease, hospice enrollment, or initial admissions to the intensive care unit. **Benchmarking:** Based on historical, episodic expenditures for each condition plus a three percent discount to derive target prices
Renal Physicians Association (RPA) (*Provider association and specialty society*) Incident ESRD Clinical Episode Payment Model Recommended for implementation, 12/18/2017	Clinical Focus: End-stage renal disease (ESRD) Providers: Nephrologists, PCPs Setting: Dialysis centers Patient Population: Patients with chronic condition (incident ESRD)	Utilization measure(s): N/A Quality measure(s): Advanced Care Planning; Catheter % for ICHD (90 and 180 day); Optimal start: day 1 of outpatient dialysis with no catheter in place (ICHD/HHD) or initiate dialysis on PD; Fistula rate of all permanent vascular access for ICHD & HDD (180 day); Home dialysis % (PD and HHD); Referral to Transplant; Patient Centeredness: Karnofsky Functionality Score Spending measure(s): Medicare Part A and Part B spending Patient experience measure(s): Patient-Reported Outcomes Measurement Information Systems (PROMIS)	How **payment is adjusted for performance:** Quality scores determine physician's eligibility and amount of shared savings. Physicians' quality scores based on performance on patient-centered quality measures (0-100) determine the percentage of overall shared savings the physician receives. The higher the quality score, the higher amount of shared savings to the participant. Further, physicians choosing to participate in MIPS APM vs. Advanced APM will determine the total upside shared savings and downside risk. There is also a one-time financial incentive/bonus payment for patient receiving a kidney transplantation. **Requirements:** Physicians must attain a quality score of at least 30 and meet financial benchmarks to qualify for shared savings. **Attribution:** Attribution is determined based on the date of first dialysis treatment entered on the CMS Form and subsequent Medicare Part B claims for a patient by a participating provider **Volume:** N/A

Proposal Name	Clinical Focus, Providers, Setting, Patient Population	Components Relevant to Performance Measurement	Technical Issues Related to Performance Measurement
			Risk stratification or adjustment: Medicare beneficiary's most recent hierarchical condition category (HCC) risk score normalized so that an average risk patient would have a score of 1; values greater than 1 would indicate comorbidities associated with higher costs of care, values less than 1 would indicate lower costs of care. **Benchmarking:** Will be set for first six months of dialysis care using the RPA Registry, which gathers data from many practices and locations. Further, historical Medicare Parts A and B costs (from claims data) for the first six months of incident dialysis patient care divided by the average of normalized HCC scores of these same patients
University of Chicago Medicine (UChicago)[v] *(Academic Institution)* The Comprehensive Care Physician Payment Model (CCP-PM) Recommended for limited-scale testing, 9/7/2018	Clinical Focus: Frequently hospitalized patients Providers: Inpatient and outpatient providers Setting: Home care and rehabilitation Patient Population: Patients at increased risk of hospitalization	Utilization measure(s): Hospitalizations Quality measure(s): Empanelment process, percentage of inpatient and outpatient general medical care provided by the participating clinician Spending measure(s): Total cost of care Patient experience measure(s): HCAHPS, self-rated mental health, patients' rating of providers	**How payment is adjusted for performance:** Care continuity fee given to providers who meet benchmarks for providing their patients with both inpatient and outpatient care. Providers continue to be subject to financial incentives/penalties under their current model (e.g., MIPS, Medicare Shared Savings Program). Care continuity fees are not at risk to not penalize providers twice. **Requirements:** Physicians can receive care continuity fees only if they are able to care for patients in clinic and in the hospital. **Attribution:** Eligible physicians can enroll a panel of CCP-PM patients for which they intend to provide an increased proportion of inpatient and outpatient general medical care, and eligible patients join the program by enrolling in the CCP-PM panel of a participating physician; alignment can continue for up to six years, with pathways based on whether the patient has had an additional hospitalization. **Volume:** The submitter noted a maximum panel size of 300 patients, with a typical panel size of 200 patients. This limitation was implemented to encourage a focus on high utilizers. The submitter also noted that they wanted to provide flexibility for individual providers to set a panel size most appropriate for their practice, and that there are challenges in variability with low patient volumes. **Risk stratification or adjustment:** N/A. The submitter noted that the high-risk population the CCP-PM targets poses significant challenges to appropriately risk-adjusting quality metrics. **Benchmarking:** Yes, based on percent provision of inpatient care and outpatient general medicine care for their enrolled patients

[v] Participating physicians continue to be responsible for financial and quality measures under their payment model (e.g., the Merit-based Incentive Payment System [MIPS], the Medicare Shared Savings Program).

Proposal Name	Clinical Focus, Providers, Setting, Patient Population	Components Relevant to Performance Measurement	Technical Issues Related to Performance Measurement
The University of Massachusetts Medical School (UMass) *(Academic institution)* Eye Care Emergency Department Avoidance Not recommended, 11/8/2019	Clinical Focus: Eye care Providers: Optometrists and ophthalmologists Setting: Practices and other entities employing eye care professionals Patient Population: Patients with non-emergent eye conditions	Utilization measure(s): Number of qualifying ED-avoidable visits (utilization of office-based services vs. utilization of ED for non-emergent eye conditions) Quality measure(s): Office-based eye care seven-day post-visit adverse event rate (including unscheduled ED visits, unscheduled hospital inpatient admissions, blindness/permanent vision damage, or death occurring within seven days of eligible office visit) Spending measure(s): Total cost of care (including payments to EDs, payments to eligible providers, program costs) Patient experience measure(s): Standardized patient survey	How **payment is adjusted for performance:** Providers who meet or exceed the target number of qualifying ED-avoidable visits and upheld or improved quality performance will receive shared savings payments. If providers do not meet utilization targets or quality performance thresholds, their financial loss will equal the minimum of 8% of payments for qualifying visits during the performance year. **Requirements:** To be eligible for shared savings and continued participation, providers must meet quality performance thresholds for both patient safety and patient experience and meet provider-specific utilization targets. **Attribution:** Not specified **Volume:** N/A; The proposal states that the model was designed based on the experiences of smaller optometry practices (averaging 1.8 clinicians/per practice). Smaller practices demonstrated the ability to implement the model and provide quantifiable value. **Risk stratification or adjustment:** The proposal states that risk adjustment is not necessary because payment methodology is based on FFS rates, although the proposal notes that adverse event rates could be adjusted for age and other risk factors. **Benchmarking:** Medicare and other participating payers will establish target utilization goals for the participating providers based on provider-specific historical volume of ED-avoidable visits. Payers will establish a baseline year and then select a specific percentage increase over base year visits to determine provider-specific target numbers for each participating provider.
The University of New Mexico Health Sciences Center (UNMHSC) (*Academic institution*) ACCESS Telemedicine: An Alternative Healthcare Delivery Model for Rural Emergencies Recommended for implementation, 9/16/2019	Clinical Focus: Cerebral emergent care; telemedicine Providers: Neurologists and neurosurgeons; providers in rural and community systems Setting: Inpatient; outpatient; or emergency department Patient Population: Patients with neurological emergencies	Utilization measure(s): Number of sites with ready telehealth systems (THS) in place; number of sites with trained telehealth administrator; number of sites with trained health care providers; number of sites with trained radiology technicians; proportion of patients with neuro-emergent conditions enrolled per site; number of local follow-ups completed; number of consults completed within 60 minutes Quality measure(s): Imaging results for acute stroke patients within 45 minutes; timeliness of Emergency Medicine Care; Hospital-Wide-All-Cause Unplanned-Readmission measure; time to treatment; proportion of patients transported to UNMHSC or other tertiary referral center; rate of tissue plasminogen activator (tPA) administration	How **payment is adjusted for performance:** Performance measures are not tied to payment **Requirements:** N/A **Attribution:** Participating neurologists and neurosurgeons will consult with patients presenting with cerebral neuro-emergent conditions in emergency rooms in underserved regions; there is no attribution of specific patients to providers since it is not tied to payment. **Volume:** N/A; the proposal does not specify the percentage who visit the ED for traumatic brain injury or their expectations of number in the model. **Risk stratification or adjustment:** N/A

Proposal Name	Clinical Focus, Providers, Setting, Patient Population	Components Relevant to Performance Measurement	Technical Issues Related to Performance Measurement
		Spending measure(s): Total Cost of Care Population-Based PMPM Index adapted to diagnostic codes for neuro-emergent conditions Patient experience measure(s): Patient Experience Questionnaire; Telemedicine Satisfaction Questionnaire	**Benchmarking:** Neurology consults are $850 and neurosurgical consults are $1,200; these were set using a fair market value process that took into account the bundled costs necessary to provide telemedicine services from an academic medical organization. However, actual benchmarking is not done since payment is not adjusted for performance.
Proposals that Meet Criterion 2 and Do Not Meet Criterion 4 (n=1)			
American College of Allergy, Asthma & Immunology (ACAAI) *(Provider association/specialty society)* Patient-Centered Asthma Care Payment (PCACP) Referred for other attention by HHS, 6/22/2020	Clinical Focus: Asthma care Providers: Allergists; immunologists; pulmonologists; PCPs; other providers Setting: Emergency department Patient Population: Patients with asthma and asthma-like symptoms	Utilization measure(s): Average number of months during which the Diagnosis and Initial Treatment Payments were billed before a diagnosis was assigned Quality measure(s): Percentage of patients with improvement in asthma-like symptoms based on self-reports; percentage of patients with improved spirometry measures; percentage of patients with ED visits or urgent care visits for asthma-like symptoms Spending measure(s): Standardized average total per-patient spending on allergy testing, asthma medications, urgent care visits for asthma-like symptoms, ED visits related to asthma, and hospitalizations related to asthma Patient experience measure(s): percentage of patients rating access to physician as "very good" or "excellent" via patient survey	Ho**w payment is adjusted for performance:** Asthma Care Teams receive the default payment level for each patient if the team scored "good" on all performance measures; payments are increased or decreased (up to + or - 5% to increase over time to + or – 9%) if team scored "high" or "low" on some performance measures. **Requirements:** There are three types of bundled payments the Asthma Care Team receives depending on patient status category. The Asthma Care Team is required to meet minimum quality standards in order to bill and receive the Diagnosis and Initial Treatment Payment. **Attribution:** Patients are not attributed; patient designates the physician(s) as their "Asthma Care Team" and agrees to receive all asthma-related services from this team for a three-month period. **Volume:** N/A **Risk stratification or adjustment:** Payment amounts and performance measures would be stratified into subcategories based on severity of symptoms and comorbidities; payment amounts and subcategories differ depending on the patient status category. **Benchmarking:** Performance on measures is assessed by comparing the Asthma Care Team's performance to the average performance of all Asthma Care Teams in the model in the current or previous year (depending on the type of measure).
Proposals that Do Not Meet Criterion 2 and Meet Criterion 4 (n=5)			
American Academy of Hospice and Palliative Medicine (AAHPM) *(Provider association/specialty society)* Patient and Caregiver	Clinical Focus: Serious illness and palliative care Providers: Palliative care teams (PCT) Setting:	Utilization measure(s): Percentage of patients who died who received hospice care; Percentage of patients who died and were enrolled in hospice more than seven days before death; Percentage of patients who died and did not have any days in an ICU during the 30 days before death Quality measure(s): For years 1 and 2, completion of four applicable palliative	Ho**w payment is adjusted for performance**: For the first two years of the model, PCTs are required to report on measures, but payment will not be tied to performance on these measures. Starting in year 3, PCTs receive a composite score that equally weights performance across three categories of quality metrics: patient-reported outcomes; completion of care processes; and utilization of health care services. Track 1 PCTs are subject to positive and negative performance incentives

Proposal Name	Clinical Focus, Providers, Setting, Patient Population	Components Relevant to Performance Measurement	Technical Issues Related to Performance Measurement
Support for Serious Illness (PACSSI) Recommended for limited-scale testing, 3/26/2018	Inpatient; outpatient; other palliative care settings Patient Population: Patients with serious illness	care activities within 15 days of PACSSI enrollment: comprehensive assessment; screening for pain, dyspnea, nausea, and constipation; documentation of a discussion regarding emotional needs; documentation of a discussion about advance care planning; Beginning year 3, completion of six applicable palliative care activities within 15 days of PACSSI enrollment: same four listed above, as well as documentation of a discussion of spiritual concerns and completion of a structured assessment of caregiver needs and distress Spending measure(s): Total cost of care for enrolled patients (including PACSSI care management payments) Patient experience measure(s): Measures from patient admission survey: Likelihood of patient recommendation, timeliness of response to urgent needs, adequacy of treatment for pain and symptoms, patient's percepts regarding quality of communication; Post-death survey for PACSSI enrollees; Hospice CAHPS survey for PACSSI enrollees transferring to hospice and dying within seven days of disenrollment from PACSSI	of up to 4% of total care management fees received for a year based on their performance on quality and spending; Track 2 (starting in Year 3) involves shared savings and losses based on total cost of care. **Requirements:** PCTs must meet minimum quality benchmarks to be eligible for payment participation. **Attribution:** Patients are not attributed; patients have to designate the PCT as their primary provider; PCTs are responsible for all patients who have chosen them to be their provider. **Volume:** PCT teams are required to accept any patient living in the service area who meets the eligibility criteria; the model will establish pre-defined capacity limits for number of patients (not further specified). If PCTs fail to meet minimum participation standards, they will be terminated from the model. **Risk stratification or adjustment:** Patients are assigned to one of two tiers (moderate- and high-complexity) based on criteria including diagnosis of serious illness, function, and health care utilization. Higher payment amounts are provided to PCTs for delivering care to tier 2 patients ($650 vs. $400 per beneficiary per month). Further, monthly payments are adjusted based on current Geographic Practice Cost Indices and patient's primary site of care (home vs. facility). **Benchmarking:** The model proposes to collect and analyze data during the first two years to establish benchmarks for each performance measure. The proposal does not specify the benchmark that will be used to assess total cost of care.
American Society of Clinical Oncology (ASCO) *(Provider association/specialty society)* Patient-Centered Oncology Payment Model (PCOP) Referred for other attention by HHS, 9/15/2020	Clinical Focus: Oncology Providers: Clinicians, including hematologists and oncologists Setting: Oncology specialty practices Patient Population: Oncology practice patients	Utilization measure(s): Unplanned hospital admissions per treatment month; emergency and observation care visits per treatment month; supportive and maintenance care drug costs per treatment month Quality measure(s): Chemotherapy administered to patients with metastatic solid tumor; GCSF administered to patients who received chemotherapy for metastatic cancer; Care Plan; Preventive care and screening for clinical depression; Preventive care and screening for high blood pressure; Trastuzumab received by patient with AJCC stage I-III and HER2 positive breast cancer; KRAS gene mutation testing performed for patients with metastatic colorectal cancer;	How **payment is adjusted for performance:** Providers receive three payments: monthly Care Management Payments (CMP), Performance Incentive Payments (PIP), and adjustments to FFS reimbursement. A portion of the CMP will be allocated to a PIP. PIPs will be positively or negatively adjusted based on provider success in adherence to clinical treatment pathways, quality metrics, and cost reduction. There are two tracks: Track 1 participants continue to receive FFS reimbursement in addition to the CMPs; Track 2 participants participate in the Consolidated Payments for Oncology Care (CPOC) where practices can bundle 50% or 100% of the value of specified services. 10% of the amount bundled will be subject to the same performance adjustment as PIPs times a 1.4 multiplier.

Proposal Name	Clinical Focus, Providers, Setting, Patient Population	Components Relevant to Performance Measurement	Technical Issues Related to Performance Measurement
		Patients with Metastatic Colorectal Cancer and KRAS gene mutation; Proportion of patients receiving chemotherapy in the last 14 days of life, Proportion Not Admitted to Hospice, and Bone Density Evaluation for Patients with Prostate Cancer and Receiving Androgen Therapy. Spending measure(s): Total Cost of Care Patient experience measure(s): Patient Satisfaction Surveys, including the Oncology Medical Home Patient Satisfaction Survey	**Requirements**: Practices must follow specified care delivery requirements, including providing education on PCOP model, financial counseling services, education on diagnoses, and other patient engagement requirements. **Attribution:** Episodes are attributed to a provider or practice based on the billing provider for the Cancer Treatment CMP or the billing of specific treatments. **Volume:** N/A **Risk stratification or adjustment:** Practices will utilize data from comprehensive patient assessments to identify patients at higher risk for symptoms, complications, and non-adherence to their cancer treatment plan. Risk stratification methods may include an algorithm based on diagnoses or a structured scoring system administered by clinicians. **Benchmarking:** Established benchmarks; however, the proposal does not specify what will be used to establish benchmarks.
Dialyze Direct (Dialyze Direct) *(Regional/local single specialty practice)* APM for Improved Quality and Cost in Providing Home Hemodialysis to Geriatric Patients Residing in Skilled Nursing Facilities Recommended for attention, 9/6/2018	Clinical Focus: End-stage renal disease (ESRD) Providers: Nephrologists Setting: Patient home Patient Population: Geriatric dialysis patients residing in SNFs	Utilization measure(s): Hospitalizations; re-hospitalizations; Emergency Department (ED) visits; observation hospital events Quality measure(s): Post-hospital discharge outcomes; complications of transportation (e.g., falls, fractures) Spending measure(s): All Medicare Part A and Part B costs with the exception of those attributable to transplantation Patient experience measure(s): Patient-Reported Outcome Measures (PROMs) such as the In-Center Hemodialysis Survey Consumer Assessment of Healthcare Providers and Systems (ICH-CAHPS) and Kidney Disease Quality of Life 36 (KDOL-36), which will be tracked and compared with patient experiences with conventional dialysis.	How **payment is adjusted for performance:** N/A; Bundled payment model with ability to receive shared savings, as well as a one-time additional payment for efforts related to educating patients on the benefits of on-site staff-assisted home dialysis in the nursing home **Requirements:** N/A **Attribution:** Attribution of the incident dialysis patient is determined by the date of the patient's admission to the skilled nursing facility (SNF). An episode of care will be the time a patient resides in the SNF. **Volume:** N/A **Risk stratification or adjustment:** N/A **Benchmarking:** Participating physician's financial benchmark is the dollar value of the average Medicare cost necessary to provide one round-trip to a nephrologist's office. The benchmark used to quantify overall value is the dollar amount of included Medicare Part A and Part B non-randomized cost derived from the comparison of two groups of patients: a prospective cohort of patients residing in a SNF receiving on-site, staff-assisted, mode of dialysis technology (more frequent dialysis [MFD]), and a matched retrospective cohort of patients residing in a SNF receiving conventional, predominantly off-site, in-center home hemodialysis (HD).

Proposal Name	Clinical Focus, Providers, Setting, Patient Population	Components Relevant to Performance Measurement	Technical Issues Related to Performance Measurement
Jean Antonucci, MD (Dr. Antonucci) *(Independent individual)* An Innovative Model for Primary Care Office Payment Recommended for limited-scale testing, 9/6/2018	Clinical Focus: Primary care Providers: Primary care providers, nurse practitioners Setting: Primary care practices Patient Population: Medicare beneficiaries	Utilization measure(s): N/A Quality measure(s): N/A Spending measure(s): PBPM payments Patient experience measure(s): How's Your Health (HYH)	How **payment is adjusted for performance:** $60 PMPM for low- and medium-risk patients, and $90 PMPM for high-risk patients. Further, 15% of annual income will be withheld; if participants do not meet quality and cost benchmarks, they may lose this income. **Requirements:** Participants will employ the HYH survey to all patients, which includes many patient-reported measures. Using HYH results from other users as a benchmark, participants will be assessed on whether they meet, exceed, or are below the benchmark. **Attribution:** Four-step process (AAFP): 1. Patient selection of primary care physician and team; 2. Primary Care Visit Events: Wellness Visits; 3. Primary Care Visit Events: All other E/M Visits; and 4. Primary Care Prescription and Order Events. **Volume:** Cap at 1,500 patients per physician. **Risk stratification or adjustment:** Using the What Matters Index (WMI) part of HYH measures, patients will be grouped into low-, medium-, and high-risk pools. Risk adjustment should occur annually, allowing physicians to review, add, and remove patients from the formal list the payer supplies to them. **Benchmarking:** Baseline will be a set time period prior to performance year. Benchmarks should be held steady for at least two years. National benchmark data will come from HYH.
Upstream Rehabilitation (Upstream) (Regional/local single specialty practice) CMS Support of Wound Care in Private Outpatient Therapy Clinics: Measuring the Effectiveness of Physical or Occupational Therapy Intervention as the Primary Means of Managing Wounds in Medicare Recipients Not recommended, 5/11/2019	Clinical Focus: Chronic wound care Providers: All providers in the patient's care plan Setting: Physical and occupational therapy centers Patient Population: Patients with chronic wounds	Utilization measure(s): Total time in treatment (duration of care) Quality measure(s): Functional outcomes of patients with open wounds utilizing the Bates-Jensen Wound Assessment; Functional independence using the Functional Independence Measure (FIM); Objective measurements (e.g., range-of-motion, strength, or edema); Disabilities of the Arm, Shoulder, and Hand Questionnaire (QuickDASH); Lower Extremity Functional Scale (LEFS); Pain Scale; Oswetry Disability Index Spending measure(s): Total cost of each patient treatment, including wound care supplies; cost savings of utilizing physical and occupational therapists in outpatient, private settings versus traditional outpatient hospital-based wound care centers Patient experience measure(s): Patient satisfaction	How **payment is adjusted for performance:** Claim refunded to CMS if minimum standards of improvement are not met. Clinicians can receive a 3% savings bonus for achieving average reimbursement costs below risk-adjusted thresholds. **Requirements:** Participating clinicians that do not meet cost or patient satisfaction targets for two subsequent quarters will be removed from the program. **Attribution:** N/A **Volume:** N/A **Risk stratification or adjustment:** Patients are categorized into low-, medium-, and high-complexity, based on comorbidities and complicating factors that would extend the level of care needed to address wound care issues. Cost targets vary based on patient complexity.

Proposal Name	Clinical Focus, Providers, Setting, Patient Population	Components Relevant to Performance Measurement	Technical Issues Related to Performance Measurement
			Benchmarking: A benchmark of 80% is set for patient satisfaction scores across all claims submitted.
Proposals that Do Not Meet Criterion 2 or Criterion 4, Were Withdrawn, Or Were Determined to Be Out of Scope by PTAC (n=9)			
American Academy of Neurology (AAN) *(Provider association and specialty society)* The Patient-Centered Headache Care Payment (PCHCP) N/A - Withdrawn	Clinical Focus: Neurology Providers: PCPs; neurologists; other physicians with expertise in headache care Setting: Inpatient or outpatient in primary care; patient home Patient Population: Patients with headaches	Utilization measure(s): Axon 22 MIPS 419 Headache- advanced brain imaging NOT ordered; Average per-patient rates of visits to emergency departments for management of headaches; Average per-patient rates of admission and duration of stay to the hospital for management of headaches Quality measure(s): Frequency, severity, and disability of headaches, and changes from the patient's baseline, using Medical Information Data Analysis System (MIDAS); Axon 13 Medication prescribed for acute migraine attack; Axon 25 Overuse of barbiturate and opioids for primary headache disorders; Axon 15 MIPS 435 Quality of life assessment for patients with primary headache disorder; MIPS 431 Preventive Care Screening: Unhealthy Alcohol Use: Screening and Brief Counseling; MIPS 134 Preventive Care and Screening: Screening for Clinical Depression and Follow-up Plan Spending measure(s): Average per-patient spending on headache-related medications; Average per-patient per-month total spending on (1) E/M visits related to headaches, (2) non-face-to-face billing codes, and (3) emergency department visits and urgent care center visits for headache Patient experience measure(s): Percent of patients rating access to providers and experience of care as "excellent"	Ho**w payment is adjusted for performance:** Flexible fixed payments or add-on payments adjusted based on performance on measures. Participating physicians receiving quality designation of "good" on all performance measures would receive the default payment level; payment increased (+4%) if some measures were "high"; payment decreased (-4%) if some measures were "low." **Requirements:** Participants must achieve quality scores of good/high to receive the default or increased payment. Participants that receive "low" scores for some measures still receive payment, but it is decreased in amount. **Attribution:** Patients are not attributed; they must opt-in to the model. **Volume:** N/A; Small practices could have their performance measured over a longer period of time (e.g., two years) in order to have more reliable measures with smaller numbers of patients. **Risk stratification or adjustment:** The payment amounts and performance measures for each payment category would be adjusted to reflect the cost of treating more complex patients. Payments are adjusted based on patient characteristics, such as frequency, headache severity (measured using MIDAS), select comorbidities, patient demographic information, and resource use. In addition, payment type varies depending on the category of headache patient: one-time payment for category 1 patients (most severe); monthly payment for category 2 patients; and add-on service for category 3 (less severe) patients. **Benchmarking:** Not specified
Clearwater Cardiovascular and Interventional Consultants, MD, PA (CCC) *(Provider association/specialty society)* Bundled PCI Services N/A - Withdrawn	Clinical Focus: Percutaneous coronary intervention services in lower-cost non-catheter labs Providers: Cardiovascular physicians Setting: Outpatient	Utilization measure(s): Resource utilization Quality measure(s): Appropriate Use Criteria (AUC); Clinical quality outcomes will be measured through the National Cardiovascular Data Registry (NCDR) system, such as complications, death, major adverse cardiac events, and other health outcomes Spending measure(s): Anchor procedure cost from claims data; 90-day post procedure cost	Ho**w payment is adjusted for performance:** Payment is not tied to performance measures; bundled episode-based model replacing FFS, with shared risk of managing 90-day post-procedure cost **Requirements:** N/A **Attribution:** N/A **Volume:** N/A **Risk stratification or adjustment:** Risk-adjustment would be similar to BPCI-A, which

Proposal Name	Clinical Focus, Providers, Setting, Patient Population	Components Relevant to Performance Measurement	Technical Issues Related to Performance Measurement
	Patient Population: Patients with stable angina	Patient experience measure(s): Patient satisfaction surveys will be measured and compared with HCAPS patient satisfaction survey results.	employs a risk adjustment model that adjusts target prices based on hierarchical condition categories (HCC), HCC interactions, HCC severity, recent resource use, demographics, long-term institutional care, dementia, MS-DRGS/APCs, clinical episode category specific adjustments, and COVID-19 infection rate. **Benchmarking:** Use an existing data registry that includes benchmarks; metrics are quantifiable through existing national criteria and evaluated against benchmark databases.
Community Oncology Alliance (COA) *(Non-profit organization)* Oncology Care Model 2.0 N/A - Withdrawn	Clinical Focus: Cancer Providers: Individuals or groups of medical oncologists providing services to patients Setting: Patient home Patient Population: Cancer patients (noted the MA plans may choose to limit types of cancers covered)	Utilization measure(s): Emergency department (ED) utilization; inpatient utilization, Part A post-acute services; selected Part B outpatient services; Part B and D chemotherapy and drug fills; ED visits and inpatient hospitalizations due to complications from chemotherapy; hospice and end-of-life services utilization Quality measure(s): Seven measures, including comprehensive care plan provided to the patient; adherence to recognized pathway and treatment guidelines; screening for clinical depression and follow-up plan; a survivorship care plan provided to the patient; Pneumococcal vaccination provided to older adults; proportion of patients with cancer receiving chemotherapy in the last 14 days of life; proportion of patients with cancer that died but without being admitted to hospice Spending measure(s): Total cost of care; Part A costs for inpatient care and post-acute and long-term care; institutional and non-institutional Part B costs; Part B and D costs for cancer-related services and drugs; total beneficiary deductible and coinsurance costs for Parts A, B, and D Patient experience measure(s): Reported through the Oncology Medical Home (OMH) patient survey	How **payment is adjusted for performance:** Episode-based payment with shared risk; participants retain a percentage of shared savings depending on their benchmarked quality scores and their total cost of care compared with the benchmark. Participants receive care management fee payments ($160 per member per month [PMPM]) and initial trigger amounts (~$150 per patient upon submission of a G code). **Requirements:** The average of the seven quality measures must be at or above the payer's measures for the grouped practices for that state. The percentage of savings is based on how teams compare to the average of other OCM 2.0 participants. **Attribution:** Patients identified through the submission of a G-code on claims, corresponding to the recommended cancer treatment plan, would be attributed to the participating team. Episodes are six months in length. **Volume:** N/A **Risk stratification or adjustment:** Shape a mutually acceptable risk methodology by engaging a group of cancer care providers and Innovation Center staff; this team would improve the Innovation Center 12-step process for risk methodology targets and hierarchical condition categories (HCCs). **Benchmarking:** The total cost of care for the entire episode period is compared with other cancer care teams within that state.
Digestive Health Network, Inc. (DHN) (Provider association/specialty society) Comprehensive	Clinical Focus: Gastrointestinal (GI)/digestive health; colorectal cancer (CRC) Providers: All providers within the care team	Utilization measure(s): Rates of site-of-service utilization (Ambulatory Surgical Center [ASC] vs. hospital outpatient department); utilization of pathology; repeat procedures; incomplete procedures; Seven-Day Risk-Standardized Hospital Visit Rate after Colonoscopy; ED utilization rate; surveillance intervals	How **payment is adjusted for performance:** Prospective episode-based model with retrospective reconciliation; adjust payments based on the quality of care delivered **Requirements:** Payment is tied to reducing repeat procedures, increasing ASC utilization, and conducting follow-up at appropriate

Proposal Name	Clinical Focus, Providers, Setting, Patient Population	Components Relevant to Performance Measurement	Technical Issues Related to Performance Measurement
Colonoscopy Advanced Alternative Payment Model for Colorectal Cancer Screening, Diagnosis and Surveillance N/A - Withdrawn	Setting: Outpatient Patient Population: Patients undergoing colorectal cancer screening, diagnosis, and surveillance using colonoscopy	Quality measure(s): MIPS quality measures: Colonoscopy Interval for Patients with a History of Adenomatous Polyps – Avoidance of Inappropriate Use; Appropriate Follow-Up Interval for Normal Colonoscopy in Average Risk Patients; Age Appropriate Screening Colonoscopy; Preventive Care and Screening: BMI Screening and Follow-Up Plan; Documentation of Current Medications in the Medical Record; Preventive Care and Screening: Tobacco Use: Screening and Cessation Intervention; Screening Colonoscopy Adenoma Detection Rate; Photo documentation of Cecal Intubation; Preventive Care and Screening: Unhealthy Alcohol Use: Screening and Brief Counseling; PHQ-2 screen for depression; Method of sedation; Adequacy of colonoscopy preparation Spending measure(s): Episode cost of care Patient experience measure(s): Overall satisfaction with experience; Professionalism of the non-medical office staff; Communication with physician being easy to understand; Included in decision-making related to care; Information provided on what to expect during and after the colonoscopy procedure; Preparation for the colonoscopy procedure; Likelihood to recommend the physician, practice, and the site of service where the procedure was performed	intervals; yearly retrospective reconciliation with downside payment adjustment for providers who fail to meet the re-do target for the CY, fail to meet the ASC utilization target for the CY, and/or fail to meet the quality criteria for surveillance follow-up intervals based on endoscopic and pathology findings. **Attribution:** Patients are attributed based on ICD-10 codes for screening, surveillance, and diagnostic colonoscopy procedures. Episodes are one year in length. **Volume:** N/A **Risk stratification or adjustment:** The proposal states that risk adjustment is achieved through limiting participation to outpatients who are American Society of Anesthesiologists (ASA) class I-III. **Benchmarking:** N/A
Zhou Yang, PhD, MHP (Dr. Yang) *(Individual)* Medicare 3 Year Value Based Payment Plan (Medicare 3VBPP) N/A, 6/29/2017	Clinical Focus: Broad Providers: Not specified Setting: Broad Patient Population: Broad	Utilization measure(s): Per member per year (PMPY) ED visits, hospital nights Quality measure(s): Preventive screening and wellness care utilization, annual mortality rate Spending measure(s): PMPY Medicare Contribution/Expenditures, Out of Pocket Expenditures, Medicare prescription drugs cost Patient experience measure(s): Patient survey regarding getting needed care, getting care quickly, how well doctors communicate, plan's customer choice, coordinated care, perceived value of care	How **payment is adjusted for performance:** N/A **Requirements:** N/A **Attribution:** N/A; voluntary participation into Medicare 3VBPP among community-dwelling beneficiaries (excluding nursing home residents) age 85 or lower without cognitive disability or severe mental illness **Volume:** Not specified **Risk stratification or adjustment:** Three-year budget constraints adjusted for inflation, age, demographics, geographic areas, and existing conditions **Benchmarking:** Not specified
Minnesota Birth Center (MBC) *(Regional/local single specialty practice)*	Clinical Focus: Maternity/ newborn care Providers: Certified nurse	Utilization measure(s): Comparison of cesarean section rates (NTSV cesarean rate); rate of ultrasound imaging Quality measure(s): Mention use of "outcome-level maternity quality	How **payment is adjusted for performance:** There are not formal performance measures provided in this proposal, and measures are not tied to payment. MBC asks for PTAC assistance in design of the payment methodology but suggests an upfront partial payment at 20

Proposal Name	Clinical Focus, Providers, Setting, Patient Population	Components Relevant to Performance Measurement	Technical Issues Related to Performance Measurement
A Single Bundled Payment for Comprehensive Low-Risk Maternity and Newborn Care Provided by Independent Midwife Led Birth Center Practices that Are Clinically Integrated with Physician and Hospital Services N/A - Withdrawn	midwives (CNMs), registered nurses (RNs), and licensed practical nurses (LPNs) Setting: Birth centers Patient Population: Pregnant people and newborns	measures" but do not provide detail on what these measures are Spending measure(s): N/A Patient experience measure(s): Printed postpartum survey (but it is not cataloged)	weeks gestation, then a final retrospective bundled payment shortly after completion of the episode; providers could also take on additional risk by assuming responsibility for some multiple of the agreed upon bundled price. **Requirements:** Not specified **Attribution:** N/A **Volume:** The model is designed for cohorts of 250-300 low-risk pregnant mothers per year led by five-member certified nurse midwife (CNM) teams that coordinate with obstetrics, pediatric, and neonatal physicians. **Risk stratification or adjustment:** Adjustments to cost could be provided via an outlier payment if the costs for the mother or her baby exceed a certain amount. **Benchmarking:** MBC asks for PTAC assistance in determining the appropriate amount of the bundled payment; authors mention using historical rates as a benchmark; however, Medicaid payments in Minnesota (and many other states) have historically been low.
Mercy Accountable Care Organization (Mercy ACO) *(Regional/local multispecialty practice or health system)* Annual Wellness Visit Billing at Rural Health Clinics (RHCs) The criteria for PFPMs established by the Secretary are not applicable to this proposal, 12/18/2017	Clinical Focus: Primary/ preventive care Providers: Rural health clinic (RHC) providers Setting: Outpatient Patient Population: Medicare beneficiaries	Utilization measure(s): N/A Quality measure(s): Colorectal cancer screening; tobacco screening & cessation; depression screening and follow-up; screening for fall risk; breast cancer screening; annual wellness visit completion rate Spending measure(s): Total cost of care (PMPM expense) Patient experience measure(s): Patient Satisfaction standards	How **payment is adjusted for performance:** While this proposal was submitted by an ACO that is part of the MIPS APM, this proposal does not propose a new model. It solely addresses the ability to provide annual wellness visits in rural health clinics (RHCs); there is a 10% withhold in provider compensation if less than 40% of attributed Medicare patients complete an annual wellness visit or if patient satisfaction standards are not met. **Requirements:** Providers must complete their documentation within a week, and providers in a Track 3 Medicare Shared Savings Program must achieve savings; providers in a Track 1 Medicare Shared Savings Program must not incur a penalty. **Attribution:** N/A **Volume:** N/A **Risk stratification or adjustment:** N/A **Benchmarking:** Not specified
Seha Medical and Wound Care (Seha) *(Individual provider)*	Clinical Focus: Acute and/or chronic wound care Providers:	Utilization measure(s): The proposal suggests number of visits to heal different wounds like diabetic and venous leg ulcers; number of prescriptions filled for proper offloading devices and footwear (for example diabetic footwear),	How **payment is adjusted for performance:** Medicare will pay a $400 per visit bundled payment that will include all services provided to an office-based or independent wound care provider or clinic. The proposal mentions that the model will create incentives for best outcomes but does not specify details.

Proposal Name	Clinical Focus, Providers, Setting, Patient Population	Components Relevant to Performance Measurement	Technical Issues Related to Performance Measurement
Bundled Payment for All Inclusive Outpatient Wound Care Services in Non Hospital Based Setting Not recommended, 5/17/2019	Independent office-based wound care physician or provider and home care providers Setting: Outpatient Patient Population: Patients with an acute or chronic wound	prescriptions for compression garments for patients with venous ulcers Quality measure(s): The proposal suggests measurement of a patient's improvement in quality of life; improvement in pain scale/control; physical and psychological improvements; blood monitoring of A1c; signing of patient contracts to encourage adherence to the plan of care Spending measure(s): Total cost of care per episode Patient experience measure(s): N/A	**Requirements:** Not specified **Attribution:** Not specified **Volume:** N/A **Risk stratification or adjustment:** N/A **Benchmarking:** Can compare to national averages if Medicare makes available its data on overall wound care expenditures
Dr. Sobel (Sobel) *(Individual)* Remote specialists and experts on demand improving care and saving costs (Revised version) N/A - Withdrawn	Clinical Focus: Broad/not specified Providers: Regional Referral Centers (specialists) Setting: Not specified Patient Population: Not specified	Utilization measure(s): Avoidable care (e.g., specialist utilization, admissions, tests) Quality measure(s): Not specified Spending measure(s): Cost of care Patient experience measure(s): Patient satisfaction with care	How **payment is adjusted for performance:** Quality, outcomes, and patient satisfaction affect fee schedule and future participation in the remote specialists' and experts' program **Requirements:** N/A **Attribution:** N/A **Volume:** N/A **Risk stratification or adjustment:** N/A **Benchmarking:** N/A

APPENDIX 3. ADDITIONAL RESOURCES RELATED TO PTAC'S THEME-BASED DISCUSSION ON DEVELOPING AND IMPLEMENTING PERFORMANCE MEASURES FOR PB-TCOC MODELS

The following is a summary of additional resources related to PTAC's theme-based discussion on developing and implementing performance measures for PB-TCOC models. These resources are publicly available on the ASPE PTAC website:

Environmental Scan and Additional Analyses

Environmental Scan on Developing and Implementing Performance Measures for Population-Based Total Cost of Care (PB-TCOC) Models

Overview of Current Performance Measures Included in Selected Medicare Payment Programs

Request for Input (RFI)

Developing and Implementing Performance Measures for Population-Based TCOC Models — Request for Input (RFI)

Materials from the Public Meetings

Materials from the Public Meeting on March 25, 2024

Presentation: Developing and Implementing Performance Measures for Population-Based Total Cost of Care (TCOC) Models — Preliminary Comments Development Team Findings

Presentation: Panelist Introduction Slides

Presentation: Subject Matter Expert Listening Sessions

Panelist Biographies

Panel Discussion Guide

Listening Session Facilitation Questions

Materials from the Public Meeting on March 26, 2024

Presentation: Panelist Introduction Slides

Presentation: Subject Matter Expert Listening Sessions

Presentation: CMS Panel Discussion

Panelist Biographies

CMS Panelist Biographies

Panel Discussion Guide

Listening Session Facilitation Questions

Other Materials Related to the Public Meeting

Public Meeting Minutes

Public Meeting Transcripts

APPENDIX 4. SUMMARY OF PTAC COMMENTS ON DEVELOPING AND IMPLEMENTING PERFORMANCE MEASURES FOR PB-TCOC MODELS

The Committee's comments have been summarized in the following broad topic areas:

- Topic 1: Developing a Balanced Measure Portfolio;
- Topic 2: Focusing on Patient-Centered Measures;
- Topic 3: Need for Reduction in Measure Complexity; and
- Topic 4: Considerations in Linking Performance Measures to Payment.

Topic 1: Developing a Balanced Measure Portfolio	
1A	Existing measures do not capture all of the important metrics for TCOC models. Emergency room and inpatient admission rates should be included but are not comprehensive. Other measures that should be considered relate to access to care, population health, and mental health.
1B	A balanced scorecard approach must occur at the system level. Focus on measures related to quality, safety, and patient experience, rather than cost and efficiency.
1C	In addition to measures of improvement, measures of accountability (e.g., safety, appropriateness, reporting) and measures for payment also should be considered. All measures will likely be different.
1D	Timeliness and access to care are metrics for both quality and safety. A list of timeliness metrics may be made available, including metrics such as specialist visits after a cancer diagnosis. Even if timeliness metrics cannot be used within the Innovation Center or CMS models yet, other payer programs could utilize them.
1E	The portfolio of measures will likely not be the same across localities. However, all portfolios will include outcome measures, appropriateness of care measures, and access to care measures with decreasing emphasis on process measures.
1F	Gaps still exist in measures designed for specialty care, particularly measures that link specialty care to primary care.
1G	Developing and implementing measures is expensive.

Topic 2: Focusing on Patient-Centered Measures	
2A	Development of person-centered outcomes and patient-reported outcomes is needed.
2B	To avoid assuming that something is wrong with a patient who lacks trust in the health care system, a measure of trust could be developed.
2C	The quality of life of caregivers also should be considered.
2D	The collection of patient-oriented measures can be challenging because they must be collected at the individual level rather than the practice level.
2E	Existing patient-reported measures and surveys may not meet the needs of high-needs populations.

Topic 3: Need for Reduction in Measure Complexity	
3A	Providers experience challenges with performance measurement due to the complexity of measures, challenges with implementing measures, and using data. Providers need a clear, multi-year road map.
3B	Performance measures need a clearly specified purpose. For example, process measures can be used for the purpose of testing theories about the link between process and outcomes instead of demonstrating a clear link between process and outcomes.
3C	There are a large number of measures that overburden providers.
3D	All-payer participation and simplification of measures can help moderate risk.
3E	Investments must be made in performance measurement.
3F	Use of claims-based measures will not drive change. It is necessary to decrease the cost of reporting, decrease the cost of measure development, and rely on digital quality measures.
3G	It is important to consider use of AI, NLP, and FHIR, and help EHR vendors to collaborate.
3H	It is difficult for federal agencies to create a data infrastructure that simplifies the process of data sharing and aggregation. However, a digital platform that treats data as a utility and technology as a commodity is critical to the success of quality measurement and improvement.
3I	Although there have been improvements, the data infrastructure in the United States remains archaic and siloed. The data burden falls primarily on physicians and practices. A health data utility approach and routine data aggregation for quality measures could reduce the burden of data collection on physicians.
3J	It is important to capture data from publicly available sources to help drive change.
3K	Data and information can be used to change performance and outcomes. Data must be actionable, specific, and at the individual level; thus, it is important to encourage data sharing. Whoever has the data should be required to share them; the accountable entity should not be solely responsible for pulling them. Having insights into the data is also important. Incentives, such as paying for consultation notes or hospital discharge summaries, should be explored as a way to encourage data sharing.
3L	Dashboards and other data visualization can help providers and systems better understand data.
3M	It is important not to assume that clinicians will know how to succeed using digital quality measures. Education on how to use these measures should be provided to clinicians.
3N	One framework that encouraged providers to invest, learn, and change included a payer-provided dashboard with actionable data for providers, a learning community, and implementation of incentive-based outcome measures.

Topic 4: Considerations in Linking Performance Measures to Payment	
4A	There are opportunities to develop CMS-level measures that could cascade to an entity-level, and then specific measures that can cascade to individual physicians depending on their specialty.
4B	The entity should bear the risk and create the measures. Providers should not be at financial risk and instead be incentivized to meet the measures.
4C	Presenters called for “winnable” measures and the ability to have input into these measures.
4D	Risk adjustment needs further attention. To improve care and outcomes, providers need concurrent risk adjustment, which differs from prospective risk adjustment.
4E	The downward pressure of financial risk has led to unintended consequences, including eroded outcomes and trust.

Topic 4: Considerations in Linking Performance Measures to Payment	
4F	As new measures are developed, the "quality industrial complex" should be guarded against. It is important to consider potential adverse financial incentives among companies that develop measures and how to ensure that data do not become proprietary.
4G	"Gaming the system" is a prevalent issue in performance measurement.
4H	A transitional plan could be created, beginning with 25 percent prospective population-based PMPM payments and 75 percent payments based on the current system, and then fully transitioning over four to six years (re: glidepath for PROMs).
4I	Multi-payer alignment and mandatory participation in programs may be necessary for success. Making program participation mandatory would require a deliberate glide path with an appropriate timeline for engagement and performance evaluation and improvement.
4J	The business case for transitioning to TCOC models differs when participation is voluntary versus mandatory. Voluntary programs require high incentives and moderated risk. All-payer participation and simplification of measures can help moderate risk.
4K	Achieving harmonization requires collaboration and multi-payer solutions.
4L	Private health plans benefit from CMS' leadership and efforts related to performance measurement without contributing investments. Many health systems and practices cannot afford to operate differently for different payers. To improve population health, more investment across all payers is needed.

REFERENCES

[1] Agency for Healthcare Research and Quality. Types of Healthcare Quality Measures. July 2015 https://www.ahrq.gov/talkingquality/measures/types.html

[2] National Quality Forum. Improving Healthcare Quality. N.D. https://www.qualityforum.org/Setting_Priorities/Improving_Healthcare_Quality.aspx

[3] American Academy of Family Physicians. Quality Measures. N.D. https://www.aafp.org/family-physician/practice-and-career/managing-your-practice/quality-measures.html

[4] Partnership for Quality Management. Endorsement & Maintenance. N.D. https://p4qm.org/EM

[5] Physician-Focused Payment Model Technical Advisory Committee. *Report to the Secretary of Health and Human Services: Optimizing Population-Based Total Cost of Care (PB-TCOC) Models in the Context of Alternative Payment Models (APMs) and Physician-Focused Payment Models (PFPMs)*. March 2023. https://aspe.hhs.gov/sites/default/files/documents/4b65476c58e363735aa9065a82a35df4/PTAC-TCOC-RTS.pdf

[6] Centers for Medicare & Medicaid Services. Blueprint Measure Lifecycle Overview. August 2023.

[7] Centers for Medicare & Medicaid Services. Blueprint Measure Lifecycle Overview. August 2023.

[8] American Academy of Family Physicians. Performance Measure Criteria. 2023. https://www.aafp.org/about/policies/all/performance-measures.html

[9] American Academy of Orthopedic Surgeons. Quality Performance Measures. 2018. https://www.aaos.org/globalassets/quality-and-practice-resources/quality-performance-measures-resouces/pm_methods_v2.pdf

[10] Tooker J; Ambulatory Care Quality Alliance. The importance of measuring quality and performance in healthcare. MedGenMed. 2005 Jun 3;7(2):49. PMID: 16369427; PMCID: PMC1681600.

[11] Agency for Healthcare Research and Quality. Section 4: Ways To Approach the Quality Improvement Process. January 2020.

[12] Centers for Medicare & Medicaid Services. Measure Development Theory. Last updated December 2024. https://mmshub.cms.gov/about-quality/blueprint-measure-lifecycle/theory

[13] Centers for Medicare and Medicaid Services. Patient-Reported Outcome Measures. December 2023. https://mmshub.cms.gov/sites/default/files/Patient-Reported-Outcome-Measures.pdf

Physician-Focused Payment Model Technical Advisory Committee

REPORT TO THE SECRETARY OF HEALTH AND HUMAN SERVICES

June 2024 Public Meeting

Addressing the Needs of Patients with Complex Chronic Conditions or Serious Illnesses in Population-Based Total Cost of Care (PB-TCOC) Models

September 25, 2025

About This Report

The Physician-Focused Payment Model Technical Advisory Committee (PTAC) was established by the Medicare Access and CHIP Reauthorization Act of 2015 (MACRA) to: 1) review physician-focused payment models (PFPMs) submitted by individuals and stakeholder entities; 2) prepare comments and recommendations regarding whether such models meet criteria established by the Secretary of Health and Human Services (HHS); and 3) submit these comments and recommendations to the Secretary. PTAC reviews submitted proposals using criteria established by the Secretary in regulations at 42 CFR §414.1465.

Within this context, from time to time, it may be beneficial for PTAC to reflect on proposed PFPMs that have been submitted to the Committee to provide further advisement on pertinent issues regarding effective payment model innovation in Alternative Payment Models (APMs) and PFPMs. Given that, in the past, at least 13 of the proposals that have been submitted to PTAC address issues related to chronic conditions or serious illnesses, PTAC now sees value in reviewing these elements in previously submitted proposals related to this topic, along with current information on patients with complex chronic conditions or serious illnesses in population-based total cost of care (PB-TCOC) models. To ensure that the Committee was fully informed, PTAC's June 2024 public meeting included a theme-based discussion on addressing the needs of patients with complex chronic conditions or serious illnesses in PB-TCOC models.

This report summarizes PTAC's findings and comments regarding patients with complex chronic conditions or serious illnesses in PB-TCOC models. This report also includes: 1) areas where additional research is needed and some potential next steps; 2) a summary of the characteristics related to complex chronic conditions and/or serious illnesses from proposals that have previously been submitted to PTAC; 3) an overview of key issues relating to patients with complex chronic conditions or serious illnesses and value-based care transformation; and 4) a list of additional resources related to this theme-based discussion that are available on the Assistant Secretary for Planning and Evaluation (ASPE) PTAC website.

Table of Contents

SUMMARY STATEMENT

From 2016 to 2020, the Physician-Focused Payment Model Technical Advisory Committee (PTAC) received 35 proposals for physician-focused payment models (PFPMs) and voted on the extent to which 28 of these proposals meet the Secretary's 10 regulatory criteria. Nearly all of the 35 proposals that were submitted to PTAC addressed the proposed model's impact on quality and costs to some degree. Since 2022, PTAC has been conducting a series of theme-based discussions to explore care delivery and payment issues related to developing and implementing population-based total cost of care (PB-TCOC) models, including issues related to performance measures and rural participation in PB-TCOC models. Key themes that emerged from these meetings related to challenges with identifying the high-cost, high-needs patient population with complex chronic conditions and/or serious illnesses; approaches to caring for these high-cost patients; and performance measures applicable for this patient population. Additionally, at least 13 of the proposals that have been submitted to PTAC included components related to chronic conditions or serious illnesses.

For this reason, PTAC now sees value in further exploring elements in previously submitted proposals related to this topic, along with current information on patients with complex chronic conditions or serious illnesses in PB-TCOC models. To ensure that the Committee was fully informed, the Committee conducted a theme-based discussion on this topic during PTAC's two-day June 2024 public meeting. The theme-based discussion included an overview presentation by PTAC members, listening session presentations by previous submitters and other subject matter experts (SMEs), as well as panel discussions with other SMEs related to addressing the needs of patients with complex chronic conditions or serious illnesses in PB-TCOC models. PTAC also requested public input during the meeting and through a Request for Input (RFI).

This report provides PTAC's findings and valuable information on best practices for addressing the needs of patients with complex chronic conditions or serious illnesses in PB-TCOC models. The information that PTAC has gleaned from a review of previous PFPM proposals and other literature that addressed this important topic, as well as input received during the theme-based discussion, will help to inform PTAC in its review of future proposals. This material has informed the Committee's comments, which are summarized in the following broad topic areas in this report:

- Topic 1: Optimizing Data for Identifying and Managing Patients with Complex Chronic Conditions or Serious Illnesses in PB-TCOC Models;
- Topic 2: Importance of Primary Care;
- Topic 3: Ensuring a Role for Palliative and Hospice Care;
- Topic 4: Addressing the Needs of Patients and Caregivers; and
- Topic 5: Performance Measures and Financial Incentives for Patients with Complex Chronic Conditions or Serious Illnesses in PB-TCOC Models.

Key highlights include:

- The top 5 percent most expensive beneficiaries account for nearly half (44 percent) of Medicare fee-for-service (FFS) spending. A significant portion of these top-spending beneficiaries are those with complex chronic conditions or serious illnesses.
- Identifying the high-cost, high-needs patient population is multi-faceted and requires appropriate data.
    - Considering a range of patient characteristics, including functional, cognitive, and social factors, is important to accurately identify and understand how to treat patients with complex chronic conditions or serious illnesses.
    - Data interoperability and data timeliness are essential to identifying the complex patient population. Mandatory collection of certain data elements may be needed. Data integration also is critical to identify health-related social needs (HRSNs).
- Care for complex patients should be holistic and longitudinal.
    - Building trust, listening to patients, and involving caregivers in decisions may improve patients' quality of life and health outcomes.
    - Understanding what matters most to the patient is important to ensure that their needs are being met.
    - Patient-focused measures and assessment of HRSNs can help promote quality care among patients with complex chronic conditions or serious illnesses.
- Central, coordinated care by a primary care team is fundamental to addressing the needs of patients with complex chronic conditions or serious illnesses.
    - Proactive (rather than reactive) care and concurrent care (e.g., disease therapies along with palliative care) are critical for treating complex patients.
    - Greater investment—infrastructure, prospective payments, income—in primary care is needed to promote whole-person care, rather than fragmented, specialty care.
- Palliative care for patients with complex chronic conditions or serious illnesses can result in improvements in patient quality of life, increased patient and caregiver satisfaction, and reduced health care utilization and costs.
    - Palliative care should be integrated within broader interdisciplinary care teams and be included as a part of value-based care and TCOC models. Incentives should be provided to promote palliative care.
- Caregivers assume substantial responsibility for coordinating care for patients with complex chronic conditions or serious illnesses. Opportunities to provide incentives, reduce burden, and offer support for caregivers should be examined.

In addition to summarizing the Committee's findings and comments related to these topics, the report also identifies areas where additional research is needed, issues for policy makers, and some potential next steps.

I. PTAC REVIEW OF PATIENTS WITH COMPLEX CHRONIC CONDITIONS OR SERIOUS ILLNESSES IN PB-TCOC MODELS

In developing the comments in this report, PTAC considered information from the theme-based discussion during the June 2024 public meeting and an environmental scan developed to provide information on addressing the needs of patients with complex chronic conditions or serious illnesses in PB-TCOC models. PTAC also considered an analysis that was conducted to examine characteristics of Medicare fee-for-service (FFS) beneficiaries who account for the highest Medicare Parts A and B spending.

PTAC formed a Preliminary Comments Development Team (PCDT) for the June 2024 theme-based discussion, which was comprised of Walter Lin, MD, MBA (Lead); Lindsay Botsford, MD, MBA; Lawrence Kosinski, MD, MBA; and Terry Mills Jr., MD, MMM (see Appendix 1 for a list of the Committee members). The PCDT reviewed the environmental scan and beneficiary analysis and delivered a summary presentation to the full Committee during the theme-based discussion. The theme-based discussion included panel discussions with stakeholders from organizations that had previously submitted PFPM proposals with components related to chronic conditions or serious illnesses. The theme-based discussion also featured perspectives from a diverse group of SMEs, and an opportunity for public comments. At the end of the theme-based discussion, Committee members identified comments to be included in this Report to the Secretary (RTS).[i]

The Committee synthesized information from PTAC proposals, the environmental scan, beneficiary analysis, and panel discussions with a previous submitter and other SMEs during the June 2024 public meeting on addressing the needs of patients with complex chronic conditions or serious illnesses in PB-TCOC models. This RTS summarizes PTAC's comments from its findings, which are organized in five topics:

- Topic 1: Optimizing Data for Identifying and Managing Patients with Complex Chronic Conditions or Serious Illnesses in PB-TCOC Models;
- Topic 2: Importance of Primary Care;
- Topic 3: Ensuring a Role for Palliative and Hospice Care;

[i] James Walton, DO, MBA, was not in attendance at the June 10-11, 2024, public meeting. Joshua Liao, MD, MSc, was not in attendance for day two of the public meeting (June 11, 2024). Henish Bhansali, MD, FACP and Krishna Ramachandran, MBA, MS were not in attendance at the June 10-11, 2024 public meeting because the terms for both PTAC members did not start until October 2024. Angelo Sinopoli, MD, and Jennifer Wiler, MD, MBA, were in attendance at the June 10-11, 2024, public meeting; the terms for both PTAC members expired in October 2024 before delivery of this report.

- Topic 4: Addressing the Needs of Patients and Caregivers; and
- Topic 5: Performance Measures and Financial Incentives for Patients with Complex Chronic Conditions or Serious Illnesses in PB-TCOC Models.

For each topic, relevant issues are highlighted, followed by a summary of PTAC's comments. Appendix 2 includes information about proposals that were previously submitted to PTAC which addressed issues related to patients with complex chronic conditions or serious illnesses. Appendix 3 provides a list of additional resources related to PTAC's complex chronic conditions or serious illnesses theme-based discussion that are available on the Assistant Secretary for Planning and Evaluation (ASPE) PTAC website. Appendix 4 includes a complete list of the Committee's comments.

II. BACKGROUND: DEFINITIONS AND CONTEXT RELATED TO PATIENTS WITH COMPLEX CHRONIC CONDITIONS OR SERIOUS ILLNESSES IN PB-TCOC MODELS

Definitions of patients with complex chronic conditions or serious illnesses vary depending on the number and types of conditions, severity, and duration of illness. Currently, there is no consensus on definitions across organizations, making it challenging to prospectively identify this patient population.

PTAC has developed the following working definition of patients with complex chronic conditions:

- Patients with more than one morbidity, chronic condition, and/or comorbidity (lasting 12 months or more) who usually require a high complexity of treatment involving multiple health care providers across various specialties and settings.

PTAC has developed the following working definition of patients with serious illnesses:

- Patients with advanced illness and patients who are in their last years of life.

Additionally, PTAC has noted that:

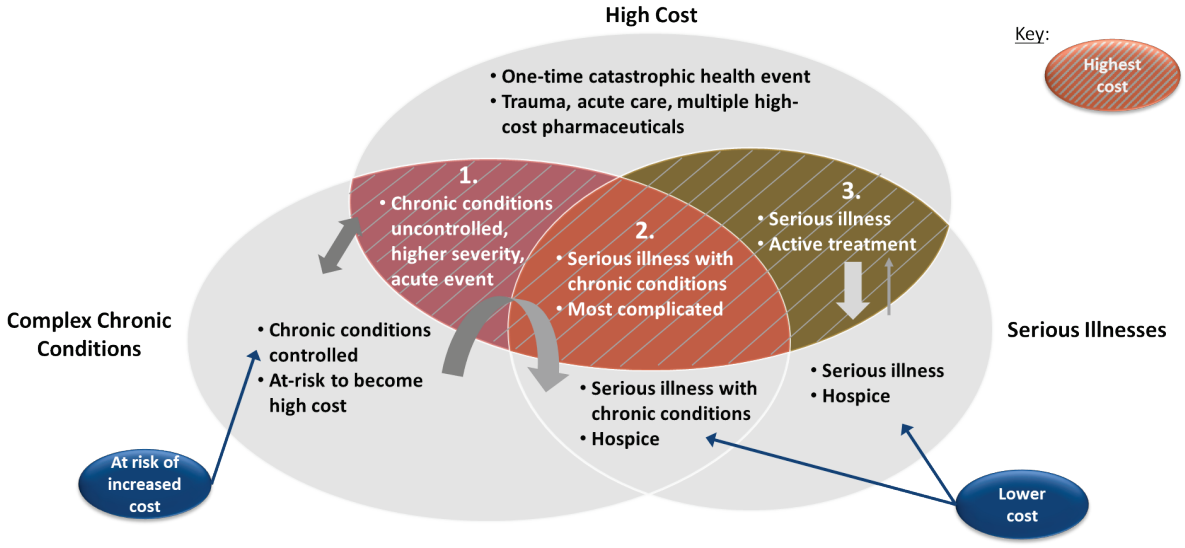
- In addition to their chronic medical conditions, these patients [with complex chronic conditions or serious illnesses] may also experience acute events that can affect their health care needs.

Patients with complex chronic conditions and/or serious illnesses tend to have the most health care needs, use the most health care services, and incur the most costs. A Kaiser Permanente analysis of the most expensive 5 percent of patients revealed three heterogeneous groups, each constituting about one-third of high-cost patients: 1) those with one-time catastrophic events (e.g., a major trauma or acute cancer); 2) those with chronic conditions (such as diabetes or chronic obstructive pulmonary disease [COPD]); and 3) those with serious medical conditions that require ongoing, expensive treatment (such as advanced heart failure or end-stage renal disease

[ESRD]).[1] These top 5 percent most expensive patients account for nearly half (44 percent) of Medicare fee-for-service (FFS) spending.[2]

Exhibit II.1 identifies three types of high-cost Medicare beneficiaries—those with uncontrolled chronic conditions, those with serious illness in active treatment, and those experiencing both serious illness and chronic conditions—who may be of particular interest for PB-TCOC models seeking to improve outcomes, quality, and care, and reduce costs.

Exhibit II.1: Relationship Between High-Cost Beneficiaries and Those with Complex Chronic Conditions or Serious Illnesses



Source: PTAC Preliminary Comments Development Team (PCDT) Findings Presentation, June 2024

These high-cost beneficiaries share some common characteristics: they are disproportionately male, non-white, socially vulnerable, dually eligible for Medicare and Medicaid, and either among the youngest (disabled or with ESRD) or oldest (frail) beneficiaries.[3,4,5,6] They also share some clinical characteristics, including having multiple chronic conditions, acute disease exacerbations, and serious illnesses (physical diseases, as well as mental health and substance use disorders).[7,8] A recent analysis by ASPE and Acumen, LLC, commissioned and presented by PTAC during the June 2024 public meeting, found that Medicare FFS beneficiaries with the highest spending had a higher mortality rate; a higher proportion of dual eligible beneficiaries; and a higher number of chronic conditions when compared with the overall FFS total population in 2021.

Health care costs vary considerably among patients with complex chronic conditions or serious illnesses. Based on the same ASPE/Acumen analysis described above, average per capita spending for the top 5 percent of Medicare FFS beneficiaries is growing faster than for the overall FFS population (3.6 versus 3.27 percent per year). Furthermore, over 40 percent of beneficiaries in the top 5 percent of Medicare FFS spending remained at least in the top 10 percent of

spending during the following year. Although many health care costs are largely unavoidable, research indicates that the majority of potentially preventable health care spending (72 percent) is among high-cost beneficiaries.[9] Moreover, four out of ten high-cost beneficiaries (44 percent) had at least one potentially preventable event.[10]

III. CHARACTERISTICS OF THE CENTER FOR MEDICARE AND MEDICAID INNOVATION MODELS RELEVANT TO COMPLEX CHRONIC CONDITIONS OR SERIOUS ILLNESSES

During the June 2024 public meeting, the Center for Medicare and Medicaid Innovation (the Innovation Center) shared lessons learned on six Innovation Center models: the Medicare Care Choices Model (MCCM); the Medicare Advantage (MA) Value-Based Insurance Design (VBID) Hospice Component; the Independence at Home Demonstration (IAH); the Accountable Care Organization (ACO) REACH High-Needs Model; the Kidney Care Choices (KCC) Model; and the Guiding an Improved Dementia Experience (GUIDE) Model. These models are aimed to address the needs of Medicare beneficiaries with complex chronic conditions or serious illnesses.

Both the **MCCM** and the **MA VBID Hospice Component** focused on hospice benefits. The MCCM allowed Medicare beneficiaries to receive treatment for terminal conditions while also receiving supportive care from participating hospices. MA VBID allowed MA organizations to include the hospice benefit as part of their benefit packages; participating plans were also required to offer palliative care and transitional concurrent care.

The **IAH Demonstration** was a statutory requirement authorized by Congress, giving the Innovation Center little control over timeline and key design components. The Demonstration provided comprehensive primary care services in a home setting to patients with multiple chronic conditions. To meet eligibility requirements, patients had to have been hospitalized and receiving acute rehabilitation services in the prior 12 months, have at least two chronic conditions, and require human assistance with at least two activities of daily living.

The **ACO REACH High-Needs Model** was designed to replicate the successful clinical approaches implemented in the Program of All-Inclusive Care for the Elderly (PACE), focusing on interdisciplinary teams that emphasize preventive care and aim to manage care across all settings. The **KCC Model** focuses on chronic kidney disease stages 4 and 5 and transplant beneficiaries.

Several models experienced challenges with acquiring provider and/or beneficiary participation. For example, only three percent of all hospices nationwide participated in MCCM, only four percent of Medicare FFS beneficiaries were possible targets for the IAH Demonstration, many provider practices ultimately left the IAH Demonstration to participate in other Innovation Center models, and both the ACO REACH High-Needs and KCC Models have shown small beneficiary population sizes. Utilization of services under the MA VBID Hospice Component was also low. Low participation and uptake of these models make it difficult for them to grow. Although the KCC Model struggled with obtaining large beneficiary population sizes, the model has achieved

high provider participation with 100 ACO participants from 10 organizations. There are also more care coordination organizations participating in KCC than originally expected.

Results were mixed on achieving cost savings. The Innovation Center found that MCCM reduced net Medicare expenditures by 30 percent, mostly due to decreasing hospitalizations and increasing hospice use earlier in the disease trajectory. However, for the IAH Demonstration, the Innovation Center found that using event-defined eligibility was challenging when trying to reduce total spending because if the event was high-cost, the period after the event was most likely associated with reduced spending with which organizations were rewarded with financial incentives for reducing costs. This resulted in a 2019 evaluation reporting no difference in spending between patients in the IAH Demonstration and those in the comparison group.

The Innovation Center's newest model, the **GUIDE Model,** was recently launched in July 2024 and is the first model to address all elements recommended for serious illness care. It will test whether a comprehensive package of care coordination and management, caregiver support and education, and respite services can achieve three primary objectives: 1) improve quality of life for people with dementia and their caregivers; 2) delay avoidable long-term nursing home care; and 3) enable more people to remain at home through end of life. Services are required to be delivered by an interdisciplinary care team comprised of a clinician with dementia expertise, as well as a care navigator. GUIDE was designed to be complementary with other models allowing providers and beneficiaries to also participate in other Innovation Center models or shared savings programs.

Experts also weighed in on specific Innovation Center models and/or Centers for Medicare & Medicaid Services (CMS) programs. One SME shared that the PACE program effectively incentivizes investment in care delivery and improvements demonstrating that the primary care system will effectively manage care coordination when financial incentives are provided. Experts also discussed areas for improvement for the ACO REACH Model, including expanding the criteria for patients in post-acute and long-term care/nursing home settings to receive high-needs care, and having CMS develop and provide information to participating organizations on how patients can transition to another program/model when the ACO REACH is scheduled to end in two years. Finally, one expert shared that the Generalist-Specialist Model of Nursing in serious illness care, where clinicians can serve as generalists in palliative care, should be used across all settings.

IV. CHARACTERISTICS OF PTAC PROPOSALS RELEVANT TO COMPLEX CHRONIC CONDITIONS OR SERIOUS ILLNESSES

Between 2016 to 2020, PTAC received 35 proposed PFPMs submitted by stakeholders and voted on the extent to which 28 of these proposals meet the Secretary's 10 regulatory criteria.[ii] At least 13 of these proposals included components related to chronic conditions or serious illnesses. The Committee found that seven of these proposals met Criterion 7 (Integration and Care Coordination). The goal of this criterion is to "encourage greater integration and care

[ii] The remaining seven proposals were withdrawn prior to the Committee's deliberation.

coordination among practitioners and across settings where multiple practitioners or settings are relevant to delivering care to the population treated under the PFPM." Five of these seven proposals were selected for an analysis of select model features and characteristics:

- American Academy of Hospice and Palliative Medicine (AAHPM): Patient and Caregiver Support for Serious Illness
- Coalition to Transform Advanced Care (C-TAC): Advanced Care Model (ACM) Service Delivery and Advanced Alternative Payment Model (APM)
- Hackensack Meridian Health and Cota (HMH/Cota): Oncology Bundled Payment Program Using CNA-Guided Care
- New York City Department of Health and Mental Hygiene (NYC DOHMH): Multi-Payer, Bundled Episode-of-Care Payment Model for Treatment of Chronic Hepatitis C Virus (HCV) Using Care Coordination by Employed Physicians in Hospital Outpatient Clinics
- Renal Physicians Association (RPA): Incident ESRD Clinical Episode Payment Model

Out of the five selected PTAC proposals that included components related to chronic conditions or serious illnesses and met Criterion 7 (Integration and Care Coordination), three proposals focused on condition-specific approaches for improving care delivery, and the remaining two proposals focused on increasing access to palliative care. All proposals intended to take place in an inpatient and/or outpatient setting. Two proposals additionally included the home as a primary setting, and one proposal included other palliative care settings.

Care coordination and/or care transition approaches included establishing a team of care coordinators (three proposals), using interdisciplinary care teams (two proposals), adopting health information technology (two proposals), and developing coordinated care plans (two proposals). All five proposals instituted more than one care coordination and/or care transition approach.

All five proposals included financial incentives to enhance provider participation in the proposed PFPM. Two proposals focused on bundled payments (with one additionally offering potential shared savings). Other proposals offered tiered monthly payments, per-beneficiary-per-month (PBPM) payments, shared savings, and/or bonus payments.

All five proposals incorporated performance measures relevant to chronic conditions or serious illnesses. Performance measures included quality (all five proposals), patient experience (four proposals), utilization (three proposals), and/or spending (three proposals) measures.

See Appendix 2 for additional information about the five selected proposals that included components related to chronic conditions or serious illnesses.

V. COMMENTS FOR CONSIDERATION BY THE SECRETARY

Based on findings from the Committee's analysis of PTAC proposals, information in the literature, and information from listening session presentations and panel discussions involving a previous submitter and additional SMEs during the June 2024 public meeting, this section summarizes PTAC's comments regarding addressing the needs of patients with complex chronic conditions or serious illnesses in PB-TCOC models. PTAC's comments are organized in five topics:

- Topic 1: Optimizing Data for Identifying and Managing Patients with Complex Chronic Conditions or Serious Illnesses in PB-TCOC Models;
- Topic 2: Importance of Primary Care;
- Topic 3: Ensuring a Role for Palliative and Hospice Care;
- Topic 4: Addressing the Needs of Patients and Caregivers; and
- Topic 5: Performance Measures and Financial Incentives for Patients with Complex Chronic Conditions or Serious Illnesses in PB-TCOC Models.

For each topic, relevant issues are highlighted, followed by a summary of PTAC's comments. Additionally, the Committee has identified areas where additional research is needed, as well as some potential next steps related to each topic. Appendix 4 includes a complete list of the Committee's comments.

V.A. Topic 1: Optimizing Data for Identifying and Managing Patients with Complex Chronic Conditions or Serious Illnesses in PB-TCOC Models

PTAC emphasized the importance of data and its use for patients with complex chronic conditions or serious illnesses:

- Use data to focus on patient characteristics and not diseases;
- Use data in ways that address the challenge of identifying high-needs patients; and
- Integrate data to address HRSNs.

PTAC's comments on optimizing data for identifying and managing patients with complex chronic conditions or serious illnesses in PB-TCOC models are listed in Exhibit V.1.

Use data to focus on patient characteristics and not diseases. Committee members indicated that providers should identify and care for high-risk patients based on a range of patient characteristics and not only information on whether patients are diagnosed with particular diseases. Most current risk stratification systems, such as the CMS Hierarchical Condition Categories (HCCs) and derivative risk adjustment factors (RAFs), rely on claims data to identify high-needs patients based on their medical diagnoses. However, complex, high-risk patients should be considered as whole individuals and not simply the sum of their diseases. Functional,

cognitive, and social factors may provide a better window into care needs and how best to manage these patients. SMEs cited numerous non-clinical factors that may be important, including: frailty, falls, activities of daily living, nutrition, cognitive status, homebound status, living alone, social support, caregiver stress, and personal health goals. This type of information is not currently available in claims data or other widely accessible data systems.

One SME suggested that care for the high-needs patient population could be improved from the use of well-being dashboards obtained by incorporating quality of life and information on HRSNs into electronic health records (EHRs). Another expert noted that providing care based on the 4Ms—mobility, mentation, medications, and what matters—can improve health outcomes for complex patients.[11]

Use data in ways that address the challenge of identifying high-needs patients. PTAC emphasized the importance of being able to identify patients with complex chronic conditions or serious illnesses, given their disproportionate impact on health care spending. Patients who are at rising risk of higher costs and those who are candidates for palliative care also may be critical populations to detect. Identifying these high-needs patient populations is challenging.

Data are fragmented for patients, particularly complex patients who have many touchpoints across different providers and health care systems. Patient medical records may be stored in multiple separate and non-integrated electronic medical record (EMR) and electronic health record (EHR) systems. There is a need to promote collaboration and integration across disparate EMR/EHR systems and vendors. One expert pointed out that trust among all stakeholders is key to achieving the necessary interoperability. Policies and procedures are critical to achieving this aim, and CMS may play an important role in supporting and setting the necessary precedence.

Data timeliness is also a critical factor. There is a need to develop an infrastructure and network that connects the multiple disparate patient data sources to have the type of data needed to promote actionable results. Increasing the timeliness of supplying data that can inform risk stratification to providers is essential so they can act upon it. Providers need to understand what is happening with patients and their families in near real time to better address their needs.

SMEs highlighted the importance of integrating social needs with clinical data to help providers identify complex patients using a holistic patient view. One Committee member stressed that data collection efforts should prioritize areas with the highest impact or ability to identify these complex, high-cost patients; non-value add data collection should be eliminated. Mandating collection of certain data elements, such as patient's functional status, may be needed and could offer a relatively immediate improvement to patient identification. Another PTAC member suggested that a single Healthcare Common Procedure Coding System (HCPCS) G-code could be introduced to flag those patients who require palliative care. Sophisticated patient algorithms and innovative identification methods, such as use of artificial intelligence, may promote optimal

identification of high-needs patients. Consideration would need to be given to issues such as ownership, management, and use of these more integrated, holistic data.

Integrate data to address health-related social needs (HRSNs). PTAC identified the important role that data integration plays in addressing HRSNs. One SME suggested that understanding the root causes of illness and developing the appropriate care plans require understanding and incorporating non-clinical factors. Obtaining and using data on a range of risk factors such as frailty and functional status are essential to this goal. Integration of such non-clinical data with claims data could significantly improve the ability to identify and care for the complex, high-needs patient population.

Exhibit V.1: PTAC Comments

Topic 1: Optimizing Data for Identifying and Managing Patients with Complex Chronic Conditions or Serious Illnesses in PB-TCOC Models

Comment 1A. Identify needs and develop programs based on patients' characteristics rather than exclusively on diseases or diagnostic information.

Comment 1B. The lack of specific codes and shortage of palliative care specialists make identifying patients for palliative care challenging. A potential solution could be using a single G-code to incentivize identification of patients who are candidates for palliative care.

Comment 1C. There is potential for immediate impact by mandating certain activities, such as collecting specific data elements and assessing functional status.

Comment 1D. Eliminate friction to promote efficiency, for example, by eliminating the reporting of data that do not impact outcomes.

Comment 1E. Risk stratification should be run frequently (e.g., monthly) so that providers can observe real data when understanding what is happening for patients and their families.

Comment 1F. There are potential advantages to collaborating with major EMR vendors. These companies can help to address challenges related to data and performance measures.

Comment 1G. Integrate data to achieve a holistic view needed to address HRSNs.

V.B. Topic 2: Importance of Primary Care

The Committee identified the importance of primary care for patients with complex chronic conditions or serious illnesses:

- Achieving holistic and longitudinal care starts with primary care;
- Proactively addressing symptom and disease management is critical; and
- Further investments in primary care may be needed to achieve holistic care.

PTAC's comments on the importance of primary care are listed in Exhibit V.2.

Achieving holistic and longitudinal care starts with primary care. Committee members indicated that a best practice for treating patients with complex chronic conditions or serious illnesses is to focus on providing holistic and longitudinal care as opposed to disease-focused, short-term, and fragmented care. One SME noted that successful models of care include whole-person-focused care, are embedded into the delivery system, and are longitudinal, whereas unsuccessful models were disease-focused and episode-based. One Committee member stressed that a longitudinal focus on patients with complex chronic conditions or serious illnesses is needed to align with the longitudinal outcomes typically used to assess quality of care for this patient population.

Holistic and longitudinal care best originates from within the primary care setting. SMEs highlighted the need for providers to transition patient care to a primary care model and shift away from fragmented care and care delivered in emergency rooms. Care coordination should take place within the primary care setting. Care coordination received outside of the primary care setting although necessary may lead to patients receiving less integrated and coordinated care. Primary care providers (PCPs) should expand their focus beyond their patients' diseases and medications and provide treatment of the whole individual, including their behavioral health, polypharmacy, and social needs. The primary care team would serve as the central coordinator of services and would devise treatment plans that shift focus to patients' goals of care instead of patients' diseases.

To achieve holistic and longitudinal care within primary care settings, Committee members highlighted the need to have PCPs engaged in providing high-value care and having the infrastructure in place to ensure availability of providers 24/7. Another Committee member noted the importance of developing a reactive system with 24/7 access to disease and symptom management, as well as having a system in place that encourages prevention.

Interdisciplinary teams are important to coordinate and ensure holistic and longitudinal care. These teams should encompass the applicable skillsets and roles that are needed but not include every type of specialist available. One expert suggested that PCPs should have a vast array of skills, such as primary palliative care and medication management, thus decreasing the need for multiple specialists. Encouraging the use of interdisciplinary teams, a 2021 report on primary care from the National Academies of Sciences, Engineering, and Medicine emphasized having a responsible figure in charge, establishing trusting relationships with patients and families, and integrating various specialties or services into the care plan.[12]

Proactively addressing symptom and disease management is critical. PTAC emphasized the importance of shifting from a reactive approach to a proactive approach to address symptom and disease management, as well as HRSNs. Health care providers should be able to provide concurrent care (e.g., medical treatment with hospice care) along with proactive and anticipatory

care. Further, catching acute exacerbations early is critical to delaying the progression or worsening of chronic disease for this patient population. This may involve responding quickly to acute episodic care concerns and evaluating patients in collaboration with the care team on a daily basis.

One Committee member also noted that primary management, rather than co-management, should be provided to this patient population. A SME made the distinction between primary management and co-management, expressing that patients with complex chronic conditions need actual care provided in a timely manner—primary management—rather than care coordination.

Further investments in primary care may be needed to achieve holistic care. Committee members indicated that further investments in primary care should be considered to achieve holistic care and form interdisciplinary care teams that originate within primary care.

Experts discussed how methods beyond making incremental Medicare fee-for-service (FFS) payment adjustments are needed to drive meaningful change, such as offering prospective or capitated primary care payments. Up-front incentive payments enable providers to have the funds to proactively conduct patient outreach and manage care.

Experts drew upon an analogy of a pie where each slice of pie represents a different piece of health care. The number of slices of pie representing primary care needs to increase. One expert highlighted that, to achieve whole-person care rooted in primary care, primary care payment methodologies need to change, which would involve changes to policies governed by the American Medical Association (AMA) or Resource Utilization Committee (RUC) to redistribute income paid to specialists and PCPs so that a greater portion of the income is invested in primary care. Another expert added that the pie analogy works well with TCOC models to easily visualize how the pie is divided; currently about 85 percent of the pie represents specialists and hospitals. With a FFS model, it is not possible to see the full picture. Integrating services, such as behavioral services, into primary care has been successful with TCOC models. To continue to build holistic care and integrate services into primary care, investment in primary care needs to increase.

One PTAC member suggested making the PCP medical career path more desirable to enhance primary care growth. PCPs should have more power over their decisions, be compensated for outcomes, and have more control over specialists. Additionally, they should be provided with financial incentives and freedom to innovate and find solutions. One SME stressed that primary care services, including care coordination, communication, and trust, are crucial to addressing systemic issues in health care. The 2021 report on primary care from the National Academies of Sciences, Engineering, and Medicine focused on implementing high-quality primary care, particularly in terms of payment and regulatory mechanisms.[13] The report discussed four payment options: 1) FFS; 2) hybrid reimbursement models; 3) broad risk-sharing models; and 4) a

global increase in primary care spending. Emphasis was placed on the need to align incentives to prioritize primary care. Increasing PCP empowerment and compensation could augment the desirability of the PCP medical career path, thus resulting in further investment in primary care and building whole-person care that is centered around the PCP.

Finally, Committee members mentioned the need to drive attribution of patients to PCPs. One SME highlighted that the lack of centralized care creates challenges for this attribution. A push toward centralized, holistic care originating in a primary care setting will help with attributing patients to a single PCP.

Exhibit V.2: PTAC Comments

Topic 2: Importance of Primary Care

Comment 2A. There is a need to be holistic in delivering patient care and ensuring that care is longitudinal in focus.

Comment 2B. Have an activated PCP and infrastructure in place to ensure availability of providers 24/7.

Comment 2C. Interdisciplinary teams should be developed wisely—for example, having the right number of people and roles involved in patient care.

Comment 2D. Shift away from a crisis/acute care approach to one that proactively addresses symptom and disease management, as well as health-related social needs.

Comment 2E. Use primary management over co-management and provide more care than care management.

Comment 2F. Primary care is the center of this work, and further investments in primary care should be considered.

Comment 2G. Consider ways to make the PCP medical career path more desirable. PCPs should have more power over their decisions, be compensated for outcomes and not volume, and have more control over specialists.

Comment 2H. Empowering PCPs more and providing them higher compensation will help achieve holistic care.

Comment 2I. Drive attribution of patients to primary care and think beyond payment approaches used in Medicare Part B.

Comment 2J. Determining how specialists can be more reliant on the primary care base from which they are receiving patients is important.

V.C. Topic 3: Ensuring a Role for Palliative and Hospice Care

PTAC expressed the importance of ensuring that attention is given to the critical role of palliative care:

- Ensure availability and access to palliative care; and
- Integrate palliative care in payment programs to improve quality and lower costs.

PTAC's comments on ensuring a role for palliative and hospice care are listed in Exhibit V.3.

Ensure availability and access to palliative care. PTAC concluded that palliative care should be available to all patients who need it. Palliative care, which focuses on managing symptoms and controlling pain (including physical and emotional), can help improve the quality of life for those living with chronic and terminal conditions. Palliative care can be useful for patients early in their diagnosis of a serious illness and continue through end of life under hospice.

The PCDT described two possible trajectories for patients diagnosed with a serious illness.[14] The "hard landing" path involves providing aggressive treatment until the patient's death. The "soft landing" path introduces palliative care over time, concurrent with treatment, eventually progressing to hospice as treatment discontinues. The PCDT further shared that research indicates that aggressive treatment near end of life does not substantially improve health or survival,[15] but that palliative care can significantly improve a patient's quality of life, as well as patient and caregiver satisfaction.[16] Several experts also noted that starting palliative care early in a patient's disease course is associated with better patient outcomes and reduced health care utilization later.[17]

SMEs suggested that several provider workforce issues can contribute to patients not receiving needed palliative care. First, the health care workforce is lacking the necessary number of palliative care specialists. Second, PCPs are not well trained to provide basic palliative care. Third, the patient referral rate by PCPs to palliative care is low. These challenges may require increased incentives to encourage health care practitioners to specialize in palliative care, and increased training and awareness of the importance of palliative care among PCPs and advanced practice clinicians (e.g., physician assistants and nurse practitioners).

Several experts stressed the importance of ensuring the availability of concurrent care, that is, the ability of patients to receive desired and beneficial disease intervention and treatment at the same time they receive palliative care. Currently, to be eligible for the CMS Medicare Hospice Benefit, a patient must forego curative care in lieu of palliative care.[18] One SME noted that patients should not be forced to choose between disease treatment that could improve their quality of life versus hospice care to manage their symptoms. CMS tested concurrent care in the Medicare Care Choices Model (MCCM), which ran from 2016 through 2021.[19] One SME whose organization participated in MCCM shared that the model was transformative for its community. Model-wide MCCM evaluation findings revealed high patient and caregiver satisfaction with quality of life and care consistent with their wishes.[20]

Integrate palliative care in payment programs to improve quality and lower costs. The Committee observed that integrating palliative care in value-based payment programs and TCOC models can lead to increases in patient quality of life and reductions in health care costs.

Research has demonstrated that palliative care can both reduce health care utilization (e.g., emergency department [ED] visits, hospital readmissions and hospital length of stay) and save money.[21,22] Evaluation results from the concurrent care MCCM revealed that, during the last 30 days of life, MCCM participants had greater use of hospice and fewer aggressive treatments. MCCM also showed a 13 percent reduction in net expenditures (Medicare Parts A and B less MCCM payments), 26 percent reduction in inpatient admissions, and 12 percent reduction in outpatient ED visits and observation stays.[23]

Several experts spoke about the importance of integrating palliative care within broader interdisciplinary care teams, for example, by designating palliative care providers to take the lead on coordinating patients' care and health-related communications. One SME described the challenge with demonstrating financial viability of palliative care as a stand-alone service. Cost savings from palliative care are realized when looking at a patient's TCOC. As such, linking palliative care to a broader cost center may be necessary to ensure that these services are supported. Incentives should be provided to promote palliative care, and cost savings need to be measured in terms of TCOC.

Exhibit V.3: PTAC Comments

Topic 3: Ensuring a Role for Palliative and Hospice Care

Comment 3A. Palliative care is important for all patients who need it. Patients and families who receive palliative care are happier, and palliative care saves the health system money.

Comment 3B. Data suggest that palliative and hospice care both improve care quality and lower costs. An ASPE research project could confirm that increasing the supply of palliative care leads to improvements in quality and decreased costs, such as primary care. There is also a strong plea from palliative care providers for mandates tied to payment programs.

Comment 3C. In an FFS system, it is financially challenging to hire much-needed palliative care specialists. TCOC environments better support provision of palliative care, which will generate a positive financial return and improve quality of care for seriously ill populations.

V.D. Topic 4: Addressing the Needs of Patients and Caregivers

The Committee emphasized the significance of addressing the needs of patients with complex chronic conditions or serious illnesses and their caregivers:

- Establishing patient trust in the care provider is critical;
- Caregiver and family engagement in the patient's care can enhance care delivery; and
- It is important to assess and focus on what matters to the patient.

PTAC's comments on addressing the needs of patients and caregivers are listed in Exhibit V.4.

Establishing patient trust in the care provider is critical. Committee members expressed the importance of the PCP role to build trust and establish connections with patients. This will ultimately lead to greater patient involvement and patient commitment to their care plan. This includes effectively communicating and showing cultural sensitivity to patients. Experts highlighted that building trust and communicating effectively with patients are important to meet the needs of diverse patients and communities and are the most critical components of team-based care. However, these components remain undervalued in the current health care system.

One Committee member elaborated that care not received directly from the patient's PCP, such as from outside care management organizations or virtual care management, may not be as effective in establishing patient trust and connection. However, if care coordination is grounded within primary care and patients primarily receive their care from a trusted PCP, care received virtually may be equally as effective in establishing trust as care received in person.

Experts shared best practices established within their current organizations or provider groups. For example, one SME expressed that his organization introduced community health coaches into the care plan, which increased trust and reduced barriers to accessing care. Another SME noted that greater trust was experienced among patients within his organization when patients were asked questions over the phone, providing more confidentiality than being asked questions in person.

Caregiver and family engagement in the patient's care can enhance care delivery. PTAC indicated that one best practice for care delivery for patients with chronic conditions or serious illnesses is to elicit participation from caregivers and family members as they may be able to provide more insights on the patients' needs than the patients are able to provide themselves. Including peers and non-licensed providers (e.g., family caregivers) in care decisions can enhance care delivery and outcomes for the high-needs patient population. Experts highlighted the significant role that family caregivers play in the quality of care that patients receive. To encourage caregiver and family engagement in the care for complex and frail populations, SMEs suggest financially incentivizing caregivers. However, effective incentivization methods are scarce, and additional research is needed on incentives that could be offered to increase caregiver participation. One example that has been implemented in a few states is the use of a paid caregiver program, which incentivizes the engagement of family members and helps alleviate some of the caregiver burden by paying caregivers for their time.

Additionally, one expert noted that many family members take on substantial responsibility for care coordination and clinical care for patients with serious illnesses. However, the demands of caregiving and the support needs of caregivers are often ignored. One SME emphasized that the health care system needs to address who or what entity should take responsibility for integrating

care across different settings to lessen the burden on caregivers. It is also important to develop quality measures that assess caregiver needs, stress levels, and care satisfaction to effectively evaluate both the quality of care the patient has received and level of burden on the caregiver.

Finally, one Committee member stressed that patients and caregivers should be added to governance models. Those individuals with direct patient care delivery experience should be included in governance to ensure that their voices are represented in policy decisions.

It is important to assess and focus on what matters to the patient. Committee members emphasized the importance of providing patient choice, goal-concordant care, and listening to patients so they feel heard and understood. Patient choice should include offering support services that are tailored to individual patient needs. Goal-concordant care should include discussing and setting goals between the provider and patient/caregiver and implementing a care delivery plan based on the established goals. Discussions about goals of care are particularly important when managing symptoms and pain among patients with complex chronic conditions or serious illnesses. Further, providers should listen to their patients to address any unmet care delivery or social needs that patients may be trying to directly or indirectly communicate. One expert elaborated that when providers listen for unmet needs, patients feel heard and understood. This also builds trust between the provider and patient and promotes the sense that patients/caregivers and providers are on the same team.

Finally, additional quality measures may need to be developed to effectively assess what matters to the patient, such as measuring level of patient loneliness, isolation, social connections, and access. Identifying needs through quality measurement may result in providing the type of care more directly needed and tailored to individual patients.

Exhibit V.4: PTAC Comments

Topic 4: Addressing the Needs of Patients and Caregivers

Comment 4A. It is important to build strong relationships and connections with patients (effective communication, cultural sensitivity, trust).

Comment 4B. Patient connection and trust are key. Outside care management organizations, virtual care management, and vendor-related care may not be as effective. Patient trust in the care provider is fundamental to getting the patient on board with their care.

Comment 4C. It is critical to not only engage patients but also engage their caregivers and family members. For this patient population, caregivers and family members may be able to provide more insights than the patients. Paying caregivers to participate may be a cost-effective strategy.

Comment 4D. Consider what incentives can be offered to patients and caregivers to participate, as well as create measures that consider what matters most to patients and their caregivers.

Comment 4E. Add patients and caregivers to governance models.

Comment 4F. Provide patient choice, including with support services.

Comment 4G. Providing goal-concordant care is a key objective. Discussions about goals of care are particularly important when managing symptoms and pain among patients with complex chronic conditions or serious illnesses.

Comment 4H. Focus on what matters to the patient (e.g., social connection, loneliness).

Comment 4I. Address health-related social needs and access to health care services.

V.E. Topic 5: Performance Measures and Financial Incentives for Patients with Complex Chronic Conditions or Serious Illnesses in PB-TCOC Models

PTAC discussed several important considerations for developing performance measures and payment model incentives for use with patients with complex chronic conditions or serious illnesses:

- High-value quality measures can help ensure quality care;
- Broader payment models and payer alignment are needed;
- Financial incentives should be meaningful and timely; and
- Incentive structures need to promote participation.

PTAC's comments on performance measures and financial incentives for patients with complex chronic conditions or serious illnesses in PB-TCOC models are listed in Exhibit V.5.

High-value quality measures can help ensure quality care. The Committee identified the critical role of quality measures to ensure high standards of care for patients with complex chronic conditions or serious illnesses, noting that emphasis should be placed on high-value metrics. One SME indicated that key quality metrics include hospital admission, emergency room utilization, over/under-utilization of services, and proper utilization of specialty care and services. PTAC also noted the importance of measures that identify patients' social needs, which are not traditionally included in quality measurement. An expert shared how health care utilization and outcomes are driven by patients' complex social needs, such as living in unsafe housing conditions, splitting medications due to inability to afford their drug copay, and not being able to understand physician instructions.

One SME cited the Innovation Center ACO REACH Model[24]—which focuses on promoting coordinated care in an ACO, especially for those in underserved communities—as an example of

a program that incorporates strong quality measurement. ACO REACH has three types of ACOs, including ACOs focused on the population of patients with complex or high needs. The model involves five key sets of quality measures: risk-standardized all-condition readmissions; all-cause unplanned admissions for patients with multiple chronic conditions; days at home for patients with complex chronic conditions; timely follow-up after acute exacerbations of chronic conditions; and the Consumer Assessment of Healthcare Providers and Systems (CAHPS) survey.[25]

Experts emphasized that quality measures for the complex patient population should focus on what matters most to patients, noting that process measures are not particularly helpful. PTAC identified the importance of patient-oriented measures as key quality metrics for patients with complex chronic conditions or serious illnesses. As stated by one expert, patient-reported measures are critical to ensure that the patient's voice is considered in the determination of value-based care. Part of the Innovation Center GUIDE Model will involve developing a new patient-reported outcome measure (PROM) on caregiver burden, which an expert flagged as an example of a meaningful quality measure for this complex patient population.[26]

Experts cited several patient-focused measures that can help promote quality care among the high-needs patient population. CAHPS incorporates measures related to the quality of care, including coordination, timeliness, and clinician communication. Two validated patient experience measures for the seriously ill patient population, developed by the American Academy of Hospice and Palliative Medicine (AAHPM) and RAND, are receiving desired help for pain, and feeling heard and understood.[27] The National Committee for Quality Assurance (NCQA) created three patient-centered outcome measures for the complex patient population involving measuring the identification, follow-up, and achievement of patient-centered outcome goals.

Broader payment models and payer alignment are needed. The Committee observed that, given the complexity and diversity of the high-needs patient population, creating broader models beyond those with a single disease focus may be needed. Experts shared that unsuccessful models have been those that are disease- and episode-focused, whereas successful models focus on the whole person and are longitudinal. One SME remarked, however, that targeting a specific issue or patient population initially could produce small changes that serve as momentum to broader systemic change.

PTAC also indicated that promoting the necessary shift to value-based care for the complex patient population may require aligning payment models across payers and mandating certain components. For example, models could mandate collection of specific data elements, such as functional status, and require that financial incentives reach individual providers. One SME noted that technology, such as electronic data collection tools and artificial intelligence (AI), may help alleviate the burden to providers of data collection and reporting.

Financial incentives should be meaningful and timely. PTAC emphasized the importance of having financial incentives that are large enough to be compelling, delivered close in time to the desired behaviors, and directly tied to specific performance. Experts noted that the current level of incentives to PCPs is insufficient. Providing substantial prospective payment to PCPs can assist in allowing them to have the necessary time to see patients with complex chronic conditions or serious illnesses, supplanting the quick-turnaround, high-volume patient visit approach that is more common.

One SME described the vision of the primary care team as the care coordinator for the high-needs patient population, acknowledging that achieving this vision may require reallocating some payments from specialists to PCPs. The current payment system pays and promotes fragmented specialty services and not coordinated care that is essential to the complex patient population. Indeed, it may be necessary to reverse the level of payment for high-needs patients to pay PCPs at a higher level than other providers.

Incentive structures need to promote participation. The Committee identified the importance of providing sufficient infrastructure investment and stable baseline payments to support practices in caring for patients with complex chronic conditions or serious illnesses. One SME noted that these investments, such as infrastructure to support data systems, analytics, and technical assistance, are particularly important for Federally Qualified Health Centers (FQHCs) and safety net institutions that have limited resources to be able to participate in PB-TCOC models. Relatedly, utilizing a phased approach, such as progressing from pay-for-reporting to upside risk, and implementing protection from downside risk, may assist poorly resourced providers who care for high-needs patients to be better able to participate in these programs. One SME indicated that it is important to ensure that programs targeting complex patients do not result in unintended consequences, such as deferment of specialty care or other services to reduce costs.

Exhibit V.5: PTAC Comments

Topic 5: Performance Measures and Financial Incentives for Patients with Complex Chronic Conditions or Serious Illnesses in PB-TCOC Models

Comment 5A. Quality metrics should be a guardrail guaranteeing a high standard of care.

Comment 5B. Focus on high-value measures, especially for risk adjustment (e.g., frailty, function, cognitive status).

Comment 5C. Patient-reported outcome measures are key quality measures, especially related to patients feeling heard and understood.

Comment 5D. Programs and incentives tailored to single disease constructs are inadequate for addressing the needs of this diverse population.

Comment 5E. It is important to identify ideal care models and then align payment incentives accordingly.

Comment 5F. Create incentives to scale beyond pilots and ensure that there is a focus on aligning Medicare with Medicaid strategies for these patient populations.

Comment 5G. Incentives need to be meaningful, timely, and tied to performance metrics to drive impact.

Comment 5H. Use a prospective payment for primary care and have real dollars available to create compelling incentives.

Comment 5I. Ensure that incentives allow for sufficient revenue flow.

Comment 5J. Baseline payments should not be reduced after one or two years. Large, up-front investments are necessary when caring for this patient population. Stable baseline payments will help.

Comment 5K. Consider protecting providers in smaller organizations from downside risk if they are caring for patients with complex chronic conditions or serious illnesses.

Comment 5L. Strong incentives often have unintended consequences, which must be carefully considered and mitigated. In addition to incentives, there should also be careful application of penalties.

APPENDIX 1. COMMITTEE MEMBERS AND TERMS

Terry L. Mills Jr., MD, MMM, *Co-Chair*
Soujanya R. Pulluru, MD, *Co-Chair*

Term Expires October 2025

Lindsay K. Botsford, MD, MBA
One Medical
Houston, TX

James Walton, DO, MBA
JWalton, LLC
Dallas, TX

Term Expires October 2026

Jay S. Feldstein, DO
Philadelphia College of Osteopathic Medicine
Philadelphia, PA

Lauran Hardin, MSN, FAAN
HC² Strategies
Maysville, KY

Joshua M. Liao, MD, MSc
The University of Texas Southwestern Medical Center
Dallas, TX

Walter Lin, MD, MBA
Generation Clinical Partners
Saint Louis, MO

Terry L. Mills Jr., MD, MMM
Aetna Better Health of Oklahoma,
Strategic Health LLC
Tulsa, OK

Term Expires October 2027

Henish Bhansali, MD, FACP
Medical Home Network
Chicago, IL

Lawrence R. Kosinski, MD, MBA
Independent Consultant
Scottsdale, AZ

Soujanya R. Pulluru, MD
CP Advisory Services, My Precious Genes
Sarasota, FL

Krishna Ramachandran, MBA, MS
UnitedHealth Group
Piedmont, CA

APPENDIX 2. CHARACTERISTICS OF SELECTED PTAC PFPM PROPOSALS IDENTIFIED AS BEING RELEVANT TO COMPLEX CHRONIC CONDITIONS OR SERIOUS ILLNESSES

Submitter and Proposal	Clinical Focus, Setting, and Patient Population	Components and Financial Incentives Relevant to Patients with Complex Chronic Conditions or Serious Illnesses
American Academy of Hospice and Palliative Medicine *Patient and Caregiver Support for Serious Illness (PACSSI)*	**Clinical Focus:** Serious illness and palliative care **Providers:** Palliative care teams (PCT) **Setting:** Inpatient; outpatient; other palliative care settings **Patient Population:** Patients with serious illness	**Overall Model Design Features:** PACSSI proposes palliative care medical home services for high-need patients not yet eligible or not wanting hospice care. **Care Coordination and/or Care Transition Approaches:** Use of interdisciplinary care teams; availability of multiple specialists; development of coordinated care plan; use of health information technology (HIT) **Financial Incentives to Enhance Participation by Providers**: Tiered monthly payments to replace evaluation and management (E/M) payments **Performance Measures Specific to Patients with Chronic Conditions or Serious Illnesses:** Yes (quality, patient experience, and utilization measures)
Coalition to Transform Advanced Care (C-TAC) *Advanced Care Model (ACM) Service Delivery and Advanced Alternative Payment Model*	**Clinical Focus:** Advanced illness **Providers:** Palliative care providers (board-certified in palliative care and other specialties involved in advanced illness care) **Setting:** Inpatient; outpatient; home **Patient Population:** Patients with advanced illness, in their last 12 months of life	**Overall Model Design Features:** ACM proposes advance care planning services through an interdisciplinary team and coordination of care with patients' regular providers. **Care Coordination and/or Care Transition Approaches:** Interdisciplinary teams and comprehensive care management **Financial Incentives to Enhance Participation by Providers**: PBPM payments with potential for quality-based bonus payment. Further, a partial advanced APM incentive where providers with a 75% enrollment of patients with advanced illness will receive a 5% bonus payment for professional fees. **Performance Measures Specific to Patients with Chronic Conditions or Serious Illnesses:** Yes (quality, patient experience, and spending measures)

Submitter and Proposal	Clinical Focus, Setting, and Patient Population	Components and Financial Incentives Relevant to Patients with Complex Chronic Conditions or Serious Illnesses
Hackensack Meridian Health and Cota (HMH/Cota) *Oncology Bundled Payment Program Using CNA-Guided Care*	**Clinical Focus:** Cancer care **Providers:** Oncologists (medical, radiation, and surgical) and other affiliated physicians **Setting:** Inpatient; outpatient; home **Patient Population:** Oncology patients (breast, colon, rectal, and lung cancer)	**Overall Model Design Features:** Oncology Bundled Payment Program proposes to use Cota Nodal Address (CNA)-Guided Care to diagnose patients and assess treatment needed. **Care Coordination and/or Care Transition Approaches:** Use of the EHR system (Epic) by all participating providers; team of care coordinators within PCP practices; care management module (Healthy Planet) for all patient care plans **Financial Incentives to Enhance Participation by Providers:** Bundled payment to cover all aspects of patients' oncology care **Performance Measures Specific to Patients with Chronic Conditions or Serious Illnesses:** Yes (quality, patient experience, and utilization measures)
New York City Department of Health and Mental Hygiene (NYC DOHMH) *Multi-Provider, Bundled Episode-of-Care Payment Model for Chronic Hepatitis C Virus (HCV) Using Care Coordination by Employed Physicians in Hospital Outpatient Clinics*	**Clinical Focus:** Hepatitis C virus (HCV) **Providers:** Primary care and internal medicine physicians (infectious disease specialists, gastroenterologists) **Setting:** Hospital-based outpatient clinics **Patient Population:** Patients with HCV	**Overall Model Design Features:** The Project INSPIRE Model proposes integrated medical, behavioral, and social services for patients with HCV. **Care Coordination and/or Care Transition Approaches:** This model utilizes care coordinators who document HCV treatment, including initiating care coordination, developing a care coordination plan, and attaining sustained virologic response (SVR). **Financial Incentives to Enhance Participation by Providers**: Bundled payment and potential shared savings **Performance Measures Specific to Patients with Chronic Conditions or Serious Illnesses:** Yes (quality, utilization, and spending measures)

Submitter and Proposal	Clinical Focus, Setting, and Patient Population	Components and Financial Incentives Relevant to Patients with Complex Chronic Conditions or Serious Illnesses
Renal Physicians Association (RPA) *Incident ESRD Clinical Episode Payment Model*	**Clinical Focus:** ESRD **Providers:** Nephrologists, PCPs **Setting:** Dialysis centers **Patient Population:** Patients with incident ESRD	**Overall Model Design Features:** The Incident ESRD Clinical Episode Payment Model proposes care coordination and renal transplantation, if applicable, for dialysis patients transitioning from chronic kidney disease (CKD) to ESRD (6-month episodes of care). **Care Coordination and/or Care Transition Approaches:** Care coordination between PCP and specialists, including vascular surgeons; coordinating dialysis care in outpatient settings **Financial Incentives to Enhance Participation by Providers:** Shared savings for the 6-month episode of care; bonus payment for patients receiving a kidney transplant **Performance Measures Specific to Patients with Chronic Conditions or Serious Illnesses:** Yes (quality, patient experience, and spending measures)

APPENDIX 3. ADDITIONAL RESOURCES RELATED TO PTAC'S THEME-BASED DISCUSSION ON ADDRESSING THE NEEDS OF PATIENTS WITH COMPLEX CHRONIC CONDITIONS OR SERIOUS ILLNESSES IN PB-TCOC MODELS

The following is a summary of additional resources related to PTAC's theme-based discussion on addressing the needs of patients with complex chronic conditions or serious illnesses in PB-TCOC models. These resources are publicly available on the ASPE PTAC website:

Environmental Scan and Additional Analyses

Environmental Scan on Addressing the Needs of Patients with Complex Chronic Conditions or Serious Illnesses in Population-Based Total Cost of Care (PB-TCOC) Models

Examination of Medicare FFS Beneficiaries that Account for the Top 10% of Medicare Spending

Request for Input (RFI)

Addressing the Needs of Patients with Complex Chronic Conditions or Serious Illnesses in Population-Based Total Cost of Care (PB-TCOC) Models — Request for Input (RFI)

Materials from the Public Meetings

Materials from the Public Meeting on June 10, 2024

Presentation: Addressing the Needs of High-Cost Patients with Complex Chronic Conditions or Serious Illnesses in Population-Based Total Cost of Care (PB-TCOC) Models — Preliminary Comments Development Team Findings

Presentation: Panelist Introduction Slides — Panel Discussion

Presentation: Panelist Introduction Slides — Roundtable Panel Discussion

Presentation: Subject Matter Expert Listening Session 1

Panelist Biographies

Panel Discussion Guide

Roundtable Panel Discussion Guide

Listening Session 1 Facilitation Questions

Materials from the Public Meeting on June 11, 2024

Presentation: Subject Matter Expert Listening Session 2

Presentation: Subject Matter Expert Listening Session 3

Presentation: CMS Panel Discussion

Panelist Biographies

CMS Panelist Biographies

Listening Session 2 Facilitation Questions

Listening Session 3 Facilitation Questions

Other Materials Related to the Public Meeting

Public Meeting Minutes

Public Meeting Transcripts

APPENDIX 4. SUMMARY OF PTAC COMMENTS ON ADDRESSING THE NEEDS OF PATIENTS WITH COMPLEX CHRONIC CONDITIONS OR SERIOUS ILLNESSES IN PB-TCOC MODELS

The Committee's comments have been summarized in the following broad topic areas:

- Topic 1: Optimizing Data for Identifying and Managing Patients with Complex Chronic Conditions or Serious Illnesses in PB-TCOC Models;
- Topic 2: Importance of Primary Care;
- Topic 3: Ensuring a Role for Palliative and Hospice Care;
- Topic 4: Addressing the Needs of Patients and Caregivers; and
- Topic 5: Performance Measures and Financial Incentives for Patients with Complex Chronic Conditions or Serious Illnesses in PB-TCOC Models.

Topic 1: Optimizing Data for Identifying and Managing Patients with Complex Chronic Conditions or Serious Illnesses in PB-TCOC Models	
1A	Identify needs and develop programs based on patients' characteristics rather than exclusively on diseases or diagnostic information.
1B	The lack of specific codes and shortage of palliative care specialists make identifying patients for palliative care challenging. A potential solution could be using a single G-code to incentivize identification of patients who are candidates for palliative care.
1C	There is potential for immediate impact by mandating certain activities, such as collecting specific data elements and assessing functional status.
1D	Eliminate friction to promote efficiency, for example, by eliminating the reporting of data that do not impact outcomes.
1E	Risk stratification should be run frequently (e.g., monthly) so that providers can observe real data when understanding what is happening for patients and their families.
1F	There are potential advantages to collaborating with major EMR vendors. These companies can help to address challenges related to data and performance measures.
1G	Integrate data to achieve a holistic view needed to address HRSNs.

Topic 2: Importance of Primary Care	
2A	There is a need to be holistic in delivering patient care and ensuring that care is longitudinal in focus.
2B	Have an activated PCP and infrastructure in place to ensure availability of providers 24/7.
2C	Interdisciplinary teams should be developed wisely—for example, having the right number of people and roles involved in patient care.
2D	Shift away from a crisis/acute care approach to one that proactively addresses symptom and disease management, as well as health-related social needs.
2E	Use primary management over co-management and provide more care than care management.
2F	Primary care is the center of this work, and further investments in primary care should be considered.

Topic 2: Importance of Primary Care	
2G	Consider ways to make the PCP medical career path more desirable. PCPs should have more power over their decisions, be compensated for outcomes and not volume, and have more control over specialists.
2H	Empowering PCPs more and providing them higher compensation will help achieve holistic care.
2I	Drive attribution of patients to primary care and think beyond payment approaches used in Medicare Part B.
2J	Determining how specialists can be more reliant on the primary care base from which they are receiving patients is important.

Topic 3: Ensuring a Role for Palliative and Hospice Care	
3A	Palliative care is important for all patients who need it. Patients and families who receive palliative care are happier, and palliative care saves the health system money.
3B	Data suggest that palliative and hospice care both improve care quality and lower costs. An ASPE research project could confirm that increasing the supply of palliative care leads to improvements in quality and decreased costs, such as primary care. There is also a strong plea from palliative care providers for mandates tied to payment programs.
3C	In an FFS system, it is financially challenging to hire much-needed palliative care specialists. TCOC environments better support provision of palliative care, which will generate a positive financial return and improve quality of care for seriously ill populations.

Topic 4: Addressing the Needs of Patients and Caregivers	
4A	It is important to build strong relationships and connections with patients (effective communication, cultural sensitivity, trust).
4B	Patient connection and trust are key. Outside care management organizations, virtual care management, and vendor-related care may not be as effective. Patient trust in the care provider is fundamental to getting the patient on board with their care.
4C	It is critical to not only engage patients but also engage their caregivers and family members. For this patient population, caregivers and family members may be able to provide more insights than the patients. Paying caregivers to participate may be a cost-effective strategy.
4D	Consider what incentives can be offered to patients and caregivers to participate, as well as create measures that consider what matters most to patients and their caregivers.
4E	Add patients and caregivers to governance models.
4F	Provide patient choice, including with support services.
4G	Providing goal-concordant care is a key objective. Discussions about goals of care are particularly important when managing symptoms and pain among patients with complex chronic conditions or serious illnesses.
4H	Focus on what matters to the patient (e.g., social connection, loneliness).
4I	Address health-related social needs and access to health care services.

Topic 5: Performance Measures and Financial Incentives for Patients with Complex Chronic Conditions or Serious Illnesses in PB-TCOC Models	
5A	Quality metrics should be a guardrail guaranteeing a high standard of care.
5B	Focus on high-value measures, especially for risk adjustment (e.g., frailty, function, cognitive status).
5C	Patient-reported outcome measures are key quality measures, especially related to patients feeling heard and understood.

Topic 5: Performance Measures and Financial Incentives for Patients with Complex Chronic Conditions or Serious Illnesses in PB-TCOC Models	
5D	Programs and incentives tailored to single disease constructs are inadequate for addressing the needs of this diverse population.
5E	It is important to identify ideal care models and then align payment incentives accordingly.
5F	Create incentives to scale beyond pilots and ensure that there is a focus on aligning Medicare with Medicaid strategies for these patient populations.
5G	Incentives need to be meaningful, timely, and tied to performance metrics to drive impact.
5H	Use a prospective payment for primary care and have real dollars available to create compelling incentives.
5I	Ensure that incentives allow for sufficient revenue flow.
5J	Baseline payments should not be reduced after one or two years. Large, up-front investments are necessary when caring for this patient population. Stable baseline payments will help.
5K	Consider protecting providers in smaller organizations from downside risk if they are caring for patients with complex chronic conditions or serious illnesses.
5L	Strong incentives often have unintended consequences, which must be carefully considered and mitigated. In addition to incentives, there should also be careful application of penalties.

REFERENCES

[1] Pearl R, Madvig P. Managing the Most Expensive Patients: A New Primary-care Model can Lower Costs and Improve Outcomes. Harvard Business Review. January-February 2020;68-76. https://hbr.org/2020/01/managing-the-most-expensive-patients

[2] MedPAC. A Data Book: Health Care Spending and the Medicare Program. July 2023.

[3] Joynt KE, Figueroa JF, Beaulieu N, Wild RC, Orav EJ, Jha AK. Segmenting High-cost Medicare Patients into Potentially Actionable Cohorts. *Healthcare*. 2017;5:62-67. doi:10.1016/j.hjdsi.2016.11.002

[4] Joynt KE, Gawande AA, Orav EJ, Jha AK. Contribution of Preventable Acute Care Spending to Total Spending for High-Cost Medicare Patients. *JAMA*. 2013;309(24):2572-2578. doi:10.1001/jama.2013.7103

[5] Powers BW, Yan J, Zhu J, Linn KA, Jain SH, Kowalski JL, et al. Subgroups of High-cost Medicare Advantage Patients: An Observational Study. *J Gen Intern Med*. 2018;34(2):218-225. doi: 10.1007/s11606-018-4759-1

[6] Zhang Y, Grinspan Z, Khullar D, Unruh MA, Shenkman E, Cohen A, et al. Developing an Actionable Patient Taxonomy to Understand and Characterize High-cost Medicare Patients. 2020:8. *Healthcare*. doi:10.1016/j.hjdsi.2019.100406

[7] Joynt KE, Figueroa JF, Beaulieu N, Wild RC, Orav EJ, Jha AK. Segmenting High-cost Medicare Patients into Potentially Actionable Cohorts. *Healthcare*. 2017;5:62-67. doi:10.1016/j.hjdsi.2016.11.002

[8] Zhang Y, Grinspan Z, Khullar D, Unruh MA, Shenkman E, Cohen A, et al. Developing an Actionable Patient Taxonomy to Understand and Characterize High-cost Medicare Patients. 2020:8. *Healthcare*. doi:10.1016/j.hjdsi.2019.100406

[9] Khullar, Dhruv, Yongkang Zhang, and Rainu Kaushal. 2020. "Potentially Preventable Spending Among High-Cost Medicare Patients: Implications for Healthcare Delivery." Journal of General Internal Medicine 35 (10): 2845–52. https://doi.org/10.1007/s11606-020-05691-8.

[10] Khullar, Dhruv, Yongkang Zhang, and Rainu Kaushal. 2020. "Potentially Preventable Spending Among High-Cost Medicare Patients: Implications for Healthcare Delivery." Journal of General Internal Medicine 35 (10): 2845–52. https://doi.org/10.1007/s11606-020-05691-8.

[11] Fulmer T, Berman A, Mate K, Pelton L. Age-Friendly Health Systems: The 4Ms. Hartford Institute for Geriatric Nursing (HIGN) General Assessment Series Issue #35. 2019. https://hign.org/sites/default/files/2020-06/Try_This_General_Assessment_35.pdf

[12] National Academies of Sciences, Engineering, and Medicine. 2021. *Implementing High-Quality Primary Care: Rebuilding the Foundation of Health Care*. Washington, DC: The National Academies Press. https://doi.org/10.17226/25983.

[13] National Academies of Sciences, Engineering, and Medicine. 2021. *Implementing High-Quality Primary Care: Rebuilding the Foundation of Health Care*. Washington, DC: The National Academies Press. https://doi.org/10.17226/25983.

[14] Kamal AH, Bull J, Kavalieratos D, Taylor DH, Downey W, et al. Palliative care needs of patients with cancer living in the community. Journal of Oncology Practice. 2011;7(6):382-388. doi: 10.1200/JOP.2011.000455

[15] Canavan ME, Wang X, Ascha MS, Miksad RA, Showalter TN, et al. Systematic anticancer therapy and overall survival in patients with very advanced solid tumors. JAMA Oncology. 2024;10(7): 887-895. doi:10.1001/jamaoncol.2024.1129

[16] Milazzo S, Hansen E, Carozza D, Case AA. How Effective Is Palliative Care in Improving Patient Outcomes? Curr Treat Options Oncol. 2020 Feb 5;21(2):12. doi: 10.1007/s11864-020-0702-x. PMID: 32025964.

[17] Petrillo LA, Jones KF, El-Jawahri A, Sanders, J, Greer JA, et al. Why and how to integrate early palliative care into cutting-edge personalized cancer care. ASCO Educational Book. 2024;44(3). DOI https://doi.org/10.1200/EDBK_100038

[18] Centers for Medicare & Medicaid Services. Hospice Care. Accessed September 24, 2024. https://www.medicare.gov/coverage/hospice-care

[19] Centers for Medicare & Medicaid Services. Medicare Care Choices Model. Accessed September 24, 2024. https://www.cms.gov/priorities/innovation/innovation-models/medicare-care-choices

[20] Centers for Medicare & Medicaid Services. Medicare Care Choices Model: Fifth and Final Annual Evaluation Report (2016-2021): Findings at a Glance. Accessed September 24, 2024. https://www.cms.gov/priorities/innovation/data-and-reports/2023/mccm-fg-fifthannrpt

[21] Mittelberger J. The Value of Palliative Care. https://www.capc.org/the-case-for-palliative-care/

[22] Triplett DP, LeBrett WG, Bryant AK, Bruggeman AR, Matsuna RK et al. Effect of palliative care on aggressiveness of end-of-life care among patients with advanced cancer. Journal of Oncology Practice. 2018:13(9):e760-e769.

[23] Centers for Medicare & Medicaid Services. Medicare Care Choices Model: Fifth and Final Annual Evaluation Report (2016-2021). https://www.cms.gov/priorities/innovation/data-and-reports/2023/mccm-fg-fifthannrpt

[24] Centers for Medicare & Medicaid Services. ACO REACH. Accessed September 25, 2024. https://www.cms.gov/priorities/innovation/innovation-models/aco-reach

[25] ACO REACH Model: PY 2025 Quality Measurement Methodology Report. September 2024. Accessed September 25, 2024. https://www.cms.gov/files/document/aco-reach-quality-msr-meth-py25.pdf

[26] Centers for Medicare & Medicaid Services. GUIDE Payment Methodology Paper: Including Overview of Beneficiary Alignment, July 2024–June 2025. May 8, 2024. Accessed September 25, 2024. https://www.cms.gov/files/document/guide-payment-methodology-paper.pdf

[27] American Academy of Hospice and Palliative Medicine. The Palliative Care Measures Project. Accessed September 25, 2024. https://aahpm.org/research-qi/quality-initiatives/

Physician-Focused Payment Model Technical Advisory Committee

REPORT TO THE SECRETARY OF HEALTH AND HUMAN SERVICES

September 2024 Public Meeting

Identifying a Pathway Toward Maximizing Participation in Population-Based Total Cost of Care (PB-TCOC) Models

September 25, 2025

About This Report

The Physician-Focused Payment Model Technical Advisory Committee (PTAC) was established by the Medicare Access and CHIP Reauthorization Act of 2015 (MACRA) to: 1) review physician-focused payment models (PFPMs) submitted by individuals and stakeholder entities; 2) prepare comments and recommendations regarding whether such models meet criteria established by the Secretary of Health and Human Services (HHS); and 3) submit these comments and recommendations to the Secretary. PTAC reviews submitted proposals using criteria established by the Secretary in regulations at 42 CFR §414.1465.

Within this context, from time to time, it may be beneficial for PTAC to reflect on proposed PFPMs that have been submitted to the Committee to provide further advisement on pertinent issues regarding effective payment model innovation in Alternative Payment Models (APMs) and PFPMs. Given that, in the past, at least nine of the proposals that have been submitted to PTAC discussed the use of total cost of care (TCOC) measures in their payment methodology and performance reporting, PTAC now sees value in reviewing these elements in previously submitted proposals related to this topic, along with current information on maximizing participation in population-based total cost of care (PB-TCOC) models. To ensure that the Committee was fully informed, PTAC's September 2024 public meeting included a theme-based discussion on identifying a pathway toward maximizing participation in PB-TCOC models.

This report summarizes PTAC's findings and comments regarding maximizing participation in PB-TCOC models. This report also includes: 1) areas where additional research is needed and some potential next steps; 2) a summary of the characteristics related to maximizing participation in PB-TCOC models from proposals that have previously been submitted to PTAC; 3) an overview of key issues relating to maximizing participation in PB-TCOC models and value-based care transformation; and 4) a list of additional resources related to this theme-based discussion that are available on the Assistant Secretary for Planning and Evaluation (ASPE) PTAC website.

Table of Contents

SUMMARY STATEMENT

From 2016 to 2020, PTAC received 35 proposals for PFPMs and voted on the extent to which 28 of these proposals meet the Secretary's 10 regulatory criteria. Nearly all of the 35 proposals that were submitted to PTAC addressed the proposed model's impact on quality and costs to some degree. Since 2022, PTAC has been conducting a series of theme-based discussions to explore care delivery and payment issues related to developing and implementing population-based total cost of care (PB-TCOC) models, including issues related to patients with complex chronic conditions or serious illnesses and performance measures in PB-TCOC models. Key themes that emerged from these meetings related to approaches to increasing provider participation in PB-TCOC models; and technical issues and challenges affecting participation in PB-TCOC models, including financial incentives, performance measures, benchmarking, data, and risk adjustment. Additionally, at least 20 of the proposals that have been submitted to PTAC met Criterion 2 (Quality and Cost), including five proposals that were determined to meet all 10 of the criteria established by the Secretary for PFPMs. Further, at least nine other proposals discussed the use of TCOC measures in their payment methodology and performance reporting.

For this reason, PTAC now sees value in further exploring elements in previously submitted proposals related to this topic, along with current information on maximizing participation in PB-TCOC models. To ensure that the Committee was fully informed, the Committee conducted a theme-based discussion on this topic during PTAC's two-day September 2024 public meeting. The theme-based discussion included an overview presentation by PTAC members, listening session presentations by previous submitters and other subject matter experts (SMEs), as well as panel discussions with other SMEs related to identifying a pathway toward maximizing participation in PB-TCOC models. PTAC also requested public input during the meeting and through a Request for Input (RFI).

This report provides PTAC's findings and valuable information on best practices for identifying a pathway toward maximizing participation in PB-TCOC models. The information that PTAC has gleaned from a review of previous PFPM proposals and other literature that addressed this important topic, as well as input received during the theme-based discussion, will help to inform PTAC in its review of future proposals. This material has informed the Committee's comments, which are summarized in the following broad topic areas in this report:

- Topic 1: Simplification of Alternative Payment Model (APM) Design;
- Topic 2: Ensuring that Financial Incentives Align with the Business Success of Providers;
- Topic 3: Improving the Accessibility and Usability of Data;
- Topic 4: Implication of Model Design on Provider Capacity and Workforce;
- Topic 5: Need for Payment Methodology Reform; and

- Topic 6: Consideration of the Role of Beneficiaries in APMs.

Key highlights include:

- As of 2023, only half of Medicare fee-for-service (FFS) beneficiaries were in an accountable care relationship.
- Several challenges exist to maximizing participation in accountable care relationships including the number and duration of Alternative Payment Models (APMs), the need for providers to ensure the sustainability of their medical businesses, the administrative complexity of participating in APMs, and the requirement to ensure that patient needs are met.
- The number of APMs should be reduced and harmonized in a portfolio with a clear vision for promoting value-based care.
    - Model customization should be considered to ensure a clear participation path for specialists as well as independent and stand-alone primary care providers (PCPs).
    - Models need to be allowed to operate long enough for practices to make necessary changes, recoup their investment, and obtain sufficient rewards.
- Model design must account for the fact that medical practices are businesses that need to ensure financial solvency.
    - Downside risk may serve as a deterrent to practice participation, particularly for small and rural practices.
    - APM performance benchmarks should be designed so that all types of practices have a clear, fair, and attainable goal that can be budgeted for and is not continually readjusted.
    - Improved risk-adjustment methods are needed to ensure more accurate and fair incentive payment modifications that account for patient mix.
- Administrative complexity and burden associated with APMs should be reduced to promote provider participation.
    - Performance measures should be simplified and aligned across programs and payers, and measures should emphasize patient-reported outcomes.
    - The health care data needed to measure and report on provider performance should be standardized and easily accessible.
    - Actionable information rather than raw data should be shared with providers to reduce the burden associated with data acquisition and analysis.
- It is important to ensure that APMs promote optimal patient care.

- Financial incentives should be aligned with patient health needs, emphasizing population health and patient outcomes.
- There may be opportunities to share financial incentives or cost savings from APMs with beneficiaries directly.

In addition to summarizing the Committee's findings and comments related to these topics, the report also identifies areas where additional research is needed, issues for policy makers, and some potential next steps.

I. PTAC REVIEW OF MAXIMIZING PARTICIPATION IN PB-TCOC MODELS

In developing the comments in this report, PTAC considered information from the theme-based discussion during the September 2024 public meeting and an environmental scan developed to provide information on identifying a pathway toward maximizing participation in PB-TCOC models. PTAC also considered an analysis that was conducted to examine trends in Medicare FFS beneficiaries attributed to APMs and the demographics and geographic distribution of APM participation.

PTAC formed a Preliminary Comments Development Team (PCDT) for the September 2024 theme-based discussion, which was comprised of Angelo Sinopoli, MD (Lead); Joshua Liao, MD, MSc; Terry Mills Jr., MD, MMM; Soujanya Pulluru, MD; and James Walton, DO, MBA (see Appendix 1 for a list of the Committee members). The PCDT reviewed the environmental scan and original Assistant Secretary for Planning and Evaluation (ASPE) analysis of beneficiary and geographic area characteristics and delivered a summary presentation to the full Committee during the theme-based discussion. The theme-based discussion included panel discussions with stakeholders from organizations that previously submitted PFPM proposals with components related to total cost of care. The theme-based discussion also featured perspectives from a diverse group of SMEs, and an opportunity for public comments. At the end of the theme-based discussion, Committee members identified comments to be included in this Report to the Secretary (RTS).[i]

The Committee synthesized information from PTAC proposals, the environmental scan, beneficiary analysis, and panel discussions with a previous submitter and other SMEs during the September 2024 public meeting on identifying a pathway toward maximizing participation in PB-TCOC models. This RTS summarizes PTAC's comments from its findings, which are organized in six topics:

- Topic 1: Simplification of Alternative Payment Model (APM) Design;

[i] Henish Bhansali, MD, FACP and Krishna Ramachandran, MBA, MS were not in attendance at the September 16-17, 2024 public meeting because the terms for both PTAC members did not start until October 2024. Angelo Sinopoli, MD and Jennifer Wiler, MD, MBA were in attendance at the September 16-17, 2024 public meeting; the terms for both PTAC members expired in October 2024 before delivery of this report.

- Topic 2: Ensuring that Financial Incentives Align with the Business Success of Providers;
- Topic 3: Improving the Accessibility and Usability of Data;
- Topic 4: Implication of Model Design on Provider Capacity and Workforce;
- Topic 5: Need for Payment Methodology Reform; and
- Topic 6: Consideration of the Role of Beneficiaries in APMs.

For each topic, relevant issues are highlighted, followed by a summary of PTAC's comments. Appendix 2 includes information about proposals that were previously submitted to PTAC which addressed issues related to maximizing participation in PB-TCOC models. Appendix 3 provides a list of additional resources related to PTAC's maximizing participation in PB-TCOC models theme-based discussion that are available on the Assistant Secretary for Planning and Evaluation (ASPE) PTAC website. Appendix 4 includes a complete list of the Committee's comments.

II. BACKGROUND: DEFINITIONS AND CONTEXT RELATED TO THE VISION FOR FUTURE PB-TCOC MODELS AND ACCOUNTABLE CARE RELATIONSHIPS

PTAC has developed the following working definition of an accountable care relationship:

- A relationship between a provider and a patient (or group of patients) that establishes that provider as accountable for quality and total cost of care (TCOC) including the possibility of financial loss/risk for an individual patient or group of patients for a defined period (e.g., 365 days).
- Would typically include accountability for quality and TCOC for all of a patient's covered health care services.

PB-TCOC models involve design and payment arrangements that promote and reward accountable care relationships. PTAC has developed the following working definition of PB-TCOC models:

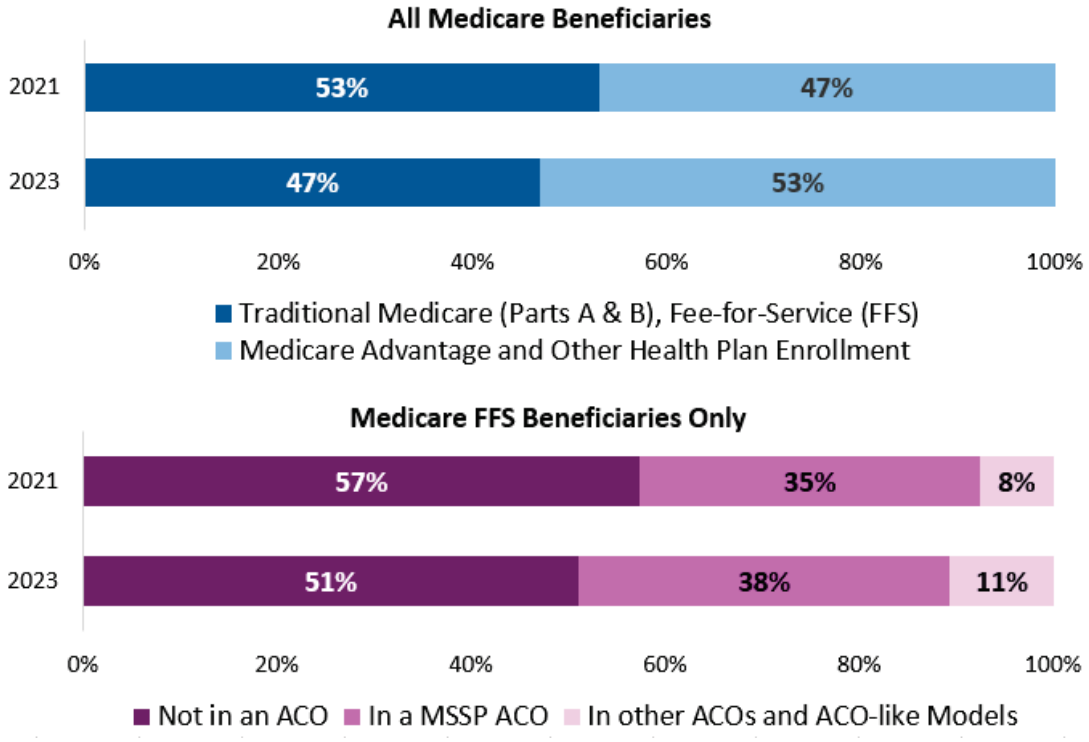
- Alternative Payment Model (APM) in which participating entities assume **accountability for quality and TCOC** and receive payments for **all covered health care costs**[ii] for a broadly defined population with varying health care needs during the course of a year (365 days).
- Within this context, a PB-TCOC model would not be an episode-based, condition-specific, or disease-specific specialty model. However, these types of models could potentially be "nested" within a PB-TCOC model.

As of 2023, according to the Medicare Payment Advisory Commission (MedPAC), approximately half of beneficiaries in traditional Medicare were involved in an Accountable Care Organization

[ii] For this purpose, all covered health care costs do not include pharmacy-related costs (Medicare Part D).

(ACO) or an ACO-like relationship, with the majority of those being part of a Medicare Shared Savings Program ACO (see Exhibit 1).[iii,1]

Exhibit 1. Medicare Beneficiaries in ACO or ACO-Like Relationships, 2021 Versus 2023

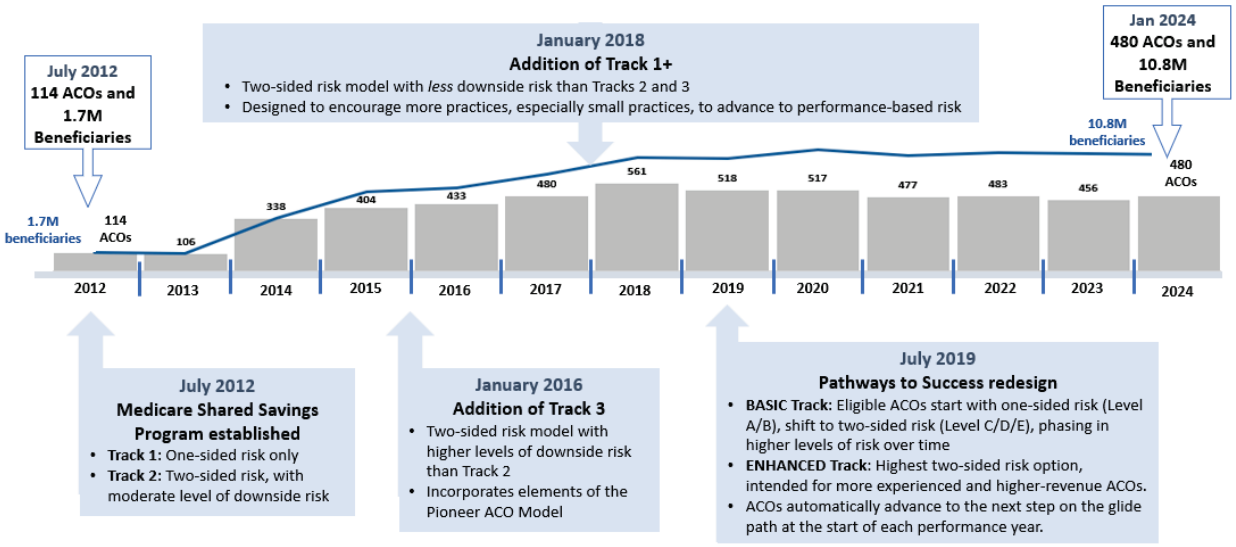


Abbreviations: ACO, Accountable Care Organization; MSSP, Medicare Shared Savings Program
Source: Based on source data from the July 2021 and July 2023 MedPAC Data Books[2,3]

One of the most important factors that affects the number of Medicare FFS beneficiaries who are aligned with APMs relates to provider decisions to participate in these models. For example, Exhibit 2 shows that growth in beneficiary enrollment in the Medicare Shared Savings Program generally increased as the number of ACOs participating in the Medicare Shared Savings Program was increasing, but became flat when the number of ACOs began to decrease.

[iii] The remaining beneficiaries in accountable care relationships were part of other ACOs or ACO-like models, including the Next Generation ACO Model or ACO REACH, the Maryland TCOC Model, and the Vermont All-Payer Model.

Exhibit 2. The Evolution of the Medicare Shared Savings Program



Source: ASPE PTAC September PCDT Findings Presentation, September 2024

More recently, as the proportion of physicians who are employed by hospitals or corporate entities has increased (from 62.2 percent in January 2019 to 77.6 percent in January 2024), ACO participation decisions may be primarily being made by large entities rather than providers.[4]

Exhibit 3 provides an overview of additional provider organization, community-level, and broader geographic area factors, as well as enabling policies that affect FFS beneficiary alignment with ACOs.

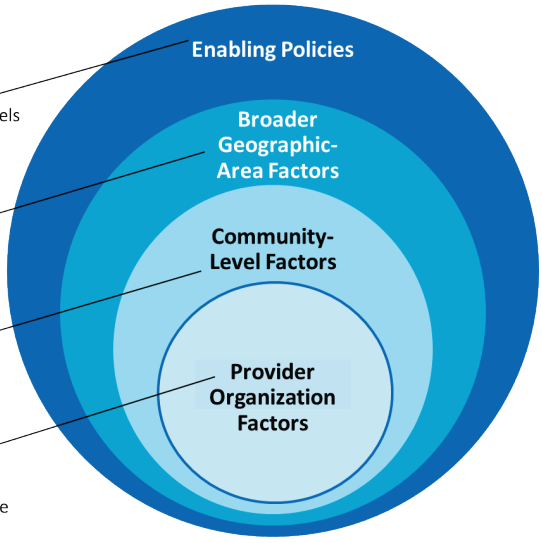
Exhibit 3. Factors Affecting Medicare FFS Beneficiary Alignment with ACOs

- Predictability of APM models (duration, incentives)
- Availability of APM models for different types of providers
- Relationship between APM models and other options

- Medicare Advantage (MA) penetration
- MSSP penetration
- Socioeconomic status (Area Deprivation Index)
- Rurality

- Primary care provider capacity
- Provider market consolidation
- Community-based organizations addressing social needs

- Provider type (panel size, clinical integration)
- Experience with value-based care Infrastructure and processes



Evidence From Published Literature

ACO Participation More Likely	ACO Participation Less Likely
Urban location	Rural location
Northeast, South, Midwest	West
Moderate MA penetration	Lower MA penetration
Multispecialty practice	Single specialty or solo practice
Hospital-owned	Physician-owned
Involves PCPs	Does not involve PCPs
Integrated EHR system	Non-integrated EHR system
Previous risk experience	No previous risk experience

Abbreviations: ACO, Accountable Care Organization; APM, Alternative Payment Model; EHR, electronic health record; MSSP, Medicare Shared Savings Program; PCP, primary care provider

Source: Adapted from the ASPE PTAC September PCDT Findings Presentation, September 2024

Drawing upon previous PTAC recommendations, PTAC has identified the following key issues for identifying pathways toward having all Medicare beneficiaries in accountable care relationships:

- Categorizing Medicare beneficiaries by the extent to which they are currently in care relationships with accountability for quality and/or TCOC.
- Characterizing geographic areas by the extent to which their providers are participating in value-based care.
- Identifying model characteristics associated with success.
- Developing approaches, models, target timeframes, and intermediary steps for increasing involvement in accountable care relationships for categories of Medicare beneficiaries (e.g., by dual eligible status, age).
- Identifying and addressing gaps and challenges.

Several challenges to achieving accountable care in APMs were identified: the number and duration of APMs, administrative complexity, the profitability of FFS arrangements, provider hesitancy to shift to risk-bearing arrangements, technical challenges associated with APM participation, and a need to focus on health-related social needs.[5]

III. CHARACTERISTICS OF PTAC PROPOSALS RELEVANT TO MAXIMIZING PARTICIPATION IN PB-TCOC MODELS

Between 2016 to 2020, PTAC received 35 proposed PFPMs submitted by stakeholders and voted on the extent to which 28 of these proposals meet the Secretary's 10 regulatory criteria.[iv] At least 20 of the proposals that have been submitted to PTAC met Criterion 2 (Quality and Cost), including five proposals that were determined to meet all 10 of the criteria established by the Secretary for PFPMs. These five proposals were selected for an analysis of select model features and characteristics:

- American College of Emergency Physicians (ACEP): Acute Unscheduled Care Model (AUCM): Enhancing Appropriate Admissions
- Avera Health: Intensive Care Management in Skilled Nursing Facility Alternative Payment Model (ICM SNF APM)
- Icahn School of Medicine at Mount Sinai: "HaH-Plus (Hospital at Home-Plus)" Provider-Focused Payment Model
- Personalized Recovery Care (PRC): Home Hospitalization: An Alternative Payment Model for Delivering Acute Care in the Home

[iv] The remaining seven proposals were withdrawn prior to the Committee's deliberation.

- Renal Physicians Association (RPA): Incident ESRD Clinical Episode Payment Model

Out of the five selected PTAC proposals, two proposals addressed inpatient services in home settings, one proposal focused on emergency department (ED) services in ED settings, one proposal addressed primary care in skilled nursing facilities, and one proposal focused on end-stage renal disease (ESRD) in dialysis centers.

Three proposals presented financial methodologies involving episode-based and/or bundled payments. Four proposals introduced shared risk, with one model providing one- and two-sided risk options. One proposal included payment waivers for ED acute care transition services, telehealth services, and post-discharge home visits.

Specialty integration approaches included establishing multidisciplinary care teams (three proposals), promoting care coordination (three proposals), and ensuring that follow-up care is provided (one proposal).

See Appendix 2 for additional information about the five selected proposals.

IV. COMMENTS FOR CONSIDERATION BY THE SECRETARY

Based on findings from the Committee's analysis of PTAC proposals, information in the literature, and information from listening session presentations and panel discussions involving previous submitters and additional SMEs during the September 2024 public meeting, this section summarizes PTAC's comments regarding identifying a pathway toward maximizing participation in PB-TCOC models. PTAC's comments are organized in six topics:

- Topic 1: Simplification of Alternative Payment Model (APM) Design;
- Topic 2: Ensuring that Financial Incentives Align with the Business Success of Providers;
- Topic 3: Improving the Accessibility and Usability of Data;
- Topic 4: Implication of Model Design on Provider Capacity and Workforce;
- Topic 5: Need for Payment Methodology Reform; and
- Topic 6: Consideration of the Role of Beneficiaries in APMs.

For each topic, relevant issues are highlighted, followed by a summary of PTAC's comments. Additionally, the Committee has identified areas where additional research is needed, as well as some potential next steps related to each topic. Appendix 4 includes a complete list of the Committee's comments.

IV.A. Topic 1: Simplification of Alternative Payment Model (APM) Design

PTAC discussed the importance of simplifying the design of APMs:

- Optimize the number and types of models; and
- Optimize the number and types of performance measures.

PTAC's comments on the simplification of APM design are listed in Exhibit IV.1.

Optimize the number and types of models. Committee members emphasized the need to simplify APMs, including reducing the number of models and increasing their duration. SMEs noted that providers often are confused about which models to join. Participating in multiple, disparate models can involve significant administrative complexities, such as different provider identification methods or performance benchmarks. Model performance also may be impacted by the presence of other models in the marketplace; for example, savings associated with population-based models may be diluted if portions of the overall savings are attributed to concurrent episode-based models.

Experts stressed that model simplification is paramount, and collaboration with frontline physicians on model development may be useful. Models should be harmonized and a synergistic portfolio of APMs should be offered that provides a clear, long-term vision of value-based payment reform. PTAC recommended moving away from the ongoing introduction of new models and shifting to updating and maintaining existing models that extend for a longer time. This may require conducting rapid evaluations and then refining existing models that already are in place.

Committee members recognized the need to balance model consolidation with model customization that supports participation across a range of provider types. One expert mentioned the critical role of population-based models in achieving health system delivery reform. However, integrating specialists into these models requires careful consideration of factors such as patient attribution, accountability for care, and incentive payments. Some specialties already may function in a primary care or care coordination capacity for their patients, for example, obstetricians/gynecologists for women or oncologists and nephrologists treating patients with cancer or kidney diseases. In other cases, model attribution logic may be needed to ensure mutual accountability between PCPs and specialists. Hybrid models also may be needed that involve nesting of specialty or procedure-specific episodes and associated bundled payments within more comprehensive population-based models.

PTAC expressed that model customization also should involve ensuring that a clear path exists for small and stand-alone primary care practices to participate. There are a multitude of challenges—cost, technology, expertise—to APM participation for smaller practices. Value-based care enablers (or conveners), which are organizations that provide their PCP members with technology and other support to transition to value-based care, have emerged as a potential path forward for increasing small practice participation in APMs.

Optimize the number and types of performance measures. In addition to the simplification of APMs, PTAC concluded that performance measures also should be simplified. This effort may be multifaceted, including reducing the number of measures, streamlining measure definitions, and standardizing measure reporting. SMEs recommended including measures of patient/provider continuity (e.g., whether the patient sees the same provider over time), access to care, and health outcomes, as well as prioritizing measures that promote innovation (such as patient experience and care coordination metrics).

PTAC and SMEs identified patient-reported outcome measures (PROMs), in particular, as a critical measure type. Measuring what matters most to patients and their families is important; patient-reported measures enable delivery of person-centered care. One expert explained that PROMs can serve to align patient expectations with outcomes, facilitate patient-physician communication and build trust, and empower patients during recovery.

SMEs raised multi-payer alignment as a key factor to optimizing performance measurement. Providers may be required to report on dozens or hundreds of measures in multiple value-based care programs across public and private payers. Many measures capture similar concepts, but few measures utilize identical definitions. This lack of measure alignment creates significant administrative burden to providers who participate in multiple programs. Multi-payer alignment also can be extended to methods of data collection and reporting of performance measures. Some states, such as California, are engaging in multi-payer alignment efforts; a pathway to multi-payer alignment at the national level also is needed.

Exhibit IV.1: PTAC Comments

Topic 1: Simplification of Alternative Payment Model (APM) Design

Comment 1A. Fewer models should be developed at this stage; these models can be tweaked or adapted instead of creating a large number of new models.

Comment 1B. The desire for fewer and simpler rational models needs to be balanced with the desire for more models that are customized.

Comment 1C. Existing structures that are part of current hybrid models can be utilized to help specialists become part of the solution.

Comment 1D. A tailored pathway for smaller and primary care groups is needed to encourage greater participation in value-based care.

Comment 1E. Measures should be simplified, fewer measures should be developed, and standard definitions should be created across Medicare and all payers.

Comment 1F. Patient-reported, longitudinal, and access-related measures need to be considered, developed, implemented, and linked to payment within APMs.

IV.B. Topic 2: Ensuring that Financial Incentives Align with the Business Success of Providers

Committee members expressed the importance of ensuring that financial incentives in APMs are aligned with the business needs of provider organizations:

- Ensure balance between APM participation costs and incentives that make business sense for the practice;
- Align financial incentives with what is best for patients; and
- Predictability and certainty are critical.

PTAC's comments on ensuring that financial incentives align with the business success of providers are listed in Exhibit IV.2.

Ensure balance between APM participation costs and incentives that make business sense for the practice. PTAC emphasized that attention on the financial impact to a medical practice is needed when designing APMs and creating financial incentives. One expert noted that implementation of value-based care programs should ensure financial viability for a very high proportion of physician practices, citing the problem that occurred in the 1990s when many practices went out of business as a result of lower payments from managed care. In assessing APM participation, practices carefully consider the associated costs, including direct financial, administrative burden, and workflow-related factors. Participation costs can be particularly challenging for independent physicians and small practices that lack the infrastructure, resources, and finances to be part of APMs.

Committee members pointed out that the size of financial incentives, particularly for primary care, is important to make it worthwhile for practices to change behavior. Experts expressed that rewards in APMs are generally insufficient. Financial incentives need to be sizable—as much as 30 to 50 percent of income—for providers to undertake the operational effort. One SME observed that for some APMs the financial incentives have been decreasing, which reduces the financial appeal for practices to continue to participate in such models versus falling back to standard FFS payments.

Experts also expressed that downside risk, which is a feature of many existing models, may be unnecessary or counterproductive in some cases. The degree of downside risk is a key consideration for practices in participating in APMs; assuming downside risk may not be worth the financial risk to the organization. Individual physicians, in particular, may be reluctant to assume this type of financial risk because it could lead to burnout (e.g., as physicians may feel a conflict between doing what they feel is right for the patient versus what they are being incentivized to do under value-based care), risk their livelihoods, and even drive practices out of business. This is particularly concerning among primary care physicians for whom there is a supply shortage in the United States. The shift to value-based care may be able to be

accomplished by offering the necessary tools, training, and financial incentives to providers and avoiding implementing downside risk that could jeopardize their businesses.

Align financial incentives with what is best for patients. PTAC identified the need to ensure that PB-TCOC financial incentives are aligned with patient health needs. Experts shared several important considerations: 1) incentives should be focused on population health rather than individual episodes of care; 2) clinical integration across providers, settings, and conditions is important to improve care coordination; and 3) financial incentives should be tied to patient outcomes, such as HbA1c or hypertension control. Some experts recommended that incentives be shared directly with the providers and staff who are coordinating and delivering patients' care. Other experts felt that providing incentives directly to physicians could be counter-productive, creating unnecessary pressure on physicians and potentially yielding undesirable outcomes (such as avoiding expensive patients with complex conditions). One suggestion was that risk could be pooled across providers and model savings shared indirectly via salaries.

SMEs described the critical role of patient attribution in ensuring proper alignment of incentives. Attribution should be an explicit part of the care plan with distinct attribution to appropriate specialists. With clinical integration, specialists can be assigned clear accountability and receive financial incentives for managing specific patient chronic conditions.

Predictability and certainty are critical. PTAC identified the importance to providers of having predictability and certainty when participating in APMs. One aspect of this is the duration of the models themselves, many of which have existed for only a few years before being stopped. This can be challenging for practices given the time and resources that may be needed to invest and gear up to participate, only to have a model end a short time later.

The financial rewards themselves represent a key aspect of uncertainty to providers participating in APMs. Practices need the ability to budget reliably, which can be challenging when financial incentives are unknown or variable, particularly for independent physicians and small practices. Models typically incorporate some form of benchmarking and risk adjustment to calculate the level of incentives, resulting in changes to the financial payments made to practices over time. This adds to the unpredictability of financial payments to providers participating in APMs. Benchmarking and risk adjustment are discussed in more detail under Topic 5 (Need for Payment Methodology Reform) in this report.

Exhibit IV.2: PTAC Comments

Topic 2: Ensuring that Financial Incentives Align with the Business Success of Providers

Comment 2A. Medicine is a business, and the drivers of providers' financial success need to be considered when developing reimbursement models for population health, while ensuring alignment with patient needs and objectives for improving outcomes, quality, and TCOC.

Comment 2B. Business success drivers should be aligned with population health needs using simple methods with actionable data.

Comment 2C. Simplicity, generous incentives, and care flexibility are critical to enhancing clinician participation and engagement with payment models. Although technical design features in models (e.g., benchmarks, risk adjustment) can improve, these technical improvements are less impactful without a foundation of simplicity and generous incentives.

Comment 2D. Primary care physicians and providers should receive higher payments. A small bonus will not change behavior; the payment needs to be consequential.

Comment 2E. Improvements in care by providers do not always translate into financial savings for physicians.

Comment 2F. Instead of trying to capture savings from primary care, the focus should be on increasing funding. Primary care is the only specialty that demonstrably enhances health outcomes nationally.

Comment 2G. Although downside risk is an important feature in many existing models, some experts question whether it is necessary for certain types of providers.

Comment 2H. The environment in which a model operates must be considered, including predictability, certainty, and the generosity with which success is rewarded.

V.C. Topic 3: Improving the Accessibility and Usability of Data

PTAC expressed the need to improve the accessibility and usability of health care data:

- Democratize and standardize data;
- Provide actionable information to providers; and
- Use innovative technologies to improve data acquisition.

PTAC's comments on improving the accessibility and usability of data are listed in Exhibit IV.3.

Democratize and standardize data. Committee members emphasized that, to promote value-based care, health care data need to be standardized and democratized—that is, made readily accessible and in a form that is easily usable for everyone who needs it. Furthermore, data should be available at reasonable cost to ensure that small and rural practices can participate in APMs.

Data are critical for managing patient care, administering APMs, understanding and improving provider performance in APMs, and ultimately driving value-based outcomes. One SME suggested that detailed data on health services utilization, cost, and quality would promote engagement of specialists, which is a key issue for achieving widespread adoption of accountable care.

Experts highlighted the importance of having standardized data and well-developed systems for accessing data. Data should be in machine-readable or system-ready formats to promote the speed at which the data can be accessed and used. Software or mobile applications ("apps") that rely on the Substitutable Medical Applications Reusable Technologies (SMART) and Fast Healthcare Interoperability Resources (FHIR) data standards, known as "SMART on FHIR," allow clinicians to access electronic health record (EHR) data from any system that adheres to this standard. One SME suggested that a learning health system that combines clinical and administrative data is needed.

SMEs expressed the need for health care data to be open source and decoupled. Providing access to data along with the detailed attribution, benchmarking, and risk-adjustment logic used in APMs could promote provider entry and participation longevity in models. Decoupling data—segmenting different types of data and storing data of different sensitivities separately—can promote data access and sharing.

The Centers for Medicare and Medicaid Services (CMS) plays a central role in standardizing and providing access to health care data. CMS identified ongoing efforts to standardize and align collection of social risk data. In a 2024 *Health Affairs* article, CMS described its data-sharing strategy to promote participation in value-based care.[6] Key principles include: 1) promoting access to CMS data, such as by streamlining data access via apps; 2) investing in data standards, such as FHIR, as well as providing data access tools and technical assistance; and 3) enhancing data sharing capabilities by partnering with EHR vendors, health information exchanges (HIEs), and advocacy organizations.

Provide actionable information to providers. PTAC emphasized that sharing raw data with providers is inadequate; rather, providers need actionable information to promote APM participation. Processing and interpreting raw data is burdensome and expensive for practices, typically requiring investment to develop a data infrastructure and hire analysts or financial intermediaries with specialized data, software, and analytics expertise. Practices weigh these administrative costs with the potential financial gains (upside and downside risk) associated with participating in APMs. Committee members and SMEs recommended shifting to providing practices with actionable information directly, suggesting that the payers or sponsors of value-based care take the lead on conducting the necessary analytics.

Use innovative technologies to improve data acquisition. PTAC observed that some types of artificial intelligence (AI), such as large language models (LLMs) that can analyze narrative or text, may offer a path to facilitate health care data acquisition. One expert shared an example of how LLMs could be used in the Enhancing Oncology Model (EOM) to measure, summarize, and map data elements that currently are not within the standard types of data collected. AI could help minimize some of the burden associated with data collection and analysis, but experts cautioned that monitoring for unintended consequences is critical.

Exhibit IV.3: PTAC Comments

Topic 3: Improving the Accessibility and Usability of Data

Comment 3A. Immediate actions could include democratizing data and source coding and improving data sharing.

Comment 3B. Democratizing and flattening data can help with rewarding success.

Comment 3C. Health care data need decoupling. Data should be open source rather than proprietary and incorporate patient-reported outcome measures and any HRSNs.

Comment 3D. There is an opportunity for CMS to have a significant impact on the effort to democratize and standardize data. The ability to standardize and syndicate data should not be expensive so that small and rural practices can participate.

Comment 3E. In addition to providing raw data, data should be made easily accessible and understandable for physicians, including decoupling data.

Comment 3F. Practices should have access to data that provide information on their performance and help them understand how to manage patients. It is important to move beyond providing raw data to providing actionable data.

Comment 3G. Data should be provided to physicians as actionable intelligence.

Comment 3H. Models and payers sponsoring value-based care could be more proactive in conducting analytics. Actionable data should be provided to physicians to reduce burden, increase participation, and improve performance.

Comment 3I. LLMs can enhance data acquisition.

IV.D. Topic 4: Implications of Model Design on Provider Capacity and Workforce

Committee members discussed the importance of model design and how it may impact provider capacity and workforce:

- ACO complexity has the unintended consequence of favoring provider consolidation; and
- There is value in long-term patient/provider relationships.

PTAC's comments on the impact of challenges related to provider capacity and workforce are listed in Exhibit IV.4.

ACO complexity has the unintended consequence of favoring provider consolidation. The PCDT described challenges related to provider participation in PB-TCOC models, including the complexity and number of APMs and the costs associated with participating in APMs, emphasizing that these challenges are particularly an issue for small, low-revenue, and rural

practices. SMEs explained that, for some providers, transitioning to value-based care on their own can be problematic as it requires significant changes to their financial and operational management. One PTAC member also commented on the increased complexity with the shift to value-based care, which requires more sophisticated data analysis leading to increased administrative burden. This increased complexity unintentionally and indirectly incentivizes provider consolidation within the ACO environment. One SME added that the complexity and burden for providers undergoing clinical transformations is significant and can lead to physician burnout. For example, establishing a data and analytics infrastructure requires substantial initial and annual financial investment.

One expert, commenting on the need to mitigate the effects of consolidation, noted that health care cost escalation should be kept at the rate of general inflation. Committee members expressed that as the needs and demands of an aging population will continue to increase over the next 20 years, the capacity of the provider community also needs to increase and align with population health needs. Further, APMs/ACOs may help to ease provider capacity issues that exist within the United States' delivery system; however, continued provider consolidation may lead to lower access and higher costs.

One expert suggested that CMS can lead by encouraging public and private investment to drive innovation and success in value-based models at much lower entry and operational costs. The value-based purchasing infrastructure has become more complicated, and the costs and efforts required continue to increase. Another expert noted that lowering health care costs requires a more efficient and flexible system, and that payment reform, such as implementing multi-payer alignment, could reduce system waste.

There is value in long-term patient/provider relationships. PTAC indicated that long-term patient-provider relationships, whether with a provider or a health care entity, are valuable for patient and provider well-being (e.g., reducing burnout). Experts noted that longitudinal provider relationships offer patients continuous and comprehensive care and establish trust between the patient and provider. Further, long-term continuity between a PCP and a patient is associated with reduced mortality rates.

APMs should be designed to attend to individuals' needs while offering care teams a way to serve patients through a mutually rewarding relationship. It is essential that programs support long-term patient/provider relationships and the capacity for providers to build trust. Center for Medicare and Medicaid Innovation (the Innovation Center) leadership acknowledges this need by including longitudinal care relationships as part of CMS' definition of accountable care. SMEs also suggested that attribution may help achieve long-term patient/provider relationships by attributing patients to the providers mainly responsible for managing the patients' diseases.

PTAC members suggested that additional research is needed regarding how provider churn affects long-term patient/provider relationships and its implications for workforce sustainability.

Exhibit IV.4: PTAC Comments

Topic 4: Implications of Model Design on Provider Capacity and Workforce

Comment 4A. The shift to value-based care has led to the unintended consequence of increased complexity, requiring more sophisticated data analysis and administrative burden, incentivizing provider consolidation. This consolidation has contributed to rising health care costs and physician burnout.

Comment 4B. There is a mismatch now and over the next 20 years between the capacity of the provider community and the needs and demands of an aging population. The physician-provider enterprise should be aligned with population health needs.

Comment 4C. Payment models may help to ease capacity issues; however, as providers consolidate, this may create less access and increase costs.

Comment 4D. There is a mismatch between supply and demand when the unit cost is more than the payment and participation is voluntary.

Comment 4E. Long-term patient-provider relationships—whether with a provider or a health care entity—are valuable for patient and provider well-being (e.g., reducing burnout). Additional information is needed regarding how churn affects these relationships and its implications for workforce sustainability.

IV.E. Topic 5: Need for Payment Methodology Reform

PTAC expressed the importance of reforming APM payment methodology:

- Revise methods used for risk-adjusting data; and
- Update approaches to provider benchmarking.

PTAC's comments on the need for payment methodology reform in PB-TCOC models are listed in Exhibit IV.5.

Revise methods used for risk-adjusting data. Committee members and SMEs emphasized that current methods used for risk adjustment—the process of adjusting payments to account for patient health care status and costs—need improvement. Specifically, SMEs noted that the CMS Hierarchical Condition Category (HCC) risk-adjustment system has not been updated since 2004 and has led to perverse incentives. For example, the method rewards providers who submit more claims and diagnoses with higher payments, which undermines population-based payment models' goals. Similarly, other traditional risk-adjustment methods, such as ordinary

least squares regression and the Charleston Comorbidity Index, also tend to overpay for common diseases and healthy patients and underpay for rare diseases. SMEs urged value-based model designers to move beyond current risk-adjustment methods.

Several SMEs emphasized that current risk-adjustment methods focus primarily on FFS claims data. One SME elaborated that FFS claims data were the best data available during the development of risk-adjustment models. However, FFS claims data often do not capture data fields needed to identify some of the most significant chronic disease risks, and more robust data are now available. If risk-adjustment models were being designed today, multiple modalities would be used to collect and incorporate data into clinical dashboards with care supports such as frailty, functional status, multimorbidity, and social risk factors. There are current opportunities to use more sophisticated data sources, such as clinical, EHR, and program data, to account for additional factors such as frailty, functional status, and cognitive status. These factors aid in more accurately estimating patient health status and are available in data sources beyond FFS claims data.

SMEs provided several techniques for improving current risk-adjustment methods, including:

- Using concurrent risk-adjusted models over prospective risk-adjustment models, which are actively used in Medicare, because concurrent models adjust for insurance plan turnover and allow for the ability to identify and pay for acute care conditions accurately.
- Establishing a risk equalization process that balances patient risk profiles to allow insurance to be offered at a common rate across patients may allow for greater predictability for budgeting and prevent insurers from loading premiums on certain patients.
- Regularly updating risk-adjustment formulas (e.g., the Netherlands and Germany revise their formulas annually).
- Rewarding for the care delivery of complex, high-cost patients and avoiding overpaying for healthy patients.
- Using different risk-adjustment formulas for different practices/services, for example, using separate formulas for ACOs that provide only medical services versus for ACOs that provide medical services as well as outpatient services and/or inpatient behavioral health services. Using separate formulas may add complexity; however, such formulas can be implemented successfully.
- Incorporating factors such as HRSNs and lack of access via tools such as the Area Deprivation Index (ADI) to aid in more accurately estimating health status in risk-adjustment models.

One SME indicated that they developed a new framework for risk adjustment, called the Diagnostic Items Classification System, that corrects for underpayment for rare diseases.[7] Health care systems in Belgium and Korea have already implemented this framework.

PTAC members emphasized that future risk-adjustment methods could be more sophisticated through use of LLMs that can process and create text. LLMs could provide an opportunity for industry innovation to leverage large and complex datasets. Several experts supported the use of LLMs for risk adjustment. Specifically, one SME shared results from a study conducted in Denmark that analyzed three different methods for calculating risk adjustment to accurately predict individual health care costs. Actuarial risk-adjustment methods accurately predicted costs 8 percent of the time, statistical methods 23 percent of the time, and LLMs 43 percent of the time. This significant difference in performance suggests that LLMs are an important tool that could be used for risk assessment and adjustment. Proper risk adjustment may also require a reinsurance program where a third party (e.g., guarantor, certified reinsurer) would pay a portion of insurers' claims, particularly for high-cost patients, which would alleviate pressure on health systems.

Update approaches to provider benchmarking. Experts indicated that benchmarking— the spending target that an organization is expected to be at or below to earn financial rewards—is a strong predictor of whether organizations join APMs and influences provider participation length in value-based purchasing models. Committee members emphasized two key points regarding benchmarking: 1) benchmarks should be aligned with inflation; and 2) organizations need to avoid the "ratchet effect" (continually lowering the benchmark based on meeting or exceeding current benchmarks).

PTAC expressed that benchmark goals should reflect a rate that is commensurate with general inflation. One SME shared that because health care expenses have risen at twice the general inflation rate over the past 50 years, health care benchmarks should be tied to general rather than health care-specific inflation. Clinicians should not be directly incentivized based on TCOC but should have incentives that are transformed into quality and outcome measures for clinicians.

Committee members also stressed the importance of avoiding the ratchet effect. Traditionally, benchmarks are set based on an organization's historical spending. The ratchet effect occurs when a provider or organization meets or exceeds their current benchmark (e.g., has decreased their spending below the target), and the benchmark is revised to align with the new level of spending. This results in a lower benchmark for the future and consequently makes it increasingly difficult for providers to meet the new benchmark and earn financial incentives. The ratchet effect forces high-performing groups to outdo their own past successful performance and can discourage a provider's willingness to continue their participation in APMs. One SME indicated that it became more difficult for ACOs with spending higher than regional expenditures to participate after the update to the benchmark calculation to

incorporate regional spending into ACO benchmarks. This introduced new incentives that favored ACOs with lower baseline spending in their region and may result in the high-spending ACOs exiting APMs and the low-spending ACOs remaining in the models. SMEs stressed that a long-term vision for setting benchmarks is needed.

The Medicare Shared Savings Program implemented benchmark policy changes in an effort to level the playing field between high-spending and low-spending providers/organizations. The Medicare Shared Savings Program addressed the rebasing ratchet effect by adding a prior savings adjustment so that some of the savings achieved are factored back into the provider benchmark, adding an administrative component in benchmark growth that dissociates the benchmark from observed FFS spending, and reducing the cap on negative regional adjustments, which restricts the maximum downward adjustment on ACOs based on costs in their region.[8] This benchmark update is called the three-way blended factor because it incorporates both national and regional trends. One expert presented an approach to simplify the benchmark adjustment by setting the initial benchmark at each ACO's historical spending and then introducing a regional convergence phase to annually update benchmarks according to each ACO's spending relative to the region. Once convergence is achieved, annual updates are based on a combination of risk-adjusted regional rates and administrative spending trends. Another SME suggested several options that could be used to help address the ratchet effect: 1) using fixed administrative benchmarks (i.e., benchmarks that are not tied to actual spending but instead are set by taking a base rate and growing it by an administrative factor or an agreed-upon rate, such as gross domestic product growth); 2) introducing permanent bonuses; or 3) enhancing capitation payments for ACO participants.

In summary, organizations may not participate in APMs if the benchmark is unfavorable or challenging to meet, either from being set too low initially or rebasing or ratcheting the benchmark down over time. An unintended consequence of benchmarking is that organizations may cherry-pick their networks to bring in providers most likely to achieve the spending targets.

Supporting Polices Raised by Experts

Update coding used to provide payments. SMEs raised the issue that coding for certain patient services under the current Medicare FFS payment schedule may need to be updated so that providers are being compensated fairly and adequately for their services provided. For example, initial patient visits require substantially more provider input and investment than follow-up visits; however, under the current payment schedule, these two different types of visits are compensated almost equally. This is due to misalignments in the underlying Medicare FFS payments regarding the input costs for delivering those services. Payment levels should also ensure that practices are adequately compensated for handling urgent cases, which are less expensive than emergency department visits. SMEs urged that these flaws in the FFS system must be addressed, and the top several hundred billing codes that account for the majority of

claims should be reevaluated to properly align input costs with the underlying Medicare payments. Specifically, several procedures are overpaid while others are underpaid.

The Innovation Center mentioned that it is currently discussing the long-term vision for cognitive specialists – physicians who have additional training related to specific conditions (e.g., dementia, cognitive impairment) – to regularly bill advanced primary care management (APCM) codes for chronic conditions. Specialists can bill APCM codes without limitation in the short term as long as appropriate eligibility requirements are met. Additionally, the 2025 Physician Fee Schedule (PFS) proposed rule includes a small bundle of care management codes that are available to physicians but are historically underutilized because they require substantial documentation. The Innovation Center continues to discuss the long-term vision for use of APCM codes and paying for team-based care through the use of codes.

Exhibit IV.5: PTAC Comments

Topic 5: Need for Payment Methodology Reform

Comment 5A. ACOs are best suited to manage high-risk patients efficiently but have struggled due to benchmarking and risk-adjustment issues.

Comment 5B. Methods of risk adjustment need improvement. There are opportunities to utilize more sophisticated data sources to account for additional factors such as frailty, functional status, and cognitive status.

Comment 5C. Risk-adjustment benchmark goals should consider a rate that is commensurate with inflation.

Comment 5D. Future risk-adjustment methods could be more sophisticated using LLMs. LLMs could provide an opportunity for industry innovation to leverage big data and create benchmarks.

Comment 5E. ACO benchmarking needs improvement because poorly performing groups are disincentivized from joining ACO programs due to artificially low benchmarks. Alternatively, the "ratcheting effect" forces high-performing groups to outdo their own past performance. The goal should be to ensure that all groups can succeed and that high performers continue to benefit from their achievements.

IV.F. Topic 6: Consideration of the Role of Beneficiaries in APMs

Committee members discussed the role of beneficiaries in APMs:

- Addressing health-related social needs (HRSNs) is critical; and
- Consider how financial incentives and cost savings can be shared with beneficiaries.

PTAC's comments on the consideration of the role of beneficiaries in APMs are listed in Exhibit IV.6.

Addressing health-related social needs (HRSNs) is critical. Committee members expressed the importance of addressing patient HRSNs to improve overall health care and reduce health care expenditures. It is also critical for providers to support patients who report a HRSN to foster trust between the patient and provider. SMEs emphasized that infrastructure should be established through upfront investments or a bulk payment to manage HRSNs and other patient needs.

Addressing HRSNs starts with being able to effectively screen for social needs. The Innovation Center reported several ongoing efforts to support social needs screening and service referrals provided by the local community. For example, the Accountable Community Health (ACH) Model successfully screened HRSNs across different settings and geographic areas. Although there are many social needs screeners currently in use, PTAC noted the need to standardize and use one social needs screener. SMEs also emphasized the need for HRSNs to be addressed across payment models and not limited to a single model.

Committee members stressed the importance of investing funding in community-based organizations to meet the needs of underserved populations, including the potential for the ADI to allocate more funding to account for risk. One SME noted that the ADI can increase resources to care for underserved patients. These neighborhood-level metrics serve as a proxy for the individual. The SME shared that the average practice needs between $60 and $93 per member per month (PMPM) to address social needs, and Federally Qualified Health Centers (FQHCs) require even more (approximately $115 PMPM) to address social needs.

The Innovation Center has used the ADI to identify certain areas where payment adjustments or global payments may be needed. For example, the Maryland TCOC Model used payments to support practices that serve patients with social needs based on areas identified by the ADI. Practices used the funding to hire community health workers and provide food vouchers. The ADI is vital for population health assessment as it allows providers to understand the social risks of their patient population. For example, some providers have mapped their patients with food insecurity to identify neighborhoods needing mobile food delivery or a Supplemental Nutrition Assistance Program (SNAP)-subsidized farmers' market. PTAC's PCDT reported that areas with higher ADI rates experienced lower participation in APM models. Providers in these high ADI areas may have lower capacity to treat challenging patients, which could deter their participation in APMs. Committee members suggested that there may be opportunities to understand HRSNs within communities with high ADI rates and identify how these factors influence APM participation.

Consider how financial incentives and cost savings can be shared with beneficiaries. Committee members noted that beneficiaries, similar to providers, should also have incentives

to participate in value-based care. Specifically, copayments for high-value services such as mental health care, chronic care management (CCM), and services covered through APCM codes, should be eliminated. Waiving co-pays may create incentives for beneficiaries to seek these services and, in doing so, take greater ownership of their health. Beneficiary involvement in their own care is critical. One SME further suggested that copayments for coordination of care codes should be removed. Coordination of care saves lives, and many patients cannot afford the copay. Further, CCM, principal care management, and transitional care management services should have no deductible or copay. One SME added that savings achieved by the APM due to lowering health care costs can be shared with patients as a means to increase their participation in APMs.

PTAC members stressed that additional work is needed to understand how to measure beneficiary needs and how to incentivize beneficiaries to participate in APMs. Open questions remain regarding how savings can be shared with beneficiaries, what beneficiaries want and need, and why beneficiaries choose a supplemental plan or go to Medicare Advantage (MA) instead of participating in an APM.

Supporting Polices Raised by Experts

There is consensus among experts that the health care system should not be responsible for all social support and instead should assist with patients' social issues that directly impact their access to health care services, such as providing transportation to medical appointments or access to virtual care. There is a need for targeted, evidence-based approaches—such as nutrition, transportation for medical appointments, and supported housing—to effectively utilize health care resources without adding unnecessary costs. Social services should be strategically integrated to align with health care goals rather than indiscriminately expanding health care's role in social services, which could lead to waste.

Exhibit IV.6: PTAC Comments

Topic 6: Consideration of the Role of Beneficiaries in APMs

Comment 6A. There is a universal need to address HRSNs through payment rates and upfront investments for building infrastructure.

Comment 6B. Currently, there are many social needs screeners; the industry should work toward standardizing and using one social needs screener.

Comment 6C. Adjustments are needed to support socially underserved populations, including the potential for the ADI to allocate more funding to account for risk. Additional funding can be invested in community-based organizations to meet the needs of underserved populations.

Comment 6D. Increased spending on addressing HRSNs may reduce health care expenditures.

Comment 6E. HRSNs should be addressed universally across payment models. Emerging needs are related to nutrition, transportation, and housing.

Comment 6F. Beneficiary adoption is important, and they should not be left out of realignment efforts. The cost of the beneficiary should be considered.

Comment 6G. Additional work is needed to understand how to measure beneficiary needs and how to incentivize activities for beneficiaries to participate in models.

Comment 6H. Patient and beneficiary involvement in their own care is critical. Incentives such as waiving copays could help encourage individuals to take greater ownership of their health.

Comment 6I. Beneficiaries must also have incentives to participate in value-based care. For example, MA plans can offer discounts on copayments and deductibles. ACOs should explore similar options to enhance their competitiveness. Copayments for high-value services, such as mental health care, chronic care management (CCM), and new advanced primary care management (APCM) codes, should be eliminated. This change is achievable using the current rulemaking process.

APPENDIX 1. COMMITTEE MEMBERS AND TERMS

Terry L. Mills Jr., MD, MMM, *Co-Chair*
Soujanya R. Pulluru, MD, *Co-Chair*

Term Expires October 2025

Lindsay K. Botsford, MD, MBA
One Medical
Houston, TX

James Walton, DO, MBA
JWalton, LLC
Dallas, TX

Term Expires October 2026

Jay S. Feldstein, DO
Philadelphia College of Osteopathic Medicine
Philadelphia, PA

Lauran Hardin, MSN, FAAN
HC^2 Strategies
Maysville, KY

Joshua M. Liao, MD, MSc
The University of Texas Southwestern Medical Center
Dallas, TX

Walter Lin, MD, MBA
Generation Clinical Partners
Saint Louis, MO

Terry L. Mills Jr., MD, MMM
Aetna Better Health of Oklahoma,
Strategic Health LLC
Tulsa, OK

Term Expires October 2027

Henish Bhansali, MD, FACP
Medical Home Network
Chicago, IL

Lawrence R. Kosinski, MD, MBA
Independent Consultant
Scottsdale, AZ

Soujanya R. Pulluru, MD
CP Advisory Services, My Precious Genes
Sarasota, FL

Krishna Ramachandran, MBA, MS
UnitedHealth Group
Piedmont, CA

APPENDIX 2. CHARACTERISTICS OF SELECTED PTAC PFPM PROPOSALS IDENTIFIED AS BEING RELEVANT TO MAXIMIZING PARTICIPATION IN PB-TCOC MODELS

Submitter and Proposal	Clinical Focus, Setting, and Patient Population	Value-Based Care and Technical Components
American College of Emergency Physicians (ACEP) *Acute Unscheduled Care Model (AUCM): Enhancing Appropriate Admissions*	**Clinical Focus:** Emergency department (ED) services **Providers:** ED physicians **Setting:** ED **Patient Population:** Patients with qualifying ED visits	**Overall Model Design Features:** AUCM aims to coordinate care post-discharge from ED. **Approaches to Improve Specialty Integration:** Ensure follow-up care when barriers exist to primary or specialty care access; mandated physician-to-physician communication when patients are discharged from the ED, or admitted or placed on observation status **Financial Methodology:** Episode-based, bundled payment; if spending for eligible and attributed episodes is less than the bundled payment target price, the participant is eligible for a positive reconciliation payment; if it is more, the participant will have to reimburse CMS. Also includes payment waivers for ED acute care transition services, telehealth services, and post-discharge home visits.
Avera Health *Intensive Care Management in Skilled Nursing Facility Alternative Payment Model (ICM SNF APM)*	**Clinical Focus:** Primary care (geriatricians) in skilled nursing facilities (SNFs) **Providers:** Geriatrician Care Teams (GCTs) **Setting:** SNFs and NFs **Patient Population:** SNF residents	**Overall Model Design Features:** The ICM SNF APM aims to provide care for nursing facility residents through 24/7 access to a geriatrician care team (GCT) using telemedicine. **Approaches to Improve Specialty Integration:** Addresses multidisciplinary care in SNFs following an acute event, establishing accountability or negotiating responsibility; geriatrician-led, multidisciplinary team where GCT responsible for medication reconciliation, and medication management is handled in coordination with the PCP **Financial Methodology:** Two-tier payment: one-time payment for new admission care and an ongoing monthly payment for post-admission care. It also discusses an option to make this a shared savings model.

Submitter and Proposal	Clinical Focus, Setting, and Patient Population	Value-Based Care and Technical Components
Icahn School of Medicine at Mount Sinai (Mount Sinai) *"HaH-Plus" (Hospital at Home-Plus): Provider-Focused Payment Model*	**Clinical Focus:** Inpatient services in home setting **Providers:** Physicians; HaH-Plus providers **Setting:** Patient home **Patient Population:** Eligible patients in one of 44 diagnosis-related groups (DRGs) for acute conditions	**Overall Model Design Features:** HaH-Plus aims to provide hospital-level services in a home setting for beneficiaries with certain acute conditions. **Approaches to Improve Specialty Integration:** Multidisciplinary care around an acute care event providing pre-acute, acute, and transition services **Financial Methodology:** Prospective, episode-based payment replacing FFS and with flexibility to support non-covered services; shared risk through retrospective reconciliation
Personalized Recovery Care (PRC) *Home Hospitalization: An Alternative Payment Model for Delivering Acute Care in the Home*	**Clinical Focus:** Inpatient services in home setting **Providers:** Admitting physician at facility receiving PRC payments; On-Call Physician; Recovery Care Coordinators **Setting:** Patient home **Patient Population:** Commercial and Medicare Advantage patients with acute conditions, based on approximately 150 DRGs	**Overall Model Design Features:** Home Hospitalization APM is an operational program in Marshfield, Wisconsin, where participants provide treatment to commercial and MA patients with certain acute conditions in their home or SNF instead of in the hospital. **Approaches to Improve Specialty Integration:** Multidisciplinary care around an acute care event **Financial Methodology:** Retrospective bundled payment with two components: 1) risk payment compared with the target cost of care (i.e., the "Target Bundled Rate"); and 2) per episode payment ("Home Hospitalization Payment"). If total costs are more than the Target Bundled Rate, participants are 100% liable (up to 10% of the benchmark rate).
Renal Physicians Association (RPA) *Incident ESRD Clinical Episode Payment Model*	**Clinical Focus:** End- stage renal disease (ESRD) **Providers:** Nephrologists, PCPs **Setting:** Dialysis centers **Patient Population:** Patients with chronic condition (incident ESRD)	**Overall Model Design Features:** The Incident ESRD Clinical Episode Payment Model proposes care coordination and renal transplantation, if applicable, for dialysis patients transitioning from chronic kidney disease (CKD) to ESRD (six-month episodes of care). **Approaches to Improve Specialty Integration:** Coordination among medical specialists and dialysis providers **Financial Methodology:** Episode-based model with continued FFS payments and an additional payment for transplant; one- and two-sided risk options

APPENDIX 3. ADDITIONAL RESOURCES RELATED TO PTAC'S THEME-BASED DISCUSSION ON IDENTIFYING A PATHWAY TOWARD MAXIMIZING PARTICIPATION IN PB-TCOC MODELS

The following is a summary of additional resources related to PTAC's theme-based discussion on identifying a pathway toward maximizing participation in PB-TCOC models. These resources are publicly available on the ASPE PTAC website:

Environmental Scan and Additional Analyses

Environmental Scan on Identifying a Pathway Toward Maximizing Participation in Population-Based Total Cost of Care (PB-TCOC) Models

Analysis of Trends in Medicare Fee-for-Service (FFS) Beneficiaries Attributed to Alternative Payment Models (APMs) and the Demographics and Geographic Distribution of APM Participation

Request for Input (RFI)

Identifying a Pathway Toward Maximizing Participation in Population-Based Total Cost of Care (PB-TCOC) Models — Request for Input (RFI)

Materials from the Public Meetings

Materials from the Public Meeting on September 16, 2024

Presentation: Identifying a Pathway Toward Maximizing Participation in Population-Based Total Cost of Care (PB-TCOC) Models — Preliminary Comments Development Team Findings

Presentation: Panelist Introduction Slides — Panel Discussion

Presentation: CMS Panel Discussion

Presentation: Panelist Introduction Slides — Roundtable Panel Discussion

Panelist Biographies

CMS Panelist Biographies

Panel Discussion Guide

Roundtable Panel Discussion Guide

Materials from the Public Meeting on September 17, 2024

Presentation: Subject Matter Expert Listening Session 1

Presentation: Subject Matter Expert Listening Session 2

Presentation: Subject Matter Expert Listening Session 3

Panelist Biographies

Listening Session 1 Facilitation Questions

Listening Session 2 Facilitation Questions

Listening Session 3 Facilitation Questions

Other Materials Related to the Public Meeting

Public Meeting Minutes

Public Meeting Transcripts

APPENDIX 4. SUMMARY OF PTAC COMMENTS ON IDENTIFYING A PATHWAY TOWARD MAXIMIZING PARTICIPATION IN PB-TCOC MODELS

The Committee's comments have been summarized in the following broad topic areas:

- Topic 1: Simplification of Alternative Payment Model (APM) Design;
- Topic 2: Ensuring that Financial Incentives Align with the Business Success of Providers;
- Topic 3: Improving the Accessibility and Usability of Data;
- Topic 4: Implications of Model Design on Provider Capacity and Workforce;
- Topic 5: Need for Payment Methodology Reform; and
- Topic 6: Consideration of the Role of Beneficiaries in APMs.

Topic 1: Simplification of Alternative Payment Model (APM) Design	
1A	Fewer models should be developed at this stage; these models can be tweaked or adapted instead of creating a large number of new models.
1B	The desire for fewer and simpler rational models needs to be balanced with the desire for more models that are customized.
1C	Existing structures that are part of current hybrid models can be utilized to help specialists become part of the solution.
1D	A tailored pathway for smaller and primary care groups is needed to encourage greater participation in value-based care.
1E	Measures should be simplified, fewer measures should be developed, and standard definitions should be created across Medicare and all payers.
1F	Patient-reported, longitudinal, and access-related measures need to be considered, developed, implemented, and linked to payment within APMs.

Topic 2: Ensuring that Financial Incentives Align with the Business Success of Providers	
2A	Medicine is a business, and the drivers of providers' financial success need to be considered when developing reimbursement models for population health, while ensuring alignment with patient needs and objectives for improving outcomes, quality, and TCOC.
2B	Business success drivers should be aligned with population health needs using simple methods with actionable data.
2C	Simplicity, generous incentives, and care flexibility are critical to enhancing clinician participation and engagement with payment models. Although technical design features in models (e.g., benchmarks, risk adjustment) can improve, these technical improvements are less impactful without a foundation of simplicity and generous incentives.
2D	Primary care physicians and providers should receive higher payments. A small bonus will not change behavior; the payment needs to be consequential.
2E	Improvements in care by providers do not always translate into financial savings for physicians.
2F	Instead of trying to capture savings from primary care, the focus should be on increasing funding. Primary care is the only specialty that demonstrably enhances health outcomes nationally.

Topic 2: Ensuring that Financial Incentives Align with the Business Success of Providers	
2G	Although downside risk is an important feature in many existing models, some experts question whether it is necessary for certain types of providers.
2H	The environment in which a model operates must be considered, including predictability, certainty, and the generosity with which success is rewarded.

Topic 3: Improving the Accessibility and Usability of Data	
3A	Immediate actions could include democratizing data and source coding and improving data sharing.
3B	Democratizing and flattening data can help with rewarding success.
3C	Health care data need decoupling. Data should be open source rather than proprietary and incorporate patient-reported outcome measures and any HRSNs.
3D	There is an opportunity for CMS to have a significant impact on the effort to democratize and standardize data. The ability to standardize and syndicate data should not be expensive so that small and rural practices can participate.
3E	In addition to providing raw data, data should be made easily accessible and understandable for physicians, including decoupling data.
3F	Practices should have access to data that provide information on their performance and help them understand how to manage patients. It is important to move beyond providing raw data to providing actionable data.
3G	Data should be provided to physicians as actionable intelligence.
3H	Models and payers sponsoring value-based care could be more proactive in conducting analytics. Actionable data should be provided to physicians to reduce burden, increase participation, and improve performance.
3I	LLMs can enhance data acquisition.

Topic 4: Implications of Model Design on Provider Capacity and Workforce	
4A	The shift to value-based care has led to the unintended consequence of increased complexity, requiring more sophisticated data analysis and administrative burden, incentivizing provider consolidation. This consolidation has contributed to rising health care costs and physician burnout.
4B	There is a mismatch now and over the next 20 years between the capacity of the provider community and the needs and demands of an aging population. The physician-provider enterprise should be aligned with population health needs.
4C	Payment models may help to ease capacity issues; however, as providers consolidate, this may create less access and increase costs.
4D	There is a mismatch between supply and demand when the unit cost is more than the payment and participation is voluntary.
4E	Long-term patient-provider relationships—whether with a provider or a healthcare entity—are valuable for patient and provider well-being (e.g., reducing burnout). Additional information is needed regarding how churn affects these relationships and its implications for workforce sustainability.

Topic 5: Need for Payment Methodology Reform	
5A	ACOs are best suited to manage high-risk patients efficiently but have struggled due to benchmarking and risk-adjustment issues.

Topic 5: Need for Payment Methodology Reform	
5B	Methods of risk adjustment need improvement. There are opportunities to utilize more sophisticated data sources to account for additional factors such as frailty, functional status, and cognitive status.
5C	Risk-adjustment benchmark goals should consider a rate that is commensurate with inflation.
5D	Future risk-adjustment methods could be more sophisticated using LLMs. LLMs could provide an opportunity for industry innovation to leverage big data and create benchmarks.
5E	ACO benchmarking needs improvement because poorly performing groups are disincentivized from joining ACO programs due to artificially low benchmarks. Alternatively, the "ratcheting effect" forces high-performing groups to outdo their own past performance. The goal should be to ensure that all groups can succeed and that high performers continue to benefit from their achievements.

Topic 6: Consideration of the Role of Beneficiaries in APMs	
6A	There is a universal need to address HRSNs through payment rates and upfront investments for building infrastructure.
6B	Currently, there are many social needs screeners; the industry should work towards standardizing and using one social needs screener.
6C	Adjustments are needed to support socially underserved populations, including the potential for the ADI to allocate more funding to account for risk. Additional funding can be invested in community-based organizations to meet the needs of underserved populations.
6D	Increased spending on addressing HRSNs may reduce health care expenditures.
6E	HRSNs should be addressed universally across payment models. Emerging needs are related to nutrition, transportation, and housing.
6F	Beneficiary adoption is important, and they should not be left out of realignment efforts. The cost of the beneficiary should be considered.
6G	Additional work is needed to understand how to measure beneficiary needs and how to incentivize activities for beneficiaries to participate in models.
6H	Patient and beneficiary involvement in their own care is critical. Incentives such as waiving copays could help encourage individuals to take greater ownership of their health.
6I	Beneficiaries must also have incentives to participate in value-based care. For example, MA plans can offer discounts on copayments and deductibles. ACOs should explore similar options to enhance their competitiveness. Copayments for high-value services, such as mental health care, chronic care management (CCM), and new advanced primary care management (APCM) codes, should be eliminated. This change is achievable using the current rulemaking process.

REFERENCES

[1] Medicare Payment Advisory Commission (MedPAC). Health care spending and the Medicare Program: a data book. Published July 2023. Accessed October 23, 2024. https://www.medpac.gov/wp-content/uploads/2023/07/July2023_MedPAC_DataBook_SEC_v2.pdf

[2] Medicare Payment Advisory Commission (MedPAC). Health care spending and the Medicare Program: a data book. Published July 2023. Accessed October 23, 2024. https://www.medpac.gov/wp-content/uploads/2023/07/July2023_MedPAC_DataBook_SEC_v2.pdf

[3] Medicare Payment Advisory Commission (MedPAC). Health care spending and the Medicare program: a data book. Published July 2021. Accessed October 23, 2024. https://www.medpac.gov/wp-content/uploads/import_data/scrape_files/docs/default-source/data-book/july2021_medpac_databook_sec.pdf

[4] Physicians Advocacy Institute (PAI). Updated report: hospital and corporate acquisition of physician practices and physician employment 2019-2023. Published April 2024. Accessed November 1, 2024. https://www.physiciansadvocacyinstitute.org/Portals/0/assets/docs/PAI-Research/PAI-Avalere%20Physician%20Employment%20Trends%20Study%202019-2023%20Final.pdf?ver=uGHF46u1GSeZgYXMKFyYvw%3d%3d

[5] PTAC Preliminary Comments Development Team (PCDT) Findings Presentation. Identifying a Pathway Toward Maximizing Participation in PB-TCOC Models. September 2024. https://aspe.hhs.gov/sites/default/files/documents/f181db353027551beb8803c9fb407010/PTAC-Sep-16-PCDT-Findings.pdf

[6] Gordon WK, Hruban Z, McGhee V, Couts T, Rawal P, Fowler E. Improving Participation in Value-Based Care—The CMS Innovation Center's Data-Sharing Strategy Initiative. Health Affairs Forefront. 2024 Aug 21. doi: 10.1377/forefront.20240820.109711.

[7] Ellis RP, Hsu HE, Siracuse JJ, Walkey AJ, Lasser KE, Jacobson BC, Andriola C, Hoagland A, Liu Y, Song C, Kuo TC, Ash AS. Development and Assessment of a New Framework for Disease Surveillance, Prediction, and Risk Adjustment: The Diagnostic Items Classification System. JAMA Health Forum. 2022 Mar 25;3(3):e220276. doi: 10.1001/jamahealthforum.2022.0276. PMID: 35977291; PMCID: PMC8956982.

[8] Centers for Medicare and Medicaid Services. Calendar Year (CY) 2023 Medicare Physician Fee Schedule Final Rule - Medicare Shared Savings Program. 2023. https://www.cms.gov/files/document/mssp-fact-sheet-cy-2023-pfs-final-rule.pdf