

Supplement to the Environmental Scan on Care Coordination in the Context of Alternative Payment Models (APMs) and Physician-Focused Payment Models (PFPMs)

September 23, 2021

The Office of the Assistant Secretary for Planning and Evaluation (ASPE) requested the development of an [*“Environmental Scan on Care Coordination in the Context of Alternative Payment Models \(APMs\) and Physician-Focused Payment Models”*](#) to assist the Physician-Focused Payment Model Technical Advisory Committee (PTAC) in preparing for a theme-based discussion on care coordination that took place during the June 10, 2021, PTAC public meeting. This supplementⁱ provides additional information on the role care coordination can play in optimizing health care delivery and value-based transformation in the context of Alternative Payment Models (APMs) and physician-focused payment models (PFPMs) specifically.

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Section I. Introduction

The Physician-Focused Payment Model Technical Advisory Committee (PTAC) conducted a theme-based discussion on topics important to physician-focused payment models (PFPMs), during the June 10, 2021, public meeting, which focused on optimizing care coordination in the context of Alternative Payment Models (APMs) and PFPMs specifically. Prior to the public meeting, the Office of the Assistant Secretary for Planning and Evaluation (ASPE) requested the development of an “[Environmental Scan on Care Coordination in the Context of Alternative Payment Models \(APMs\) and Physician-Focused Payment Models](#)” (which will be referred to in this document as “the original environmental scan”) to provide background information for Committee members. This supplement provides additional context on the role care coordination can play in optimizing health care delivery and value-based transformation under APMs. Exhibit I.1 describes the three sections that are included in the supplement, with their corresponding content and data sources.

Exhibit I.1. Overview of Information Included in the Supplement to the Environmental Scan

Section	Content	Data Source
II. UPDATE ON INNOVATIVE APPROACHES TO CARE COORDINATION	<p>Additional information on topics that were mentioned during the June 10, 2021, theme-based discussion</p> <ol style="list-style-type: none"> 1. Examples of care delivery models with evidence of success for high-need patients 2. Evidence on shared decision-making in care coordination 3. Innovative practices in integrating physical and behavioral health 4. Innovations in Medicaid for incorporating social determinants of health (SDOH) in care coordination 5. Profile of companies in the health care market with innovative care coordination approaches 	Peer-reviewed and grey literature
III. CASE STUDIES: INNOVATIVE APPROACHES TO CARE COORDINATION IN SELECTED PROPOSALS THAT HAVE BEEN SUBMITTED TO PTAC	Case studies summarizing selected proposals that included innovative approaches to care coordination related to current issues in care coordination, as indicated in the findings that were included in the original environmental scan and topics that were discussed during the June 10, 2021, theme-based discussion	PTAC reports to the Secretary
IV. ANNOTATED BIBLIOGRAPHY ON SELECTED LITERATURE RELATED TO ADDITIONAL TOPICS	Key findings from selected literature related to additional topics that were discussed during the June 10, 2021, care coordination theme-based discussion	Peer-reviewed and grey literature

Section II. Update on Innovative Approaches to Care Coordination

During the June 2021 theme-based discussion on care coordination, Committee members and panel discussion participants identified several innovative approaches to care coordination that address issues that were raised in the original environmental scan. Examples included promising evidence on care delivery models with evidence of success for high-need patients, shared decision-making (SDM), programs that integrate behavioral health and primary care, efforts on the part of state Medicaid agencies to incorporate social determinants of health (SDOH) data into care coordination, and the potential of innovative health care startup companies to inform care coordination practices. The remainder of this section provides an update on evidence related to each of these approaches.

II.A. Examples of Care Models with Evidence of Success for High-Need Patients

In its report, *Effective Care for High-Need Patients*, the National Academy of Medicine created an analytical framework for evaluating care models for high-need patients.¹ The report identified several features of successful care models, including teamwork led by a trained care coordinator as the communication hub and leader, coordination across the care team, responsiveness, feedback, medication management, outreach, and follow-up, particularly after hospital stays. The remainder of this section highlights the 14 successful care models that were analyzed in the report which, if properly paired with the appropriate high-need patient group, could generate intended outcomes (see Exhibit II.1).

Care Management Plus serves adults 65 years and older, specifically those with multiple complex chronic conditions combined with social risk and behavioral health factors. The program pairs patients in primary care clinics with specially trained care managers who help develop and implement care plans, regularly follow up with patients to ensure continuity of care, and provide coaching and self-care education to patients and families. The analysis found that the model improves patient well-being among all patients and significantly decreases utilization among diabetic patients.

Commonwealth Care Alliance provides enhanced primary care coordination through multidisciplinary clinical teams led by nurse practitioners to the disabled population in Massachusetts. Care teams conduct comprehensive assessments to help develop individualized care plans that integrate behavioral health care for those who need it. Care teams are accessible 24/7 in the home, in the hospital, and at the doctor's office. Analysis of the model revealed decreased health care utilization among participants.

Complex Care Program at Children's National Health System targets medically complex children with two or more chronic conditions. The intervention provides ongoing care coordination between visits, including among families, primary care providers (PCPs), and specialists, using a multi-faceted team approach that includes nurse case management, parent navigators, and social work. Written care plans created with the family help facilitate communication with PCPs. The program helps families negotiate the health care system and connects them to community resources. Evidence shows that the program helps decrease health care utilization.

GRACE pairs support teams of advanced practice nurses and social workers with low-income seniors with medical complexity. The support team conducts an in-home assessment and develops

individualized care plans, working closely with a larger interdisciplinary care team. Additionally, the program provides specific patient education and self-management tools for low-literacy seniors. The program has reduced health care utilization and health care costs.

Guided Care serves older adults with multiple chronic conditions, using predictive modeling and 12 months of claims data to target the 20 to 25 percent of patients most at risk of needing complex care in the near future. Registered nurses trained in complex care management conduct in-home assessments and develop care plans to help coordinate care with multidisciplinary providers. The model incorporates patient education and self-management strategies that focus on addressing issues before hospitalization becomes necessary, ultimately demonstrating improved patient well-being and decreased health care utilization.

Health Quality Partners targets Medicare beneficiaries with chronic conditions. The program leverages registered nurse care coordinators to change patient behavior. Care coordinators provide evidence-based patient education, including condition-specific self-monitoring training, and focus on frequent in-person contact with patients and physicians. The program showed evidence of reduced health care utilization and spending, decreasing average monthly Medicare Part A and B expenditures by 21 percent.

Health Services for Children with Special Needs focuses on high-need, high-cost pediatric patients. The program provides a care manager to manage appointments, arrange transportation, and connect patients with community resources and organizations. Care managers work with providers and patients to create a care coordination plan, which is updated at least twice a year. No outcomes were available at the time of analysis.

Homeless Patient Aligned Care Team (H-PACT) serves homeless veterans with complex medical and social problems. H-PACT clinics are located at Veterans Affairs medical centers, community-based outpatient clinics, and Community Resource and Referral Centers. Clinics coordinate teams of medical providers, social workers, mental health and substance use counselors, nurses, and homeless program staff who deliver comprehensive, individualized care to veterans, including services that lead to permanent housing. Evidence supports decreased utilization among program participants.

Hospital at Home identifies potentially eligible older patients who are acutely ill and require hospital-level care when they come into the emergency department (ED) or ambulatory care site, and transports them home for care. Patients are provided with one-on-one nursing care in the initial stage, and then receive at least daily visits from nurses and physicians, who are on call for urgent or emergent visits. The program showed evidence of increased patient well-being, decreased utilization, and decreased patient costs.

IMPACT targets older adults with depression and includes collaborative care and a care manager. Each individual's PCP works collaboratively with a consulting psychiatrist and a depression care manager to formulate and implement a treatment plan, including antidepressant medication and/or short-term counseling. The care manager educates the patient about depression and provides coaching on self-care techniques. Providers use ongoing measurement and depression screening tools to adapt care to changing symptoms. When a patient improves, the care manager and patient jointly develop a plan to

prevent relapse. IMPACT patients showed increased well-being, and total health care costs were \$3,300 lower per patient on average than those of patients receiving usual primary care.

MIND at Home is a home-based program that connects elderly patients with dementia and their caregivers to community-based agencies, medical and mental health care providers, and community resources. The interdisciplinary team of trained nonclinical community workers and mental health clinicians provides individualized care planning, implementation, and monitoring for both patients and caregivers based on comprehensive in-home dementia-related needs assessments. The team also provides education, skills training, and self-management support for patients and families. Analysis of the model shows increased patient well-being and decreased health care utilization.

Naylor Transitional Care Model (University of Pennsylvania) provides comprehensive discharge planning for hospitalized, high-risk older adults with chronic conditions. Discharge planning is conducted by multidisciplinary provider teams led by advanced practice nurses. The program also includes a three-month-long, post-discharge follow-up that includes frequent home visits and telephone availability. The program aims to involve patients and family members in identifying patient and family goals and building self-management skills. Research has demonstrated that this program is effective at improving patient quality of life, reducing rehospitalizations, and reducing total cost of care.

Partners HealthCare Integrated Care Management Program targets children and Medicare beneficiaries who are high-cost and/or have complex conditions. The program integrates care managers into primary care practices where they provide patient education and address medical and psychosocial needs with the goal of preventing ED and inpatient visits. Care managers also support end-of-life decision-making. Analysis of the program revealed a decrease in both utilization and cost, with a 20 percent reduction in hospital admissions, 13 percent reduction in ED visits, and 7 percent annual savings after accounting for intervention costs.

Program of All-Inclusive Care for the Elderly (PACE) Program targets adults age 55 and older who are publicly insured, have chronic conditions and functional and/or cognitive impairments, and live in the service area of a local PACE organization. An interdisciplinary team of health professionals provides PACE participants with coordinated care with the goal of enabling patients to continue to live independently in the community. Patients receive all covered Medicare and Medicaid services through the local PACE organization and at a local PACE center, thereby enhancing care coordination. Each PACE site provides comprehensive preventive, primary, acute, and long-term care and social services, including adult day care, meals, and transportation. Clinical staff are employed or contracted by the local PACE organization, which is paid on a per-capita basis and not based on volume of services provided. Analysis of the outcomes of the program shows improved patient well-being, decreased utilization, and decreased health care costs.

Exhibit II.1. Examples of Successful Care Models for High-Need Patients

Program	Children w/Complex Needs	Non-elderly Disabled	Multiple Chronic	Major Complex Chronic	Frail Elderly	Advancing Illness
Care Management Plus				**		**
Commonwealth Care Alliance		**				
Complex Care Program at Children’s National Health System	*					
GRACE				**		
Guided Care				*		
Health Quality Partners			*	*		
Health Services for Children with Special Needs	**					
Hospital at Home						*
H-PACT		**				
IMPACT			**		**	
Partners HealthCare Integrated Care Management Program	*			*		
MIND at home					**	
Naylor Transitional Care Model (Penn)					*	
PACE					**	

* Care models that have evidence of success that have been matched to at least one of six population segments

** Care models that also target social and/or behavioral risk factors faced by high-need patients

II.B. Summary of Evidence on Shared Decision-Making

The Agency for Healthcare Research and Quality (AHRQ) defines SDM as “when a health care provider and a patient work together to make a health care decision that is best for the patient.” AHRQ has indicated that the best health care decisions will incorporate evidence-based information about available care, the provider's expertise, and each patient's principles and priorities.² During the June 2021 theme-based discussion, Committee members and panel discussion participants emphasized the importance of SDM in care coordination and associated SDM with positive health and cost outcomes. SDM processes can help to improve patient and care team communication, align care plans and treatments with patient priorities and preferences, and improve patient engagement and satisfaction. Because of its potential to improve health outcomes, SDM is a required component of programs like the Medicare Shared Savings Program (MSSP).³

There is some evidence supporting the value of SDM in improving process measures and intermediate patient outcomes. A meta-analysis of SDM interventions showed a moderate positive effect of SDM on increased knowledge of treatment options, informed choice, participation in decision-making, and decision self-efficacy; and reduced conflict over decisions for more vulnerable patients (e.g., patients who are more socially disadvantaged due to their socioeconomic status, ethnic minority status, education or literacy, or geographic residence). This was especially true for patients with lower literacy levels.⁴ Studies have also found that decision tools for advanced care planning can increase patient knowledge and

awareness of treatment choices. Some studies indicated an increase in documentation of advanced care planning, clinical decisions, and improved care from the use of decision tools.⁵

Research has also established the importance of caregivers in the SDM process. For instance, a systematic review of SDM in people living with dementia found that the patient and caregiver roles in SDM are often combined, as the assumption is that people living with dementia are unable to make their own decisions.⁶ Caregiver engagement is also integral in SDM for mental health treatment, and SDM itself can facilitate patient-caregiver conversations in treatment for heart failure.^{7,8} Prior research has demonstrated a need for more evaluations of interventions to increase the participation of family members in SDM.⁹

However, overall evidence of the effectiveness of SDM is mixed. A systematic review of SDM and patient outcomes found that only 43 percent of studies demonstrated a significant and positive relationship. Fifty-two percent of the patient outcomes assessed with patient-reported measures were significant and positive versus 21 percent of the outcomes with observer-rated measures and 0 percent of the outcomes with clinician-reported measures. Overall, SDM was most strongly associated with improved affective-cognitive outcomes for patients, including understanding, satisfaction, and trust (54 percent). Only 37 percent of studies with behavioral outcomes (e.g., adherence to treatment and adoption of positive health behaviors) and 25 percent of studies with patient health outcomes (e.g., quality of life, self-assessed health, and physiological measures) were positively associated with SDM.¹⁰

Researchers have found several barriers and facilitators to incorporating SDM. A 2019 study examined different health care staffs' processes and perceived challenges to providing SDM in three different medical centers with established screening programs for lung cancer. Challenges identified by clinicians included the amount of time needed to meet SDM requirements and the complexity of the requirements; a perception that patients do not want, need, or understand extensive information on risks and benefits of various treatments; patients' preference for clinician recommendations; and lack of formal training on SDM. Perceived challenges identified by care coordinators included patients' acceptance of clinician decisions; the formality associated with having an SDM conversation with a patient; an absence of an established relationship with the patient; and patients' requests for screening. The study concluded that designating a staff member as the primary SDM entity may resolve common challenges to effective SDM.¹¹ A 2019 review of care coordination functions noted that registered nurses might be best positioned for this SDM role, as they serve as advocates for the patient and their caregivers/families on the care team, and already have an established relationship with the patient.¹² Other barriers identified in a systematic literature review of SDM in oncology include uncertainty in treatment decision, adverse effects of treatment, and lack of physician communication.¹³ In older patients with chronic conditions, barriers to effective SDM include poor health and cognitive/physical impairments, lack of physician communication and interpretation skills, and organizational factors (e.g., high turnover rates, lack of quality electronic patient record results).¹⁴

There are various approaches to SDM and mixed evidence related to supporting the effectiveness of particular approaches. A systematic review of 40 SDM models found that the action of describing treatment options was the most common SDM component identified, followed by making the decision with the patient, incorporating patient preferences, tailoring information for the patient, deliberating on and negotiating care options, creating choice awareness, and learning more about the patient.¹⁵ AHRQ

recently introduced a tool called the Seek, Help, Assess, Reach, Evaluate (SHARE) Approach, which demonstrates a five-step SDM process, including a comparison of advantages, risks, and disadvantages of each care option using thoughtful conversation with the patient about their goals, preferences, priorities, and needs. This ensures that SDM is incorporated consistently regardless of the staff's role in the practice. Steps include engaging the patient, helping them explore and compare their treatment options, assessing the patient's values and preferences, creating a decision with the patient, and evaluating the patient's decision. A 2020 editorial responding to SDM in atrial fibrillation identified four fundamental goals for SDM and care coordination to be successful: patient engagement in the care planning process with the goal of self-management and participation in care planning and treatment decisions; use of a multidisciplinary care team with structured education for patients; use of technology for integrated care; and a comprehensive approach to care.¹⁶

II.C. Innovative Approaches and Best Practices in Integrating Physical and Behavioral Health

During the theme-based discussion, panel discussion participants and Committee members emphasized the importance of coordinating physical and behavioral health services. The following section highlights examples of innovative approaches and best practices for addressing behavioral and psychosocial health care needs, as well as the physical health care needs of patients.

Integration of Primary Care and Behavioral Health. Several organizations have recognized the value of coordinating care for physical and behavioral health conditions, and have worked to integrate primary care and behavioral health services through cross-specialty collaboration. For example, a rural hospital network leverages its Mental Health Integration (MHI) program, which addresses both physical and mental health needs in a single care team that is led by each patient's PCP, and is made available to the general patient population.¹⁷ Other members of the care team may include a mental health provider (e.g., psychologist or social worker), and a care manager or health advocate. In 2017, the organization received the 2017 Hearst Health Prize for the MHI program, recognizing the integration of mental health screening and treatment within the primary care system. The organization also includes an in-hospital psychiatric unit called the Behavioral Health Unit (BHU), and runs an ongoing health and wellness initiative focused on whole-person wellness, including behavioral well-being.¹⁸

Similarly, a large private, nonprofit health care system offers integrated psychiatric care clinics within specialty practices, including obstetrics and gynecology, and geriatric medicine.¹⁹ These clinics enable access to specialized psychiatric care in an office where the patient is already established and familiar with their care team. The health system's outpatient clinics provide comprehensive assessments, consultations, medication management, and psychotherapy. The system also utilizes the Collaborative Care Model, which was first established as a model at the University of Washington, to treat mental health conditions that require consistent follow-up (e.g., depression or anxiety). The program is based on principles of effective chronic illness care, and tracks defined patient populations in a registry. Primary care and behavioral health providers deliver medications and targeted psychosocial treatments, along with regular psychiatric case management and treatment. A meta-analysis of the Collaborative Care Model assessed 79 randomized controlled trials that compared collaborative care with routine care or alternative treatments. The analysis found that the model improves health outcomes for patients with depression or anxiety for up to two years, increases medication adherence and mental health-related

quality of life, and demonstrates greater patient satisfaction with care among those patients with depression or anxiety.²⁰

Launched in January 2017, the Center for Medicare and Medicaid Innovation's (CMMI's) Comprehensive Primary Care Plus (CPC+) model is one of the most expansive primary care payment and delivery reform efforts to be tested in the U.S., with over 3,000 participating practices in 18 regions across the country. In the third performance year of the CPC+ model, the Centers for Medicare & Medicaid Services (CMS) requested that practices follow an evidence-based approach to provide integrated behavioral health care.²¹ CMS suggested two optional evidence-based models for CPC+ practices to adopt: Primary Care Behaviorist and Care Management for Mental Illness. In the Primary Care Behaviorist model, an on-site behavioral health specialist (e.g., social worker or psychiatric nurse practitioner) provides therapy for a limited time for patients with behavioral health needs. In the Care Management for Mental Illness model, a care manager with behavioral health training assists in coordinating care for patients with behavioral health needs. Ninety-nine percent of CPC+ practices reported that they integrated a behavioral health care strategy in all three performance years, with 55 percent reporting that they integrated a Primary Care Behaviorist model and 39 percent reporting that they integrated a Care Management for Mental Illness model in performance year three.²²

CPC+ also recommended the following steps for participating practices to support behavioral health integration: establish a plan for identifying patients with behavioral health needs; develop workflows and processes; identify and/or hire appropriate personnel; train staff; and implement measures to monitor and adapt care management for patients with mental health disorders. Over half of CPC+ practices reported that they implemented four or five recommended steps in performance year three, with over 75 percent reporting establishing a plan to identify patients with behavioral health needs, developing workflows for behavioral health integration, and training staff to address these needs. In performance year three, a higher percentage of CPC+ providers provided in-practice behavioral counseling services relative to providers in comparison practices. Those same CPC+ providers were also less likely to report that their capacity to provide quality care was limited "a great deal" due to a shortage of behavioral health specialists for consultations and referrals than their peers. Finally, results suggested that large and system-owned providers were better positioned to hire and retain behavioral health specialists than small or independent practices. Substantially more large practices and system-owned practices reported a co-located behavioral health specialist (71 percent and 56 percent, respectively), compared to small practices and independent practices (28 percent and 40 percent, respectively).²³

Although there are several promising models for integrating primary and behavioral health, there are challenges to implementing these models more widely. There is a shortage of behavioral health professionals throughout the U.S., particularly in rural areas.²⁴ Despite the need to increase the behavioral health workforce, Medicare reimburses only certain clinicians for providing behavioral health services.²⁵ Several organizations have advocated for expanding coverage to licensed professional counselors (LPCs), mental health counselors (MHCs), and marriage and family therapists (MFTs), noting that these providers can help improve access to behavioral health care for Medicare beneficiaries.^{26,27}

Data Analytics. The use of data analytics has been another important strategy for facilitating efforts to address patients' health needs. A rural hospital network operates a large and detailed repository of clinical and financial data spanning more than 40 years. The network cites analytics as a "process rather

than project.”²⁸ In this vein, the same health system has established a dedicated center for informatics research, devoting resources to advanced information systems that can automate routine functions (e.g., the clinical data interface automatically uploads data from medical devices and inputs them into clinical records), provide electronic communication to caregivers, support clinical decision-making, and facilitate statistical analyses to guide improvements in medical outcomes and the delivery of evidence-based care (e.g., a clinical-support system with protocols that can easily be updated with the latest best practices).²⁹
,³⁰

Similarly, a large private health system has used an analytics vendor to incorporate computerized algorithms to help clinicians make more informed clinical decisions and help predict or prevent diseases.³¹ The same organization is looking into incorporating more novel data (e.g., environmental data, weather data, and consumer purchasing data) into predictive modeling for preventive care. For example, certain purchasing behaviors or environmental events could indicate an increased likelihood of an ED visit, and providers could then be prompted to reach out to these patients. These data can help identify patterns and develop a predictive model to help target preventive care and identify opportunities for earlier intervention.³² Another behavioral health care provider collects survey data from patients and uses this information to recognize changes in patterns (e.g., reports of new symptoms or life events that could trigger behavioral health episodes) to identify opportunities for prospective intervention. Prospective interventions include reminders of the strategies for managing behavioral health episodes that patients have identified with their provider during prior therapy sessions.^{33 34}

Another company developed an algorithm and COVID-19 vulnerability risk score that identifies patients who are high-risk, and assists providers with addressing key principles of health for these patients, including assessing and addressing social and behavioral health needs (e.g., access to food, housing security, safety at home, depression, anxiety, and substance use).^{35 36 37} This vendor also offers population health software-as-a-service analytic support to specifically integrate population-level data across electronic health records (EHRs), hospital event notifications, updates on lab results and pharmacy notifications, and insights into practice-generated and payer claims into a single dashboard for ease of use.³⁸

Telehealth/Telepsychiatry. Many startup companies are emerging in the behavioral health remote care space. Some offer comprehensive telehealth and/or telepsychiatry services across dedicated centers for individual online talk therapy, psychiatric services to assist with clinical evaluation and medication management, couples therapy, and specialized teen therapy for young people aged 13-17.^{39 40}

There is a wide array of communication options offered within these new behavioral health care applications. Services include anytime messaging with a provider, informal chat sessions, video or telephonic consults, and self-scheduled live sessions with a provider from a mobile phone or computer.⁴¹ One company includes a dedicated “provider switch” function within its application, allowing patients who are unsatisfied with their care to easily switch providers without needing to talk to a live representative.⁴²

A private health system offers psychiatric telehealth services for adults as part of its Collaborative Care Model, which incorporates a multidisciplinary team including a PCP/resident, behavioral health care manager, and psychiatric consultant. The health system also offers lectures on mental health issues,

emotional aspects of illness, and motivational interviewing for residents as part of their postgraduate training.^{43 44}

Artificial Intelligence. Some behavioral health providers and organizations, including startup companies, are applying artificial intelligence (AI) to help detect when patients are at risk for developing a serious behavioral health issue, such as chemical dependency or self-harm.⁴⁵ AI applies machine learning using data from medical records and patient questionnaires to identify when patients are vulnerable and in need of intervention. For instance, AI can provide alerts to providers when patients are overusing prescription opioids or reporting symptoms that suggest exacerbation of depression.⁴⁶ Patients can be connected with chatbots to help them navigate their symptoms or connect directly with their provider, depending on their level of need.⁴⁷

One unique application uses an AI chatbot to provide patients with a conversational agent (a kind of specialized virtual assistant) to talk to at any time of day without any delay. The application pairs cognitive behavioral therapy techniques with AI to develop a new method of psychotherapy that may focus on converting cognitive distortions or behaviors into manageable facts that are easier to address. The AI platform analyzes patient texts via machine learning to create a virtual therapeutic relationship, which can shift the conversation to a human provider when needed. The machine learning algorithm can help identify suicidal ideation or other crisis language alerting providers of the need for emergency crisis intervention from a licensed professional.⁴⁸

Medication-Assisted Treatment and Mental/Behavioral Health. Primary care-based interventions to provide medication-assisted treatment (MAT) have been associated with similar efficacy to MAT in substance use disorder (SUD) facilities, particularly models with interdisciplinary care or care coordinated by physician and non-physician providers.⁴⁹ The Substance Abuse and Mental Health Services Administration (SAMHSA) has worked to expand access to MAT in response to the opioid crisis. Between 2016 and 2019, the Health Resources and Services Administration (HRSA) initiated investments of \$545 million in ongoing annual funding to increase and enhance SUD prevention and treatment services (including MAT), and mental health services in health centers.⁵⁰ The SUPPORT Act of 2018 expanded the range of providers that could offer MAT in an office setting, including primary care practices, which may expand the delivery of MAT in primary care settings.⁵¹

II.D. Innovations in Medicaid for Incorporating Social Determinants of Health (SDOH) in Care Coordination

The original environmental scan indicated that Medicaid has long employed alternatives to traditional fee-for-service (FFS) payment structures to reimburse providers for care coordination – with all but four state Medicaid programs having transitioned toward capitated payments through comprehensive risk-based managed care organizations (MCOs) and/or primary care case management (PCCM) as of 2019. As awareness of the importance of SDOH in health outcomes has increased, state Medicaid programs are implementing innovative approaches related to collecting data on and addressing SDOH. California and North Carolina have been particularly proactive in incorporating SDOH into care coordination models.

California. The California Department of Health Care Services (DHCS), the state agency responsible for the management and delivery of the California Medicaid program (Medi-Cal), has identified the need to address SDOH using care coordination. In 2018, DHCS introduced California Advancing and Innovating

Medi-Cal (CalAIM), a multi-year initiative with the goal of improving the quality of life and health outcomes of Medi-Cal beneficiaries via comprehensive delivery system, program, and payment reforms. CalAIM provides a framework to implement non-medical interventions focused on a whole-person care approach that targets SDOH as part of the initiative's broader effort to improve care coordination for Medi-Cal beneficiaries. Although the CalAIM program was initially scheduled to commence in January 2021, the start date was postponed to allow DHCS and its partners to allocate resources toward the COVID-19 public health emergency (PHE).⁵² As of February 2021, DHCS proposed a new start date of January 1, 2022.⁵³

Key elements of CalAIM are drawn from various successful pilot programs from the CMS Section 1115 demonstration. Success within these programs was attributed to increased user engagement, cost savings, and positive participant experiences with and perceptions of the program, among other indicators.⁵⁴ Examples of successful Medi-Cal pilot programs with SDOH-related components include:

- **The Health Homes Program (HHP)** serves Medi-Cal beneficiaries with complex medical needs and chronic conditions. HHP coordinates care for physical health needs, care for behavioral health needs, and community-based services targeting social support needs. In an effort to address social needs, HHP offers special assistance to individuals experiencing or at risk of homelessness.⁵⁵
- **Whole Person Care (WPC) Pilots** coordinate care for physical health, behavioral health, and social services needs for particularly vulnerable Medi-Cal beneficiaries. In addition to targeting low-income, high-risk beneficiaries, many of the WPC Pilots provide housing assistance services and prioritize mentally ill individuals who might require additional social supports.⁵⁶
- **Coordinated Care Initiative (CCI)** serves low-income seniors and individuals with disabilities through the enhanced integration of medical, behavioral, long-term, and home- and community-based services.⁵⁷
- **CalViva Health** delivers community health worker (CHW) home visits to help beneficiaries connect to health and social services. The program prioritizes vulnerable populations, including individuals with behavioral health and/or substance use issues. CalViva CHWs also provide housing, clothing, food, transportation, and language services assistance.⁵⁸

North Carolina. In 2018, CMS approved North Carolina's 1115 waiver for a five-year demonstration to conduct the Healthy Opportunities Pilots program, which is scheduled to begin in spring 2022.⁵⁹ The pilots, which will operate within the North Carolina Medicaid Managed Care program, will establish a comprehensive approach to integrate and test evidence-based non-medical services (e.g., activities to address housing stability, transportation access, and food security) with the aim of improving health outcomes and health care costs for high-risk patients. While some practices have begun to incorporate SDOH-related practices such as patient screenings for SDOH indicators, the Healthy Opportunities Pilots program will create a standardized, statewide approach to addressing social and environmental factors. During its initial rollout, the program will prioritize issues surrounding housing stability, access to transportation, food security, and interpersonal safety. Some of the strategies that the Healthy Opportunities Pilots plan to employ include a statewide map of SDOH indicators to inform resource allocation, SDOH patient screenings, an electronic coordinated care network, and a CHW initiative.⁶⁰ If the pilots are successful, the North Carolina Department of Health and Human Services intends to integrate pilot services statewide for all Medicaid Managed Care beneficiaries.⁶¹

Oregon. The Oregon Health Authority (OHA), the body responsible for overseeing the state’s Medicaid program (the Oregon Health Plan [OHP]), has identified health equity as one of its core values.⁶² In order to promote more equitable health outcomes, the OHA is working to address not only clinical conditions, but also social conditions and historical injustices that can prevent individuals from achieving their full health potential.

Coordinated Care Organizations (CCOs) were first introduced in 2012 through an 1115 Medicaid demonstration waiver. CCOs serve the state’s Medicaid population and help implement the OHA’s health equity and SDOH agenda.⁶³ A new five-year demonstration implemented in 2017 and scheduled to continue through 2022 has expanded the flexibility of these CCOs to offer health-related services that were not previously covered under the state’s Medicaid program. To that end, the 2017-2022 demonstration allocates specific funding for CCOs to use to address SDOH and equity. Efforts by CCOs to promote health equity and to meet the health-related social needs (HRSNs) of their members span a range of domains and have included actions such as installing community walking trails and playgrounds or providing job training and transportation services.

Health Share of Oregon, the CCO serving Medicaid beneficiaries in the Portland tri-county area, was recently selected to implement the Regional Supportive Housing Impact Fund (RSHIF).⁶⁴ The RSHIF, which establishes a “flexible funding pool” for meeting housing-related social needs, is a key component of the supportive housing strategic framework created in 2019 by the Corporation for Supportive Housing, an organization working to advance social solutions through housing accessibility. The framework lays out a strategy for the pooled funds to be used to assist those who experience homelessness, have complex health challenges (e.g., behavioral health-related issues), and/or are transitioning out of institutional or acute care settings. Additionally, the framework explicitly highlights the importance of delivering services that will result in equitable outcomes regardless of an individual’s race, ethnicity, or any other factor associated with their identity.

Oklahoma. In recent years, Oklahoma has pursued various population health initiatives, including some that address SDOH. Two initiatives of specific relevance to the state’s Medicaid population are the Oklahoma State Health System Innovation Plan and the Accountable Health Communities (AHC) model, a CMMI model which includes 27 other awardees across the U.S.

The Oklahoma State Health System Innovation Plan grew from a partnership between the State of Oklahoma and CMS as part of CMS’ State Innovation Models (SIM) initiative to advance state-level health care payment and delivery system reform models.⁶⁵ The Oklahoma Innovation Plan, active from 2016 to 2020, identified addressing SDOH as fundamental to improving statewide population health outcomes, especially with respect to Medicaid patients with HRSNs. Efforts to address SDOH included development of an integrated database comprised of clinical, claims, and SDOH data. Other efforts sought to address social determinants through a more effective alignment of education and state job needs.⁶⁶

As part of AHC’s effort to better understand how non-clinical factors influence patient outcomes, the program will focus on a wide range of core areas: housing instability and quality, food insecurity, utility needs, interpersonal violence, and transportation needs beyond medical transportation. AHC aims to target these needs through a series of activities, which include HRSNs screenings, referrals to and assistance connecting with community services, and aligning community partners to optimize their capacity to meet patient HRSNs. To help advance these efforts, MyHealth has introduced mobile screening technology that sends patients a text message with a link to a screening that will identify their

HRSNs and then provide patients a list of resources tailored to addressing their specific HRSNs. According to MyHealth, this process does not increase the workload for health care facilities.

II.E. Innovative Care Coordination Approaches in the Health Care Market

During the care coordination theme-based discussion in June 2021, PTAC noted that some newer companies are entering the health care marketplace and creating disruption in the delivery system relating to how patients get access to care. Committee members discussed the ability of innovative organizations to connect directly with patients and families and coordinate care, and suggested that there may be lessons learned from these companies for other parts of the health care delivery system, including potential downstream effects on Medicare and Medicaid. One Committee member indicated that some potentially valuable ideas emerging from these companies include the importance of screening for SDOH in the same manner as comprehensive physical assessments, and the need to address systematic failures that contribute to high ED utilization. PTAC discussed the importance of monitoring emerging trends among innovative health care organizations and assessing their potential impact.

Prior to and during the COVID-19 PHE, certain health care organizations have employed non-traditional approaches to coordinating care for vulnerable high-risk older patients. These organizations have demonstrated that focusing on a strong primary care system can help to mitigate negative outcomes for high-risk patients and help to prevent future health crises (e.g., leveraging tools like telehealth to reduce additional strain on health systems so that providers can more effectively address and contain emergencies like the COVID-19 PHE). Companies in the commercial marketplace have engaged in standard care coordination functions that are similar to those included in PFPs proposed to PTAC and CMMI models. However, many organizations are exploring innovative approaches, improving upon best practices identified in some proposed PFPs that have been submitted to PTAC and CMMI models, and/or embracing the ideas and concepts that were discussed during the public meeting. The following is an overview of some common approaches that these companies are taking to improve care coordination.

Payment and Staffing Models. Many private companies are creating value-based managed care arrangements that align patient, provider, and payer incentives. One such innovation designed by a private company is a capitated payment structure that allows for remote consultations (via technologies such as phone, email, and Skype) and care coordination that would not typically be billable under an FFS model.⁶⁷ Capitated payments also allow organizations the freedom to experiment with new models. For example, to promote future innovations, one organization encourages care teams to implement local and community-level initiatives which are then extended to the rest of the organization if proven to be successful.⁶⁸ For some companies, the use of a capitated payment structure allowed for an easier transition to virtual care during the COVID-19 PHE because organizations were not dependent on in-person visits for revenue.^{69, 70}

Innovative staffing models also allow some companies to transition away from FFS, enabling greater focus on care coordination. One company adopted a model that allows physicians to maintain operational independence, but requires them to assume increasing levels of financial risk as they transition to value-based care.⁷¹ During the COVID-19 PHE, this organization developed digital telehealth toolkits for providers, which provided independent providers with the support necessary to implement telehealth and bill Medicare-reimbursed services that are intended to keep vulnerable patients at home.

Care Delivery. Similar to many Medicare APMs (e.g., CPC+ and the Next Generation Accountable Care Organization model),⁷² private companies are creating innovative approaches to coordinating patient care. For example, one organization has instituted team-based primary care and care coordination led by individual health coaches.⁷³ These coaches may be social workers or laypersons who provide care coordination, explain diagnoses and other medical information, assist with medical paperwork, and/or provide health education (e.g., fitness or nutrition classes). Individually assigned health coaches are responsible for maintaining communication with patients and working closely with PCPs to manage all aspects of patient care, including addressing social determinants of health. These organizations and others are providing 24/7 access to an on-call physician, same- or next-day appointments for urgent needs, coordinated care with specialists, access to a collaborative care platform, and free on-site health education classes.^{74 75 76}

Technological Innovation. Several organizations are leveraging new technologies to support their care coordination initiatives. Many have developed custom EHR platforms that incorporate functionalities such as tracking patient data; connecting providers across care teams, including doctors, health coaches, and patients; and facilitating coordination between providers.^{77 78 79} During the COVID-19 PHE, many companies were also able to rapidly adapt their technological innovations to address the needs of their patients during the pandemic, including offering remote monitoring and evidence-based supportive care. For example, one company was able to offer home-based health care for higher-risk patients during the pandemic by using remote monitoring to complement virtual care visits—delivering tools like blood-pressure cuffs, oxygen and pulse oximeters for home use, and providing home visits by nurse practitioners.⁸⁰ Additionally, in some cases, providers at these organizations were already offering visits and consultations using multiple modalities, including audio and audio-visual visits.

Predictive Analytics. Innovative organizations are developing new approaches for applying data-driven solutions to support effective and efficient care coordination. Innovators are using process and outcomes data to evaluate the quality of primary care and provider performance by coordinating and adjusting care plans for their most resource-intensive patients, applying risk stratification, and appropriately targeting investments. For example, one company identifies high-risk older patients enrolled in Medicare Advantage (MA) plans who may benefit from enhanced coordination through periodic risk assessments, predictive algorithms, and physician referral.⁸¹ Similarly, during the COVID-19 PHE, one company leveraged its predictive analytics capabilities to create a registry of all cases and used standardized acuity levels to calculate a COVID-19 morbidity and mortality score to determine a patient’s risk of contracting COVID-19.⁸² This registry allowed for prioritization of appropriate interventions and outreach for patients (e.g., daily nursing phone calls, ED referrals, food delivery, home-based social work services, and house calls).

Cross-Sector Coordination and SDOH. Some private companies are also creating new approaches for coordinating a range of services across sectors to address HRSNs, such as community outreach and community-based care delivery.^{83 84} Many of these organizations have been partnering with community-based organizations and local social service providers to see that their members are receiving adequate services, including housing, employment, food assistance, behavioral health, and utilities support.⁸⁵ For example, one organization established a partnership with the ride-sharing company Lyft to improve transportation.⁸⁶

Section III. Case Studies: Innovative Approaches to Care Coordination in Selected Proposals That Have Been Submitted to PTAC

Between 2016 and 2020, PTAC found that 16 proposals “Meet” the Secretary’s “Integration and Care Coordination” Criterion (including one proposal whose rating was “Meets and Deserves Priority Consideration” for this criterion). The *Environmental Scan on Care Coordination in the Context of APMs and PFPMs*ⁱⁱ included a high-level summary of the overall characteristics of these proposed models, as well as the characteristics of their care coordination components. This section of the *Supplement to the Environmental Scan on Care Coordination in the Context of APMs and PFPMs* provides case studies of eight of these proposed models that included innovative approaches related to current issues in care coordination, based on the findings that were included in the original environmental scan and the topics that were discussed during the June 10, 2021, public meeting.

The original environmental scan highlighted evidence linking specific care coordination approaches with positive health, utilization, and cost outcomes. Models that manage transitions in care have demonstrated reduced hospital readmissions and lower costs.⁸⁷ Additionally, stakeholders who participated in the panel discussions at the June 2021 public meeting echoed the importance of ensuring smooth transitions between the hospital and primary care, citing the Naylor Transitional Care Model.⁸⁸ Another effective approach to care coordination involves targeting high-risk patients, which is associated with reduced ED visits and lower costs.⁸⁹ During the public meeting, panel discussion participants emphasized the need to focus on high-risk patients and noted that social risks should also be taken into consideration when designing care coordination models. Finally, models that actively engage PCPs have been associated with reductions in avoidable ED visits.⁹⁰ There was consensus among the panel discussion participants that primary care practices can be important settings for care coordination. Additionally, Committee members indicated that all types of APMs, including specialty models, should at minimum include a component for coordinating with the PCP.

This section highlights several proposed models that addressed at least one of these approaches with a strong evidence base, as well as proposed models that included a focus on patient-centered care or equity, which were identified as a key priority during the June 2021 theme-based discussion.

ⁱⁱ The Environmental Scan on Care Coordination in the Context of Alternative Payment Models (APMs) and Physician-Focused Payment Models (PFPMs) is available here: <https://aspe.hhs.gov/sites/default/files/private/pdf/261946/Jun-2021-CC-Escan.pdf>

Exhibit III.1. American Academy of Family Physicians: Advanced Primary Care: A Foundational Alternative Payment Model (APC-APM) for Delivering Patient-Centered, Longitudinal, and Coordinated Care⁹¹

Care Coordination Context: Population-Specific	
Overview of Proposed Model	The proposed model aims to improve clinical quality, improve patient outcomes, and reduce overall health care spending by increasing the accessibility of an APM to primary care practices, increasing the total amount of payment for primary care, and changing incentives for primary care practices. Family medicine, general practice, geriatric medicine, pediatric medicine, or internal medicine physicians would be eligible to participate, with the primary care practice likely serving as the APM Entity. APM Entities would receive payments in four parts: 1) a risk-adjusted payment per beneficiary per month (PBPM) for evaluation and management (E&M) services delivered by the primary care practice; 2) a risk-adjusted PBPM payment for care management services delivered by the practice; 3) prospectively-awarded incentive payments that may have to be repaid based on practice performance; and 4) continued payment under the Medicare Physician Fee Schedule for services outside of E&M.
How Care Coordination was Incorporated in the Proposed Model	<ul style="list-style-type: none"> • Potential APM Entities must attest to how they address or plan to address five key areas, one of which is “comprehensiveness and care coordination.” • APM Entities must adopt the Joint Principles of the Patient-Centered Medical Home.
PTAC Comments on Strengths in Proposed Model for Criterion 7 “Integration and Care Coordination”	<ul style="list-style-type: none"> • Participating practices are expected to implement the five functions that guide CPC+ care delivery transformation and adopt the Joint Principles of the Patient-Centered Medical Home, both of which include integration and care coordination.
PTAC Comments on Gaps in the Proposed Model for Criterion 7 “Integration and Care Coordination”	<ul style="list-style-type: none"> • PTAC noted the proposed model does not include any requirements or measures for care coordination for individual patients. • PTAC indicated that details on how a participating primary care practice will coordinate with specialists (which may vary regionally) are lacking. PTAC indicated that the submitter should propose a mechanism for assuring such coordination.
Key Aspects of the Proposed Model Relevant to Current Issues in Care Coordination	<ul style="list-style-type: none"> • The proposed model recognizes primary care practices as the entity coordinating care and provides both enabling resources and financial incentives for care coordination, which were identified by subject matter experts and PTAC as a priority during the June 2021 public meeting.⁹²

Exhibit III.2. American Academy of Hospice and Palliative Medicine (AAPHM): Patient and Caregiver Support for Serious Illness (PACSSI)⁹³

Care Coordination Context: Population-Specific	
Overview of Proposed Model	AAHPM’s proposed <i>PACSSI</i> model contains five core components: 1) targeting palliative care services to individuals with serious health conditions and distinguishing hospice from palliative care; 2) delivering palliative care through multidisciplinary palliative care teams (PCTs) that include a physician; 3) providing PBPM care management payments; 4) allowing the PCT to receive palliative care payments; and 5) providing financial incentives to reward the delivery of high-quality care. The proposed <i>PACSSI</i> model also includes patient and caregiver education, distress and safety assessments, establishing goals of care plans with input from all providers, and home visits.
How Care Coordination was Incorporated in the Proposed Model	<ul style="list-style-type: none"> • The proposed model supports PCTs and requires participating practices to complete care coordination processes, which include developing a care plan and establishing accountability or negotiating responsibilities, leading to effective communication. • The proposed model adjusts the composition of the care team to meet the needs of the patient community and provide any necessary services.
PTAC Comments on Strengths in Proposed Model for Criterion 7 “Integration and Care Coordination”	<ul style="list-style-type: none"> • PTAC noted that the provision of care management and use of interdisciplinary PCTs encourages greater integration and care coordination. Through developing a care plan, arranging services, and communicating with all physicians on an ongoing basis, care coordination is likely to increase.
PTAC Comments on Gaps in the Proposed Model for Criterion 7 “Integration and Care Coordination”	<ul style="list-style-type: none"> • PTAC noted that there is a lack of strong care coordination measures in the quality measure set. The measures include patient-reported outcomes on aspects of their palliative care, PCT completion of care processes, and utilization of hospice and intensive care unit (ICU) services at the end of life.
Key Aspects of the Proposed Model Relevant to Current Issues in Care Coordination	<ul style="list-style-type: none"> • The proposed model focuses on seriously ill patients; evidence indicates that these patients especially benefit from patient-centered care coordination interventions (e.g., reducing avoidable hospitalizations).⁹⁴ While PTAC expressed concerns that the proposed model’s quality measures did not fully capture strong care coordination measures, the patient-reported outcomes are informative and match the priorities identified by subject matter experts during the June 2021 public meeting.

Exhibit III.3. American College of Emergency Physicians: Acute Unscheduled Care Model: Enhancing Appropriate Admissions⁹⁵

Care Coordination Context: Acute Care	
Overview of Proposed Model	The proposed model places financial and quality-of-care risk on emergency physicians based on their discharge disposition decisions from the ED in order to engage them in value-based care and reduce readmissions. The proposed model identifies patients at risk for post-discharge events and readmissions, and rewards clinicians for coordinating and managing patient care post-discharge. Shared savings are generated when expenditures are below a targeted price for a Medicare beneficiary within a 30-day episode.
How Care Coordination was Incorporated in the Proposed Model	<ul style="list-style-type: none"> • The proposed model establishes accountability and negotiated responsibility among care providers by using care coordinators to facilitate discharge and enabling smooth handoffs between ED physicians and PCPs. At the time of ED discharge, the ED physician must communicate with a follow-up care provider. An ED-based care coordinator will facilitate this handoff. • The proposed model also incorporates monitoring and follow-up with patients through emergency physicians to arrange for post-discharge home visits, enabling the use of telehealth, and incorporating payment for a post-discharge follow-up or an ED visit for certain conditions if follow-up is not available within 48 hours. Patients participate in discharge decisions in the proposed model, promoting SDM. • The proposed model includes quality measures for care coordination (percentage of eligible cases in which a shared discharge assessment was completed and reviewed by physician is reported – minimum threshold 40 percent). • The proposed model includes several Medicare program policy waivers that: 1) authorize ED physicians to bill for transitional care management (TCM) codes; 2) allow ED physicians to provide telehealth services; and 3) allow licensed clinical staff to provide home visits under the general supervision of an ED physician to eligible Medicare beneficiaries.
PTAC Comments on Strengths in Proposed Model for Criterion 7 “Integration and Care Coordination”	<ul style="list-style-type: none"> • PTAC concluded that the proposed model incentivizes greater communication and coordination between the ED and all physicians who are following up with the patient. • The proposed model strengthens the handoff from the ED physician to the PCP. • The proposed model’s feedback loop of patient information 30 days post-discharge allows for referrals to appropriate care settings and time to develop a care plan.
PTAC Comments on Gaps in the Proposed Model for Criterion 7 “Integration and Care Coordination”	<ul style="list-style-type: none"> • PTAC noted that the distinction between observation stays in the ED versus other hospital locations could increase hospital barriers to coordination. However, the submitters have removed that distinction.
Key Aspects of the Proposed Model Relevant to Current Issues in Care Coordination	<ul style="list-style-type: none"> • The proposed model addresses transitions in care, which was a feature of effective patient-centered care coordination models in the original care coordination environmental scan and a priority identified by PTAC during the June 2021 public meeting.^{96,97}

Exhibit III.4. American Society of Clinical Oncology: Patient-Centered Oncology Payment Model (PCOP)⁹⁸

Care Coordination Context: Population-Specific	
Overview of Proposed Model	The proposed <i>PCOP</i> model seeks to transform cancer care delivery and reimbursement while ensuring that all individuals with cancer have access to high-quality, high-value cancer care using concepts of an oncology medical home. <i>PCOP</i> includes the creation of PCOP Communities, in which multiple providers, payers, and other stakeholders within a geographic region agree upon a set of quality metrics and clinical pathways to assess the performance of participating practices, as well as the value of care delivery and performance payments. The proposed model’s payment methodology includes a monthly care management payment (CMP) to support additional services, performance-based payment adjustments, and the option for “Track 2” practices to bundle reimbursements for certain services with two-sided risk.
How Care Coordination was Incorporated in the Proposed Model	<ul style="list-style-type: none"> • The proposed model features team-based care led by a hematologist/oncologist, and requires participating practices to meet 22 “PCOP care delivery requirements,” including a domain for Comprehensive Team-Based Care. This domain includes the requirement that a medical oncologist direct the patient’s care team within the practice, direct care coordination with other pertinent physicians and services, and manage or co-manage inpatient care. • Practices would also be required to prioritize team-based care with policies and practices that clearly delineate roles and responsibilities; implement and prioritize team huddles for communicating and promoting patient safety; and regularly assess how the practice team is functioning. • Track 2 practices would be subject to some additional care delivery requirements, including patient and family advisory councils, triage and urgent care, patient navigation, risk stratification, and advanced care planning.
PTAC Comments on Strengths in Proposed Model for Criterion 7 “Integration and Care Coordination”	<ul style="list-style-type: none"> • PTAC noted that the proposed <i>PCOP</i> model promotes greater integration and care coordination for hematology/oncology through its care delivery requirement for comprehensive team-based care and other participating practice care delivery requirements. • PTAC also noted that the proposed model would encourage the use of common, high-quality clinical pathways and quality metrics for all participating payers, which could also improve care coordination and ensure equity in treatment. • PTAC stated that the proposed model’s CMPs would help participating practices to invest in care management resources.
PTAC Comments on Gaps in the Proposed Model for Criterion 7 “Integration and Care Coordination”	<ul style="list-style-type: none"> • PTAC noted that for some of the proposed model’s specific PCOP care delivery requirements, participating practices may need to use proprietary pathways and standards (which could result in a cost to the practices). • PTAC also noted that while PCOP Communities would be free to develop their own methods for ensuring compliance with all of the proposed model’s care delivery standards, this may be challenging and costly to individual PCOP Communities. • PTAC indicated that the proposed model does not encourage greater integration and care coordination across all oncology sub-specialties (including radiation and surgical oncology services) because its primary focus is on hematology/oncology providers.
Key Aspects of the Proposed Model Relevant to Current Issues in Care Coordination	<ul style="list-style-type: none"> • The proposed model’s use of clinical pathways was commended by PTAC as a potential means of reducing care stinting and improving equity, which was identified as a priority during the June 2021 public meeting.

Exhibit III.5. Coalition to Transform Advanced Care (C-TAC): Advanced Care Model (ACM) Service Delivery and Advanced Alternative Payment Model⁹⁹

Care Coordination Context: Population-Specific	
Overview of Proposed Model	The Coalition to Transform Advanced Care (C-TAC)'s proposed <i>Advanced Care Model (ACM)</i> had five core components: 1) targeting palliative care services to individuals with serious health conditions and additional prognostic criteria; 2) delivering palliative care through multidisciplinary PCTs; 3) providing PBPM care management payments; 4) allowing different types of entities, including physician practices, hospitals, Accountable Care Organizations (ACOs), health systems, hospices, and home health agencies, to receive palliative care payments; and 5) providing financial incentives to reward the delivery of high-quality care. The proposed ACM model also included SDM, addressing patients' curative along with palliative care needs, and 24/7 access to clinical support.
How Care Coordination was Incorporated in the Proposed Model	<ul style="list-style-type: none"> • The proposed model features an interdisciplinary palliative care team comprised of a nurse, social worker, and spiritual care worker. • Care coordination and case management of the beneficiary's total health care needs are identified as a critical service covered under the proposed payment. • One of 13 quality measures used in determining bonus payments specifically addresses care coordination.
PTAC Comments on Strengths in Proposed Model for Criterion 7 "Integration and Care Coordination"	<ul style="list-style-type: none"> • PTAC noted the delivery of palliative care by an interdisciplinary care team is essential to addressing the distinct and diverse needs of people living with serious illness, their families, and their caregivers. • PTAC commented that strong measures of care coordination in the proposed quality measure set will help achieve care coordination across the care team and the patients' PCPs. • PTAC noted that the proposed model considers care coordination and care management relative to the beneficiary's total health care needs as a "necessary and desirable component of palliative care models."
PTAC Comments on Gaps in the Proposed Model for Criterion 7 "Integration and Care Coordination"	<ul style="list-style-type: none"> • PTAC raised concerns about the potential variation in ACMs and the degree of clinical expertise in palliative care that could vary depending on which provider type holds certification. • PTAC noted that palliative care models need explicit standards and requirements for how care teams will work with PCPs, which are underdeveloped in the proposal.
Key Aspects of the Proposed Model Relevant to Current Issues in Care Coordination	<ul style="list-style-type: none"> • The proposed model addresses seriously ill patients and includes a strong focus on interdisciplinary collaboration, which were emphasized as priorities by subject matter experts and PTAC during the June 2021 public meeting.¹⁰⁰

Exhibit III.6. Icahn School of Medicine at Mount Sinai: HaH Plus (Hospital at Home Plus) Provider-Focused Payment Model¹⁰¹

Care Coordination Context: Acute Care	
Overview of Proposed Model	The <i>HaH Plus</i> proposed model targets Medicare beneficiaries with acute illness or exacerbated chronic disease, allowing them to receive hospital-level acute care services in-home, as well as 30 days of transition care following “discharge” from acute care. The acute care phase of the proposed model involves daily (or multiple daily) visits by a physician or advanced practice nurse, daily (or multiple daily) visits by a registered nurse, and in-home radiology, labs, and pharmacy. Transition care includes post-discharge visits and coordinated care with the patient’s regular care providers. The payment mechanism is two-part: a bundled payment equal to 95 percent of the sum of the Diagnosis Related Group (DRG) payment and average professional fees, and a performance-based payment based on total spending during the acute care phase and transition phase relative to target price and quality measures.
How Care Coordination was Incorporated in the Proposed Model	<ul style="list-style-type: none"> • Providers remain consistent across acute and post-acute care phases. Transition care services include care coordination with the patient’s regular care providers. • Care is delivered in-home, reducing variation in settings and promoting stronger care coordination.
PTAC Comments on Strengths in Proposed Model for Criterion 7 “Integration and Care Coordination”	<ul style="list-style-type: none"> • The same providers direct care during acute and post-acute phases, and both phases occur in the home, limiting transitions among providers or settings and thereby promoting coordination. • The proposed model contains mechanisms by which patients’ regular care providers are aware of participation in the proposed model and are involved in care planning as appropriate. • With the home as the setting of care, insights may be shed on the patient’s home situation, which may be useful in further care planning.
PTAC Comments on Gaps in the Proposed Model for Criterion 7 “Integration and Care Coordination”	<ul style="list-style-type: none"> • None noted
Key Aspects of the Proposed Model Relevant to Current Issues in Care Coordination	<ul style="list-style-type: none"> • The proposed model addresses transitions in care, which was found to be a successful patient-centered care coordination strategy in the original environmental scan.¹⁰² • PTAC has expressed interest in Hospital at Home models, and CMS has provided regulatory flexibilities to allow eligible hospitals to treat eligible patients in their homes as part of the Hospital Without Walls program in response to the COVID-19 PHE.¹⁰³

Exhibit III.7. Personalized Recovery Care, LLC (PRC): Home Hospitalization: An Alternative Payment Model for Delivering Acute Care in the Home

Care Coordination Context: Acute Care	
Overview of Proposed Model	The proposed model would provide new PRC home hospitalization APM (HH-APM) payments designed to allow Medicare beneficiaries with acute illness or exacerbated chronic illness that would otherwise require inpatient hospitalization to receive hospital-level acute care services and transitional care in their homes. During the acute care phase, the APM Entity is required to: 1) have the admitting physician hold telehealth visits with the patient at least daily; 2) have a registered nurse make visits to the patient’s home at least twice daily; 3) provide for 24/7 phone response by a registered nurse acting as a Recovery Care Coordinator; and 4) have 24/7 on-call physician access. During the post-acute care phase, the APM Entity would be expected to have the Recovery Care Coordinator monitor and coordinate the patient’s care. The proposed model includes two payments: a bundled Home Hospitalization Payment equal to 70 percent of the typical Medicare Inpatient Prospective Payment System (IPPS) rate for the patient’s condition, and a performance-based payment based on total spending during the 30-day episode and performance on five quality measures.
How Care Coordination was Incorporated in the Proposed Model	The proposed model’s bundled payment incentivizes coordination of a comprehensive range of services for patients in the acute and post-acute phases of care. The Home Hospitalization Payment covers in-home infusion services; speech, physical, and occupational therapy; specialty visits; transportation services; durable medical equipment; and radiology and laboratory tests, medications, and emergency services if needed in the acute phase, and home health in the post-acute phase.
PTAC Comments on Strengths in Proposed Model for Criterion 7 “Integration and Care Coordination”	<ul style="list-style-type: none"> • The same team manages the patient during the acute care and post-acute care phases. • The APM Entity would be financially responsible for the cost of inpatient and post-acute care for patients who need to be taken to the ED or admitted to the hospital during a home hospitalization episode, which will require the Entity to develop relationships with hospitals and post-acute care providers. • The patients’ PCPs receive discharge summaries within 48 hours of a patient’s discharge, and a follow-up appointment with the PCP would be scheduled within five to seven days. • There is a quality measure and explicit financial incentive for coordinating with PCPs after the acute phase.
PTAC Comments on Gaps in the Proposed Model for Criterion 7 “Integration and Care Coordination”	<ul style="list-style-type: none"> • None noted
Key Aspects of the Proposed Model Relevant to Current Issues in Care Coordination	<ul style="list-style-type: none"> • The proposed model addresses transitions in care and coordination with the PCP, which were found to be a successful patient-centered care coordination strategy in the original environmental scan, and were emphasized by panel discussion participants during the June 2021 theme-based discussion.^{104,105} • PTAC has expressed interest in Hospital at Home models, and CMS has provided regulatory flexibilities to allow eligible hospitals to treat eligible patients in their homes as part of the Hospital Without Walls program in response to the COVID-19 PHE.

Exhibit III.8. University of New Mexico Health Sciences Center: ACCESS Telemedicine: An Alternative Healthcare Delivery Model for Rural Cerebral Emergencies

Care Coordination Context: Acute Care	
Overview of Proposed Model	The proposed <i>ACCESS</i> model began as a CMMI Health Care Innovation Award (HCIA) and aims to expand access to neurological and neurosurgical expertise in rural hospitals through telemedicine (audio/visual). Providers can request a consultation with a specialist via the online platform, and they will be connected to an available specialist to review the case and assess the patient. The proposed model uses a bundled payment for all Medicare patients who require emergency neurological care, which covers consultation, technology improvements, education, and quality assurance.
How Care Coordination was Incorporated in the Proposed Model	<ul style="list-style-type: none"> • The proposed model connects specialty care providers via telehealth in underserved and rural areas of the United States and can reduce care transfers. • Quality measures to improve care coordination include patient experience, total cost of care, readmission rates, transfer rates, and timeliness of care.
PTAC Comments on Strengths in Proposed Model for Criterion 7 “Integration and Care Coordination”	<ul style="list-style-type: none"> • PTAC appreciated that the goal of the proposed model is to improve integration and care coordination through connection of different care settings – primarily between rural hospitals and tertiary care facilities. Specifically, the consulting telehealth specialist can examine the patient via audio/visual technology, discuss information with the rural physician treating the patient, and view imaging and lab results from the rural hospital.
PTAC Comments on Gaps in the Proposed Model for Criterion 7 “Integration and Care Coordination”	<ul style="list-style-type: none"> • PTAC noted that the consulting telehealth physician does not have access to the patient’s EHR, which may lead to gaps in treatment recommendations.
Key Aspects of the Proposed Model Relevant to Current Issues in Care Coordination	<ul style="list-style-type: none"> • The proposed model addresses disparities in access to care in rural areas, which was identified as a priority during the June 2021 public meeting.

Section IV. Annotated Bibliography on Selected Literature Related to Additional Topics

The following annotated bibliography includes recent literature related to additional topics that were mentioned during the care coordination theme-based discussion at the June 10, 2021, public meeting, including a *Health Affairs* blog post about social risk adjustments for Medicare payments, a review of Center for Medicare and Medicaid Innovation (CMMI) and CMMI models, a National Academy of Medicine consensus report on primary care, and two reports from the National Academies of Sciences, Engineering, and Medicine (NASEM) on integrating social care into health care delivery and implementing high-quality primary care. The annotated bibliography also includes any selected recent literature on shared decision-making (SDM), behavioral and primary care integration, Medicaid innovations for addressing social determinants of health (SDOH) in care coordination, and innovative approaches to care coordination.

Archer J, Bower P, Gilbody S, Lovell K, Richards D, Gask L, Dickens C, Coventry P. Collaborative care for people with depression and anxiety. *Cochrane Database of Systematic Reviews*. 2012;10.

Subtopic(s): Innovative Practices in Integrating Physical and Behavioral Health

Type of Source: Journal article

Objective: To assess the effectiveness of collaborative care for patients with depression or anxiety.

Main Findings: The primary analysis of the selected randomized controlled trials (RCTs) demonstrates significantly greater improvement in depression and anxiety outcomes for adults with depression or anxiety who were treated with a collaborative care model in the short-, medium-, and long-term (i.e., up to two years).

Strengths/Limitations: This study had rigorous inclusion criteria but also included some studies where the methods had bias.

Generalizability to Medicare Population: Weak; the study included 79 randomized controlled trials of collaborative care for participants of any age and geographic area with depression or anxiety.

Methods: Meta-analysis of randomized controlled trials

Austin CA, Mohottige D, Sudore RL, Smith AK, Hanson LC. Tools to Promote Shared Decision Making in Serious Illness: A Systematic Review. *JAMA Internal Medicine*. 2015;175(7):1213-1221.
doi:10.1001/jamainternmed.2015.1679

Subtopic(s): Summary of Evidence on Shared Decision-Making

Type of Source: Journal article

Objective: Perform a systematic review of evidence on device aids and other tools that promote SDM for serious illness.

Main Findings: Of the 17 RCTs that tested decision-making tools in serious illness, nearly all trials showed that decision tools improved patient knowledge and engagement of treatment options. Five of the RCTs provided additional evidence that decision tools improve advanced care planning documentation, clinical decisions, and treatment.

Strengths/Limitations: Many of the study populations in the RCTs were small, and diagnoses of the serious illness were heterogeneous and therefore limit conclusions about specific diseases. More than half of the studies used convenience samples, and the nature of the interventions often resulted in a non-blinded study design. Finally, since the analysis was limited to published research, there may have been a publication bias toward positive results.

Generalizability to Medicare Population: Moderate; the systematic review focused on RCTs with decision tools in serious illness, including patients with life-threatening illness, advanced stages of chronic disease, or comorbidity and frailty. While the study was not specific to Medicare, it is likely that many of these patients were eligible for or enrolled in Medicare.

Methods: Systematic review of evidence from RCTs

Bloink J, Adler KG. Transitional Care Management Services: New Codes, New Requirements. *Family Practice Management*. 2013;20(3).

Subtopic(s): Analysis of Recent Utilization of Chronic Care Management and Transitional Care Management Claims

Type of Source: Journal article

Objective: Review components of the transitional care management (TCM) codes, associated services, billing processes, and other factors.

Main Findings: TCM codes require initial contact within two business days after discharge; face-to-face visits must occur within seven to 14 calendar days post-discharge; many services associated with TCM codes are non-face-to-face visits. Article discusses processes for billing, and how to rapidly determine whether a patient was discharged.

Strengths/Limitations: This article provides an overview of the TCM codes from the perspective of a practicing family physician, noting that further clarifications from CMS are forthcoming.

Generalizability to Medicare Population: Strong; CMS was instrumental to the creation of the TCM codes, though they can also be used outside of Medicare.

Methods: Brief/informal environmental scan

Bomhof-Roordink H, Gärtner FR, Stiggelbout AM, Pieterse AH. Key components of shared decision making models: a systematic review. *BMJ Open*. 2019;9(12):e031763. doi:10.1136/bmjopen-2019-031763

Subtopic(s): Summary of Evidence on Shared Decision-Making

Type of Source: Journal article

Objective: Perform a systematic review of evidence on SDM models, the prominent components present in SDM models, who is responsible for these components, and occurrence of SDM over time; and present an SDM components map.

Main Findings: Overall, the action of describing treatment options was the most prominent SDM component across all models, with the following components also in the majority of models: making decisions together, determining patient preferences, tailoring information, deliberating, creating choice awareness, and learning about the patient.

Strengths/Limitations: The selection of articles and data was confirmed through consensus among researchers; however, articles that did not provide evidence of presenting an SDM model in the title or abstract could have been falsely excluded. Finally, the inclusion criteria for SDM models may have been too strict or wide-ranging.

Generalizability to Medicare Population: Weak; the review is for all SDM models and does not focus on Medicare populations.

Methods: Systematic literature review

Centers for Medicare & Medicaid Services. Beneficiary Engagement and Incentives Models: Shared Decision Making Model. December 2016. Accessed July 14, 2021. <https://www.cms.gov/newsroom/fact-sheets/beneficiary-engagement-and-incentives-models-shared-decision-making-model>

Subtopic: Summary of Evidence on Shared Decision-Making

Type of Source: CMS fact sheet

Objective: To provide background information on the Beneficiary Engagement and Incentives (BEI) Models, including the Shared Decision-Making Model and the Direct Decision Support Model.

Main Findings: The BEI Models will test different approaches to SDM.

Strengths/Limitations: N/A

Generalizability to Medicare Population: Strong; the models focus on Medicare beneficiaries.

Methods: N/A

Covey JR, Kamal KM, Gorse EE, et al. Barriers and facilitators to shared decision-making in oncology: a systematic review of the literature. *Support Care Cancer*. 2019;27(5):1613-1637. doi:10.1007/s00520-019-04675-7

Subtopic(s): Summary of Evidence on Shared Decision-Making

Type of Source: Journal article

Objective: Review patient-related challenges and facilitators to SDM in oncology care.

Main Findings: Of the 35 articles included in the review, the following themes were identified as barriers to SDM: uncertainty in decisions on treatments, concern on adverse effects, and poor physician communication. Themes on facilitators for SDM included provider consideration of patient preferences, positive physician action and behaviors, and engagement of support systems.

Strengths/Limitations: Many of the study populations were heterogeneous and therefore limit conclusions about specific cancer diagnoses or study designs. The mixture of qualitative and quantitative data made comparisons across studies difficult, but also provides a more rich view of the different methodologies.

Generalizability to Medicare Population: Moderate; the systematic review included literature that focused on the Medicare population.

Methods: Systematic literature review using the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) for articles between 2007 and 2017

Durand M-A, Carpenter L, Dolan H, et al. Do interventions designed to support shared decision-making reduce health inequalities? A systematic review and meta-analysis. *PLoS One*. 2014;9(4):e94670.

Subtopic(s): Summary of Evidence on Shared Decision-Making

Type of Source: Journal article

Objective: Evaluate the impact of SDM interventions on vulnerable populations and disparities in health.

Main Findings: The meta-analysis found a moderate positive impact of SDM on vulnerable populations. The systematic review suggested that overall, SDM interventions increased information, informed choice, and engagement in SDMH.

Strengths/Limitations: Many of the study populations and articles included in the review were heterogeneous and therefore limit conclusions about specific diagnoses or study designs. To account for heterogeneity, a random effects model was used for the meta-analysis, a meta-regression was performed, and a stratified analysis was undertaken to determine how the overall effect estimate varied by study design.

Generalizability to Medicare Population: Weak; while the review focuses on vulnerable populations, it is unclear what proportion of these patients are eligible for or enrolled in Medicare.

Methods: Systematic review and meta-analysis of RCTs and observational studies

Garvelink MM, Ngangue PAG, Adekpedjou R, Diof NT, Goh L, Blair L, Légaré F. A Synthesis Of Knowledge About Caregiver Decision Making Finds Gaps In Support For Those Who Care For Aging Loved Ones. *Health Affairs*. 2016;35(4):619-26.

Subtopic(s): Summary of Evidence on Shared Decision-Making

Type of Source: Journal article

Objective: To determine the effectiveness of interventions to improve caregiver involvement in decision-making with older patients, and to characterize caregivers' experience of decision-making in the absence of interventions.

Main Findings: There have been insufficient quantitative evaluations of interventions to involve caregivers in decision-making with older patients. Existing evaluations found few clinically significant effects. Some studies found positive evaluations of the following SDM functions: availability of a decision coach, and a supportive decision-making environment. The report recommends additional rigorously evaluated interventions on caregiver involvement in shared-decision with older patients.

Strengths/Limitations: It was difficult to compare studies due to the large variability in quantitative outcome measures, and many studies quantified decision-making experiences using self-reported satisfaction measures, which tend to be answered in a socially desirable way that compromises reliability. Six of the studies examined included participants younger than the age of 60; however, when the authors conducted a sensitivity analysis to exclude these studies, the results did not differ from the main analysis. Finally, the study was limited to articles that focused on a single decision type, and therefore, many relevant day-to-day decisions involving caregivers were excluded.

Generalizability to Medicare Population: Strong; the article focused on a patient population in which most patients were likely eligible for Medicare (60 years or older) and their caregivers.

Methods: Mixed methods knowledge synthesis of 49 qualitative, 14 quantitative, and three mixed methods studies

Geddis-Regan, A, Errington, L, Abley, C, Wassall, R, Exley, C, Thomson, R. Enhancing shared and surrogate decision making for people living with dementia: A systematic review of the effectiveness of interventions. *Health Expect*. 2021;24:19– 32. <https://doi-org.proxy.uchicago.edu/10.1111/hex.13167>

Subtopic(s): Summary of Evidence on Shared Decision-Making

Type of Source: Journal article

Objective: To determine what interventions are effective at improving SDM or surrogate decision-making on the quality of health care for people living with dementia.

Main Findings: Decision-making interventions consist of multiple components that aim to establish patient preferences for future health care. The impact of advance care planning interventions was rarely evaluated, and interventions did not increase the concordance of decisions with a person's value. The decision-specific interventions were unlikely to produce benefit in other decision contexts.

Strengths/Limitations: Search criteria were broad, but specifically limited to patients with dementia; therefore, a broader search of older patients may have identified additional studies. While full-text reviews were mostly done by only one author, in-depth discussion about the suitability of inclusion was conducted for each study between two authors to help reduce some personal bias.

Generalizability to Medicare Population: Moderate; while the study is limited just to patients with dementia, a proportion of that population is likely eligible for Medicare.

Methods: Narrative systematic review of existing literature

Govindaraan V, Ramamurti R. Transforming Health Care from the Ground Up. Harvard Business Review. 2018;96(4):96-104. Accessed July 14, 2021. <https://hbr.org/2018/07/transforming-health-care-from-the-ground-up>

Subtopic(s): Innovative Practices in Integrating Physical and Behavioral Health

Type of Source: Journal article

Objective: To review the examples of the University of Mississippi Medical Center and Iora Health's bottom-up innovation in health care delivery.

Main Findings: Iora Health reduced hospitalizations of its patients by up to 40 percent and reduced the total cost of care for these patients by 15 percent to 20 percent.

Strengths/Limitations: Findings presented were self-reported by the organizations and thus subject to bias.

Generalizability to Medicare Population: Strong; focuses on a model (i.e., Iora Health) that decreased hospitalizations and reduced total health care spending for patients, who are mostly on Medicare Advantage (MA) plans.

Methods: Interviews with executives and summary of descriptive analysis from the organizations profiled

Hamann J, Heres S. Why and How Family Caregivers Should Participate in Shared Decision Making in Mental Health. Psychiatric Services. 2019;70(5); 418-421.

Subtopic(s): Summary of Evidence on Shared Decision-Making

Type of Source: Open forum article/brief

Objective: Provide arguments that both patient involvement (i.e., SDM) and caregiver involvement are critical and should be considered together during SDM.

Main Findings: Limited previous research suggests that caregiver involvement might improve clinical decision-making and health outcomes for both patients and caregivers. However, more information and research on caregiver involvement in SDM is needed.

Strengths/Limitations: This is an opinion piece, and while literature is referenced throughout, it is therefore subject to the authors' bias and selection of literature.

Generalizability to Medicare Population: Weak; the literature does not reference Medicare or Medicare-eligible populations.

Methods: Brief literature review

Hendriks JM, Lee G. Shared decision-making: the patient on the forefront of care coordination. European Heart Journal - Quality of Care and Clinical Outcomes. 2020;6(4): 231-233.

Subtopic: Summary of Evidence on Shared Decision-Making

Type of Source: Editorial

Objective: To address the impact of SDM in treating newly diagnosed patients with atrial fibrillation (AF).

Main Findings: This editorial refers to "Shared decision making in atrial fibrillation: patient-reported involvement in treatment decisions," by F. Ali-Ahmed et al. The findings from this study indicated there may not be widespread use of SDM because the majority of those making the decisions were sole health professionals. Other barriers to SDM include time restrictions to the health care professional and "assumed patient knowledge deficits." The authors conclude that increased communication between the patient and the health care professional is essential to the achievement of care coordination.

Strengths/Limitations: This is an editorial piece and therefore subject to the authors' bias.

Generalizability to Medicare Population: Moderate, not specific to Medicare, but AF is prevalent in the Medicare population.

Methods: Patient-reported survey

Howe, M. Profile – Iora Health Transactional vs. relationship-based care. *Nursing Management*. 2017;48(5).

Subtopic(s): Innovative Practices in Integrating Physical and Behavioral Health

Type of Source: Journal article

Objective: To highlight the work of the Iora Health model in changing care delivery.

Main Findings: The Iora Health Model Medicare practices have an average patient satisfaction survey score of 90 compared to an average score of 4 for traditional primary care offices.

Strengths/Limitations: Findings are self-reported by the organization and therefore subject to bias.

Generalizability to Medicare Population: Strong; the majority of patients in the Iora Health model are MA beneficiaries.

Methods: Vignettes of patients, interviews with staff, and patient surveys

Ikram U, Gallani S, Figueroa J, Feeley T. 4 Strategies to Make Telehealth Work for Elderly Patients. *Harvard Business Review*. 2020;11.

Subtopic(s): Innovative Practices in Integrating Physical and Behavioral Health

Type of Source: Journal article

Objective: To identify how PCPs help patients adopt telehealth, and when face-to-face visits are still the best option during the COVID-19 PHE.

Main Findings: A review of the strategies four innovative provider organizations have used to engage with older patients via telehealth, including delivering technology and mobile medical assistants, engaging caregivers in telehealth visits, using practice visits and health ambassadors to assist patients with limited digital literacy, and enhancing telehealth visits with objective physical measurements.

Strengths/Limitations: The article reviews strategies employed by four innovative organizations, and while those four organizations provide a range of services and serve different patient populations, the findings are limited to just what these organizations do and who they serve.

Generalizability to Medicare Population: Strong; the organizations participate in MA plans and receive a capitated payment for each patient.

Methods: Researchers interviewed executives and frontline providers at four primary care organizations.

Ikram U, Gallani S, Figueroa J, Feeley T. Protecting Vulnerable Older Patients During the Pandemic. *NEJM Catalyst*. 2020.

Subtopic(s): Innovative Practices in Integrating Physical and Behavioral Health

Type of Source: Journal article

Objective: To identify how PCPs help patients adopt telehealth, and when face-to-face visits are still the best option during the COVID-19 PHE.

Main Findings: A review of the strategies four innovative provider organizations have used to engage with older patients via telehealth, including delivering technology and mobile medical assistants, engaging caregivers in telehealth visits, using practice visits and health ambassadors to assist patients with limited digital literacy, and enhancing telehealth visits with objective physical measurements.

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Generalizability to Medicare Population: Strong; the organizations participate in MA plans and receive a capitated payment for each patient.

Methods: Researchers interviewed executives and frontline providers at four primary care organizations.

Long, P., Abrams M., Milstein A., Anderson G., Apton K.L., Dahlberg M.L., and Whicher D., Editors. 2017. *Effective Care for High-Need Patients: Opportunities for Improving Outcomes, Value, and Health*. Washington, DC: National Academy of Medicine.

Subtopic(s): Innovative Practices in Integrating Physical and Behavioral Health; Literature Referenced During the June 10, 2021, Theme-Based Discussion

Type of Source: Report

Objective: To detail key characteristics of high-need patients and to assess strategies for better serving their needs.

Main Findings: The National Academy of Medicine (NAM) defines high-need patients based on three criteria: total accrued health care costs, intensity of care utilized for a given period of time, and functional limitations. Effective care models for high-need patients deliver across three domains: health and well-being, care utilization, and costs. The report identifies 14 successful care models that if properly paired with the appropriate high-need patient group could generate intended outcomes. The workgroup identified the following care and condition attributes of successful care models: assessment, targeting, planning, alignment, training (including patient and caregiver education and engagement), communication, monitoring, and continuity. The workgroup also identified delivery features of successful care models, including teamwork led by a trained care coordinator as the communication hub and leader, coordination across the care team, responsiveness, feedback, medication management, outreach, and follow-up, particularly after hospital stays. Impediments to the successful implementation of these models currently include misalignment between financial incentives and the required services to care for high-need patients (e.g., FFS-based approaches over value-based arrangements), disparate health and data systems, and ineffective workforce training programs for clinicians.

Strengths/Limitations: The report is strengthened by the iterative review and convening of different stakeholder groups to identify and discuss the 14 successful care models. The report is limited by a lack of diversity of stakeholder groups involved in the process, and could be further strengthened by including previously unrepresented groups in future panels.

Generalizability to Medicare Population: Moderate; not exclusive to Medicare, although large proportion of high-need patients receive Medicare.

Methods: Expert panel review

Mathematica Policy Research, Inc. *CPC+ Third Annual Report*. Mathematica Policy Research; 2021. Accessed January 29, 2021. <https://innovation.cms.gov/data-and-reports/2021/cpc-plus-third-annual-eval-report>

Subtopic(s): Innovative Practices in Integrating Physical and Behavioral Health

Type of Source: Report

Objective: To report on the findings from the first three years of the Comprehensive Primary Care Plus (CPC+) demonstration.

Main Findings: The model did not impact expenditures, excluding CMS' enhanced payments, and expenditures increased when accounting for enhanced payments. CPC+ decreased ED visits by approximately 1.5 percent, but did not have statistically significant effects on hospitalizations, ambulatory specialty primary care visits, or urgent care center visits. The demonstration was associated with small improvements in quality measures, including the percentage of beneficiaries with diabetes who received recommended services, the percentage of female beneficiaries who received breast cancer screening, and measures of patient and caregiver engagement.

Strengths/Limitations: Due to the limited set of claims-based quality measures and the small estimated improvements, the report could not draw conclusions on the impact of CPC+ on quality.
Generalizability to Medicare Population: Strong; demonstration focused on Medicare beneficiaries.
Methods: Evaluation methods included analyses of claims data, payer and provider surveys, program documentation, beneficiary and provider interviews, and beneficiary surveys.

Medicare Mental Health Workforce Coalition. Expanding the Medicare Provider Workforce: A Solution to the Behavioral Health Crisis. *CenterStone*. Accessed July 14, 2021. <https://centerstone.org/wp-content/uploads/MHAI-A-One-Pager-FINAL.pdf>

Subtopic(s): Innovative Approaches and Best Practices in Integrating Physical and Behavioral Health
Type of Source: Brief

Objective: To provide an overview of the Mental Health Access Improvement Act in recognizing mental health counselors and therapists as covered Medicare providers in order to improve care gaps for Medicare beneficiaries and reduce hospital costs.

Main Findings: The proposed legislation would add around 200,000 mental health providers to the Medicare network, improve access in rural areas, allow mental health counselors and therapists to directly bill to Medicare for their services, lower cost of care, and improve patient outcomes.

Strengths/Limitations: This brief is from the Medicare Mental Health Workforce Coalition, and therefore reflects the priorities and support from organizations that are impacted by this proposed legislation (e.g., the American Counseling Association, the American Mental Health Counselors Association).

Generalizability to Medicare Population: Strong; proposed legislation is specific to Medicare beneficiaries.

Methods: N/A

Melzer AC, Golden SE, Ono SS, Datta S, Crothers K, Slatore CG. What Exactly Is Shared Decision-Making? A Qualitative Study of Shared Decision-Making in Lung Cancer Screening. *J Gen Intern Med*. 2020;35(3):546-553. <https://doi.org/10.1007/s11606-019-05516-3>

Subtopic: Innovative Practices in Integrating Physical and Behavioral Health

Type of Source: Journal article

Objective: To examine how clinicians communicate and perceive using SDM for patients considering lung cancer screening (LCS) at three medical centers with established screening programs.

Main Findings: The main findings indicate that while clinicians support the use of SDM for LCS decisions, there are challenges requiring PCPs to perform SDM, such as practicing strong communication.

Strengths/Limitations: Not all PCPs interviewed worked for the LCS program.

Generalizability to Medicare Population: Strong; SDM is required by CMS.

Methods: Researchers analyzed semi-structured interviews with 24 clinicians, including LCS coordinators (two); pulmonologists (three); PCPs (17), four of whom worked for the LCS program; a thoracic surgeon; and a radiologist.

Meyers DE, Goodlin SJ. End-of-Life Decisions and Palliative Care in Advanced Heart Failure. *Canadian Journal of Cardiology*. 2016;32(9) 1148-1156.

Subtopic(s): Summary of Evidence on Shared Decision-Making

Type of Source: Journal article

Objective: Review how heart failure clinicians can integrate palliative care strategies by incorporating several important components of planning and decision-making for heart failure patients and by incorporating the basic tenets of shared decision-making.

Main Findings: Evidence shows that there is a clear benefit to heart failure patients when palliative care is involved at all points along the illness trajectory. For example, a recent pilot study of palliative care in patients referred for transplant evaluation showed an increase in patient satisfaction, a reduction in the use of opioids, and an improvement in future care planning.

Strengths/Limitations: The article does not explain the inclusion criteria for literature, and therefore, literature could be subject to the authors' bias.

Generalizability to Medicare Population: Weak; while the article briefly mentions CMS, it was published by a Canadian journal.

Methods: Brief literature review

Myers G, Price G, Pykosz M. A Report from the Covid Front Lines of Value-Based Primary Care. NEJM Catalyst. 2020. <https://catalyst.nejm.org/doi/full/10.1056/CAT.20.0148>

Subtopic(s): Innovative Practices in Integrating Physical and Behavioral Health

Type of Source: Commentary

Objective: To summarize efforts by Oak Street Health to develop a remote care program, including telehealth visits, COVID-19 resources, and social determinants of health support, during the COVID-19 PHE.

Main Findings: Oak Street Health developed a remote care program with 93 percent of visits conducted by phone or video, provided COVID-19 support, and addressed social determinants of health with wellness checks and life-sustaining supplies.

Strengths/Limitations: The report is written by Oak Street Health, and therefore reflects an internal perspective of its work.

Generalizability to Medicare Population: Strong; Oak Street Health serves nearly 80,000 Medicare patients, and roughly half of the Oak Street Health patients are dual-eligible.

Methods: N/A

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

Subtopic(s): Literature Referenced During the June 10, 2021, Theme-Based Discussion

Type of Source: Report

Objective: To report on the NASEM's Committee on Implementing High-Quality Primary Care's recommendations for implementing high-quality primary care.

Main Findings: Primary care-related visits account for about one-third of all health care visits in the U.S., yet receive only around 5 percent of all health care expenditures. This has contributed to primary care being an under-funded, under-staffed, and under-utilized component of the health care system—trends that have been exacerbated by the COVID-19 pandemic. The report presents five implementation objectives, which the committee believes ought to guide the country on its path to improving high-quality primary care: 1) pay for patient-centered care, not the procedure-centered systems; 2) ensure accessibility of high-quality primary care to all individuals/communities; 3) train an interprofessional workforce where people live and work; 4) design information technology that serves all stakeholders; and 5) ensure successful implementation of high-quality care through monitoring and evaluation. Lastly, the report highlights the importance of supporting the above-outlined objectives with adequate public policy.

Strengths/Limitations: Given that the report is the product of stakeholder consensus and review, it is strengthened by the representation of those included in the committee, and limited by any stakeholders who were not included in the committee.

Generalizability to Medicare Population: Strong; implementation plan pertains to Medicaid, Medicare, commercial insurers, and self-insured employers. Additionally, the report contains instructions specific to CMS.

Methods: Workgroup consensus process; peer-reviewed and grey literature review

National Academies of Sciences, Engineering, and Medicine 2019. *Integrating Social Care into the Delivery of Health Care: Moving Upstream to Improve the Nation's Health*. Washington, DC: The National Academies Press. <https://doi.org/10.17226/25467>.

Subtopic(s): Literature Referenced During the June 10, 2021, Theme-Based Discussion

Type of Source: Report

Objective: To report on the outcomes of an 18-month study led by an 18-person committee of experts seeking to examine the potential for integrating services addressing social needs and SDOH into the delivery of health care.

Main Findings: The committee established five interrelated elements/capabilities fundamental to the integration of social care into health care: 1) awareness of the social risks faced by patients and communities; 2) capacity to adjust care to accommodate the social barriers faced by a particular patient or community; 3) ability to assist patients in accessing the necessary social care resources; 4) understanding of social care assets in a given community and then the alignment of these preexisting assets and health care systems; and 5) advocacy of policies that facilitate the creation and redeployment of necessary resources. Additionally, the committee maintains that the successful integration of social care into health care requires an adequately staffed and trained workforce, appropriate health information technologies, and new financing models.

Strengths/Limitations: In gathering evidence from which to base recommendations, the committee did not conduct a systematic literature review, though the committee's report did undergo review by an independent, external group of experts.

Generalizability to Medicare Population: Strong; findings are generalizable to all patients. However, the report includes specific steps that CMS can take to facilitate the committee's recommendations.

Methods: Search of peer-reviewed literature, reports from governmental agencies and private organizations, books, websites, and presentations

Olgin A, Cuello M, Breen T. Talking with Iora Health, an Innovative Primary Care Provider. Gist Healthcare. 2020. Accessed July 15, 2021. <https://gisthealthcare.com/talking-iora-health/>

Subtopic(s): Innovative Practices in Integrating Physical and Behavioral Health

Type of Source: Commentary

Objective: To learn about the care delivery and payment model used by Iora Health to deliver primary care to Medicare beneficiaries.

Main Findings: The Iora Health model uses 100 percent value-based payments which paid for care offered through both video- and audio-only calls prior to and during the pandemic.

Strengths/Limitations: The piece focuses on the perspective of the organization and is therefore subject to bias.

Generalizability to Medicare Population: Strong; Iora Health is a company working on delivering value-based care to Medicare patients.

Methods: Interview with executive

O'Malley AS, Sarwar R, Keith R, Balke P, Ma S, McCall N. Provider Experiences with Chronic Care Management (CCM) Services and Fees: A Qualitative Research Study. *J Gen Intern Med.* 2017;32(12):1294-1300. doi:10.1007/s11606-017-4134-7

Subtopic(s): Analysis of Recent Utilization of Chronic Care Management and Transitional Care Management Claims

Type of Source: Journal article

Objective: To explore the experiences, facilitators, and challenges of practices providing CCM services, and their implications going forward.

Main Findings: Facilitators to implementation included practice care managers, patient-centered medical home (PCMH) models, and prior care coordination experience. Providers noted that CCM payments did not adequately reimburse practices for upfront investments needed to provide CCM services or the time needed to provide CCM services to patients with complex needs.

Strengths/Limitations: This study included a disproportionate number of non-billing providers (four of 60 providers), so results may not be generalizable to a wider population of non-billing providers.

Generalizability to Medicare Population: Strong; this study focused on CCM payments for Medicare beneficiaries.

Methods: Semi-structured interviews

Pel-Littel RE, Snaterse M, Teppich NM, et al. Barriers and facilitators for shared decision making in older patients with multiple chronic conditions: a systematic review. *BMC Geriatric.* 2021;21(1):112. doi:10.1186/s12877-021-02050-y

Subtopic(s): Summary of Evidence on Shared Decision-Making

Type of Source: Journal article

Objective: Review barriers and facilitators to SDM experienced by older patients with multiple chronic conditions, informal caregivers, and health care providers.

Main Findings: Older patients with multiple chronic conditions are less likely to participate in SDM due to poor health and cognitive or physical impairments. Poor interpersonal skills and organizational barriers can prevent health care professionals from participating in SDM. Facilitators of SDM include sharing information about personal values, priorities, and preferences; and including informal caregivers in decision support activities.

Strengths/Limitations: Many of the study populations and articles included in the review were heterogeneous and therefore limit conclusions about specific diagnoses or study designs. Finally, since the analysis was limited to published research, there may have been a publication bias toward positive results.

Generalizability to Medicare Population: Moderate; while the review does not explicitly focus on Medicare, it does focus on a population that is largely eligible for and/or enrolled in Medicare.

Methods: Systematic literature review

Phillips R.L., Ostrovsky A., Bazemore A.W. Adjusting Medicare Payments for Social Risk to Better Support Social Needs. *Health Affairs.* Published June 1, 2021.

<https://www.healthaffairs.org/doi/10.1377/hblog20210526.933567/full>

Subtopic(s): Literature Referenced During the June 10, 2021, Theme-Based Discussion

Type of Source: Blog post

Objective: To report on the outcomes of the stakeholder policy design workshop addressing social needs payment adjustments for Medicare providers per the 2014 Improving Medicare Post-Acute Care Transformation (IMPACT) Act.

Main Findings: The use of small-area-based (typically census tract) indices of social risk increases the likelihood of aligning Medicare resources with community/patient needs in a systematic and

transparent manner. The authors make the case that area-based indices are less likely than patient-reported social needs data to introduce biases in the data collection process (e.g., under-representative data). Workshop participants settled on a Medicare FFS model relying on the Social Deprivation Index and Area Deprivation Index as a means forward for determining payment adjustments. Although reports suggest that small-area-based measures of social risk could be an avenue for payment adjustment, reports do not propose exactly how much payments ought to be adjusted.

Strengths/Limitations: The blog post references reports that use a claims-based measurement approach, which is designed for payment and not for assessing health status. Therefore, the use of claims to assess risk may exclude some beneficiaries.

Generalizability to Medicare Population: Strong; the policy design workshop focused on Medicare providers and how to adjust Medicare payments/flow of resources to providers in accordance with area-based social risk.

Methods: Workgroup consensus process

Shay LA, Lafata JE. Where is the evidence? A systematic review of shared decision making and patient outcomes. *Med Decis Making*. 2015;35(1):114-131. doi:10.1177/0272989X14551638

Subtopic(s): Summary of Evidence on Shared Decision-Making

Type of Source: Journal article

Objective: Review evidence linking patient outcomes to SDM and identify what measurement perspectives of SDM are associated with each type of patient outcomes (i.e., affective cognitive, behavioral, and health).

Main Findings: SDM tends to result in improved patient-reported affective-cognitive outcomes. Evidence is lacking for the association between empirical measures of SDM and patient behavioral and health outcomes.

Strengths/Limitations: There was a relatively small number of studies, and the review precluded any meta-analyses. Study inclusion and exclusion criteria required both an empirical measure of SDM, as well as an assessment of the association between the measure and patient outcome, which meant that most of the studies included were observational in design.

Generalizability to Medicare Population: Weak; the review does not explicitly focus on Medicare.

Methods: Systematic literature review

Smith B. CMS Innovation Center at 10 Years – Progress and Lessons Learned. *The New England Journal of Medicine*. 2021; 384(8):759-764. DOI: 10.1056/NEJMs2031138

Subtopic(s): Literature Referenced During the June 10, 2021, Theme-Based Discussion

Type of Source: Journal article

Objective: To report results to date, lessons learned, and potential paths forward with respect to CMMI over the past decade since inception.

Main Findings: Value-focused care has begun to spread throughout the United States with approximately 40 percent of Medicare FFS payments and approximately 30 percent of commercial payments made using value-based arrangements. Although several CMMI models have resulted in financial savings and improvements in quality of care, the overwhelming majority of the models have failed to save in total cost of care—with some on pace to lose millions or billions of dollars—and or have not produced significant improvements in quality. Voluntary models (50 of the 54 models) have witnessed higher dropout rates, as well as significant financial losses—in large part due to the extensive upfront payments required to retain financially apprehensive providers. Benchmarking has proven to be a challenge, especially prospective rather than retrospective approaches, due to variations in prices across time and place, which have also contributed to

substantial financial losses. Additionally, there have been challenges related to accurately capturing patient perceptions of quality/quality improvement, as well as challenges pertaining to the management of data in value-based care arrangements versus FFS data.

Strengths/Limitations: The article was written by the then deputy administrator and director of CMMI, Brad Smith, and therefore is potentially impacted by internal perspectives and biases.

Generalizability to Medicare Population: Strong; review focuses on Medicare and Medicaid; however, it is not always clear if a model pertains to both Medicare and Medicaid or just one of them.

Methods: N/A

Swan BA, Haas S, Jessie AT. Care coordination: Roles of registered nurses across the care continuum. *Nursing Economics*. 2019;37(6):317-323.

Subtopic: Summary of Evidence on Shared Decision-Making

Type of Source: Commentary

Objective: To examine the roles and implications for health care delivery when involving registered nurses in care coordination.

Main Findings: Researchers found seven implications when the health care system supports the involvement of registered nurses in care coordination: investment in registered nurse roles with full authority to practice care coordination; advocacy for national EHR standardization; focus on improving billing codes to promote care coordination; encouragement for interprofessional care coordination teams; acknowledgement of the inconsistencies of care coordination interventions; support for the advancement of the technology to improve care coordination; and capitalization on SDM to develop care coordination.

Strengths/Limitations: This study focuses only on the registered nurse population.

Generalizability to Medicare Population: Weak; under current law, Medicare cannot make direct payments to registered nurses under Part B.

Methods: N/A

Tanio C, Chen C. Innovations at Miami practice show promise for treating high-risk Medicare patients. *Health Aff (Millwood)*. 2013;32(6):1078-82. doi: 10.1377/hlthaff.2012.0201. PMID: 23733982.

Subtopic: Innovative Practices in Integrating Physical and Behavioral Health

Type of Source: Blog post

Objective: To review innovations made by ChenMed, including a comprehensive approach to delivering services in the community, smaller panel sizes, and customized information technology.

Main Findings: Key elements of the ChenMed model include convenience and access, emphasis on patient and physician time, compliance with medication, physician culture, and customized electronic health records and decision support. A focus on improving quality outcomes and avoiding hospital admissions led to a comparatively smaller total of hospital days per patient (1,058) compared to the average (1,712) in 2011.

Strengths/Limitations: The report is written by ChenMed, and therefore reflects an internal perspective of its work.

Generalizability to Medicare Population: Strong; the model focuses on serving low-to-moderate income elderly patients primarily through the MA program.

Methods: Analysis of patient satisfaction surveys using Net Promoter Score methodology

Treiger, TM. Shared Decision-Making: A New Frontier for Case Management Leadership. *Professional Case Management*. 2020;25(2):56-76. doi: 10.1097/NCM.0000000000000394.
<https://pubmed.ncbi.nlm.nih.gov/32000204/>

Subtopic: Summary of Evidence on Shared Decision-Making

Type of Source: Journal article

Objective: To study how case managers can help support shared decision-making efforts.

Main Findings: Communication is key for effective care coordination and shared decision-making within professional case management.

Strengths/Limitations: The study addresses shared decision-making within case management specifically.

Generalizability to Medicare Population: Moderate; the research involved “all health care sectors where professional case management is practiced.”

Methods: Analysis of management foundational documents

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