Physician-Focused Payment Model Technical Advisory Committee

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September 22, 2021

Xavier Becerra, Secretary
U.S. Department of Health and Human Services
200 Independence Avenue, SW
Washington, DC 20201

Dear Secretary Becerra:

On behalf of the Physician-Focused Payment Model Technical Advisory Committee (PTAC), I am pleased to submit PTAC's report on the role of care coordination in optimizing health care delivery and value-based care transformation in the context of Alternative Payment Models (APMs) and physician-focused payment models (PFPMs). Section 1868(c) of the Social Security Act directs PTAC to: 1) review 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 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 topic of care coordination.

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. While most of these proposals included at least one component related to care coordination, the Committee found that 16 proposals "Meet" the Secretary's "Integration and Care Coordination" criterion (including one proposal found to "Meet and Deserve Priority Consideration" for this criterion). Given that PTAC members have found care coordination to be an important factor during the Committee's review of proposed models, PTAC now sees value in reviewing care

coordination elements within these proposals, along with current information on care coordination and value-based care transformation. To ensure that the Committee was fully informed, the June 2021 public meeting included a theme-based discussion on optimizing care coordination in the context of APMs and PFPMs. The theme-based discussion included panel discussions with previous submitters and other subject matter experts on care coordination. PTAC also requested input from the public during the public meeting and through a Request for Input (RFI).

This report provides PTAC's findings and valuable information on best practices for optimizing patient-centered care coordination, including insights based on recent experience during the COVID-19 public health emergency (PHE). 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:

- Category 1: Optimizing Patient-Centered Care Coordination;

- Category 2: Addressing Patient and Caregiver Needs Holistically in Care Coordination;

- Category 3: Addressing Provider Needs in Care Coordination;

- Category 4: Addressing Health System and Infrastructure Needs to Optimize Care Coordination;

- Category 5: Measuring the Quality and Effectiveness of Care Coordination; and

- Category 6: Addressing Payment Issues: Role of APMs and PFPMs.

Key highlights include:

- There is a need to broaden the focus of care coordination from managing procedures or visits to managing the patient's journey.

- It is important to coordinate among all providers and community-based organizations (CBOs) that are involved in the patient's clinical, behavioral health, and social determinants of health (SDOH) needs, and to manage key transitions across specialties and contexts.

- Care coordinators can be located in various settings, and it is unlikely that there will be a one-size-fits-all approach regarding where the care coordination function should be located.

- There is a need to more rapidly share information about care coordination best practices and evidence-based models with providers, particularly small or independent practices who have limited resources or infrastructure.

- Providers need reliable funding to invest in improving care coordination.

- There is a need to move beyond traditional outcome measures when measuring the value and return on investment of patient-centered care coordination.

- Value-based payment models and APMs can help to incentivize the provision of multi-specialty and interdisciplinary care coordination throughout the patient's journey.

- There is an opportunity to strengthen care coordination within APMs. While many APMs include at least some of the functional domains that are associated with care coordination, it is important to ensure that APMs include all of the functional domains that are relevant for their context.

In addition to summarizing the Committee's findings and comments related to these topics, the report also identifies areas where additional research is needed 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,

//Jeffrey Bailet//

Jeffrey Bailet, MD

Chair

Attachment

Physician-Focused Payment Model Technical Advisory Committee

REPORT TO THE SECRETARY OF HEALTH AND HUMAN SERVICES

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The Role of Care Coordination in Optimizing Health Care Delivery and Value-Based Care Transformation within Alternative Payment Models and Physician-Focused Payment Models

September 22, 2021

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, PTAC members have found care coordination to be an important factor during the Committee's review of proposed models, PTAC now sees value in reviewing care coordination elements within these proposals, along with current information on care coordination and value-based care transformation. To ensure that the Committee was fully informed, PTAC's June 2021 public meeting included a theme-based discussion on care coordination in the context of APMs and PFPMs.

This report summarizes PTAC's findings and comments regarding the role of care coordination in optimizing health care delivery and value-based care transformation within APMs and PFPMs. This report also includes: 1) areas where additional research is needed and some potential next steps; 2) a summary of the characteristics related to care coordination from proposals that have previously been submitted to PTAC; 3) an overview of key issues relating to care coordination 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.

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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.[i] While most of these proposals included at least one component related to care coordination, the Committee found that 16 proposals "Meet" the Secretary's "Integration and Care Coordination" criterion (including one proposal found to "Meet and Deserve Priority Consideration" for this criterion). Given that PTAC members have found care coordination to be an important factor during the Committee's review of proposed models, PTAC now sees value in reviewing care coordination elements within these proposals, along with current information on care coordination and value-based care transformation. To ensure that the Committee was fully informed, the June 2021 public meeting included a theme-based discussion on optimizing care coordination in the context of APMs and PFPMs. The theme-based discussion included panel discussions with previous submitters and other subject matter experts on care coordination. PTAC also requested input from the public during the public meeting and through a Request for Input (RFI).

This report provides PTAC's findings and valuable information on best practices for optimizing patient-centered care coordination, including insights based on recent experience during the COVID-19 public health emergency (PHE). 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:

- Category 1: Optimizing Patient-Centered Care Coordination;

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- Category 5: Measuring the Quality and Effectiveness of Care Coordination; and

- Category 6: Addressing Payment Issues: Role of APMs and PFPMs.

Key highlights include:

- There is a need to broaden the focus of care coordination from managing procedures or visits to managing the patient's journey.

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

- It is important to coordinate among all providers and community-based organizations (CBOs) that are involved in the patient's clinical, behavioral health, and social determinants of health (SDOH) needs, and to manage key transitions across specialties and contexts.

- Care coordinators can be located in various settings, and it is unlikely that there will be a one-size-fits-all approach regarding where the care coordination function should be located.

- There is a need to more rapidly share information about care coordination best practices and evidence-based models with providers, particularly small or independent practices who have limited resources or infrastructure.

- Providers need reliable funding to invest in improving care coordination.

- There is a need to move beyond traditional outcome measures when measuring the value and return on investment of patient-centered care coordination.

- Value-based payment models and APMs can help to incentivize the provision of multi-specialty and interdisciplinary care coordination throughout the patient's journey.

- There is an opportunity to strengthen care coordination within APMs. While many APMs include at least some of the functional domains that are associated with care coordination, it is important to ensure that APMs include all of the functional domains that are relevant for their context.

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

I. PTAC REVIEW OF CARE COORDINATION IN THE CONTEXT OF APMS AND PFPMS

An environmental scan was developed to provide background information for PTAC on care coordination, the role of care coordination in APMs and PFPMs, and issues and opportunities associated with optimizing care coordination in an APM. PTAC formed a Preliminary Comments Development Team (PCDT) consisting of three PTAC members (Terry L. Mills Jr., MD, MMM; Lauran Hardin, MSN, FAAN; and Angelo Sinopoli, MD). (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 June 2021 theme-based discussion. The June 2021 theme-based discussion also included panel discussions with stakeholders from five organizations who previously submitted PFPM proposals with care coordination components, perspectives from a diverse group of subject matter experts, and an opportunity for public

comments. Committee members concluded the June 2021 theme-based discussion by identifying comments to be included in the report to the Secretary (RTS).[ii] [iii]

A supplement to the environmental scan was developed to provide additional context based on additional reports and topics mentioned during the public meeting that were not addressed in the original environmental scan; and to summarize case studies of selected PTAC proposals that included innovative approaches to care coordination. A quantitative analysis of the use of Chronic Care Management (CCM) and Transitional Care Management (TCM) reimbursement codes in 2019 was conducted to provide additional context regarding this issue. Additionally, PTAC received seven public comments in response to an RFI that was posted in June 2021. The PCDT provided feedback related to the supplement to the environmental scan, quantitative analysis of CCM and TCM claims, and summary of the Committee's comments from the public meeting.

The remaining sections of this report provide information on the definition of care coordination used to inform the theme-based discussion materials; a summary of the characteristics of proposals that were previously submitted to PTAC and determined to "Meet" or "Meet and Deserve Priority Consideration" for the Secretary's "Integration and Care Coordination" criterion (see Appendix 2); an overview of key issues relating to care coordination and value-based care transformation; and a summary of PTAC's findings and comments, as well as areas where additional research is needed and potential next steps. Appendix 3 provides a list of additional resources related to PTAC's care coordination theme-based discussion that are available on the Assistant Secretary for Planning and Evaluation (ASPE) PTAC website.

II. DEFINITION OF CARE COORDINATION

The concept of care coordination has been defined in various ways based on care setting, providers, and other factors in the literature, without consensus on the definition. For purposes of conducting the June 2021 theme-based discussion and producing supporting materials, PTAC used the definition developed by the Agency for Healthcare Research and Quality (AHRQ) based on a systematic review conducted in 2007. AHRQ's definition is as follows:

> "*Care coordination involves deliberately organizing patient care activities and sharing information among all of the participants concerned with a patient's care to achieve safer and more effective care. This means that the patient's needs and preferences are known ahead of time and communicated at the right time to the right people, and that this information is used to provide safe, appropriate, and effective care to the patient.*"[1]

AHRQ has identified three perspectives that are relevant for perceiving and measuring care coordination: patient/family, health care professional, and health care systems representative.[2]

[ii] Angelo Sinopoli, MD was not in attendance at the June 20, 2021, public meeting.
[iii] Carrie H. Colla, PhD resigned from PTAC effective July 2, 2021.

AHRQ has also identified several functions that are important for care coordination, depending on the needs of the patient, including:

- Establish accountability or negotiate responsibility;

- Communicate;

- Facilitate transitions;

- Assess needs and goals;

- Create a proactive plan of care;

- Monitor, follow up, and respond to change;

- Support self-management goals;

- Link to community resources; and

- Align resources with patient and population needs.[2]

Care coordination is viewed as a means of achieving the overall objective of coordinated care – improving health outcomes by providing high-quality care and eliminating redundant health care system costs – by focusing on integrating and synchronizing care across providers, organizations, and settings.

Care coordination activities can be implemented in several different contexts, including care coordination for population-wide health management, care coordination for specific populations, and care coordination around an acute care event. Care coordination can also include coordination across sectors to address health-related social needs/social determinants of health.

Evidence is mixed about the impact of care coordination interventions on use, quality, and cost of care. However, some studies show certain care coordination functions have positive utilization outcomes, including targeting high-risk patients, facilitating care transitions, and coordinating primary care.[3]

III. CHARACTERISTICS OF CARE COORDINATION-RELATED PTAC PROPOSALS

Between 2016 and 2020, PTAC received 35 proposed PFPMs submitted by stakeholders.[iv] Among these proposals, 28 proposals received full deliberation by PTAC. With respect to Criterion 7, "Integration and Care Coordination" (i.e., whether the proposal encourages "greater integration and care coordination among practitioners and across settings where multiple practitioners or settings are relevant to delivering care to the population treated under

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[iv] The 35 proposals submitted to PTAC represent an unduplicated count (i.e., proposals with multiple submissions are counted only once) of the number of proposals; 28 proposals were voted and deliberated on by the Committee, and seven proposals were withdrawn by submitters prior to deliberation (including one proposal that was withdrawn prior to any review by the Committee).

the PFPM"), one proposal was rated as "Meets and Deserves Priority Consideration" and 15 proposals were rated as "Meets" for this criterion.[v]

Care coordination approaches varied among the proposals that were reviewed by PTAC[vi] along the dimensions of context, objectives, and functions:

- ***Context (main):*** Twenty-one percent of the proposed models focused on coordinating care for population-wide health management; 62 percent focused on coordinating population-specific care; and 18 percent focused on coordinating care for an acute care event.[vii]

- ***Objectives (multiple objectives possible):*** Twenty-six percent of the proposed models addressed patient/family-focused objectives; 21 percent of the proposed models addressed individual provider-focused objectives; and 68 percent of the proposed models addressed health care system-related objectives. [viii]

- ***Functions (multiple functions possible):*** Fifty-three percent of the proposed models sought to establish accountability or negotiate responsibility through the use of designated interdisciplinary care teams or care coordinators; 41 percent looked to facilitate transitions and coordination across settings; 21 percent focused on supporting communication; and 21 percent focused on assessing and documenting patient needs and goals.

Exhibit III.1 provides a description of five proposals that were found to "Meet" Criterion 7 and used innovative approaches to address issues that were specifically raised during the theme-based discussion. (Appendix 2 contains a description of all 16 proposals that were found to "Meet" Criterion 7.)

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[v] The Committee's rating for Criterion 7 was "Meets and Deserves Priority Consideration" for one proposed model, "Meets" for 15 proposed models, "Does Not Meet" for 10 proposed models, and "Not Applicable" for the remaining two proposed models.

[vi] A total of 34 proposals were reviewed by PTAC, excluding one proposal that was withdrawn prior to any review by the Committee.

[vii] Percentages for context are mutually exclusive; the numbers do not add to 100 percent due to rounding.

[viii] Percentages for objectives and function are not mutually exclusive. For example, a proposal could include both care coordination functions that sought to established accountability and functions that documented patient needs and goals.

Exhibit III.1.   Summary of the Care Delivery and Payment Model Characteristics of Five Selected PTAC Proposed Models*

Submitter and Proposal	Clinical Focus, Setting, and Payment Mechanism	Care Coordination Context	Care Coordination Objectives
American Academy of Hospice and Palliative Medicine (AAHPM) *Patient and Caregiver Support for Serious Illness (PACSSI)*	**Clinical Focus:** Serious illness and palliative care **Setting:** Inpatient, outpatient, other **Payment Mechanism:** Capitated per beneficiary per month (PBPM)	Population-specific • Multidisciplinary • Multispecialty during episode of advanced illness	• Support interdisciplinary palliative care teams
American College of Emergency Physicians (ACEP) *Acute Unscheduled Care Model (AUCM)*	**Clinical Focus:** Emergency department (ED) services **Setting:** ED **Payment Mechanism:** Episode-based model with continued fee-for-service (FFS)	Acute care • Multidisciplinary care around an acute care event • Follow patient through episode beginning with discharge through 30-day period	• Facilitate appropriate discharge • Inform patients of treatment options • Manage unscheduled care episodes by protocol • Arrange post-discharge home visit
Coalition to Transform Advanced Care (C-TAC) *Advanced Care Model (ACM) Service Delivery and Advanced Alternative Payment Model*	**Clinical Focus:** Serious illness and palliative care **Setting:** Patient home **Payment Mechanism:** Capitated PBPM	Population-specific • Multidisciplinary during episode of advanced illness • Specific to patients meeting ACM criteria to identify individuals in last 12 months of life	• Evidence-based treatments; align with patient preferences • Symptom management • 24/7 access to clinical support • Comprehensive care plan • Transitional and post-acute care • Established reliable handoff processes • Advanced care planning • Reduce unwanted/duplicate visits and interventions
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 **Setting:** Patient home **Payment Mechanism:** Bundled episode-based payment replacing FFS	Acute care • Multidisciplinary care around an acute care event; manage episode around acute care event	• Improve quality and reduce costs by reducing complications and readmissions
University of New Mexico Health Sciences Center (UNMHSC) *ACCESS Telemedicine: An Alternative Healthcare Delivery Model for Rural Cerebral Emergencies*	**Clinical Focus:** Cerebral emergent care; telemedicine **Setting:** Inpatient; outpatient; or ED **Payment Mechanism:** Additional one-time payment	Acute care • Within condition specialty care around an acute care event • Support for neurology/neurosurgery providers in underserved communities	• Connect/coordinate missing link of specialty care in underserved areas

* PTAC found that Mount Sinai "Meets and Deserves Priority Consideration" for Criterion 7. PTAC's rating for the other proposals in this table was "Meets" for Criterion 7.

IV. KEY ISSUES RELATED TO OPTIMIZING CARE COORDINATION FOR VALUE-BASED CARE TRANSFORMATION IN THE CONTEXT OF APMs AND PFPMs

This section describes key issues related to optimizing care coordination for value-based care that were discussed during the June 2021 theme-based discussion. Additional information about these issues can be found in the materials that are listed in Appendix 3, which are publicly available on the ASPE PTAC website.

IV.A. Opportunities to Improve Health Care Through Care Coordination

Drawing from their own experiences, the various previous submitter and subject matter expert panelists who participated in PTAC's theme-based discussion identified a number of important benefits of care coordination and discussed ideal functions of care coordination models. Many panelists emphasized the important role of care coordination to facilitate equitable patient-centered care and to address clinical needs, behavioral health, SDOH, and other non-clinical needs (e.g., spiritual, financial, or cultural needs). A few panelists emphasized that care coordination can and should help meet the needs and goals of the person holistically. They noted that by meeting patient goals and needs holistically, care coordination can help to improve patient-oriented health care outcomes, avoid the misallocation of resources, and create a common vision for patient-centered care across provider types. Panelists also indicated that it is important for care coordination interventions to foster closer longitudinal relationships with patients to help anticipate and proactively address needs, rather than setting up interventions that are primarily designed to react to those needs.

To achieve these objectives, several panelists suggested that providers consider incorporating the following care coordination mechanisms into their models in a manner consistent with the needs of their patient and caregiver populations:

- Using shared care planning tools that are person-centered and include patients and families in the care planning process; and

- Capturing and analyzing data on clinical care, utilization, claims, and SDOH to provide a holistic picture of the patient's health using SDOH data to help connect patients to community resources, as appropriate.

Panelists also discussed the potential opportunity to update tools like the Consumer Assessment of Healthcare Providers and Systems (CAHPS) survey to include patient experience related to care coordination and SDOH. Additionally, one panelist discussed a current effort by the Centers for Medicare & Medicaid Services (CMS) to develop a measure assessing whether patients feel heard and understood.

IV.B. Care Coordination Innovations During the Public Health Emergency

The panelists noted increased innovation in care coordination during the PHE and suggested continuing and strengthening this innovation across health care systems after the PHE. Innovative approaches related to care coordination that were referenced by panelists include:

- Increasing the use of telehealth, which can facilitate care coordination by providing timely and responsive care; telehealth gives providers more flexibility, eliminates travel burden, prevents workforce burnout, creates workforce extenders, leverages community health workers (CHWs), and helps to identify needs and disparities in the patient population;

- Increasing screening for SDOH (e.g., food, transportation, and broadband access) and risk adjustment based on social needs (e.g., using social deprivation indices to risk-adjust prospective payments to providers with higher-risk patient populations);

- Broadening assistance offered by providers to include social factors affecting health (e.g., meals, temporary housing, broadband access, and transportation);

- Addressing issues of social isolation, including peer-to-peer outreach and care navigation; and

- Using algorithms to identify at-risk patient panels and complete health and safety check-ins via telehealth.

IV.C. Important Barriers to Effective Adoption and Use of Care Coordination

The panelists who participated in the theme-based discussion identified several challenges to the effective adoption and implementation of patient-centered care coordination, including difficulties identifying the best person to coordinate care; addressing equity; sharing data; measuring and evaluating care coordination; and securing reliable funding for care coordination activities. Panelists also discussed the challenge that providers face in identifying the best person to coordinate care for any given patient. They noted that the focus of care coordination will differ depending on the patient's stage of life, the acuity of their conditions, and other personal factors. They noted that patients often have multiple care coordinators. For example, one coordinator may focus on the patient's clinical needs while another may help coordinate services to address SDOH; there may also be different coordinators for managing patients' primary care, specialty care, and hospital transitions. Additionally, the theme-based discussion revealed that coordination and collaboration between staff from different systems and sectors can be challenging. For example, some clinical providers may find it difficult to translate information that they receive from behavioral health providers into actionable information.

Several panel discussion participants also discussed the need for sufficient staffing and data resources to support care coordination. They expressed concerns about reducing the administrative and cognitive burden that care coordination creates for providers and

individuals involved in coordinating care. For example, some panelists noted that the requirements for billing insurers for care coordination services under Medicare FFS, as well as the care delivery requirements to participate in APMs, can be onerous, particularly for small practices.

Panelists also discussed how models can be better enabled to reduce inequity and address the needs of their entire patient population. For example, panelists suggested that providers consider how models can increase equity in access to care, insurance, housing, safety, or food security. The PHE brought issues of equity into focus as telehealth use increased. While panelists acknowledged that telehealth can increase access to care coordination, they also noted that telehealth can further exacerbate disparities in access to care due to inequities in broadband or technology access.

Participants in the panel discussions also discussed challenges related to data availability, data sharing, and interoperability, including:

- Insufficient ethical guardrails for sharing data (e.g., patient consent, whether patients or providers can change data post-submission);

- Data silos separating care management claims (such as CCM codes) and claims data, and lack of electronic health records (EHRs) data in useful formats and integrated into accessible structures and systems;

- Slow progress in extracting and translating electronic clinical data into meaningful and useful data flows for providers;

- Inadequate access for some practices (such as smaller and independent practices) to data and tools to identify patients who are most at risk; and

- Lack of widely available data on cost and quality of care for providers to reference when coordinating care (e.g., to facilitate appropriate referrals to the best available specialist).

Additionally, panelists indicated that evaluation and measurement issues can impact the successful implementation and effectiveness of patient-centered care coordination. Specifically, many of the panelists discussed barriers and challenges to effectively evaluating models and determining which models should be expanded. Examples of common challenges include:

- Difficulties accounting for model overlap in conducting evaluations;

- Challenges when comparing an APM to a traditional FFS model that is more limited in the services it provides (for example, some panelists indicated that APMs might find it necessary to compete against inappropriate benchmarks); and

- APMs might be unable to demonstrate value and cost neutrality when compared with a corresponding FFS model that undervalues care, especially in a short time period.

Beyond measurement and evaluation issues, panelists indicated that one major barrier to effective patient-centered care coordination relates to insufficient financial resources or investments. Panelists emphasized the importance of upfront investments (e.g., prospective payments) for facilitating providers' ability to make initial and long-term investments in effective, patient-centered care coordination. They indicated that providers need the resources (e.g., technology, staffing) to support care coordination efforts upfront and throughout the care coordination process.

IV.D. Opportunities to Address Barriers

Panel discussion participants identified a number of potential approaches for addressing barriers related to optimizing the use of patient-centered care coordination. They indicated that providing patient-centered and equitable care coordination requires an intentional effort. To address the challenge of identifying the appropriate care coordinator and cross-coordinator collaboration, several panelists suggested that models leverage primary care providers (PCPs) as the primary entity that coordinates care, while ensuring that PCPs are paid for care coordination and other associated services. A few panelists also emphasized the importance of leveraging the nurse workforce to connect patients with their care team. Additionally, several panelists discussed the role CHWs can play in helping patients navigate clinical and social services. Panelists also discussed the importance of maintaining flexibility around determining who provides care coordination to account for patient needs across settings and local context.

Regarding data challenges, panelists emphasized the importance of shared data governance, health information technology (HIT), and EHR interoperability. When implementing or developing a new model, panelists suggested that providers consider using data to better understand which patients should be targeted and how long they likely need to receive a care coordination intervention. For example, some panelists discussed how HIT presents an opportunity to enable population management and thereby enhance care coordination. For instance, HIT applications can assist in identifying high-risk patients who are most in need of care coordination and convey their needs to the care team. HIT can also help facilitate targeted outreach to patients. One panelist shared an example of an Accountable Care Organization (ACO) using population health data to identify and conduct outreach to vulnerable patients during the COVID-19 PHE. This effort uncovered higher levels of social isolation than expected, found that patients had difficulty filling pharmacy refills, and found examples of creative adaptations and flexibilities on the part of caregivers. Panelists noted that HIT tools can also help to preemptively identify patients who will likely need care coordination through algorithms. Early identification of these patients facilitates the development of relationships with care coordinators, which is important for successful interventions.

Regarding addressing evaluation and measurement concerns, panelists discussed the importance of robust, relevant, and usable measures for practices, and the incorporation of these outcomes into an accountability structure. While panelists widely acknowledged the

value of cost measures as a tool for identifying cost savings or cost neutrality, they also indicated that costs are not always straightforward to capture, and that it is equally important to assess other aspects of care coordination (e.g., outcome measures like patient experience of care).

Some panelists supported using structure and process measures to evaluate APMs and care coordination interventions. For example, they indicated that process measures can track whether providers are creating and sharing care plans and whether follow-up appointments and referrals are made. Other panelists noted that process measures often do not capture whether an action or intervention was done well and suggested that providers be accountable for outcome measures such as patient experience of care or utilization. However, another panelist indicated that process and sub-process measures can still be useful for determining whether particular providers are involved with care or patients are engaged in certain ways.

Several panelists called for improving patient-reported outcome measures and incorporating them into evaluations of care coordination models, as well as including measures related to SDOH. One panelist suggested that the CAHPS survey could be updated to better reflect patient experience with care coordination or SDOH. Another panelist suggested looking at a combination of process and outcomes measures similar to the Comprehensive Diabetes Care bundle of measures.[4] Additionally, another panelist suggested examining the progress that has been made by state Medicaid agencies in developing SDOH measures.

Various panelists emphasized the importance of ensuring that resources are available to assist providers in implementing evidence-based care coordination through methods such as toolkits and expert recommendations. Panelists also discussed the need for more implementation research to help diffuse innovation. They indicated that many successful models of care coordination already exist, but providers need support with implementing and adapting the models to their specific context. Several panelists also discussed the need to implement successful care coordination interventions and best practices more broadly in order to reach a wider range of providers and patients.

A common issue cited by the panelists related to insufficient reimbursement and payment support for effective care coordination. For example, one panelist suggested that Medicare FFS reimbursement rates for CCM and TCM codes may not fully cover the cost of making it possible for providers with appropriate licensure to coordinate care for the most critical patients. Panelists also suggested that model developers begin by focusing on establishing adequate payment to fund the services being provided and interventions being implemented, and then determine how to connect payment to desired health and care outcomes. Panelists also discussed the need to implement more care coordination models and provide more stability for practices participating in existing APMs, including on-ramps for new participants and off-ramps for participants at the end of model testing.

Panelists also highlighted the need to address these issues in the context of equity. They indicated that efforts to understand patient needs and preferences, shared decision-making (SDM) interventions, efforts to improve care coordination measures, improvements in the use of data and accessibility of data, and infrastructure investments can contribute to the goal of working toward equity in access to and quality of care.

IV.E. Importance of APM or PFPM Frameworks

Some panelists noted that value-based payment models and APMs may be the best way to provide upfront funding for improving care coordination and optimizing the effective use of care coordination within the health care system. One panelist noted that the PHE exacerbated disparities in access to and quality of care, but also provided an opportunity to design better payment models to help resolve such disparities. As perceived by one panelist, practices with prospective payments for providers fared better financially and clinically and were better able to adopt telehealth during the PHE than did practices that were strictly FFS. Finally, panelists referenced a lack of investments in APMs and performance measures, as well as a lack of models that work across both Medicare and Medicaid, to address the needs of a broader population.

Several panelists shared the belief that payment reform should precede care delivery reform. Panelists expressed a concern that systems need to prioritize payments that meet patient population needs and support upfront investments for effective care coordination. To encourage payment reform, some panelists suggested that more on-ramps be created for practices to move from FFS to APMs, align the structures of their models with value pathways, and enable providers to take on risk. One panelist indicated out that a practice's ability to ensure appropriate and timely access to appropriate care for each patient can open up the provider's schedule and create more opportunity for others to access that same provider for the appropriate care. In order to balance enablement and alignment payment models, some panelists suggested that practices be able move from FFS to APMs in phases, as they align the structures of their models with value pathways and get providers to a place where they can take on risk.

While discussing risk, panelists indicated that APMs need to evaluate and consider the level of risk that practices can adopt. They also noted that risk adjustments and Hierarchical Condition Category (HCC) coding need to evolve to assess the risk of populations according to their social needs. Panelists also indicated a belief that individual practices can better manage downside financial risk by coordinating with other practices and taking on risk as a partnership. Another panelist raised a concern about overreliance on risk in some APMs, and that upfront payments to providers may be more effective at enabling care coordination than FFS.

Panelists discussed the potential for APMs and PFPMs to use care coordination to either alleviate or exacerbate the financial strain on practices, provider burnout, and administrative

burden. Panelists identified specific conditions needed for care coordination to relieve providers and help reduce burnout: greater access to resources, a manageable number of requirements or enablement criteria, and financial alignment with care (e.g., models like Comprehensive Primary Care Plus [CPC+] and Medicare Shared Savings Program [MSSP] that financially align practices to the goal and outcome). Finally, one panelist noted that an organization's capacity to identify and address patient social needs is key to preventing provider burnout. Therefore, panelists suggested that APMs be designed with the capacity to attend to social needs and link patients to community resources.

V. COMMENTS FOR CONSIDERATION BY THE SECRETARY

Based on findings from the Committee's analysis of care coordination components in PTAC proposals, information in the literature, and panel discussions with subject matter experts and previous submitters, this section summarizes PTAC's comments regarding the role of care coordination in optimizing health care delivery and value-based care transformation in the context of APMs and PFPMs. PTAC's comments are organized in six categories:

- Category 1: Optimizing Patient-Centered Care Coordination;

- Category 2: Addressing Patient and Caregiver Needs Holistically in Care Coordination;

- Category 3: Addressing Provider Needs in Care Coordination;

- Category 4: Addressing Health System and Infrastructure Needs to Optimize Care Coordination;

- Category 5: Measuring the Quality and Effectiveness of Care Coordination; and

- Category 6: Addressing Payment Issues: Role of APMs and PFPMs.

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 and potential next steps related to each topic. Appendix 4 includes a complete list of the Committee's comments.

V.A. Category 1: Optimizing Patient-Centered Care Coordination

Committee members have identified the following activities as being particularly important for optimizing patient-centered care coordination in the context of APMs:

- Care coordination that is patient-centered;

- Encouraging coordination of treatment and care activities across settings, provider types, and sectors; and

- Clarification of the role of care coordinators.

Care coordination that is patient-centered. Best practices indicate that care coordination should be patient-centered. Patients have different needs and require different care coordination approaches depending on their situation, preferences, and the context in which they are receiving care. It is important to include all of the care coordination domains and activities that are relevant for meeting patient needs in the context and setting in which care is being provided. It is also important to identify and coordinate care for high-risk patients with multiple comorbidities and patients with rising risk, and to have a "whole person lens" that focuses on managing the patient throughout their journey.

Encouraging coordination of treatment and care activities across settings, provider types, and sectors. It is important to coordinate among all of the providers and CBOs that are involved in the patient's care. It is also important to ensure coordination during key transitions across specialties and contexts. The node between primary and specialty care is an especially important area to focus on for improving equity, quality, and utilization outcomes. Similarly, coordination between emergency departments (EDs) and PCPs, and hospitals and PCPs is also critical for ensuring seamless transitions in care and improving outcomes. Some of the proposed models that were previously submitted to PTAC featured interdisciplinary care teams managing patients' needs.

Clarification of the role of care coordinators. The care coordinator role is important for facilitating coordination between various members of the care team, as well as coordination with the patient and caregivers. Care coordinators can reside in many settings, including PCP offices, health plans, ACOs, specialist offices, hospitals, behavioral health providers, or CBOs. It is unlikely that there will be a one-size-fits-all approach regarding where the care coordinator should be located. For example, patients with complex needs may require a combination of medical, social, and behavioral health services; and their needs may change over time. It is beneficial for care coordinators to have a longitudinal relationship with the patient and the patient's family. In determining how to provide the right person with the right care in the right setting at the right time, it can be helpful to determine who is seeing the patient the most frequently, who is closest to the locus of care, and who is most appropriate to intervene in a way that achieves quality.

There can also be differences in the kinds of staff who are providing care coordination and the nature of their relationship with the patient's care team, depending on the patient's needs. For example, CHWs can help to support clinicians, particularly in addressing patients' social needs. However, given the importance of their role, there is a need for adequate training and compensation of CHWs. Additionally, CHWs would need to be connected to clinical practices electronically in order to effectively coordinate care.

PTAC's comments, areas for additional research, and next steps regarding optimizing patient-centered care coordination are listed in Exhibit V.1.

Exhibit V.1:   PTAC Comments, Areas for Additional Research, and Potential Next Steps

Category 1: Optimizing Patient-Centered Care Coordination

Comment 1A. *Patient-centered care coordination can be a valuable tool for improving outcomes and reducing costs, particularly for high-risk patients with multiple comorbidities. It is important to include all of the care coordination functional domains that are relevant for patient needs in the context and setting in which care is being provided. It is also important to identify and coordinate care for patients with rising risk.*

Comment 1B. *There is a need to broaden the focus of care coordination from managing procedures or visits to managing the patient's journey. It is important to coordinate among all providers and CBOs that are involved in the patient's care, and manage key transitions across specialties and contexts.*

Comment 1C. *Care coordinators can reside in many settings. It is unlikely that there will be a one-size-fits-all approach regarding where care coordination should be located.*

Comment 1D. *The individuals who are providing care coordination may vary in different contexts. For example, nurses may be appropriate for complex care management. CHWs can also be an important resource for providing care coordination, particularly for smaller physician practices.*

Comment 1E: *It is important to ensure that care coordinators have adequate training and a connection with the care team. It is also beneficial for care coordinators to have a longitudinal relationship with the patient and the patient's family.*

Areas Where Additional Research Is Needed

- *What are best practices for patient-centered care coordination, and how do they vary by setting and context?*
- *How do primary care-based care coordination activities vary from coordination required to transition patients out of acute care?*
- *Is it feasible to have all of a patient's care coordination conducted out of the primary care setting (including hospital transitions)?*
- *What are best practices for leveraging CHWs to optimize care coordination? What are the infrastructure needs to incorporate CHWs into care teams?*
- *What are best practices for conducting longitudinal care coordination across settings, providers, and payers?*
- *What evidence exists on the effectiveness of care coordinators with particular skills and licensure? Do findings vary based on patient characteristics, setting, or geographical context?*

V.B. Category 2: Addressing Patient and Caregiver Needs Holistically in Care Coordination

There are several considerations that are particularly important for improving care coordination from the perspective of patients and caregivers, including:

- The importance of SDM and patient engagement;

- Addressing SDOH and non-clinical needs;

- Addressing behavioral health needs; and

- Understanding costs to patients and caregivers.

The importance of SDM and patient engagement. Shared decision-making is one of the important activities related to patient-centered care coordination. There are many points where the care team can provide potential insights to assist the patient in navigating their care. Not all providers may be skilled at having SDM conversations to inform and engage patients in the decision-making process, but this is a skill that can be learned. It is important to remove financial considerations from the SDM process, and focus on honoring patient and caregiver preferences even if it results in more expensive care. It is important to understand patient- and family-defined value in designing potential patient engagement incentives.

Addressing SDOH and non-clinical needs. It is important to link the coordination of patients' clinical care needs with the wider context that includes the patient's SDOH needs because clinical care accounts for only a small portion of health outcomes. Providers and policy makers are recognizing the importance of housing, food, and other services that help patients achieve and maintain health. Additionally, considering patients' cultural and language needs can help to facilitate care coordination. Addressing SDOH first requires provider awareness through social risk screening.

Addressing behavioral health needs. Coordinating patients' physical and behavioral health needs is an important component of patient-centered care coordination. The patients that need care coordination most – namely those with multiple disease states, complicated disease histories, and multiple comorbidities – are also the patients that tend to need behavioral health

services the most, and their families need support. It is important to ensure that patients' mental health needs are addressed and are integrated into their general care plans. Some practices have embedded behavioral health to some degree in their primary care practices, with successful outcomes.

Understanding costs to patients and caregivers. It is important to consider the out-of-pocket costs to patients and families associated with coordinating care. Navigating services can be challenging and expensive for patients and caregivers, especially when patients have multiple clinical and social needs.

PTAC's comments, areas for additional research, and next steps regarding addressing patient and caregiver needs are included in Exhibit V.2.

Exhibit V.2:   PTAC Comments, Areas for Additional Research, and Potential Next Steps

Category 2: Addressing Patient and Caregiver Needs Holistically in Care Coordination

Comment 2A. *SDM is one of the important activities related to patient-centered care coordination. There are many points where potential insights can be provided to assist the patient in navigating their care.*

Comment 2B. *It is important to ensure coordination of patients' physical and behavioral health needs, as well as patients' SDOH needs.*

Areas Where Additional Research Is Needed

- *What are best practices for using SDM in care coordination?*
- *How can patient and caregiver values be represented in care coordination activities?*
- *What training is necessary for providers to conduct effective SDM conversations to support care coordination?*
- *What are best practices for providing incentives for patients and caregivers in care coordination models?*
- *What are best practices for addressing SDOH in the clinical setting?*
- *What are best practices for developing partnerships between health care and social service providers to address SDOH?*
- *What are best practices for incorporating behavioral health into care coordination models?*
- *How can medical training be improved to enable all providers to recognize and address behavioral health needs?*
- *What additional support and resources are needed by patients and their families?*

V.C. Category 3: Addressing Provider Needs in Care Coordination

There are several considerations for enabling providers to optimize care coordination. These needs include:

- Reliable funding for investing in patient-centered care coordination;

- Adequate data on patients' needs; and

- Information about effective care coordination models related to their context.

Reliable funding for investing in patient-centered care coordination. Providers need reliable funding to invest in optimizing care coordination, including well-trained, well-compensated care coordinators and the necessary data infrastructure. While primary care practices currently provide some care coordination activities, it may be necessary to provide additional incentives to facilitate the provision of holistic care coordination for patients with complex needs by PCPs (e.g., including hospital transitions). Payment sustainability and durability will affect practices' willingness to devote resources to building patient-centered care coordination programs.

Adequate data related to patients' needs. Providers need adequate data on patients' clinical and social needs to effectively coordinate care. For example, providers need to know when patients have been admitted to and are being discharged from the hospital, and which patients

with chronic conditions can benefit from enhanced care coordination. It is also important for providers to have the necessary infrastructure to support receiving data feeds.

Information about effective care coordination models related to their context. There is a need for resources to support providers in implementing evidence-based, patient-centered care coordination. Developing toolkits that identify essential components and best practices associated with cost-effective, patient-centered care coordination interventions, as well as elements that are adaptable to different practice settings, could be very useful for providers. For example, one toolkit could address implementing patient-centered care coordination models in large integrated systems with multigroup practices (including primary care to hospital, hospital to post-acute care, and transition back to primary care). Another toolkit could address smaller, independent primary care and specialty care practices/subspecialists who would need data feeds and infrastructure to improve care coordination for their patients (including identifying near-term targets for early improvements). Both toolkits could also include best practices for coordination with behavioral health services and coordination with community organizations for addressing social needs.

PTAC's comments, areas for additional research, and next steps regarding addressing provider needs related to implementing patient-centered care coordination are included in Exhibit V.3.

Exhibit V.3:   PTAC Comments, Areas for Additional Research, and Potential Next Steps

Category 3: Addressing Provider Needs in Care Coordination

Comment 3A. *Providers need reliable funding to invest in improving care coordination, including well-trained and well-compensated care coordinators and the necessary data infrastructure. Additionally, there is a need to reduce the administrative burden associated with documenting and billing for care management services.*

Comment 3B. *There is a need to more rapidly share information about care coordination best practices, success stories, and findings with the stakeholder and researcher communities. Innovative approaches for service delivery and process improvements can potentially translate to broader system change.*

Comment 3C. *Having a "toolkit" of care coordination models could be a useful resource for different kinds of providers who want to implement patient-centered care coordination, particularly for small or independent practices that have limited resources or infrastructure.*

Areas Where Additional Research Is Needed

- *What are best practices for cross-setting and cross-disciplinary care coordination?*
- *What are best practices for managing referrals between primary and specialty care?*
- *What are best practices for developing information systems to support population health management?*

> - *What are preferred avenues for sharing findings from implementation research on care coordination? How can promising approaches be shared and implemented most effectively with interested practices?*
> - *What data are necessary for providers to effectively manage patient panels and address social needs?*
> - *What are other best practices for alleviating provider burden to optimize care coordination?*
>
> ### *Potential Next Steps*
>
> - *All APMs, PFPMs, and CMS-sponsored innovation models should include a defined care coordination model that is appropriate for the setting, with tools and funding for providers.*
> - *Consider further research on strategies for coordinating care across settings and disciplines, particularly in transfers between primary and specialty care.*
> - *Consider strategies for reducing the administrative burden associated with care management tools to facilitate documenting and billing for care coordination services.*
> - *Consider convening sessions with stakeholders and supporting efforts to disseminate findings from observational studies of care coordination interventions.*
> - *Consider developing toolkits with cost-effective care coordination strategies that identify essential components of the intervention, as well as elements that are adaptable to different practice and environmental contexts.*

V.D. Category 4: Addressing Health System and Infrastructure Needs to Optimize Care Coordination

A variety of health system and infrastructure changes are needed to help optimize the provision of patient-centered care coordination. These needs include:

- Addressing opportunities and challenges related to HIT;
- Importance of researching and sharing best practices; and
- Understanding emerging trends in care coordination.

Addressing opportunities and challenges related to HIT. Various operational and technical limits on data sharing present challenges for the use of HIT to support care coordination. For example, there is limited availability of data that can help providers to quickly understand the patient's story without having to verbally interact with the patient. Many practices, particularly smaller practices, currently have inadequate access and tools for identifying patients who would benefit from care coordination. Additionally, some providers may not have timely access to relevant patient data, such as PCPs who may not be aware that their patients have been hospitalized. In addition, there is limited availability of timely measures of patient-reported

outcomes to inform care coordination. There are also questions regarding the validity of data that providers are receiving.

The lack of sufficient infrastructure, interoperability, and effective channels for sharing patient information across providers in different practices and settings is a major challenge to using HIT to help facilitate patient-centered care coordination. Patient data often reside in silos that can inhibit the crucial cross-provider communication that is necessary for care coordination. Large, integrated providers may have more established data sharing protocols if they have a full range of primary care, specialty care, post-acute care, and other providers within the system. However, smaller and independent practices may be more interdependent and require the development of data sharing protocols, relying on data feeds from a variety of other providers.

There are also important issues related to data governance that need to be addressed related to determining which parties and providers have access to data and at what time, and privacy. Additionally, there are policy and regulatory issues, as well as Health Insurance Portability and Accountability Act (HIPAA) concerns that affect the availability and sharing of data. As data sharing to support care coordination increases, there is a growing need for shared data governance structures and ethical guardrails. For example, processes for obtaining and documenting patient consent for data sharing could strengthen patient protections and privacy but may be difficult to implement operationally. In addition, data sharing introduces the question of whether patients or providers can change data after submission to others or if data are drawn from large data warehouses.

Importance of researching and sharing best practices. Effective implementation of patient-centered care coordination depends on identifying the models and interventions that are most effective for meeting the needs of a given patient population at a particular point in time based on the patient's journey. There is an opportunity to highlight care coordination success stories and disseminate information about these best practices more rapidly to the provider and research communities. While providers who spend a lot of time working with underserved populations can be an important source for identifying creative solutions for service delivery and process improvements that can potentially translate to broader system change, the literature may not discuss many of these innovations because these providers are generally under-resourced and may lack research support. Linking these providers with the research community can help to disseminate implementation research and effectiveness research related to these models.

For example, there is an opportunity to share information about core care coordination activities that are being used in models that target patients with complex needs. These activities include identifying the care continuum team regardless of setting (e.g., primary care, specialty, payer care management, faith community, trusted neighborhood relationship); holding a shared case conference with an interdisciplinary care team to develop an integrated story of the patient and a shared plan of care; determining who has the strongest trust

relationship with the patient, who will serve as the main contact with the patient; following the patient longitudinally and across the continuum (e.g., clinic, hospital, and home); and creating a community among the care coordinators so that best practices can be shared, accelerated, and translated into pathways for standardization around how complexity is managed.

There is also an opportunity to begin developing a number of defined, evidence-based care coordinated models that would make it possible to give providers a toolkit regarding how to do patient-centered care coordination in their context. Examples could include models related to managing the transition from acute care to post-acute care; managing the interface before the patient returns to primary care-based care coordination; and managing the handoff between disease-focused care management and primary care-based care coordination.

Understanding emerging trends in care coordination. It may be helpful to examine health care start-up companies as potential sources of novel care coordination strategies. These companies are changing the way in which patients and families access care and providers deliver care. Their models have the potential to disrupt the traditional paradigm of care delivery, particularly for primary care, but the companies also could potentially capitalize on their capacity to interact directly with patients and their families to coordinate care. Although these companies have been focused primarily on commercial products, there is an opportunity to study and learn from the emerging models to facilitate uptake of best practices and understand potential downstream effects on Medicare and Medicaid.

PTAC's comments, areas for additional research, and next steps regarding addressing health system and infrastructure needs are listed in Exhibit V.4.

Exhibit V.4:   PTAC Comments, Areas for Additional Research, and Potential Next Steps

Category 4: Addressing Health System and Infrastructure Needs to Optimize Care Coordination

Comment 4A. *It will be important to develop the necessary infrastructure to facilitate data sharing across multiple providers, recognizing that there may be differing needs for larger integrated providers and smaller independent practices.*

Comment 4B. *It will be important to consider issues related to data and data governance, including who has access to data, timeliness of access to data, validity and usability of data, and privacy issues.*

Comment 4C. *There is an opportunity to begin developing a standardized set of interconnected care coordination models based on best practices for coordinating care across disciplines and settings.*

V.E. Category 5: Measuring the Quality and Effectiveness of Care Coordination

Committee members discussed several limitations in how care coordination is currently measured and evaluated. There are several opportunities for improving efforts to measure the value or return on investment (ROI) associated with patient-centered care coordination, including:

- Moving beyond traditional outcome and performance measures;

- Developing better patient-centered outcome measures; and

- Including measures of equity.

Moving beyond traditional outcome and performance measures. There is a need to move beyond traditional outcome measures when measuring the ROI of care coordination. Prior evaluations have focused on outcomes that are straightforward to track and quantify—such as ED visits, hospitalizations, and cost savings. However, solely focusing on cost and utilization measures is insufficient for assessing the full benefits associated with patient-centered care

coordination. It is difficult to measure how many hospitalizations and trips to the ED have been avoided as a result of improved patient-centered care coordination. Additionally, it is difficult to obtain an ROI for investing in patient-centered care coordination in one year due to the upfront costs associated with personnel and technology; it may be more reasonable to measure ROI over several years.

There is a need to move from solely focusing on outcomes that providers should seek to avoid, and move toward measuring outcomes that providers should seek to achieve. However, it can be difficult to measure benefits associated with improving patient satisfaction and quality of life, especially as patients and their families define quality of life. It can also be difficult to measure the effectiveness of care coordination due to variation in how data on existing measures are captured; difficulty in collecting data associated with certain methodologically precise measures; insufficient data systems and other resources for collecting the information; difficulty and timeliness related to accessing the data; and imprecise methods of linking outcomes to specific clinicians with sufficient reliability and clarity.

For these reasons, process measures and patient-centered outcome measures may be more effective for capturing the impacts of patient-centered care coordination than traditional performance measures. It may ultimately be necessary to develop a combination of process measures and sub-process measures that have an impact on outcomes, or a bundle measurement that includes a combination of semi-outcome measures and process measures that are more effective in measuring the provision of patient-centered care coordination than any of the current measures.

It may also be necessary to collect data on process measures that have not previously been tracked, such as data regarding patient engagement; the kinds of entities that have been involved in the patient's care (from a community health perspective); whether SDM conversations have occurred with the patient; and whether interdisciplinary conversations have occurred among members of the care team. Additionally, it will be important to develop a range indicating the level of performance on these metrics that would be consistent with providing effective patient-centered care coordination.

Developing better patient-centered outcome measures. It is important to understand patient experience and satisfaction with care, and this requires valid and reliable patient-centered outcome measures. The collection of data on patient-reported health outcomes is nascent, but the potential timeliness and availability of these kinds of measures will be important for enabling providers to monitor and improve care coordination. For example, some stakeholders that have submitted proposals to PTAC have leveraged these data and shown an impact. There are also opportunities for improving the ambulatory CAHPS survey to more effectively address care coordination experiences – for example, including data related to SDOH in the survey. Additionally, it could be helpful to consider the CollaboRATE measure, which asks for the

patient's and family's perspective on care coordination[5]; or examine how medical specialties have leveraged patient-reported health outcomes.

Including measures of equity. There has been emerging interest in including measures of equity as they relate to care coordination. Potential examples include aggregating data and outcomes by race, ethnicity, and other factors; and looking at the impact of care coordination on equity-related issues such as housing, food security, and access to care.

PTAC's comments, areas for additional research, and next steps regarding improving the measurement of the quality and effectiveness of care coordination are included in Exhibit V.5.

Exhibit V.5:   PTAC Comments, Areas for Additional Research, and Potential Next Steps

Category 5: Measuring the Quality and Effectiveness of Care Coordination

Comment 5A. *There is a need to move beyond traditional outcome measures when measuring the value and return on investment of care coordination. Instead of focusing solely on outcomes to avoid (such as ED visits and hospitalizations), there is a need to consider benefits associated with improving patient satisfaction and quality of life.*

Comment 5B. *It may be necessary to develop a combination of process measures and sub-process measures that have an impact on outcomes. The timeliness of data on patient satisfaction and patient-reported outcomes will be important. It may also be necessary to collect data on measures that have not previously been tracked (for example, regarding patient engagement).*

Comment 5C. *There is also an emerging interest in measurements of equity as they relate to care coordination, including aggregating data and outcomes by race, ethnicity, and other factors; and examining the impact of care coordination on equity-related issues (such as housing, food security, and access to care).*

Areas Where Additional Research Is Needed

- *What validated instruments, beyond CAHPS, exist to measure patient experience with care coordination?*
- *What efforts are underway to improve existing instruments or develop new instruments to capture patient experience with care coordination?*
- *Is there a need for new instruments to be designed to measure patient experience with care coordination? What domains should be included in these instruments?*
- *What validated measures exist to assess process and equity aspects of care coordination?*

> - *Is there a need for new measures to assess process and equity aspects of care coordination?*
> - *How can achievement of patient and caregiver goals be measured?*
>
> ***Potential Next Steps***
>
> - *Consider revising existing measures or developing new measures of patient satisfaction and patient experience with care coordination.*
> - *Consider simplifying definitions and operational requirements for measures of quality and effectiveness related to care coordination.*
> - *In the context of APMs, consider incorporating patient experience measures into quality and evaluation measures.*
> - *In the context of APMs, consider incorporating process and equity measures into quality and evaluation measures.*

V.F. Category 6: Addressing Payment Issues: Role of APMs and PFPMs

APMs can help to incentivize a change in the paradigm for providing patient care through the use of prospective payments. There are several areas of opportunity for APMs to accelerate efforts to optimize patient-centered care coordination, including:

- Providing financial resources and incentives for patient-centered multispecialty and interdisciplinary coordination of care;

- Opportunities for emphasizing and strengthening care coordination in APMs;

- Diversity in payment models for supporting care coordination; and

- The importance of multi-payer models.

Providing financial resources and incentives to support patient-centered multispecialty and interdisciplinary coordination of care. Sustainable, long-term funding is necessary to fully support the implementation of patient-centered care coordination programs. APMs can help to incentivize the provision of care coordination throughout a patient's journey by providing prospective payments that can help to shift the focus away from specific encounter or episode of care. While some models have focused on specific aspects of care coordination (e.g., the patient's journey from the hospital to post-acute care, primary care, or on specific patient populations and types of providers), there are opportunities for more interspecialty collaboration and care coordination. Additionally, there are opportunities to develop more evidence regarding effective care coordination models for supporting the journey of patients with specific conditions, thereby improving equity and quality. The experience during the PHE has demonstrated that systems with prospective payments for providers are also likely to have greater flexibility to invest resources into delivery system enhancements such as incorporating telehealth or enhancing coordination of care across specialties.

APMs also have the ability to incorporate risk to align providers' incentives with quality and cost outcomes. Additionally, APMs have the potential to help disseminate best practices by providing an opportunity to test the effectiveness and facilitate the scalability of patient-centered care coordination interventions. APMs can also provide additional resources and tools for enabling providers to implement a more holistic approach to care coordination that improves communication among the various members of the care team, provides necessary training for care coordinators, and facilitates coordination with behavioral health.

Opportunities for emphasizing and strengthening care coordination in APMs. While many APMs include at least some of the functional domains that are associated with patient-centered care coordination, it is important to ensure that APMs include all of the care coordination domains and activities that are relevant for their context. It will also be important to identify and disseminate best practices to assist providers in implementing patient-centered care coordination, including coordination with behavioral health services, in their context. Additionally, with respect to PFPMs, it will be important to move from proposed models that are focused on specific patient populations, clinical conditions, or a specific part of a patient's journey, to proposed models that incorporate a broader approach to care coordination.`

Diversity in payment models for supporting care coordination. It is unlikely that there will be a one-size-fits-all care delivery model for providing patient-centered care coordination for all types of patients at various points during their patient journey. Therefore, there may be a need for some payment model diversity in order to support the anticipated differentiation in care coordination models.

The importance of developing multi-payer models. The development of multi-payer models can be important for aligning incentives and providing resources to support sustainable care coordination interventions. Engaging with multiple payers is necessary to coordinate care over a patient's journey. Commercial payers can add value based on their insights regarding providing patient-centered care coordination.

PTAC's comments, areas for additional research, and next steps regarding addressing the role of APMs and PFPMs in optimizing care coordination are included in Exhibit V.6.

Exhibit V.6:   **PTAC Comments, Areas for Additional Research, and Potential Next Steps**

Category 6: Addressing Payment Issues: Role of APMs and PFPMs

Comment 6A: *APMs can help to disseminate best practices; incentivize the provision of multispecialty and interdisciplinary care coordination throughout the patient's journey; and provide opportunities for testing the effectiveness and scalability of new care delivery models. There is also an opportunity to pursue the development of multi-payer models to align incentives.*

Comment 6B: *It is important to strengthen care coordination within APMs. While many APMs include at least some of the functional domains that are associated with care coordination, it is important to ensure that APMs include all of the functional domains that are relevant for their context.*

Areas Where Additional Research Is Needed:

- *What types of upfront investments are required for practices in different settings to develop the infrastructure necessary for effective care coordination?*
- *What types of incentives are required for providers to deliver effective care coordination?*
- *What are ideal models for risk adjustment to ensure providers are incentivized to provide care coordination to patients with complex needs?*
- *What types of care coordination activities are Medicaid and commercial payers engaged in?*
- *What are some common areas of interest and activities where efforts can be harmonized across payers?*
- *How can incentives be aligned across payers participating in care coordination models?*
- *What are best practices in operational, clinical, and payment models for ensuring equity in care coordination models? How can current care coordination models be improved to reduce disparities in access and quality?*
- *How can APMs incentivize coordination of clinical and social needs?*
- *How can APMs incentivize coordination with behavioral health needs?*

Potential Next Steps:

- *In the context of APMs, consider developing more models that align practices' financial incentives with care coordination goals.*
- *Consider partnering with Medicare Advantage, Medicaid, and commercial payers to develop and test care coordination strategies relevant to all populations and for those patients with specific health conditions.*

VI. CONCLUSIONS

This report highlights key comments stemming from PTAC's assessment and public deliberation on the topic of optimizing care coordination in APMs and PFPMs. Care coordination is an essential tool for managing the clinical and social needs of Medicare and Medicaid beneficiaries, but the ideal model for care coordination varies based on the acuity and preferences of the patient, the care setting, and local geographic needs. It is essential to ensure that communication occurs between all members of the team that are involved with the patient's care. However, as patient needs shift over time, the person who is best situated to coordinate care may also shift based on who is closest to the locus of care and who has the most trusting relationship with the patient.

While care coordination approaches should be flexible, some elements are essential for all models. First, care coordination should be patient-centered, incorporating SDM and patient-reported performance measures. Second, care coordination models should address the full range of the patient's journey, including population-based, chronic condition, and acute care needs, as well as SDOH and behavioral health. Third, establishing longitudinal relationships between patients and care coordinators is crucial. Fourth, care coordination models should be interdisciplinary and include coordination across providers in different specialties and settings. Finally, care coordination models must include payment structures to compensate providers for the time required to coordinate care, and possibly allow for reimbursement of non-clinical staff such CHWs and licensed professional counselors (LPCs).

Many exemplary models of care coordination have been implemented across the U.S., with lessons learned that can be informative to current practices and new models being developed by CMS and other payers. Developing toolkits and playbooks based on insight from these areas of excellence will help disseminate best practices. Findings from ongoing evaluations of care coordination models can also be disseminated in a timelier manner to ensure that care coordination efforts are applying the latest evidence. New and ongoing evaluations can focus on the value of care coordination beyond the typical metrics of utilization and cost impacts.

PTAC would be pleased to work with the Secretary to determine ways in which the information contained in this report might be used to ensure that care coordination will work to the advantage of the Medicare program and its beneficiaries. In particular, PTAC can draw on its experience and that of its stakeholders, including review of future proposals, to help to inform the incorporation of care coordination within APMs and PFPMs.

APPENDIX 1. COMMITTEE MEMBERS AND TERMS

Jeffrey Bailet, MD, *Chair*
Paul Casale, MD, MPH, *Vice Chair*

Term Expires October 2021

Jeffrey Bailet, MD
Altais
San Francisco, CA

Kavita K. Patel, MD, MSHS
The Brookings Institution
Washington, DC

Angelo Sinopoli, MD
Independent Consultant
Greenville, SC

Jennifer L. Wiler, MD, MBA
UCHealth and University of Colorado School of Medicine
Aurora, CO

Term Expires October 2022

Paul N. Casale, MD, MPH
NewYork-Presbyterian, Weill Cornell Medicine and Columbia University
New York, NY

Bruce Steinwald, MBA
Independent Consultant
Washington, DC

Term Expires October 2023

Carrie H. Colla, PhD[ix]
The Dartmouth Institute for Health Policy and Clinical Practice in the Geisel School of Medicine at Dartmouth College
Lebanon, NH

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

Lauran Hardin, MSN, FAAN
National Center for Complex Health and Social Needs, Camden Coalition of Healthcare Providers
Camden, NJ

Joshua M. Liao, MD, MSc
University of Washington School of Medicine
Seattle, WA

Terry L. Mills Jr., MD, MMM
CommunityCare
Tulsa, OK

[ix] Carrie H. Colla, PhD resigned from PTAC effective July 2, 2021.

APPENDIX 2. CHARACTERISTICS OF PTAC PROPOSALS WITH A PTAC RATING OF "MEETS" OR "MEETS AND DESERVES PRIORITY CONSIDERATION" FOR CRITERION 7, "INTEGRATION AND CARE COORDINATION," DECEMBER 2016 – SEPTEMBER 2020

Submitter and Proposal	Clinical Focus, Setting, and Payment Mechanism	Care Coordination Context	Care Coordination Objectives
American Academy of Family Physicians (AAFP) *Advanced Primary Care: A Foundational Alternative Payment Model (APC-APM)*	**Clinical Focus:** Primary care **Setting:** Primary care practices **Payment Mechanism:** Capitated per beneficiary per month (PBPM)	Population-wide • Multidisciplinary for medical services not tied to an episode • Multiple chronic conditions • Advanced primary care providers (PCPs) leading teams of non-physicians based on five key functions of Comprehensive Primary Care Plus (CPC+) and including behavioral and mental health	• Fulfilling five key functions of CPC+ (access and continuity, planned care and population health, care management, patient and caregiver engagement, and coordination) • PCPs thought to be best positioned to coordinate care across settings
American Academy of Hospice and Palliative Medicine (AAHPM) *Patient and Caregiver Support for Serious Illness (PACSSI)*	**Clinical Focus:** Serious illness and palliative care **Setting:** Inpatient, outpatient, other **Payment Mechanism:** Capitated PBPM	Population-specific • Multidisciplinary • Multispecialty during episode of advanced illness	• Support interdisciplinary palliative care teams
American College of Emergency Physicians (ACEP) *Acute Unscheduled Care Model (AUCM)*	**Clinical Focus:** Emergency department (ED) services **Setting:** ED **Payment Mechanism:** Episode-based model with continued fee-for-service (FFS)	Acute care • Multidisciplinary care around an acute care event • Follow patient through episode beginning with discharge through 30-day period	• Facilitate appropriate discharge • Inform patients of treatment options • Manage unscheduled care episodes by protocol • Arrange post-discharge home visit

Submitter and Proposal	Clinical Focus, Setting, and Payment Mechanism	Care Coordination Context	Care Coordination Objectives
American College of Physicians-National Committee for Quality Assurance (ACP-NCQA) *The "Medical Neighborhood" Advanced Alternative Payment Model (AAPM)*	**Clinical Focus:** PCPs and specialists **Setting:** Primary care practices **Payment Mechanism:** Add-on PBPM	Population-wide • Multidisciplinary • Address multiple chronic conditions	• Better coordination between primary care and specialty care practices
American College of Surgeons (ACS) *ACS–Brandeis Advanced Alternative Payment Model*	**Clinical Focus:** Cross-clinical **Setting:** Inpatient, outpatient, ambulatory **Payment Mechanism:** Episode-based model with continued FFS	Population-specific • Multispecialty of general and specialty surgeons during an episode of care defined by a selected set of procedural/condition episodes	• Increase integration across specialties by grouping general and specialty surgeons who participate in a single episode of care, a selected set of procedural or condition episodes, or cumulative patient-level aggregations of all outcomes
American Society of Clinical Oncology (ASCO) *Patient-Centered Oncology Payment Model (PCOP)*	**Clinical Focus:** Cancer care **Setting:** Inpatient, outpatient **Payment Mechanism:** Episode-based payment with two tracks	Population-specific • Within condition hematology/oncology services and multispecialty practices with hematology/oncology providers	• Reduce utilization for conditions that could be averted • Reduce total ED visits and observation stays
Avera Health (Avera) *Intensive Care Management in Skilled Nursing Facility Alternative Payment Model (ICM SNF APM)*	**Clinical Focus:** Primary care in skilled nursing facilities (SNFs) **Setting:** SNFs, nursing facilities (NFs) **Payment Mechanism:** Add-on PBPM	Population-specific • Multidisciplinary care in SNF after acute care event • Implementation is facility-wide • Eligibility criteria include articulating strategy for PCP care coordination and other quality measures	• Reduce avoidable ED visits and hospitalizations

Submitter and Proposal	Clinical Focus, Setting, and Payment Mechanism	Care Coordination Context	Care Coordination Objectives
Coalition to Transform Advanced Care (C-TAC) *Advanced Care Model (ACM) Service Delivery and Advanced Alternative Payment Model*	**Clinical Focus:** Serious illness and palliative care **Setting:** Patient home **Payment Mechanism:** Capitated PBPM	Population-specific • Multidisciplinary during episode of advanced illness • Specific to patients meeting ACM criteria to identify individuals in last 12 months of life	• Evidence-based treatments; align with patient preferences • Symptom management • 24/7 access to clinical support • Comprehensive care plan • Transitional and post-acute care • Established reliable handoff processes • Advanced care planning • Reduce unwanted/duplicate visits and interventions
Hackensack Meridian Health and Cota, Inc. (HMH/Cota) *Oncology Bundled Payment Program Using CAN-Guided Care*	**Clinical Focus:** Oncology **Setting:** Inpatient and outpatient care **Payment Mechanism:** Bundled episode-based payment replacing FFS	Population-specific • Within condition • Multidisciplinary	• Patient satisfaction with care and adverse outcomes avoidance
Innovative Oncology Business Solutions, Inc. (IOBS) *Making Accountable Sustainable Oncology Networks (MASON)*	**Clinical Focus:** Cancer care **Setting:** Outpatient **Payment Mechanism:** Episode-based	Population-specific • Within condition • Episode defined to encompass more than just time period for chemotherapy • Inclusive of independent practice physicians	• Delivery of evidence-based care (including scheduling same day appointments as needed) • Avoid unnecessary ED usage and hospitalization • Early intervention
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 **Setting:** Patient home **Payment Mechanism:** Bundled episode-based payment replacing FFS	Acute care • Multidisciplinary care around an acute care event; manage episode around acute care event	• Improve quality and reduce costs by reducing complications and readmissions

Submitter and Proposal	Clinical Focus, Setting, and Payment Mechanism	Care Coordination Context	Care Coordination Objectives
New York City Department of Health and Mental Hygiene (NYC DOHMH) *Multi-provider, bundled episode of care payment model for treatment of chronic hepatitis C virus (HCV)*	**Clinical Focus:** HCV **Setting:** Primary care and specialty care **Payment Mechanism:** Bundled episode-based payment replacing FFS	Population-specific • Within condition • Multidisciplinary; hospital-based clinics (with PCPs able to refer to other diagnostic and treatment services within same facility); telementoring with specialists	• Reduce patient handoffs with telementoring • Assist patient navigation through health care system
Personalized Recovery Care (PRC) *Home Hospitalization: An Alternative Payment Model for Delivering Acute Care in the Home*	**Clinical Focus:** Inpatient services in home setting **Setting:** Patient home **Payment Mechanism:** Bundled episode-based payment replacing FFS	Acute care • Multidisciplinary care around an acute care event; management around an acute episode	• Improve health care quality by providing hospital-level care in patient's home, while changing the reimbursement for participating physicians by making them accountable for quality and cost throughout a 30-day episode
Renal Physicians Association (RPA) *Incident ESRD Clinical Episode Payment Model*	**Clinical Focus:** End-stage renal disease (ESRD) **Setting:** Dialysis centers **Payment Mechanism:** Episode-based model	Population-specific • Within condition • Single specialty within episode	• Hospital admission and readmission avoidance
University of Chicago Medicine (UChicago) *The Comprehensive Care Physician Payment Model (CCP-PM)*	**Clinical Focus:** Frequently hospitalized patients **Setting:** Home care and rehabilitation **Payment Mechanism:** Add-on PBPM	Acute care • Multispecialty care around an acute care event, during episode	• Promoting continuity between traditional inpatient and outpatient settings by encouraging physicians to see their patients both in the home and rehabilitation settings when appropriate

Submitter and Proposal	Clinical Focus, Setting, and Payment Mechanism	Care Coordination Context	Care Coordination Objectives
University of New Mexico Health Sciences Center (UNMHSC) *ACCESS Telemedicine: An Alternative Healthcare Delivery Model for Rural Cerebral Emergencies*	**Clinical Focus:** Cerebral emergent care; telemedicine **Setting:** Inpatient; outpatient; or ED **Payment Mechanism:** Additional one-time payment	Acute care • Within condition specialty care around an acute care event • Support for neurology/ neurosurgery providers in underserved communities	• Connect/coordinate missing link of specialty care in underserved areas

* PTAC found that Mount Sinai "Meets and Deserves Priority Consideration" for Criterion 7. PTAC's rating for the other proposals in this table was "Meets" for Criterion 7.

APPENDIX 3. ADDITIONAL RESOURCES RELATED TO PTAC'S THEME-BASED DISCUSSION ON OPTIMIZING CARE COORDINATION IN ALTERNATIVE PAYMENT MODELS AND PHYSICIAN-FOCUSED PAYMENT MODELS

The following is a summary of additional resources related to PTAC's theme-based discussion on optimizing care coordination in Alternative Payment Models (APMs) and physician-focused payment models (PFPMs). These resources are publicly available on the ASPE PTAC website at the links that are provided below.

Environmental Scans and Reports

Environmental Scan on Care Coordination in the Context of APMs and PFPMs

Care Coordination Environmental Scan Supplement *(Forthcoming)*

Analysis of 2019 Medicare Fee-for-Service Claims for Chronic Care Management (CCM) and Transitional Care Management (TCM) Services *(Forthcoming)*

Request for Input (RFI)

Request for Input on PTAC's Review of Care Coordination and PFPMs

Public Input on PTAC's Review of Telehealth and PFPMs

Materials from the Public Meeting

June 10, 2021, Presentation: An Overview of Care Coordination Components in Proposals Submitted to the Physician-Focused Payment Model Technical Advisory Committee (PTAC) and Other Highlights from the Care Coordination Environmental Scan

June 10, 2021, Panelist Biographies

June 10, 2021, Panelist Questions

Other Information Related to the Public Meeting

June 10, 2021 Public Meeting Minutes

June 10, 2021, Public Meeting Transcript

APPENDIX 4. SUMMARY OF PTAC COMMENTS ON OPTIMIZING CARE COORDINATION IN THE CONTEXT OF APMS AND PFPMS

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

- Category 1: Optimizing Patient-Centered Care Coordination

- Category 2: Addressing Patient and Caregiver Needs Holistically in Care Coordination

- Category 3: Addressing Provider Needs in Care Coordination

- Category 4: Addressing Health System and Infrastructure Needs to Optimize Care Coordination

- Category 5: Measuring the Quality and Effectiveness of Care Coordination

- Category 6: Addressing Payment Issues: Role of APMs and PFPMs

Category 1: Optimizing Patient-Centered Care Coordination	
1A	Patient-centered care coordination can be a valuable tool for improving outcomes and reducing costs, particularly for high-risk patients with multiple comorbidities. It is important to include all of the care coordination functional domains that are relevant for patient needs in the context and setting in which care is being provided. It is also important to identify and coordinate care for patients with rising risk.
1B	There is a need to broaden the focus of care coordination from managing procedures or visits to managing the patient's journey. It is important to coordinate among all providers and community-based organizations (CBOs) that are involved in the patient's care, and manage key transitions across specialties and contexts.
1C	Care coordinators can reside in many settings. It is unlikely that there will be a one-size-fits-all approach regarding where care coordination should be located.
1D	The individuals who are providing care coordination may vary in different contexts. For example, nurses may be appropriate for complex care management. Community health workers (CHWs) can also be an important resource for providing care coordination, particularly for smaller physician practices.
1E	It is important to ensure that care coordinators have adequate training and a connection with the care team. It is also beneficial for care coordinators to have a longitudinal relationship with the patient and the patient's family.

Category 2: Addressing Patient and Caregiver Needs Holistically in Care Coordination	
2A	Shared decision-making (SDM) is one of the important activities related to patient-centered care coordination. There are many points where potential insights can be provided to assist the patient in navigating their care.
2B	It is important to ensure coordination of patients' physical and behavioral health needs, as well as patients' social determinants of health (SDOH) needs.

Category 3: Addressing Provider Needs in Care Coordination	
3A	Providers need reliable funding to invest in improving care coordination, including well-trained and well-compensated care coordinators and the necessary data infrastructure. Additionally, there is a need to reduce the administrative burden associated with documenting and billing for care management services.
3B	There is a need to more rapidly share information about care coordination best practices, success stories, and findings with the stakeholder and researcher communities. Innovative approaches for service delivery and process improvements can potentially translate to broader system change.
3C	Having a "toolkit" of care coordination models could be a useful resource for different kinds of providers who want to implement patient-centered care coordination, particularly for small or independent practices that have limited resources or infrastructure.

Category 4: Addressing Health System and Infrastructure Needs to Optimize Care Coordination	
4A	It will be important to develop the necessary infrastructure to facilitate data sharing across multiple providers, recognizing that there may be differing needs for larger integrated providers and smaller independent practices.
4B	It will be important to consider issues related to data and data governance, including who has access to data, timeliness of access to data, validity and usability of data, and privacy issues.
4C	There is an opportunity to begin developing a standardized set of interconnected care coordination models based on best practices for coordinating care across disciplines and settings.

Category 5: Measuring the Quality and Effectiveness of Care Coordination	
5A	There is a need to move beyond traditional outcome measures when measuring the value and return on investment of care coordination. Instead of focusing solely on outcomes to avoid (such as emergency department [ED] visits and hospitalizations), there is a need to consider benefits associated with improving patient satisfaction and quality of life.
5B	It may be necessary to develop a combination of process measures and sub-process measures that have an impact on outcomes. The timeliness of data on patient satisfaction and patient-reported outcomes will be important. It may also be necessary to collect data on measures that have not previously been tracked (for example, regarding patient engagement).
5C	There is also an emerging interest in measurements of equity as they relate to care coordination, including aggregating data and outcomes by race, ethnicity, and other factors; and examining the impact of care coordination on equity-related issues (such as housing, food security, and access to care).

Category 6: Addressing Payment Issues: Role of APMs and PFPMs	
6A	APMs can help to disseminate best practices; incentivize the provision of multispeciality and interdisciplinary care coordination throughout the patient's journey; and provide opportunities for testing the effectiveness and scalability of new care delivery models. There is also an opportunity to pursue the development of multi-payer models to align incentives.
6B	It is important to strengthen care coordination within APMs. While many APMs include at least some of the functional domains that are associated with care coordination, it is important to ensure that APMs include all of the functional domains that are relevant for their context.

[1] Agency for Healthcare Research and Quality. Care Coordination. Accessed February 11, 2021, from https://www.ahrq.gov/ncepcr/care/coordination.html

[2] Agency for Healthcare Research and Quality. Care Coordination Measures Atlas Update. Published June 2014. Accessed April 12, 2021. http://www.ahrq.gov/ncepcr/care/coordination/atlas/chapter1.html

[3] Physician-Focused Payment Model Technical Advisory Committee (PTAC). *Environmental Scan on Care Coordination in the Context of Alternative Payment Models (APMs) and Physician-Focused Payment Models (PFPMs)*. Accessed July 14, 2021. https://aspe.hhs.gov/system/files/pdf/261946/Jun-2021-CC-Escan.pdf

[4] National Committee for Quality Assurance. Comprehensive Diabetes Care (CDC). Accessed July 13, 2021. https://www.ncqa.org/hedis/measures/comprehensive-diabetes-care/

[5] The collaboRATE measure is included in the collaboRATE instrument, which was developed by Glyn Elwyn to measure the level of shared decision-making in the clinical encounter from the patient's perspective. http://www.glynelwyn.com/collaborate.html