

POLICY ANALYSIS

A Review of Proposed Models Deliberated and Voted on by the Physician- Focused Payment Model Technical Advisory Committee (PTAC) as of December 2019

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Table of Contents

Executive Summary	4
Findings	4
Summary	5
Purpose and Overview	6
Background	7
Data and Methods	9
Findings	13
Entities Submitting Proposals	13
Areas of Focus: Providers, Settings, and Conditions	13
Proposed Models: Origins and History	15
Issues Targeted: Care Delivery	16
Issues Targeted: Payment	18
Proposed Models for Care Delivery	20
Proposed Payment Models	23
Proposed Approaches to Risk Adjustment	29
Proposed Performance Measures for Quality and Cost	30
Conclusion	32

List of Exhibits

Exhibit 1:	Who are Eligible Clinicians in PFPMs?	8
Exhibit 2:	PFPMs Reviewed in PTAC Reports to the Secretary as of December 2019	9
Exhibit 3:	Status of Models Proposed to PTAC December 2016–December 2019.....	11
Exhibit 4:	Types of Entities Submitting Proposals to PTAC, December 2016–December 2019	13
Exhibit 5:	Focus Areas of Proposed Models Reviewed by PTAC, December 2016–December 2019.....	14
Exhibit 6:	Care Delivery and Payment Issues Targeted in PFPMs Deliberated and Voted on by PTAC, December 2016–December 2019.....	18
Exhibit 7:	Types of Care and Delivery Issues and Examples of Proposed Solutions in PFPMs Deliberated and Voted on by PTAC, December 2016 – December 2019	22
Exhibit 8:	Approaches to Payment for Service Delivery in PFPMs Deliberated and Voted on by PTAC, December 2016–December 2019.....	23
Exhibit 9:	Payment Methodologies Associated with Proposed PFFM Focus Areas in PFPMs Deliberated and Voted on by PTAC, December 2016–December 2019 ...	24
Exhibit 10:	Overview of PBPM Models Deliberated and Voted on by PTAC, December 2016– December 2019.....	25
Exhibit 11:	CMS Waivers to Medicare Payment Rules in PBPM Models Deliberated and Voted on by PTAC, December 2016–December 2019	27
Exhibit 12:	Approaches to Financial Risk in PFPMs Deliberated and Voted on by PTAC, December 2016–December 2019	28
Exhibit 13:	Considerations for Assessing the Role of Quality Measures in APMs	30
Appendix Exhibit 1:	Detailed Overview of PFPMs Deliberated and Voted on By PTAC, December 2016–December 2019	33

Executive Summary

Under the bipartisan Medicare Access and CHIP Reauthorization Act (MACRA) of 2015, Congress significantly changed Medicare fee-for-service (FFS) physician payment methods. The law also specifically encouraged development of alternative payment models (APMs) known as physician-focused payment models (PFPMs) and created the Physician-Focused Payment Model Technical Advisory Committee (PTAC) to review stakeholder-submitted PFPM proposals and make comments and recommendations on them to the Secretary of Health and Human Services (HHS). To highlight themes and common elements across proposals regarding issues targeted and proposed solutions, this report reviews all proposed payment models submitted to PTAC and deliberated and voted on as of December 31, 2019.

Findings

As of December 2019, 34 proposed models had been submitted to PTAC for review, and PTAC had deliberated and voted on 24 proposals. (PTAC concluded that the criteria for PFPMs established by the Secretary are not applicable to two of the 22 proposals.) The remaining 10 proposals (of the original 34 submissions) were either under PTAC review at that time or had been withdrawn.

Submitter types. The 34 submissions span a range of submitter types, most commonly national provider associations or specialty societies (10 submitters) and regional/local single-specialty physician practices (8 submitters).

Areas of focus. The 24 proposed models deliberated and voted on by PTAC fall into three main categories:

- **Health Conditions:** Targeting care delivery for beneficiaries with a particular health condition, such as chronic obstructive pulmonary disease (COPD) or cancer (13 proposals)
- **Providers or Settings:** Addressing a particular provider type or setting, such as primary care clinicians or inpatient hospital services (11 proposals, which includes two proposals that also focused on a health condition)
- **Broadly Applicable:** Covering a range of conditions or providers (2 proposals)

Origins and history. Most of the proposed models deliberated and voted on by PTAC proposed to either build on existing payment reform efforts or pilot new approaches. Six proposed models leveraged existing APMs, and five were based on Health Care Innovation Awards (HCIAAs) administered by the Center for Medicare & Medicaid Innovation (CMMI) at the Centers for Medicare & Medicaid Services (CMS). In addition, four proposed models explicitly sought to pilot a new payment concept on a small scale.

Gaps targeted. Many of the proposed models identified a number of care delivery and payment gaps in the current Medicare FFS program. Care delivery gaps clustered around a few themes: suboptimal care management; limited access to services; utilization of unnecessary services; and lack of integrated care across providers, settings, and disease phases. Submitters linked these gaps with adverse outcomes, including unnecessary hospitalizations, excess spending, poor quality care, and reduced satisfaction among beneficiaries and providers. Payment gaps centered on areas where submitters believed the

Medicare physician fee schedule (MPFS) directly or indirectly contributed to those care delivery gaps, such as non-covered services.

Proposed payment models. To address these previously described issues, submitters proposed payment models in the following categories:

- Models that **continued FFS payments**, plus provided additional payments for new activities or services
- Models with **per beneficiary per month (PBPM)** payments
- Models that defined an **episode of care** where the provider had financial incentives to meet performance targets: some with continued FFS billing and some with fixed episode payments replacing FFS payments

Financial risk and incentives. In addition to proposing changes in provider payment, many of the proposed models included different ways of putting providers at financial risk for patient care. Almost all proposed models included a two-sided performance incentive where providers share savings under the model and bear some financial risk for expenditures exceeding a target amount. Some proposals provided different participation tracks with different levels of risk. Some proposals phased in greater risk over time. The proposed models differed in whether Medicare FFS payments would be at risk or just the additional proposed payments were at risk.

Quality and cost measurement. The proposed models incorporated cost and quality performance measurement and accountability in a number of ways. In some models, minimum performance on a quality measure was a requirement for initial or continued model participation. Some proposed models required providers to achieve specific benchmarks for quality measures to receive any shared savings. In addition, some models linked performance on quality measures to the size of shared savings or shared losses. Models also proposed different approaches to rewarding performance on cost metrics, such as total cost of care, condition-specific cost of care, or health care utilization measures.

Summary

A review of the proposed PFPs deliberated and voted on by PTAC as of December 31, 2019, finds that the proposed models submitted to PTAC address care for a variety of health conditions and clinical settings. About half of the models proposed PBPM payments. These PBPM payment models, as well as episode-based payment models, varied in the extent to which proposed payments replaced (versus supplemented) existing fee schedule payments. Almost all models included shared risk for providers for performance against spending targets, and the majority linked financial incentives to performance on quality outcomes.

This review is intended to assist in assessing common elements and variations across the models that have been deliberated and voted on by PTAC as of December 31, 2019.

Purpose and Overview

This report reviews and analyzes the PTAC reports that were submitted to the Secretary as of December 31, 2019, relating to models that have been deliberated and voted on by PTAC. This analysis aims to synthesize and describe the range and diversity of payment issues identified by proposed PFPMs and key features of proposed care models and payment solutions. An objective of this analysis is to assess common elements and variations in proposed PFPMs. In particular, the proposed models submitted to PTAC may help identify gaps in payment and care delivery policies that health care providers believe need attention.

The research questions guiding the analysis are as follows:

- Do proposed models address gaps in payment for common provider types?
- What Medicare payment and service delivery gaps are most commonly identified by proposal submitters?
- Do the proposed PFPMs submitted to date address gaps in Medicare payment or care delivery for Medicare beneficiaries?
- What payment policy solutions did submitters most frequently propose?

In addressing these questions, this report begins by describing the types of individuals and organizations that submitted 34 proposed models to PTAC. Next, the report provides a substantive review of the 24 models deliberated and voted on by PTAC, beginning with the focus of the proposed models, such as the targeted subpopulation of Medicare beneficiaries or care settings addressed. The report then reviews the origins of the proposed models and discusses care delivery and payment issues targeted by the proposed models. The report also describes proposed care delivery and payment approaches, including: the level of financial risk providers assume based on performance on cost and quality metrics; risk-adjustment methods that account for differences in patients' health status and other factors; and quality and cost performance measures. The report complements published analyses of proposals submitted to PTAC.ⁱ

Background

Since 1992, Medicare has used a fee schedule to pay physicians and other clinicians for providing thousands of individual medical services. Many experts believe the FFS payment contributes to fragmented and inefficient care delivery. By incentivizing providers to deliver more services regardless of quality, FFS payment can increase costs without improving patient outcomes and can even diminish quality of care.ⁱⁱ

In recent years, policy changes in Medicare have emphasized moving from volume-based FFS payment to value-based payment through APMs. APMs encourage physicians and other providers to be more accountable for the quality and cost of care and patient experiences of care. Under the bipartisan MACRA of 2015, Congress significantly changed Medicare FFS physician payment methods. Key MACRA changes included streamlining three existing Medicare FFS physician quality reporting programs into the Merit-based Incentive Payment System (MIPS) and establishing incentives for physicians to participate in APMs.

APMs are designed to encourage high-quality and cost-efficient care by rewarding providers for better outcomes and lower costs. They can apply to a specific clinical condition such as cancer, a discrete care episode such as a hip replacement, or a patient population such as people with end-stage renal disease (ESRD).ⁱⁱⁱ Depending on the approach, providers might share in any savings gained through more efficient care delivery (shared savings or upside-only risk); share in both savings and losses (shared, two-sided, or downside risk); or receive a fixed per-person monthly payment to provide specified care for a defined population of patients (full risk or capitation).

Background on PTAC

MACRA also specifically encouraged development of APMs known as PFPs and created PTAC to review stakeholder-proposed PFPs. In Medicare PFPs, physicians or other eligible professionals (see Exhibit 1 below), such as nurse practitioners or physician assistants, must play a core role in implementing the payment methodology, and the APM must target the quality and costs of services that participating eligible professionals provide, order, or significantly influence.^{iv} The creation of PTAC gave stakeholders the opportunity to develop APMs for public review and consideration by PTAC and HHS.

Exhibit 1: Who are Eligible Clinicians in PFPMs?

<p>Federal Statute: Section 1848(k)(3) of the Social Security Act defines “eligible professional” as any of the following:</p> <ol style="list-style-type: none"> 1. A physician 2. A practitioner described in section 1842(b)(18)(C). A practitioner described in this subparagraph is any of the following: <ol style="list-style-type: none"> i. A physician assistant, nurse practitioner, or clinical nurse specialist (as defined in section 1861(aa)(5)) ii. A certified registered nurse anesthetist (as defined in section 1861(bb)(2)) iii. A certified nurse-midwife (as defined in section 1861(gg)(2)) iv. A clinical social worker (as defined in section 1861(hh)(2)) v. A clinical psychologist (as defined by the Secretary for purposes of section 1861(ii)) vi. A registered dietitian or nutrition professional. vii. A physical or occupational therapist or a qualified speech-language pathologist viii. Beginning with 2009, a qualified audiologist (as defined in section 1861(ll)(3)(B))
<p>Federal Regulations (42 CFR §414.1305) define “eligible clinicians” as an “eligible professional” (as defined in section 1848(k)(3) of the Social Security Act), as “identified by a unique TIN and NPI combination and includes any of the following:</p> <ol style="list-style-type: none"> 1. A physician 2. A practitioner described in section 1842(b)(18)(C) of the Act 3. A physical or occupational therapist or a qualified speech-language pathologist 4. A qualified audiologist (as defined in section 1861(ll)(3)(B) of the Act)

NOTE: NPI= National Provider Identifier; TIN = Tax Identification Number.

The 11-member PTAC, composed of individuals with national recognition for their expertise in PFPMs and related delivery of care under the Medicare program, begins review of PFFM proposals through preliminary review teams (PRTs) typically consisting of three PTAC members, including at least one physician.^v PRTs prepare a preliminary analysis of the proposed model for use in the full PTAC’s review and deliberation on the proposal. Frequently, PRTs send written questions or hold follow-up conversations with submitters to clarify aspects of proposed models. PRTs also can request additional quantitative or qualitative analyses, consult with clinical experts, obtain information on aspects of current Medicare programs that intersect with the proposal under review, and obtain actuarial consultation on the implications of a proposed model. Once PRTs have gathered all the information the PRT believed was needed to evaluate the proposal, they write a report to the full PTAC assessing the extent to which the proposal meets the regulatory criteria for PFPMs. PRTs may also provide initial feedback to the submitter in advance of sending a report to the full PTAC on the extent to which the proposal meets the Secretary’s criteria.

PTAC evaluates and deliberates on the proposed PFPMs at a public meeting where the PRT presents its findings to the full Committee, the submitter has an opportunity to make a public statement and respond to questions from Committee members, and there is an opportunity for public comment. PTAC then summarizes its comments and recommendations in a report to the Secretary of HHS. The report to the Secretary also includes a description of the model; PTAC’s rationale for its recommendation to the Secretary; an evaluation of the proposed model relative to the Secretary’s 10 criteria; and a summary of PTAC members’ voting distributions for the proposed model, relative to the 10 criteria and the overall PTAC recommendation.

Data and Methods

Between December 2016 and December 2019, 34 proposed PFPMs were submitted to PTAC for review (see the Appendix for more details). This report focuses on the 24 proposed models that were deliberated and voted on by PTAC and for which reports had been submitted to the Secretary as of December 31, 2019. The remaining 10 proposals submitted as of that date were either under active review or had been withdrawn from consideration. PTAC concluded that the criteria for PFPMs established by the Secretary are not applicable to two of the 24 proposals. The first of these two proposals, submitted by Mercy Accountable Care Organization (ACO), requested “relatively minor changes to existing regulations and billing guidance in a well-developed and frequently updated payment methodology.”^{vi} The second of these proposals, from Dr. Yang, outlined a fundamental restructuring of the Medicare program, including substantial redesign of Medicare benefits and use of defined contribution plans; PTAC determined the proposal did not include an approach to physician payment and the Secretary’s criteria for PFPMs did not apply to the proposal. Because these two proposals differ substantially from the other 22, they are excluded from some aspects of review where noted (e.g., approaches to financial risk). This report refers to proposed PFPMs by their abbreviated names as shown in Exhibit 2.

Exhibit 2: PFPMs Reviewed in PTAC Reports to the Secretary as of December 2019

Full Proposal Name	Submitter	Abbreviated Name
Advanced Primary Care: A Foundational Alternative Payment Model (APC-APM) for Delivering Patient-Centered, Longitudinal, and Coordinated Care	American Academy of Family Physicians	AAFP
Patient and Caregiver Support for Serious Illness	American Academy of Hospice and Palliative Medicine	AAHPM
Acute Unscheduled Care Model (AUCM): Enhancing Appropriate Admissions	American College of Emergency Physicians	ACEP
The ACS-Brandeis Advanced APM	American College of Surgeons	ACS
Intensive Care Management in Skilled Nursing Facility Alternative Payment Model (ICM SNF APM)	Avera Health	Avera Health
Advanced Care Model (ACM) Service Delivery and Advanced Alternative Payment Model	Coalition to Transform Advanced Care	C-TAC
Alternative Payment Model for Improved Quality and Cost in Providing Home Hemodialysis to Geriatric Patients Residing in Skilled Nursing Facilities	Dialyze Direct	Dialyze Direct
An Innovative Model for Primary Care Office Payment	Jean Antonucci, MD	Dr. Antonucci
Medicare 3 Year Value Based Payment Plan (Medicare 3VBPP)	Zhou Yang, PhD, MHP	Dr. Yang
Oncology Bundled Payment Program Using CNA-Guided Care	Hackensack Meridian Health and Cota	HMH/Cota
Community Aging in Place – Advancing Better Living for Elders (CAPABLE) Provider-Focused Payment Model	Johns Hopkins School of Nursing and Stanford Clinical Excellence Research Center	Hopkins/Stanford

Full Proposal Name	Submitter	Abbreviated Name
Project Sonar	Illinois Gastroenterology Group and SonarMD	IGG/SonarMD
Making Accountable Sustainable Oncology Networks (MASON)	Innovative Oncology Business Solutions	IOBS
LUGPA APM for Initial Therapy of Newly Diagnosed Patients with Organ-Confined Prostate Cancer	Large Urology Group Practice Association	LUGPA
Annual Wellness Visit Billing at Rural Health Clinics	Mercy Accountable Care Organization	Mercy ACO
HaH Plus (Hospital at Home Plus) Provider-Focused Payment Model	Icahn School of Medicine at Mount Sinai	Mount Sinai
Multi-Payer, Bundled Episode-of-Care Payment Model for Treatment of Chronic Hepatitis C Virus (HCV) Using Care Coordination by Employed Physicians in Hospital Outpatient Clinics	New York City Department of Health and Mental Hygiene	NYC DOHMH
The COPD and Asthma Monitoring Project	Pulmonary Medicine, Infectious Disease and Critical Care Consultants Medical Group	PMA
Home Hospitalization: An Alternative Payment Model for Delivering Acute Care in the Home	Personalized Recovery Care	PRC
Incident ESRD Clinical Episode Payment Model	Renal Physicians Association	RPA
Bundled Payment for All Inclusive Outpatient Wound Care Services in Non-Hospital Based Setting	Seha Medical and Wound Care	Seha
Comprehensive Care Physician Payment Model	University of Chicago Medicine	UChicago
ACCESS Telemedicine: An Alternative Healthcare Delivery Model for Rural Cerebral Emergencies	University of New Mexico Health Sciences Center	UNMHSC
CMS Support of Wound Care in Private Outpatient Therapy Clinics: Measuring the Effectiveness of Physical or Occupational Therapy Intervention as the Primary Means of Managing Wounds in Medicare Recipients	Upstream Rehabilitation	Upstream

NOTE: Sorted alphabetically by abbreviated name.

Exhibit 3 shows the status of all 34 proposals submitted to PTAC as of December 31, 2019. Of the other 10 proposed PFPs submitted but not deliberated and voted on by PTAC, three remained under review, and seven had been withdrawn as of that date. This report includes these 10 additional proposed models in the assessment of submitter types (Exhibit 4) but not in the substantive review of proposed models.

Exhibit 3: Status of Models Proposed to PTAC December 2016–December 2019¹

Deliberated and Included in a Report to the Secretary (N=24)	Under Active Review (N=3)	Withdrawn* (N=7)
<ul style="list-style-type: none"> ■ AAFP ■ AAHPM ■ ACEP ■ ACS ■ Avera Health ■ C-TAC ■ Dialyze Direct ■ Dr. Antonucci ■ Dr. Yang ■ HMH/Cota ■ Hopkins/Stanford ■ IGG/SonarMD ■ IOBS ■ LUGPA ■ Mercy ACO ■ Mount Sinai ■ NYC DOHMH ■ PMA ■ PRC ■ RPA ■ Seha ■ UChicago ■ UNMHSC ■ Upstream 	<ul style="list-style-type: none"> ■ ACAAI ■ Sobel ■ UMass 	<ul style="list-style-type: none"> ■ AAHKS ■ AAN ■ CCC ■ COA ■ DHN ■ MBC ■ NCQA/ACP

NOTES: *These proposals may be in the process of revision and resubmission by the submitter but were officially withdrawn as of December 31, 2019. Full submitter names for withdrawn proposals: AAHKS=American Association of Hip and Knee Surgeons; AAN=American Academy of Neurology; CCC = Clearwater Cardiovascular and Interventional Consultants; COA=Community Oncology Alliance; DHN= Digestive Health Network; MBC= Minnesota Birth Center; NCQA/ACP = National Committee for Quality Assurance and American College of Physicians.

Methods

A report to the Secretary (RTS) summarizes key information about proposed models in a consistent and efficient way. Using the reports as the primary data source, qualitative software (NVivo v12) was used to code descriptions of proposed PFPs using the following domains:

- Proposal overview, including submission date, submitter, background
- Target condition or patient population
- Provider type
- FFS payment and care delivery issues targeted

¹For an updated summary of proposal status (including proposals submitted or reviewed after production of this report), please see the Proposal Tracker on the PTAC website maintained by ASPE, available at <https://aspe.hhs.gov/proposal-submissions-physician-focused-payment-model-technical-advisory-committee>.

- Care delivery model proposed
- Payment model proposed
- Quality

Coded text was reviewed, and themes were synthesized across our review of the proposed PFPs. These themes were shared with ASPE for input and refined through an iterative process. In some cases, the RTS did not include enough detail to fully describe a particular aspect of a proposed model. When questions about a model's approach remained after reading the RTS, the proposal submission was reviewed for additional information. For example, if an RTS mentioned that the model proposed quality measures and linked those measures to payment, the proposal submission was assessed to see which quality measures were proposed and how those measures were linked to payment.

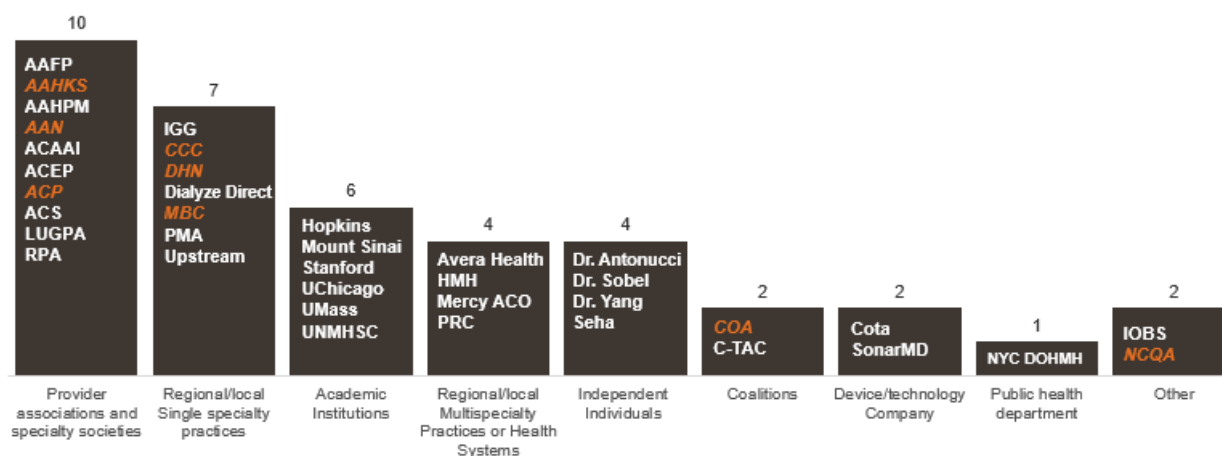
Findings

This Findings section includes descriptive background information about the proposed models, the key issues presented, and major elements of the proposed solutions offered. The first section describes the types of submitters who provided PFFM ideas for PTAC deliberation and characteristics of the proposed models. Next is a substantive review of the 24 models deliberated and voted on by PTAC, including a description of areas of focus and background on the origins and history of the proposed models. Following is an assessment of the delivery system issues and payment issues addressed by the PFFMs and their proposed payment approaches.

Entities Submitting Proposals

A range of stakeholders and individuals have submitted proposed PFFMs for PTAC review, including physician societies, academic institutions, physician group practices, medical device makers, private individuals, and a public health department. National provider organizations and physician specialty societies were the most common submitter type, followed by regional/local single-specialty physician practices or organizations. Exhibit 4 shows the types of organizations and individuals that have submitted proposals as of December 31, 2019, including those proposals under active review or withdrawn (shown in orange italicized font color). Some of the proposals that have been withdrawn may be under revision to be resubmitted to PTAC at a later date for further review.

Exhibit 4: Types of Entities Submitting Proposals to PTAC, December 2016–December 2019



SOURCE: Authors’ analysis of 34 proposals submitted to PTAC as of December 31, 2019.

NOTES: The total number of submitters (n=38) exceeds the number of submitted proposals (N=34) due to joint submissions. Withdrawn proposals are noted in dark orange italicized font.

Areas of Focus: Providers, Settings, and Conditions

Proposed models included a wide range of providers, including specialty physicians, primary care clinicians, physical and occupational therapists, and other care team members such as nutritionists, patient educators, and counselors. For example, proposed models addressed specialty care provided by gastroenterologists, pulmonologists, oncologists, nephrologists, urologists, and physical and occupational

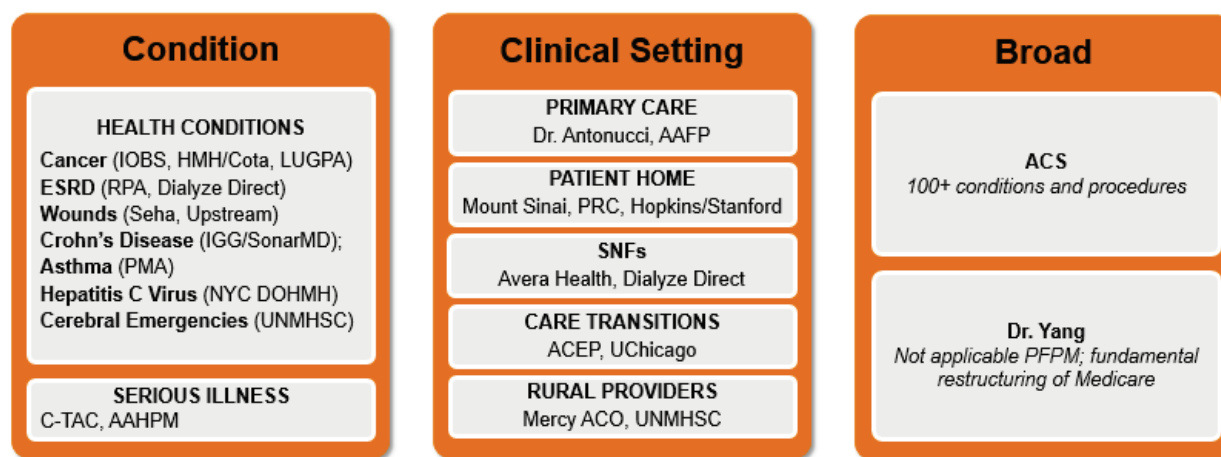
therapists. Primary care clinicians—general internal medicine, family medicine, and geriatricians—were the explicit focus of three proposals and were referenced in many others. Hospital-based clinicians, including emergency medicine physicians, hospitalists, and surgeons, were targeted by several proposed models. Finally, several proposed PFPMs suggested creating interdisciplinary care teams.

For the most part, the 24 models deliberated and voted on by PTAC may be grouped by area of focus, as follows:

- **Condition:** focused on beneficiaries with a particular health condition, such as cancer or COPD.
- **Clinical Setting:** focused on a particular provider type or setting, such as primary care clinicians or inpatient hospital services; these models may address care for a variety of health conditions
- **Broad:** more broadly applicable to a range of conditions or providers rather than a particular setting or condition

See Exhibit 5 below.

Exhibit 5: Focus Areas of Proposed Models Reviewed by PTAC, December 2016–December 2019



SOURCE: Authors’ analysis of 24 proposals deliberated and voted on by PTAC as of December 31, 2019.

NOTE: Dialyze Direct and UNMHSC are included in two categories, as these proposals focus on both a specific health condition (ESRD and cerebral emergencies, respectively) and a clinical setting (skilled nursing facilities, or SNFs, and rural providers).

Condition Focus

More than half of the proposed models deliberated and voted on by PTAC (N=13) focused on a particular health condition or phase of care delivery and the providers associated with care for that condition.

Eleven of these 13 models addressed specific health conditions, such as cancer, ESRD, and wounds; two addressed care for patients with serious illness. Serious illness that may be suitable for palliative care and other support services can include a variety of health conditions (e.g., diseases of the heart, kidney, liver, lungs, or cancer). As a result, the two proposed models pertaining to serious illness were somewhat distinct because they addressed care delivery for a disease phase across multiple conditions, providers, and settings.

Clinical Setting Focus

Nine proposed models focused on a specific clinical setting rather than a particular health condition, and two proposed models focused on both particular clinical setting and health condition (Dialyze Direct and UNMHSC). As shown in Exhibit 5, these proposals covered care in primary care settings, inpatient institutions, outpatient facilities and clinics, post-acute care facilities, rural providers, and patients' homes. Even if two given proposals focused on the same clinical setting, they may have each addressed different care or payment issues in that setting or differed in the details of the proposed care and payment model. For example, the two proposed skilled nursing facility (SNF) models addressed different issues (hemodialysis versus access to a geriatrician via telehealth). Also, the two models focused on care transitions between inpatient and outpatient settings addressed different types of in-hospital care: ACEP focused on the emergency department (ED), whereas UChicago covered services for admitted patients. The two primary care models and two hospital-at-home models had similarities in the care and delivery payment issues they addressed. These models differed more in the specific details of the proposed approach.^{vii} The UNMHSC and Mercy ACO proposal focused on rural providers. However, PTAC determined that the Mercy ACO submission was not an applicable PFPM because it presented relatively minor changes to a well-established and frequently updated payment methodology.^{viii}

Broader Applicability to Medicare FFS

Two models deliberated and voted on by PTAC went beyond a particular health condition or clinical setting and had broad applicability within Medicare FFS. The ACS proposal would establish APM episodes for more than 100 conditions or procedures across a variety of settings, using an episode grouper algorithm^{ix} that organized FFS claims into a preset package or bundle of services for a particular condition or procedure within a specified time period. The other proposed model (Dr. Yang) was distinct in recommending a fundamental restructuring of the Medicare program, including substantial redesign of Medicare benefits and use of a defined contribution plan; however, for this proposal, PTAC determined that the criteria for PFPMs established by the Secretary were not applicable because the proposal did not contain an approach to physician payment.

Proposed Models: Origins and History

Generally, the 24 proposed PFPMs expanded or built on existing payment reform efforts or proposed piloting new payment approaches on a small scale. Six proposed models built on existing APMs, and seven were based on HCIAAs administered by CMMI at CMS. In addition, three proposed models explicitly sought to pilot a new payment concept on a small scale.

At least four of the proposed models—IOPS, Dialyze Direct, HMH/Cota, and LUGPA—focused on a clinical specialty addressed to some degree by an existing APM, including CMMI's Oncology Care Model (OCM) and Comprehensive ESRD Care Model. Another two proposed models with a primary care focus (AAFP and Dr. Antonucci) also drew upon the longer history of APMs focused on improving primary care delivery. These proposals addressed perceived shortcomings in existing APMs, such as gaps in eligible providers, geographic limitations, or episode definition. These models also capitalized on the work done to develop the existing APMs, experiences of providers with these models in the field, and available literature about the impact of the existing APMs.

Seven of the proposed models built on interventions funded as CMMI HCIA—Mount Sinai, IOBS, UChicago, Avera Health, NYC DOHMH, Hopkins/Stanford, and UNMHSC. CMMI announced the HCIA in 2012, awarding three years of funding for 107 projects that aimed to deliver better health, improved care, and lower costs to people enrolled in Medicare, Medicaid, and the Children’s Health Insurance Program (CHIP), particularly those with the greatest health care needs.^x Because HCIA tested and evaluated these care delivery models, some evidence existed in evaluation reports about the link between the care model and cost and quality outcomes.

Four submitters offered models to pilot a new APM approach—PMA, HMH/Cota, IOBS, and Upstream. These submitters all included provider practices that were actively engaged in care delivery; the proposed pilot frequently identified physician practices or providers that would participate and test the model, including but not limited to the submitter. For example, IOBS proposed to initially include 16 practice sites, and the Upstream proposal stated its intention to include 200 physical or occupational therapists. These illustrated a desire among providers to test new care delivery and payment models that may not be ready for full implementation.

Issues Targeted: Care Delivery

By proposing a PFPM, submitters inherently targeted care delivery gaps or opportunities in Medicare FFS and the associated payment gaps under FFS that relate to the care delivery gap, directly or indirectly. Care delivery issues identified in proposed models cluster around several broad themes: suboptimal care management, limited access to services, utilization of unnecessary services, and lack of care coordination during care transitions. Submitters linked these issues with adverse outcomes, including unnecessary hospitalizations, excess spending, and reduced beneficiary and provider satisfaction.

Proposed models sometimes addressed more than one care delivery issue, and care delivery could overlap considerably with payment issues targeted by proposals. In the view of submitters, issues in current FFS payments did not support optimal care delivery (see discussion in the next section). Exhibit 6 summarizes the care delivery and payment issues targeted by proposals.

Suboptimal Care Management

Evidence shows that improved primary care and better care coordination and management of certain chronic conditions can help avoid unnecessary hospitalizations.^{xi} Submitters suggested that the Medicare physician payments generally did not support care management activities that would improve patient care. The primary care proposals (AAFP and Dr. Antonucci) would direct resources aimed at closing gaps in primary care management for patients. Managing the variety of health conditions and medications for patients and communicating with other providers is time consuming for primary care practices. The fee schedule has historically incentivized face-to-face visits that can place a burden on patients and providers. Similarly, the Avera Health proposal identified care management gaps for Medicare beneficiaries receiving care in SNFs between onsite SNF staff and medical consultants. For example, a beneficiary might need care that exceeds onsite capabilities or potential hospitalization but a readily accessible and timely consultation with a geriatrician is not always available. In the face of clinical uncertainty, SNF staff may be inclined to send the beneficiary to the hospital.

Limited Access

Closely linked with suboptimal care management were limitations in beneficiary access to services; limited access for patients can adversely affect good care management. Improving access to care could improve care management and reduce hospitalizations by reducing barriers to timely consultations with providers. In addition, patient choice and satisfaction could improve when access improves. Barriers to access can take many forms, such as travel distance to providers and facilities, limited hours for medical visits or consultations, or treatment plans requiring frequent visits.

Several of the proposals pointed out access challenges associated with conditions that require patients to travel to a central facility for frequent follow-up care. Examples of these treatments include in-center dialysis for patients with ESRD or hospital-based wound care. The two wound care proposals (Seha and Upstream) would shift the locus of wound care from hospital-based clinics to providers and settings more convenient to beneficiaries, including private freestanding clinics and physical and occupational therapists. Similarly, in the Dialyze Direct proposal, submitters proposed offering onsite dialysis services for beneficiaries in SNFs. In the UNMHSC proposal, telehealth consultations for patients with cerebral emergencies with neurologists and neurosurgeons could reduce the need for these patients to be transferred to a hospital further from home for treatment. Moreover, travel to a hospital for an acute care procedure represented a burden for patients, along with follow-up visits after the procedure during the patient's recovery. Some services typically delivered in hospitals could be provided safely at home, as suggested by the two hospital-at-home proposal submitters (PRC and Mount Sinai).

Unnecessary or Harmful Care

While some submitters focused on increasing use of high-value services, others focused on reducing overuse of certain services that may be avoidable, provide little value to patients, or may actually cause harm. For example, the LUGPA proposal sought to shift care patterns away from active intervention for patients with localized prostate cancer toward active surveillance. Active intervention could cause adverse physical and social outcomes for patients and provide little clinical benefit. Despite this, barriers—including payment incentives and also a lack of shared decision-making and patient engagement—prevent more widespread adoption of active surveillance. The Hopkins/Stanford model sought to improve the functional ability of frail adults living in their homes by delivering services that could avoid further functional decline and future use of high-cost services. Some of the services (e.g., home modifications, motivational interviewing, assessing individual goals and person-environment fit) in the Hopkins/Stanford proposed model are not currently reimbursed by the MPFS. Other proposals also aimed to reduce unnecessary hospitalizations or emergency department (ED) visits stemming from inadequate care management.

Lack of Integrated Care across Providers and Settings

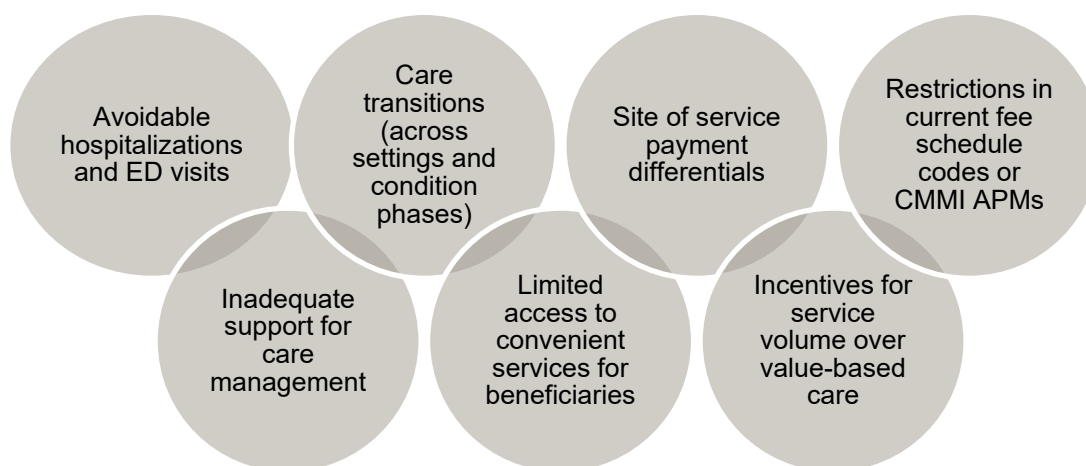
In the course of a treatment episode, patients can encounter a number of health care providers. These providers may have different clinical specialties or practice in different settings. Without integrated care and effective communication across providers, patients may encounter conflicting medical guidance, receive duplicative services, or receive contraindicated treatments with potentially harmful effects.

The two care transition-focused models mentioned previously addressed care coordination challenges when a patient moves from one care setting to another. For example, the ACEP proposal addressed

transitions between the ED and home, while the UChicago proposal targeted transitions between inpatient and ambulatory care. Transitions between care settings typically require handoffs among multiple providers caring for the patient, and these proposals would give providers additional flexibility to deliver services across settings and improve continuity of care.

Other submitters addressed improving integration of care throughout disease progression. For example, the RPA proposal focused on beneficiaries with chronic kidney disease whose conditions are advancing to ESRD. Generally, a surgical procedure to prepare an access site (e.g., a fistula) for the dialysis machine several weeks before beginning dialysis helps to avoid unnecessary hospitalizations, infections, and other adverse events during initial ESRD. However, this would require an integrated approach with patient education and counseling regarding patient prognosis as well as coordination among primary care providers, nephrologists, surgeons, and hospital-based clinicians who may care for a patient advancing to ESRD.

Exhibit 6: Care Delivery and Payment Issues Targeted in PFPMs Deliberated and Voted on by PTAC, December 2016–December 2019



SOURCE: Authors' analysis of 24 proposals deliberated and voted on by PTAC as of December 31, 2019.

Issues Targeted: Payment

Proposals focused on payment issues linked directly to specific care delivery challenges; in essence, submitters often appeared to believe that the MPFS does not support high-quality and efficient care delivery for a variety of reasons.^{xiii} This section reviews submitters' perceived issues with Medicare payment contributing to the care delivery gaps described above.

Noncovered Services

In some cases, proposals highlighted gaps in the services Medicare covers that submitters believed would improve care. Without Medicare payment, providers must choose between delivering patient care they believe is less than ideal or absorb the cost of additional care. These noncovered services highlighted in proposals spanned *who*, *what*, and *where* issues related to billable Medicare services for beneficiaries. The *who* referred to interdisciplinary care team members who could provide useful services—such as

therapists, nutritionists, or social workers—but were unable to bill Medicare or bill for certain types of services. The *what* included services like remote monitoring and telehealth consultations between patients and providers, though Medicare added telehealth benefits in the 2019 MPFS.^{xiii} The *where* referenced limitations on settings where services could be delivered and reimbursed, such as hospital-level acute care services delivered in the home.

Insufficient Payment for Care Management

Many submitters stated that current Medicare payment policy inadequately supports care management, which could lead to unnecessary hospitalizations and other poor outcomes. Though CMS introduced chronic care management codes in the MPFS to address this issue, submitters noted barriers to the codes' widespread use. More broadly, there has been longstanding criticism of the MPFS for undervaluing the time physicians spend on care management, particularly for primary care physicians, and instead incentivizing a high volume of intensive services and procedures.^{xiv} As an example of perceived limitations in the chronic care management codes, submitters of the IGG/SonarMD model noted that while Medicare pays for chronic care management services, the required elements (e.g., minutes of clinical staff time, number of chronic conditions, etc.) to bill the existing codes do not align with the proposed intervention.

Misaligned Incentives

The MPFS has been criticized for incentivizing the delivery of a high volume of services over high-value services due to its reliance on FFS payment, in which providers are paid more for delivering more services. For example, one of the proposed models (LUGPA) addressed payment incentives in the MPFS that are at odds with recommended care for patients. The LUGPA proposal stated that providers had a financial incentive to pursue more aggressive treatment for patients with localized prostate cancer because they were paid more for performing procedures on these patients. Even though active surveillance was an accepted and even recommended standard of care for certain patients, the submitters believed that the MPFS did not adequately compensate providers for the time and effort required to follow that care plan.

Limitations in Existing APMs

For proposals building on an existing CMMI APM, the submitters expressed concerns about limits on providers' ability to participate, including eligibility criteria, limited geographic penetration of existing models, episode definition, or model focus.

Three proposed models addressed types of cancer, a clinical area where CMMI operates the OCM. In the LUGPA prostate cancer model, the submitters noted that the focus on chemotherapy in the OCM limits its applicability to localized prostate cancer, a condition where other therapies such as radiation, hormone therapy, prostatectomy, or active surveillance typically are initiated rather than chemotherapy. The other two proposed PFPs focusing on cancer sought a more granular and flexible approach to cancer payment than is feasible under the OCM, including episode lengths that varied with the prognosis for different cancers and precision medicine treatment pathways. The IOBS model proposed to hold providers responsible for cancer-related expenditures rather than the total cost of care target used in the OCM.

There was also an existing APM focused on ESRD, the Comprehensive ESRD Care Model. The RPA proposal stated that it was distinct from the existing model for several reasons, including a broader

geographic scope. The RPA proposal also focused directly on improving the transition to dialysis, while the existing model took a more comprehensive payment approach to an episode of ESRD care once dialysis begins.

Differential Payments Based on Site of Service

Several proposed models addressed site-of-service issues in Medicare payment that submitters believed lead to unnecessary costs. Medicare pays providers different amounts for the same services delivered in different settings, adjusting physician labor, practice expense, and facility fees based on estimated costs of providing the service in different settings. These differential payments could create financial incentives to shift care delivery toward one setting over another. In addition, hospital ownership of physician practices has historically enabled the practice to receive higher payments, but CMS has taken steps to make payments more site-neutral.^{xv}

Both wound care proposed models (Seha and Upstream) focused on perceived inequities in payments for wound care services, with Seha focused primarily on differences between services provided in the inpatient or hospital outpatient settings relative to freestanding provider clinics and Upstream focused on payments to physical and occupational therapists practicing in private outpatient settings relative to hospital-based care. The hospital-at-home models, likewise, adopted the idea that inpatient stays and associated hospital facility payments were unnecessary for certain services that could be delivered more efficiently and conveniently at a patient's home.

Proposed Models for Care Delivery

Many of the proposed models reviewed by PTAC articulated a care model that essentially maps pathways for optimal care delivery and communication across providers and settings. Some of the proposed care models featured an interdisciplinary team approach, while others focused on a subset of providers. Two models proposed a population health approach to care. However, PTAC comments indicated that five of the proposed models lacked a clearly articulated vision of how care would be delivered.

Interdisciplinary Teams

The serious illness proposals (C-TAC and AAHPM) envisioned development of an interdisciplinary care team. This team would share information and meet the range of patient care needs as well as share the financial obligations and rewards of the proposed model. The cancer-focused HMM/Cota and IOBS proposals also featured interdisciplinary care teams, with the added feature of precision medicine. These two proposals would use large datasets and sophisticated analytics to define clusters of patients with similar characteristics and evidence-based treatment protocols. The two models would then tailor more precise care plans based on a range of patient factors, and incentivize providers to adhere to the applicable care plans.

Specialty Care Management

For a number of proposals—generally the health condition-focused proposals—the care model targeted a particular condition or setting and related providers. The specialty practice treating the condition would take on a greater role coordinating care: educating the patient, and monitoring disease progression.

Proposals added same-day scheduling slots for urgent visits, increased nurse triage support, and used technology to collect and share information with patients and other providers.

Telehealth was a common element of the proposed care management approach in these models; the ACEP, PMA, IGG/SonarMD, and Avera Health proposals all included a telehealth component to improve care management. Elements of telehealth included remote monitoring through mobile devices, televisits facilitated by technology that expand geographic access as well as create around-the-clock access to care, and software-supported outreach to patients to monitor and support adherence with treatment regimens.

Population Health

Three of the models adopted a population health approach for care delivery: the two primary care models (AAFP and Dr. Antonucci) and the UChicago model. In these models, providers were responsible for managing and delivering a range of services for their panel of patients. In the two primary care models, monthly payments provided additional flexibility to enable primary care practices to provide e-visits, telehealth, care coordination, infrastructure improvements, and other innovations not allowed by the MPFS. The UChicago proposal similarly established panels of medically frail patients and put providers—generally internists and hospitalists—at financial risk for their care.

More Accessible Care

The proposed Upstream, Seha, and Dialyze Direct models emphasized making care more convenient for beneficiaries. By reducing access barriers, these proposals sought to facilitate frequent visits to help optimize patient outcomes while reducing preventable ED visits or hospital admissions. The Upstream model also included a personnel substitution, emphasizing and expanding the role of physical and occupational therapists in treating wounds and relying less on hospital-based physicians. The two hospital-at-home proposal submitters (PRC and Mount Sinai) outlined the delivery of certain higher-intensity acute care services typically provided in an inpatient setting in patients' homes, as a way to improve health outcomes and make care more convenient and potentially safer for beneficiaries by increasing compliance and avoiding hospitalization. Similarly, the Hopkins/Stanford proposed model would provide patients with home visits with occupational therapists and registered nurses and minor home adaptations to improve functional ability, prevent falls, and avoid high-cost service use.

In addition to improving care management, telehealth services also can improve access to care by reducing substantial burden and time for beneficiaries and providers, such as frequent in-person visits to monitor chronic conditions (IGG/SonarMD, PMA), reducing unnecessary hospitalizations (Avera Health), and reducing transfers to other hospitals for specialty services (UNMHSC)

Exhibit 7 describes types of solutions submitters have proposed to address the care delivery and payment issues targeted in their proposed models. Examples of proposals that include such an approach follow the general description of the proposed solution.

Exhibit 7: Types of Care and Delivery Issues and Examples of Proposed Solutions in PFPMs Deliberated and Voted on by PTAC, December 2016 – December 2019

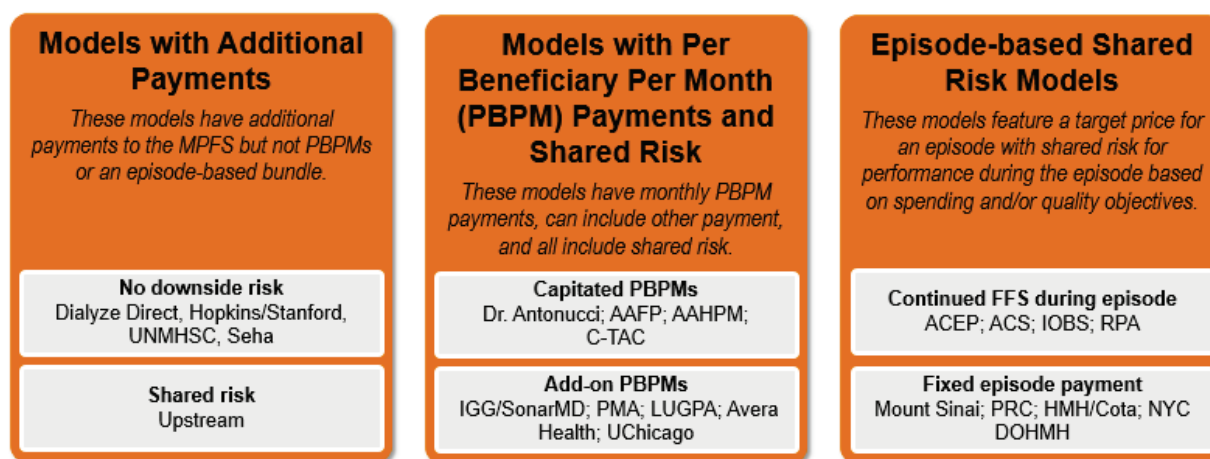
Types of Care Delivery and Payment Issues	Types of Proposed Solutions (Examples of Proposed Models)
Suboptimal care management/Insufficient payment for care management	<ul style="list-style-type: none"> ■ Monthly add-on payments that could be used to enhance care management for eligible beneficiaries (PMA, IGG/SonarMD, LUGPA, Avera Health, UChicago) ■ Monthly capitated payments to support care management for a panel of Medicare beneficiaries (AAFP, Dr. Antonucci, C-TAC, AAHPM) ■ Episode-based payments that could be used to enhance care management (NYC DOHMH, HMH/Cota, PRC) ■ Accountability for performance on outcomes associated with care management during an episode (ACEP, ACS, IOBS, RPA)
Limited access	<ul style="list-style-type: none"> ■ Episode-based payments for care delivered in a more convenient setting (Mount Sinai, PRC) ■ New payments to shift care to providers and settings more convenient to beneficiaries (Seha, Upstream) ■ Enhanced support for telehealth services (Avera Health, PMA, IGG/SonarMD, UNMHSC) ■ Payments and flexibility for additional providers to conduct home visits during an episode (ACEP, Hopkins/Stanford) ■ Payments to support same-day scheduling, triage lines, and other tools to enhance access to timely care (Avera Health)
Overutilization of potentially unnecessary or harmful care/ Misaligned incentives	<ul style="list-style-type: none"> ■ Performance incentives with shared risk for spending above a target amount (LUGPA, RPA)
Lack of integrated care across providers, settings, and disease phases	<ul style="list-style-type: none"> ■ Episode-based models with performance incentives to encourage integration (ACS, UChicago, ACEP, HMH/Cota, IOBS) ■ Monthly payments to support interdisciplinary team-based care (C-TAC, AAHPM) ■ Financial incentives to encourage better coordination and upstream preparation for advancing illness (RPA)
Noncovered services	<ul style="list-style-type: none"> ■ Monthly payments with flexibility to support services not currently covered in FFS Medicare (IGG/SonarMD, C-TAC, AAHPM) ■ Episode-based payments with flexibility to support services not currently covered in FFS Medicare (ACEP, Mount Sinai) ■ Explicit one-time payments for currently uncovered services (Upstream, Dialyze Direct, Hopkins/Stanford)
Restrictions in current APMs	<ul style="list-style-type: none"> ■ Episode definition that differs from existing APM to focus on phase of treatment (RPA) ■ Episode definition that differs from existing APM to focus on type of condition or providers generally excluded from existing APM (LUGPA) ■ Payment model incorporating large datasets and algorithms to more precisely classify patients and treatment pathways (HMH/Cota, IOBS)
Site of service payment differentials	<ul style="list-style-type: none"> ■ New payments to shift care away from costlier settings (Seha, Upstream)

Proposed Payment Models

The proposed payment models are summarized in Exhibit 8 and include additional payments, PBPM payments, and episode-based payments. Additional payments would supplement existing FFS payments and are intended to support the proposed model. PBPM payments include capitated approaches to replace existing payment for evaluation and management services, as well as add-on PBPM payments to facilitate disease management for an existing condition. Episode-based payments would include approaches where providers continue to receive FFS payments during the episode and those in which providers would be paid a fixed rate per episode based on a bundle of services and would incur downside risk.

Add-on PBPMs were the most commonly proposed payment approach (N=5), but capitated PBPMs and episode-based models with and without fixed episode payments also were proposed (N=4 of each type).

Exhibit 8: Approaches to Payment for Service Delivery in PFPMs Deliberated and Voted on by PTAC, December 2016–December 2019



Source: Authors' analysis of 22 proposals deliberated and voted on by PTAC as of December 31, 2019, to which the Secretary's criteria were applicable.

Exhibit 9 links the proposed payment methodologies to the areas of focus of proposed models. The health condition-focused proposals ranged across all types of payment models except capitated PBPMs. While the focus of proposed PFPMs' payment approaches were diverse, there were some notable patterns. The serious illness models exclusively proposed capitated PBPM approaches, as did the primary care models. The two hospital-at-home models both proposed a fixed episode payment pegged to the hospital-based diagnosis-related group (DRG) payment for the acute care service. The remaining setting-focused models, including those focused on SNFs, care transitions, and rural clinics, were similar in what they did *not* propose—full risk models that were part of capitated PBPMs or episode-based models with a fixed episode payment. The following sections highlight features and examples of each payment approach.

Exhibit 9: Payment Methodologies Associated with Proposed PFPM Focus Areas in PFPMs Deliberated and Voted on by PTAC, December 2016–December 2019

	Models with Additional Payments		PBPM Shared-risk Models		Episode-based Models	
	No downside risk	Shared risk	Capitated PBPM	Add-on PBPM	Episode-based FFS with shared risk	Fixed episode payment with shared risk
Condition-specific	1	1	2	3	2	2
Health conditions	Seha	Upstream		IGG/ SonarMD PMA LUGPA	IOBS RPA	HMH/Cota NYC DOHMH
Serious Illness	--	--	AAHPM C-TAC	--	--	--
Setting/Provider-specific	4	0	2	2	1	2
Primary care	--	--	Dr. Antonucci AAFP	--	--	--
Patient Home	Hopkins/ Stanford	--	--	--	--	Mt. Sinai PRC
SNFs	Dialyze Direct	--	--	Avera Health	--	--
Care transitions	--	--	--	UChicago	ACEP	--
Rural Providers	UNMHSC Mercy ACO*	--	--	--	--	--
Broadly focused	0	0	0	0	1 (ACS)	0

NOTES: *Though Mercy ACO was determined not to meet PFPM requirements, it is included in this summary table because the proposal was part of the assessment. Dr. Yang’s proposal is broad in focus and also determined not to be applicable as a PFPM, but it cannot be classified using these categories.

Additional Payments

Five proposed models would continue to use FFS payments plus an additional payment to implement the proposed model (Seha, Dialyze Direct, Upstream, Hopkins/Stanford, and UNMHSC). Dialyze Direct proposed to pay nephrologists a fixed one-time fee to evaluate beneficiaries with ESRD in SNFs and provide education about home hemodialysis as an option to going to a dialysis center. The model also included shared savings based on avoided transportation costs. Seha proposed a bundled payment for wound care services, although the bundle would be paid per visit and did not have an associated definition of an episode. UNMHSC proposed a bundled one-time payment to originating hospitals for telehealth consultations with neurologists and neurosurgeons. The Hopkins/Stanford proposal would pay a flat bundled payment for 10 therapy sessions and minor home modifications over a four to five month period.

Four of the five models (Seha, Dialyze Direct, Hopkins/Stanford, and UNMHSC) included no downside risk for participants, so there were minimal incentives to control volume.

Upstream shared some features of episode-based shared-risk models by including performance measures for quality and cost. However, Upstream included a one-time \$250 supply credit and continued FFS payments during the episode. Upstream also included downside risk if payments for physical and occupational therapy services exceeded a target amount, unlike the Seha and Dialyze Direct proposals.

PBPM Payments

Nine models proposed to pay providers a fixed PBPM amount to provide certain services to eligible beneficiaries. Exhibit 10 summarizes the services covered in the PBPM payments, the monthly payment rates, and other key features of proposed models with PBPM payments. The models varied in whether the PBPM was a flat fee for all eligible beneficiaries or risk-adjusted to reflect additional resources needed to care for sicker patients.

In four proposed models (AAFP, Dr. Antonucci, C-TAC, and AAHPM), PBPM payments replaced a significant portion of existing MPFS payments for evaluation and management (E&M) services. In the remaining five PBPM models, PBPM payments represented an additional payment to participating providers to support new or enhanced services. Most of these add-on PBPM payment models were structured as a condition-specific, disease management model, or specialty care medical home model. All of the PBPM-based models that were deliberated and voted on by PTAC included two-sided risk as a feature of the payment methodology, with financial incentives linked to performance on cost of quality outcomes during a defined episode of care.

Exhibit 10: Overview of PBPM Models Deliberated and Voted on by PTAC, December 2016–December 2019

	Condition or Clinical Area	PBPM Amount	Replacement of MPFS Codes	PBPM Risk Stratification	Services Covered	Additional New Payments
Dr. Antonucci	Primary care	\$60/\$90	Yes—capitation for services covered	Yes	E&M services, minor procedures, and office-based tests	None
AAFP	Primary care	TBD	Yes—capitation for either office-based E&M services or for all E&M services regardless of site of service	Yes	Office-based or all E&M services, care management	None

	Condition or Clinical Area	PBPM Amount	Replacement of MPFS Codes	PBPM Risk Stratification	Services Covered	Additional New Payments
AAHPM	Serious illness	\$400/\$650	Yes—E&M services	Yes	Palliative care, care coordination, 24/7 access, advanced care planning, spiritual and psychosocial care, home visits, and shared decision-making	None
C-TAC	Serious illness	\$400	Yes—replaces E&M, CCM, Complex CCM, Transitional Care Management, and Advance Care Planning payments	No	Palliative care, care coordination, 24/7 access, advanced care planning, and shared decision-making	None
IGG/SonarMD	Crohn's Disease	\$70	No	No	Remote monitoring of patients	\$200 for initial visit
PMA	Asthma and COPD	\$175	No	No	Remote monitoring of patients	Bluetooth meter
Avera Health	SNF residents	\$55	No	No	24-7 telemedicine access to Geriatric Care Team	\$252 for initial consultation
UChicago	Frail patients with hospitalizations	Between \$10–\$40	No	No	Internal medicine services across inpatient and outpatient setting	None
LUGPA	Prostate cancer	\$75	No	No	Care management during active surveillance episode	None

Episode-Based Payment

Eight of the proposed PFPs used episode-based payments and included a target payment for the episode, with retrospective reconciliation based on provider performance on spending targets and/or quality measures. These models were split into two groups based on whether providers would continue to receive FFS payments during the episode or a fixed payment per episode. In the latter approach, participating providers could face full downside risk for spending during an episode that exceeded the episode case rate.

The four models with continued FFS payments were ACEP, ACS, IOBS, and RPA. In these proposed models, payments would continue via the MPFS during the episode, but reconciliation against a performance target would create an incentive for providers to control costs, improve quality, or do both.

The four models with an upfront episode payment for a set of services during the episode were Mount Sinai, PRC, HMH/Cota, and NYC DOHMH. These models all featured a target payment with retrospective reconciliation, meaning that after the episode, providers could share in savings or be at risk for spending above the target price. The two hospital-at-home models both proposed using a DRG-like payment for care during the episode, but the payments supported post-acute transition services such as home visits and 24/7 clinician access for about 30 days following admission. The Mount Sinai proposed model bundled typical professional services provided during an inpatient stay for the DRG and covered a 30-day post-acute period. The HMH/Cota proposal paid the APM entity a predetermined amount for oncology services based on the Cota Nodal Address, a data-based classification for cancer patient risk and treatment pathways. The APM then disbursed these funds to providers over the course of the episode. The NYC DOHMH proposed model established a bundled payment for phases of hepatitis C care, and the bundle was paid to the participating provider at the beginning of the episode to cover expenditures.

Exhibit 11: CMS Waivers to Medicare Payment Rules in PBPM Models Deliberated and Voted on by PTAC, December 2016–December 2019

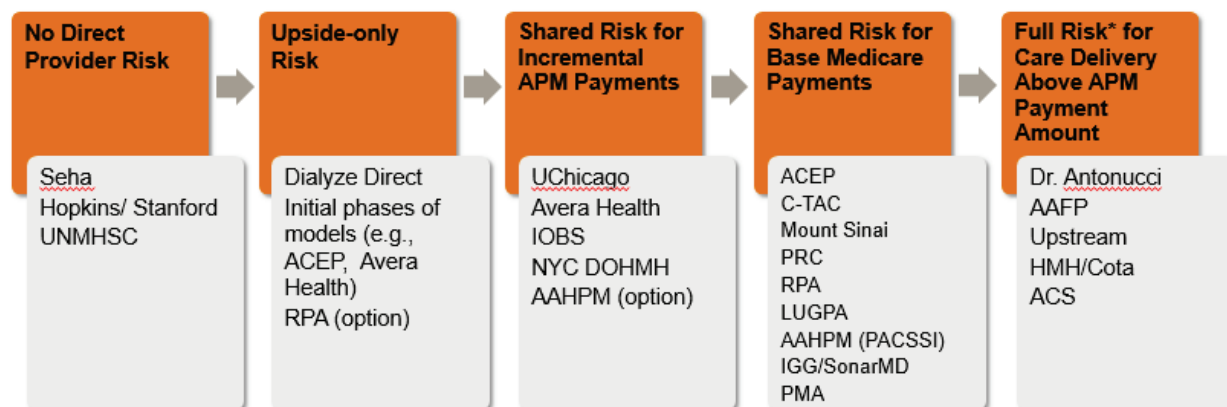
Some of the proposed PFPMs could require CMS waivers to Medicare payment rules. Several proposed models explicitly cited the need for a waiver, while others likely would require a waiver but did not propose a waiver. For example:

- Several proposals requested waivers to the Stark self-referral law, which prohibits physicians from referring Medicare patients for designated health services, such as imaging, to an entity with which the physician (or immediate family member) has a financial relationship, unless an exception applies. This restriction can limit providers' ability to split care-management fees or other financial incentives among care team members.
- The ACEP proposal requested three waivers to: 1) allow emergency physicians to bill for transitional care management codes; 2) allow emergency physicians to provide telehealth services; and 3) allow home visits by registered clinical staff within 30 days of a qualifying ED visit.
- The PMA proposal requested a waiver of beneficiary copayment requirements for remote telemonitoring services.
- Other proposals likely would need waivers of anti-kickback or Stark laws to be implemented, but the waivers were not directly addressed in the proposals or reports to the Secretary.

Financial Risk

The models reviewed by PTAC proposed a variety of approaches to align payment incentives for high-quality, efficient care by putting providers at some degree of financial risk for the cost and quality of patient care, including shared savings and downside risk and the basis for savings or loss calculations (Exhibit 12).

Exhibit 12: Approaches to Financial Risk in PFPMs Deliberated and Voted on by PTAC, December 2016–December 2019



SOURCE: Authors’ analysis of 24 proposals deliberated and voted on by PTAC as of December 31, 2019, to which the Secretary’s criteria were applicable.

NOTE: *Full risk includes models with capitated PBPM payments as well as models with a fixed episode-based payment or cap on payments. These models can also include performance-based shared risk payments.

Performance Incentives

Almost all of the proposed models had some form of a performance-based payment incentive, with the exceptions of Seha, Hopkins/Stanford, and UNMHSC. Among the proposals with performance-based payment incentives, one proposal included shared savings—Dialyze Direct proposed to give nephrologists a portion of savings from reduced transportation costs. All of the other proposed models with performance-based payment incentives included some form of two-sided or downside risk, where providers stood to share in both savings and losses. Provider acceptance of two-sided risk is one of several criteria for a payment model to be considered an advanced APM by HHS, but PFPMs submitted to PTAC do not need to be advanced APMs.²

Accountability Basis

Models differed with respect to the basis of payments that would be at risk. In some cases, such as the NYC DOHMH and the Avera Health proposed models, only the incremental payments provided by the model were affected by performance (e.g., add-on care management PBPM payments) and not the providers’ base or core FFS payments.

An additional dimension where several models differed was the basis for estimating shared savings and shared losses. While most models used a measure of health spending—for example, total cost of care, condition-specific cost of care, or payments for the provider’s services during an episode—as the unit for determining both shared losses and shared savings, two models proposed using a measure beyond spending on medical care. The NYC DOHMH proposed bonus payments based on an estimate of life

² An Advanced APM requires participants to use certified electronic health record (EHR) technology; provides payment for covered professional services based on quality measures comparable to those used in the MIPS quality performance category; and is either a medical home model expanded under CMMI authority or requires participants to bear significant financial risk. More information is available online at <https://qpp.cms.gov/apms/advanced-apms> (accessed November 19, 2019).

years gained with sustained virological response for patients with hepatitis C. The Dialyze Direct proposal provided bonus payments to nephrologists based on avoided transportation costs if SNF patients with ESRD received home hemodialysis instead of in-center dialysis.

Phasing of and Options for Risk

A number of models described a phased approach to provider risk over time or offered different risk tracks for participants, so even within a single model, the methodology could differ. For example, the RPA proposal used both a shared savings and a two-sided risk option for participants. The ACEP model included three risk tracks for participants: 1) pay for reporting transition to pay for performance, with downside risk starting in performance year three; 2) pay for performance with a stop gain/loss of 10 percent, with downside risk starting in performance year one; and 3) pay for performance with a progressive stop gain/stop loss capped at 20 percent/20 percent, with downside risk starting in performance year one.

This excerpt from the RTS on the AAHPM proposed serious illness model demonstrates the variety of approaches to risk sharing that can exist within one proposed APM:

Under Track 1, PCTs [patient care teams, the APM entity] would be subject to positive and negative payment incentives of up to 4 percent of total PACSSI care management fees received for the year.... Track 2 is a voluntary track available to PCTs in Year 3. Under this track, practices would take on shared risk and savings based on total cost of care. Risk would be based on spending above a risk-adjusted benchmark, but would be limited to the lesser of 3 percent of the total cost of care benchmark or 8 percent of each PCT's total Medicare A and B revenues. Shared savings would be based on spending below the benchmark and would be capped at 20 percent of the total cost of care benchmark.

Proposed Approaches to Risk Adjustment

Risk adjustment helps to enable accurate comparisons of clinician or facility performance by accounting for differences in patient health status and other demographic factors—such as age, gender, and income—that can contribute to higher spending for care. In PFPM proposals, risk adjustment was used two ways: 1) risk adjustment or risk stratification of payments to providers to support care delivery, and 2) risk adjustment of performance targets to calculate shared savings or losses.

Risk-Adjusted Payments

Among proposed models with PBPM payments, only three models (Dr. Antonucci, AAFP, and AAHPM) directly mentioned creating tiered payments for care based on beneficiary risk. In proposed models with an episode-based payment, HMH/Cota proposed to identify 27 payment bundles for the four cancer types, with a goal of ensuring payments matched the care needs of subgroups of similar patients. The two hospital-at-home proposed models (PRC and HMH/Cota) used a DRG-like bundled payment to reflect patient diagnosis. The NYC DOHMH model included two payment levels that differed based on whether the beneficiary was dually eligible for Medicare and Medicaid.

Risk-Adjusted Targets

Nearly all of the proposed models set a performance benchmark related to spending, and the models proposed a variety of approaches for adjusting the benchmark to reflect differences in risk between participating beneficiaries and a comparison population. These approaches included using beneficiary demographics, the number of health conditions, the CMS-HCC model (hierarchical condition categories), patient-reported survey data, a comparison with patients with matching DRGs (diagnosis-related groups), and big data approaches that use algorithms to identify patterns in large datasets and associated patient and treatment characteristics. The models also defined different groups to use for comparison, including geographic, historical, site-specific, and peer provider (e.g., academic medical centers) control groups.

Proposed Performance Measures for Quality and Cost

Improving health care quality and reducing cost growth are primary objectives of value-based payment; proposed PFPMs should reduce health care spending, improve health care quality, or accomplish both objectives. As a result, quality and cost performance measurement and accountability are an important feature of PFPMs. There may be proposed payment reforms that could potentially improve quality and reduce spending, but without performance measures these models are not APMs. Importantly for PFPMs, quality can be linked to payment in several different ways, including as minimum requirements for participation, as a threshold for receiving shared savings or being at risk for losses, or as a factor in determining the magnitude of shared savings or losses.

Exhibit 13 outlines major considerations for proposed PFPMs that shape the approach to quality performance measurement. These considerations include the aspect of the model addressed by the quality measure—namely, whether the model is achieving its objectives, is leading to undesirable outcomes, and affecting the experience of participating patients and providers. In addition, quality measures can capture different domains, such as structure, process, and outcomes.^{xvi}

Exhibit 13: Considerations for Assessing the Role of Quality Measures in APMs

<p>What aspect of the APM do the quality measures address?</p>	<ul style="list-style-type: none"> • Is the model achieving objectives? • Does the model have unintended consequences? • What is the patient experience in the model?
<p>What dimension of quality do the measures address?</p>	<ul style="list-style-type: none"> • Structure (e.g. certification requirements) • Process (e.g. number of visits) • Outcome (e.g. health improvement or decline)
<p>How are the quality measures linked to payment?</p>	<ul style="list-style-type: none"> • What is the spectrum of linkages between quality measures and proposed payments in the model? • Does the model include minimum quality standards? • Does the model link performance on quality measures to payments positively, negatively, or neither? • Does quality performance affect base Medicare payments, incremental payments in the model, or incentivize quality in some other way?

SOURCE: Authors’ analysis of 22 proposals deliberated and voted on by PTAC as of December 31, 2019.

Measures Addressing Spending

Almost all of the proposed models included performance-based payments, which require specification of performance measures to determine payments. Cost or spending measures comparing payments for health care services for beneficiaries participating in the model against spending for similar beneficiaries outside the model were common, though the basis for the spending target differed across proposals as described previously.

Several proposals included utilization measures as a related performance measure. For example, the UChicago proposal based bonus payments on whether the provider was responsible for target percentages of internal medicine service provision for eligible beneficiaries in both the inpatient and outpatient settings. Other proposed models included hospitalization rates or ED visits for participating beneficiaries as a performance measure.

Quality Measures

Aside from spending measures, the proposals also incorporated quality measures in several distinct ways. First, a quality measure could serve as a threshold for initial or continued participation in the model. In the Upstream wound care model, practices that did not achieve 80 percent patient satisfaction rates for two consecutive quarters would be dismissed from the program. Other models required that practices document shared decision-making infrastructure, achieve specific training requirements, or meet other baseline provider eligibility criteria to participate, as an indicator of quality.

Secondly, quality measures were used to evaluate program impact in some of the proposals. In these models, submitters described data on quality measures that could be collected and used to evaluate the program, but the quality measures were not linked to payment. Three proposed models included quality measures in this way (IGG/SonarMD, PMA, and Mount Sinai).

Finally, several models proposed to use quality measures to determine performance-based payments. In some proposed models, a minimum quality score was necessary to be eligible for shared savings (e.g., RPA). Some models also proposed to use quality measures to determine the magnitude of shared-savings bonuses—namely, that better performance on quality measures yielded higher shared-savings payments. On the other hand, some models also proposed using poor performance on quality measures to reduce the size of payment bonuses, to increase the size of shared losses to be returned to CMS, or to make it more difficult to achieve spending targets.

The types of quality measures included in proposed models also varied. Some proposed models only required providers to report performance on quality measures, while other models incorporated the level of performance on outcome measures in the payment methodology.

Conclusion

The findings from this analysis are intended to assist in assessing common elements and variation across the models that have been deliberated and voted on by PTAC as of December 31, 2019. Proposed PFPMs deliberated and voted on by PTAC as of December 31, 2019, varied across important dimensions. For example, proposals targeted different kinds of provider-types, clinical conditions, and care settings. Proposed PFPMs also addressed different delivery system challenges and tackled these challenges using various payment approaches.

From a delivery system perspective, PFPMs aimed to improve care management, to remove access limitations for specific services, to reduce unnecessary or harmful care, and to integrate care across providers, settings, and disease progression. Proposed changes to payment included adding to the MPFS in different ways, using fixed or episode-based payments, or using PBPM payments. PBPMs as “add-ons” to FFS payments, capitated PBPMs, and episode-based models with and without fixed payments were proposed with similar frequency.

Even when using the same general payment approaches, different PFPMs proposed different scenarios for implementing a given approach. For example, the proposed PFPMs differed in terms of whether the proposed payment change would supplement or replace FFS payments and how the proposed payments addressed risk accountability. Almost all of the models proposed risk accountability approaches that involved two-sided shared risk for participating providers. However, they varied in terms of whether and how cost and quality benchmarks drove financial risk to the provider.

Comparing the population or provider focus of the proposals against their proposed changes to payment systems does not identify clear patterns, but notable observations do emerge. For example, the serious illness models exclusively proposed capitated PBPM approaches, as did the primary care models. The two hospital-at-home models both proposed a fixed episode payment pegged to the hospital-based DRG payment for the acute care service. The other setting-focused proposed models did *not* propose full risk models that were part of capitated PBPMs or episode-based models with a fixed episode payment.

Appendix Exhibit 1: Detailed Overview of PFPs Deliberated and Voted on By PTAC, December 2016–December 2019

Proposal Short Name	Provider Type	Clinical Setting	Condition/Target Population	Care Coordination & Integration	Quality	Payment Policy Solution	PTAC Deliberation Date	PTAC Recommendation
AAFP	Primary care	Ambulatory	Primary care	Within specialty (primary care)	Linked to payment	Capitated PBPM with shared risk (options for accountability)	12/19/2017	Limited-scale testing
AAHPM	Palliative care providers	Home health, hospice	Serious illness	Multidisciplinary	Linked to payment	Capitated PBPM with shared risk (options for accountability)	3/26/2018	Limited-scale testing
ACEP	Emergency room physicians	Emergency department	Qualifying ED visits	Multidisciplinary	Linked to payment	Episode-based model with continued FFS, with shared risk (options for accountability)	9/6/2018	Recommended
ACS	Broad	Inpatient, outpatient & ambulatory	Broad (includes 100+ conditions or procedures)	Not specified	Linked to payment; reporting	Episode-based model with continued FFS and shared risk	4/11/2017	Limited scale testing
Avera Health	Primary care (geriatricians)	Skilled nursing facilities	SNF residents	Multidisciplinary	Linked to payment	Add-on PBPM with shared risk (options for accountability)	3/27/2018	Recommended
C-TAC	Palliative care providers	Inpatient, outpatient & ambulatory	Serious illness	Multidisciplinary	Linked to payment	Capitated PBPM with shared risk	3/26/2018	Limited-scale testing
Dialyze Direct	Specialists (nephrologists)	Skilled nursing facilities	Chronic condition (ESRD)	Within condition	None	One-time additional payment with shared savings	9/6/2018	Recommend for attention
Dr. Antonucci	Primary care	Ambulatory	Primary care	Not specified	Linked to payment; patient-reported using online survey	Capitated PBPM with shared risk	9/6/2018	Limited-scale testing
Dr. Yang	Not specified	Broad	Community-dwelling Medicare beneficiaries	NA	NA	Medicare benefit restructuring through health accounts	12/18/2017	NA
HMH/Cota	Specialist (oncologists)	Inpatient, outpatient & ambulatory	Cancer (breast, colon, rectal, and lung)	Multidisciplinary	Linked to payment	Bundled episode-based payment replacing FFS, with shared risk	9/8/2017	Limited-scale testing
Hopkins/Stanford	Occupational therapists and registered nurses	Patient home	Community-dwelling patients with chronic conditions and functional limitations	Not specified	Not linked to payment	Additional one-time bundled payment without shared risk	6/17/2019	Recommended for testing to inform payment model development
IGG/SonarMD	Specialist (gastroenterologist)	Ambulatory	Chronic disease (Crohn's Disease)	Within condition	Not linked to payment	Add-on PBPM with two-sided risk, plus a payment to support remote monitoring	4/10/2017	Limited scale testing
IOBS	Specialists (oncologists)	Ambulatory, inpatient & outpatient	Cancer	Primarily within condition	Linked to payment	Episode-based model with continued FFS, with shared risk	12/10/2018	Referred for further development and implementation

Proposal Short Name	Provider Type	Clinical Setting	Condition/Target Population	Care Coordination & Integration	Quality	Payment Policy Solution	PTAC Deliberation Date	PTAC Recommendation
LUGPA	Specialist (urologists)	Ambulatory	Cancer (prostate cancer)	Within condition	Linked to payment	Add-on PBPM with shared risk	12/19/2017	Not recommended
Mercy ACO	Rural health clinics	RHCs	Rural Medicare beneficiaries	NA	NA	Separately payable annual visit for RHCs	12/18/2017	NA
Mount Sinai	Broad	Inpatient services in home setting	Acute conditions (eligible patients in one of 44 DRGs)	Multidisciplinary within episode	Not linked to payment	Episode-based payment replacing FFS, with shared risk	9/7/2017	Recommended
NYC DOHMH	Specialist (gastroenterologist)	Outpatient & ambulatory	Chronic condition (Hepatitis C Virus)	Multidisciplinary	Linked to payment	Bundled episode-based payment replacing FFS, with shared risk	12/18/2017	Not recommended
PMA	Specialist (pulmonologist)	Ambulatory; telemedicine	Chronic disease (COPD and asthma)	Within condition	Measures and link to payment not specified	Add-on PBPM with shared risk, plus payment to support Bluetooth meter	4/11/2017	Not recommended
PRC	Broad	Inpatient services in home setting	Acute conditions (patients within ~150 DRGs)	Multidisciplinary	Linked to payment	Bundled episode-based payment replacing FFS, with shared risk	3/26/2018	Recommended
RPA	Specialist (nephrologists)	Ambulatory; dialysis centers	Chronic condition (incident ESRD)	Primarily within condition	Linked to payment	Episode-based model with shared risk and transplant bonus	12/18/2017	Recommended (without transplant bonus)
Seha	Not specified	Ambulatory	Chronic condition (wounds)	Within condition	Not linked to payment	Additional visit-based payment (no episode)	3/11/2019	Not recommended
UChicago	Primary care (including hospitalists)	Inpatient & outpatient	Frail/complex patients with hospitalizations		Linked to payment; utilization measures	Add-on PBPM with shared risk	9/8/2018	Limited-scale testing
UNMHSC	Neurologists, Neurosurgeons	Emergency department	Neurological emergencies	Within condition	Not linked to payment	Additional one-time payment without shared risk	9/16/2019	Recommended for further development and testing
Upstream	Physical and occupational therapists	Ambulatory	Chronic condition (wounds)	Within condition	Linked to payment	Additional one-time payment with shared risk, plus expanded billing capacity for providers	3/11/2019	Not recommended

SOURCE: Authors' analysis of 24 proposals deliberated and voted on by PTAC as of December 31, 2019.

NOTE: PBPM=per beneficiary per month; DRG=diagnosis-related group.

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