POLICY ANALYSIS

A Review of Physician-Focused Payment Model Technical Advisory Committee (PTAC) Voting Patterns and Comments on Proposed Physician-Focused Payment Models as of December 2020

DATE:

AUGUST 2023

PRESENTED TO:

Audrey McDowell

Office of the Assistant Secretary for Planning and Evaluation

Department of Health and Human Services

200 Independence Avenue, SW

Washington, DC 20201

PRESENTED BY:

Adil Moiduddin, MPP, NORC Laura Skopec, Urban Institute Kelsey Shields, MSPH, NORC

This analysis was prepared under contract #HHSP233201500048I-HHSP23337014T between the Department of Health and Human Services' Office of Health Policy of the Assistant Secretary for Planning and Evaluation (ASPE) and NORC at the University of Chicago. The opinions and views expressed in this analysis are those of the authors. They do not reflect the views of the Department of Health and Human Services, the contractor, or any other funding organizations. This analysis was completed and submitted in August 2023.





Table of Contents

Executive Summary	
Findings	
Summary	6
Purpose and Overview	7
Background	8
Nature of Proposals Submitted	3
The Preliminary Review Team	
Full PTAC Review on Scoring Criteria	11
Full PTAC Voting on Overall Recommendations	13
Data and Methods	16
Findings	18
PTAC Voting Patterns	18
Common Themes in PTAC Comments	26
Conclusion	40

List of Exhibits

Exhibit 1:	PFPMs Reviewed in PTAC Reports to the Secretary as of December 2020	9
Exhibit 2:	PFPM Regulatory Criteria Established By the Secretary	11
Exhibit 3:	PTAC Voting Process	12
Exhibit 4:	PTAC Recommendations by Criterion for Proposals Voted and Deliberated on by PTAC	12
Exhibit 5:	Changes in PTAC Approach to Voting on Overall Recommendations*	14
Exhibit 6:	PTAC Recommendations to the Secretary, by Proposal	15
Exhibit 7:	Example of PTAC Voting Table	16
Exhibit 8:	Overall PTAC Voting by Criterion	18
Exhibit 9:	PTAC Voting on Priority Criteria for Proposed Models Recommended for Implementation, Further Development and Implementation, Testing, or Limited-Scale Testing	20
Exhibit 10:	PTAC Voting on Priority Criteria: Proposed Models Recommended for Implementation	22
Exhibit 11:	PTAC Voting on Priority Criteria: Proposed Models Recommended for Further Development and Implementation and Proposed Models Recommended for Limited-Scale Testing	24
Exhibit 12:	PRT and PTAC Voting on Priority Criteria, by Proposal	25
Appendix E	Exhibit 1: PTAC Voting Through December 2020, for Criteria One, Two, and Three (High Priority)	42
Appendix E	Exhibit 2: PTAC Voting Through December 2020, for Criteria Four Through Ten	43

Executive Summary

The Medicare Access and CHIP Reauthorization Act of 2015 (MACRA) 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). MACRA established the Committee to review stakeholder-submitted PFPM proposals and provide comments and recommendations to the Secretary of Health and Human Services (HHS). 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 PFPM proposals through Preliminary Review Teams (PRTs), which typically consist of three Committee members, including at least one physician. Each PRT conducts a preliminary analysis of the proposed model and writes a report to the full PTAC. The PRT's report summarizes the PRT's findings regarding the extent to which the proposed model meets the Secretary's regulatory criteria for PFPMs and is used by the full PTAC in its review and deliberation on the proposal. Committee members evaluate, deliberate, and vote on each proposed PFPM at a public meeting. PTAC then summarizes its comments and recommendations in a report to the Secretary of HHS.

This report updates a March 2020 analysis of PTAC voting patterns and comments on PFPMs² to incorporate reports to the Secretary (RTS) submitted between December 2019 and December 2020. This report uses two approaches to describe patterns in how members of PTAC assessed proposed payment models submitted to the Committee to date: 1) describing Committee members' votes on PFPM proposals deliberated on by PTAC; and 2) analyzing Committee members' comments regarding how the proposals relate to the 10 criteria for PFPMs established by the Secretary, as conveyed in each RTS. By summarizing patterns and themes garnered from an analysis of PTAC's assessment of the proposed models submitted for PTAC's review, this report may be useful for understanding the breadth, objectives, and variation of APMs submitted by stakeholders. This report may also be useful in providing insights regarding the findings derived from the Committee's analysis of the proposals relative to the Secretary's criteria.

Findings

As of December 2020, PTAC had voted on the extent to which 28 proposed models meet the Secretary's criteria.³ PTAC submitted 26 RTSes regarding its deliberation on these proposals, including two RTSes that combined the Committee's comments on separate proposals that addressed similar topics into a single report.

¹ Assistant Secretary for Planning and Evaluation. FAQS: Physician-Focused Payment Model Technical Advisory Committee. U.S. Department of Health & Human Services. https://aspe.hhs.gov/faqs-physician-focused-payment-model-technical-advisory-committee. Accessed July 8, 2019.

² Devers K, Skopec L, Williams Torres G, Berenson R. A Review of Physician-Focused Payment Model Technical Advisory Committee (PTAC) Voting Patterns and Comments on Proposed Physician-Focused Payment Models as of December 2019. Office of the Assistant Secretary for Planning and Evaluation, Department of Health and Human Services; 2020:40. https://aspe.hhs.gov/sites/default/files/private/pdf/252376/VotingPatternsandCommentsonProposedModelsasofDec2019.pdf
³ From 2016 to 2020, PTAC received 35 proposals for PFPMs and voted on the extent to which 28 of these proposals meet the Secretary's 10 regulatory criteria. The remaining seven proposals were withdrawn prior to the Committee's deliberation.

In addition to voting on how well proposals meet each of the Secretary's criteria, Committee members also vote on an overall recommendation for the proposal. (PTAC provided an overall recommendation to the Secretary for 26 proposals and concluded that the criteria for PFPMs established by the Secretary are not applicable to two of the 28 proposals.)

Voting

PTAC's voting on proposed models varied by criterion and among Committee members. The 10 criteria established by the Secretary include scope, quality and cost, payment methodology, value over volume, flexibility, ability to be evaluated, integration and care coordination, patient choice, patient safety, and health information technology. Definitions for each criterion are available in Exhibit 2.

Three of the Secretary's criteria were key differentiators. Among the 26 proposed models for which PTAC made an overall recommendation to the Secretary, the major differentiating criteria in PTAC voting patterns were quality and cost (N=19 were found to meet this criterion), payment methodology (N=12 were found to meet this criterion), and integration and care coordination (N=16 were found to meet this criterion).

Votes varied across Committee members. Among the five proposed models that were recommended for implementation, Committee members generally voted similarly on most of the Secretary's criteria. However, for three of these proposed models, there was wide variation in voting on the payment methodology Criterion. For proposed models that were recommended for testing or limited-scale testing, there was wide variation in PTAC voting for some proposed models on scope, quality and cost, payment methodology, value over volume, integration and care coordination, and patient safety criteria. (See Appendix Exhibit 1 and Appendix Exhibit 2 for a summary of PTAC voting by proposed model and criterion.)

Themes

Analysis of PTAC comments across proposals identified several key themes and insights across six domains that were related, but not identical to, the Secretary's criteria:

- Scope and Scalability: Provide new opportunities for APM participation; provide new services for Medicare beneficiaries; identify issues in Medicare's payment structure; avoid nongeneralizable care delivery approaches; and address interaction with existing Center for Medicare and Medicaid Innovation (CMMI) models, including potential opportunities to add additional services to existing models.
- Quality: Design care models to improve quality; tie payment to quality; measure patient experience; and address quality assurance.
- Payment Model: Explore a fee schedule change; justify payment amounts; clarify accountability; consider whether two-sided risk is appropriate; consider whether shared savings and penalties based on total cost of care are appropriate; identify positive and negative incentives created by the proposed payment model; and use risk adjustment.
- **Evidence and Evaluability:** Describe how the proposed model can be evaluated; provide evaluation results for previously tested models; strengthen evidence for the proposed model; conduct real-world testing; and ensure sufficient sample sizes and relevant comparison groups.

- Care Coordination, Care Integration, and Shared Decision-Making: Describe formal integration and care coordination approach; explain how integration and care coordination will be incentivized and ensured; ensure that integration and care coordination focuses on the whole patient, not just the targeted disease; describe how patient preferences and individual needs would be considered; and develop formal shared decision-making processes.
- Health Information Technology: Use novel technologies where appropriate; describe beneficiary and provider burden; avoid proprietary technology; and describe how health information technology will be used.

Summary

Among the 26 proposed models for which PTAC provided an overall recommendation to the Secretary, the Committee found that more than 80 percent of the proposed models met the scope, value over volume, flexibility, ability to be evaluated, patient choice, patient safety, and health information technology criteria. The Committee found that all of the proposals met the flexibility criterion, and that all but one of the met the patient choice criterion. In addition, there was broad agreement between PRT and PTAC voting on most criteria, though the full Committee was more likely to find that a proposed model met the scope criterion (22 versus 17 proposed models). By contrast, however, the Committee found that less than 80 percent of the proposed models met the payment methodology, quality and cost, and integration and care coordination criteria—suggesting that it was more difficult for the proposed models to meet these remaining three criteria.

The Committee found that: only 12 proposed models met the payment methodology criterion, 20 proposals met the quality and cost criterion, and 16 proposals met the integration and care coordination criterion. Committee members also differed in how they rated proposals against each of these criteria (with voting options including: 1 or 2, does not meet criterion; 3 or 4, meets criterion; 5 or 6, meets criterion and deserves priority consideration; or not applicable), emphasizing the importance of the criteria in the Committee's deliberative process. The payment methodology criterion, in particular, was a significant source of voting variation among Committee members.

The assessment of PTAC voting and comments on the extent to which proposed models were found to meet the Secretary's criteria for PFPMs revealed both areas of consensus (e.g., flexibility) and relative disagreement (e.g., payment methodology) within PTAC. In addition, Committee members' voting patterns showed that certain criteria are more difficult to meet than others, particularly quality and cost, payment methodology, and integration and care coordination. Finally, PTAC's comments based on the Committee's review and deliberation on the proposed models provide important insights regarding key strengths and areas for potential improvement across proposed models.⁴

⁴ Starting in 2021, PTAC has held a series of theme-based meetings to further inform Committee members and the Secretary on pertinent issues related to effective payment model innovation in APMs and PFPMs that have been addressed in the proposals that stakeholders have submitted to the Committee. Topics that have been addressed include: Telehealth and APMs, Care Coordination and APMs, Social Determinants of Health and Equity and APMs, Population-Based Total Cost of Care (PB-TCOC) Models, Improving Care Delivery and Integrating Specialty Care In Population-Based Models, and Improving Management of Care Transitions in Population-Based Models. Additionally, PTAC's September 18-29, 2023 public meeting will focus on Encouraging Rural Participation in PB-TCOC Models. PTAC has prepared environmental scans and other documents that provide additional information related to these topics, including insights from relevant previously submitted proposals, and

Purpose and Overview

This report describes patterns in how members of the Physician-Focused Payment Model Technical Advisory Committee (PTAC) have assessed proposed payment models deliberated on by the Committee as of December 31, 2020.⁵ Analyses are presented for Committee members' votes on 28 physician-focused payment model (PFPM) proposals submitted to PTAC and the Committee's comments on the extent to which the proposals meet the 10 criteria established by the Secretary of Health and Human Services (HHS) in regulations at 42 CFR §414.1465 for PFPMs. The focus is on identifying patterns and themes that resulted from these analyses and reviews of PFPMs, relative to the Secretary's criteria.

The report is organized as follows:

- Background on PTAC proposals, voting rules, and reports to the Secretary
- Data and methods used to produce this analysis
- Findings from the analysis of PTAC voting patterns
- Findings from the synthesis of themes identified in Committee member comments
- Conclusion

insights from the Committee's review of these proposals. These documents are available on the ASPE PTAC website at https://aspe.hhs.gov/collaborations-committees-advisory-groups/ptac/ptac-resources.

⁵ This report updates a previous report, which analyzed PTAC voting patterns and comments as of December 2019. See Devers K, Skopec L, Williams Torres G, Berenson R. A Review of Physician-Focused Payment Model Technical Advisory Committee (PTAC) Voting Patterns and Comments on Proposed Physician-Focused Payment Models as of December 2019. Office of the Assistant Secretary for Planning and Evaluation, Department of Health and Human Services; 2020:40. https://aspe.hhs.gov/sites/default/files/private/pdf/252376/VotingPatternsandCommentsonProposedModelsasofDec2019.pdf

Background

The Medicare Access and CHIP Reauthorization Act of 2015 (MACRA) 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 PTAC to review stakeholder-proposed PFPMs and provide comments and recommendations to the Secretary of HHS. 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 its review of PFPM proposal with Preliminary Review Teams (PRTs), which typically consist of three Committee members, including at least one physician. Each PRT conducts a preliminary analysis of the proposed model and writes a report to the full PTAC assessing the extent to which the proposed model meets the Secretary's regulatory criteria for PFPMs. This report is then used by the full PTAC to inform its review and deliberation on the proposal. Committee members evaluate, deliberate, and vote on each proposed PFPM at a public meeting. PTAC then summarizes its comments and recommendations in a report to the Secretary of HHS (RTS).

Nature of Proposals Submitted

As of December 31, 2020, PTAC has submitted 26 RTSes regarding 28 proposed models.⁷ Exhibit 1 lists each of the proposals that are relevant to this report. As noted in the exhibit, proposed PFPMs come from a range of submitter types, including national provider associations or specialty societies, regional/local single-specialty physician practices, and other provider organizations. As described in the companion report, *A Review of Proposed Models Deliberated and Voted on by the Physician-Focused Payment Model Technical Advisory Committee (PTAC) as of December 2020*, the proposal submissions include a diverse array of providers, conditions, and settings. For example, some proposed PFPMs focus on beneficiaries with a particular health condition, such as cancer or chronic obstructive pulmonary disease (COPD), while others consider a particular provider type or setting, such as primary care clinicians or inpatient hospital services. In addition, the proposed payment models may be grouped into three major categories: those with additional payments, those with per beneficiary per month (PBPM) payments and shared risk, and those with episode-based payments.

⁶ Assistant Secretary for Planning and Evaluation. FAQS: Physician-Focused Payment Model Technical Advisory Committee. U.S. Department of Health & Human Services. https://aspe.hhs.gov/faqs-physician-focused-payment-model-technical-advisory-committee. Accessed July 8, 2019.

⁷ This brief does not cover proposals that were submitted to PTAC but not discussed at a public meeting by the full Committee as of December 31, 2020. All reports to the Secretary (RTS) reviewed in this paper were made public by December 31, 2020. In addition, this paper does not cover proposals that were withdrawn by the submitters.

Exhibit 1: PFPMs Reviewed in PTAC Reports to the Secretary as of December 2020

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	ААНРМ
Patient-Centered Asthma Care Payment (PCACP): An Alternative Payment Model for Patient-Centered Asthma Care	American College of Allergy, Asthma & Immunology	ACAAI
Acute Unscheduled Care Model (AUCM): Enhancing Appropriate Admissions	American College of Emergency Physicians	ACEP
The "Medical Neighborhood" Advanced Alternative Payment Model (AAPM) (Revised Version)	American College of Physicians; National Committee for Quality Assurance	ACP-NCQA
The ACS-Brandeis Advanced APM	American College of Surgeons	ACS
Patient-Centered Oncology Payment Model (PCOP)	American Society of Clinical Oncology	ASCO
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
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

Full Proposal Name	Submitter	Abbreviated Name
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	РМА
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
Eye Care Emergency Department Avoidance (EyEDA) Model	University of Massachusetts Medical School	UMass
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.

The Preliminary Review Team

PTAC's review of each submitted PFPM begins with a PRT typically consisting of three Committee members including at least one physician. PRTs conduct a preliminary analysis of the proposed model for use in the full PTAC's review and deliberation on the proposal. The PRT reviews and discusses each proposal and seeks additional information if needed. In order to clarify aspects of proposed models, PRTs also frequently send written questions or hold follow-up conversations with submitters. 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, and obtain actuarial consultation on the implications of a proposed model. Once the PRT has fully gathered and assessed all information it deems necessary, it writes a report to the full PTAC summarizing its evaluation and the extent to which the proposal meets the Secretary's 10 regulatory criteria for PFPMs. The PRT makes findings relative to each criterion regarding whether the proposal does not meet, meets, or meets and deserves priority

⁴ Assistant Secretary for Planning and Evaluation. FAQS: Physician-Focused Payment Model Technical Advisory Committee. U.S. Department of Health & Human Services. https://aspe.hhs.gov/faqs-physician-focused-payment-model-technical-advisory-committee. Accessed July 8, 2019.

consideration. A PRT may also provide initial feedback to the submitter on the extent to which the proposal meets the Secretary's criteria for PFPMs in advance of sending a report to the full PTAC. Exhibit 2 below provides a summary of the Secretary's 10 criteria; see Appendix A for more detailed information.

Exhibit 2: PFPM Regulatory Criteria Established By the Secretary

Scope: Aim to either directly address an issue in payment policy that broadens and expands the Centers for Medicare & Medicaid Services (CMS) APM portfolio or include APM Entities whose opportunities to participate in APMs have been limited.	Quality and Cost: [PFPMs] are anticipated to improve health care quality at no additional cost, maintain health care quality while decreasing cost, o both improve health care quality and decrease cost.
Payment Methodology: Pay APM Entities with a payment methodology designed to achieve the goals of the PFPM criteria. Addresses in detail through this methodology how Medicare and other payers, if applicable, pay APM Entities, how the payment methodology differs from current payment methodologies, and why the PFPM cannot be tested under current payment methodologies.	Value over Volume: Provide incentives to practitioners to deliver high-quality health care.
Flexibility: Provide the flexibility needed for practitioners to deliver high-quality health care.	6. Ability to Be Evaluated: Have evaluable goals for quality of care, and any other goals of the PFPM.
Integration and Care Coordination: Encourage greater integration and care coordination among practitioners and across settings where multiple practitioners or settings are relevant to delivering care to the population treated under the PFPM.	8. Patient Choice: Encourage greater attention to the health of the population served while also supporting the unique needs and preferences of individual patients.
Patient Safety: Aim to maintain or improve standards of patient safety.	 Health Information Technology: Encourage use of health information technology to inform care.

Full PTAC Review on Scoring Criteria

The full PTAC evaluates and deliberates on the proposed PFPM at a public meeting. During the public meeting, the PRT lead provides an overview of the proposed model and conveys the PRT's evaluation of the proposed model, including the extent to which the PRT has found that proposal meets the Secretary's 10 regulatory criteria for PFPMs. In addition, 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 on the proposed model. Following public deliberation, Committee members vote on the proposal to determine scores for each of the 10 criteria established by the Secretary. The Committee has identified the first three criteria (scope, quality and cost, and payment methodology) as being high priority. Committee members can assign each proposed model a score of 1 to 6 on each criterion. A proposed model may also be assigned a score noted as "not applicable" for one or more criteria. The distribution

^{9 42} CFR §414.1465.

¹⁰ "Not applicable" may indicate, for example, that the proposed model is not relevant for the vast majority of the Medicare population (e.g., maternity care models); represents a wholesale change to Medicare's structure rather than a targeted payment model (e.g., changes to Medicare's cost-sharing design); or requests only a straightforward fee schedule change (e.g., expansion of the allowable uses for a currently available fee schedule code).

of scores from each Committee member is calculated to determine whether there is consensus on a score, with all or nearly all votes in agreement on "does not meet," "meets," or "meets and deserves priority consideration." Exhibit 3 below provides a summary of the voting process.

Exhibit 3: PTAC Voting Process

When Committee members vote during the public meeting, each criterion receives a score of 1 to 6, as follows:

- 1-2: does not meet criterion
- 3-4: meets criterion
- 5-6: meets criterion and deserves priority consideration

Committee members can also vote that a proposal is not applicable for a particular criterion.

Additionally, Committee members may determine that the criteria for PFPMs established by the Secretary are not applicable to a proposed model. Such proposed models are not included in this analysis unless otherwise noted.

If an initial vote does not reach consensus, additional deliberation and a second round of voting may occur. Once consensus is achieved, Committee members submit final votes on each criterion, with a score of 1 to 6 (or not applicable) as before. Again, the distribution of scores is calculated, and the final, overall score for each criterion is determined based on the range in which the majority of votes fell. If a majority of Committee members voted 1 or 2, the proposed model is found to not meet the criterion; if a majority voted 3 or 4, the proposed model is found to meet the criterion; and if a majority voted 5 or 6, the proposed model is found to meet the criterion and deserves priority consideration relative to that criterion. Exhibit 4 below shows the number of proposals that the Committee found did not meet, met, or met and deserved priority consideration for each criterion. If a majority of Committee members voted 3 or higher but there is not consensus on whether the Committee finds the proposed model meets the criterion or meets and deserves priority consideration, the proposed model is found to meet the criterion.

Exhibit 4: PTAC Recommendations by Criterion for Proposals Voted and Deliberated on by PTAC

	Number o	f Proposals Recei the 10 Crite	Percent of Proposals the Committee Found "Meets" or	
Criteria	Does Not Meets Meets Criterion and Deserves Priority Consideration		"Meets and Deserves Priority Consideration"	
Priority Criteria				
1. Scope	4	12	10	85%
2. Quality and Cost	7	18	1	73%
3. Payment Methodology	14	12	0	46%
Other Criteria				
4. Value over Volume	3	23	0	88%
5. Flexibility	0	26	0	100%
6. Ability to Be Evaluated	5	21	0	81%
7. Integration and Care Coordination	10	15	1	62%
8. Patient Choice	1	21	4	96%

	Number o	f Proposals Recei the 10 Crite	Percent of Proposals the Committee Found "Meets" or	
Criteria	Does Not Meet	Meets	Meets Criterion and Deserves Priority Consideration	"Meets and Deserves Priority Consideration"
9. Patient Safety	3	22	1	88%
10. Health Information Technology	4	19	3	85%

SOURCE: Authors' analysis of 26 proposals deliberated and voted on by PTAC as of December 31, 2020; excludes two proposals for which PTAC concluded that the criteria for PFPMs established by the Secretary were not applicable.

Full PTAC Voting on Overall Recommendations

In addition to voting on how well proposals meet each of the Secretary's criteria, Committee members also vote on an overall recommendation for the proposal. Initially and up until September 2018, Committee members voted for one of four dispositions as an overall recommendation for each proposal. These dispositions included: "Do not recommend," "Recommend for limited-scale testing," "Recommend for implementation," and "Recommend for implementation as a high priority." The latter two categories were for proposed models recommended for full implementation by HHS. Additionally, Committee members could vote "Not applicable" for the overall recommendation in cases where the criteria for PFPMs established by the Secretary were found to not be applicable to a given proposal. In contrast to PTAC voting on whether a proposal meets the Secretary's criteria, a two-thirds supermajority of Committee members was required for the overall recommendation to the Secretary.

At the September 2018 PTAC public meeting, Committee members voted to add another disposition option—"recommend proposal for attention"—as an overall voting category. This option allows PTAC to draw the Secretary's attention to payment issues identified by a submitter, without recommending the proposed model for implementation or testing. For example, the Committee may recommend a proposed model for attention when PTAC has significant concerns about the particular proposed payment model, but Committee members wish to highlight the opportunity for payment reform identified by the proposed model (e.g., Dialyze Direct).

In addition, following the September 2018 public meeting, PTAC created a two-part process for making overall recommendations. Under this approach, Committee members first vote to "recommend," "not recommend," or "refer" the proposed PFPM to HHS for other attention. Then, for those proposed models that were recommended, PTAC votes on whether the recommended PFPM is ready for full implementation as is; if it should be further developed during implementation; if it requires additional testing before implementation, or if it should be implemented as part of an existing APM. Exhibit 5 describes changes in the PTAC voting process for overall recommendations approved at the September 2018 public meeting (which were implemented during the Committee's deliberation at the December 2018 public meeting), and Exhibit 6 summarizes the Committee's overall recommendation for each proposed model with an RTS as of December 2020.

In April 2021, PTAC updated the Committee's Proposal Submission Instructions to include an additional "track" for proposal review to provide additional flexibility for stakeholders. This second track ("Track

2") is most appropriate for stakeholders whose proposal may raise important care delivery, payment, or policy issues but may have varying degrees of resources available, which can influence their ability to address certain criteria in detail (such as payment methodology). For both the standard ("Track 1") and the Track 2 proposals, PTAC will deliberate and score the proposal on each criterion established by the Secretary of HHS. For Track 1 proposals, after the Committee scores the on each criterion, Committee members will vote to place 1 proposal in one of three updated recommendation categories (recommend full proposal, recommend components of the proposal; or not recommended). PTAC will not vote on an overall recommendation for Track 2 proposals as Track 2 models will have insufficient information for the Committee's full and comprehensive deliberation. The full Committee's findings from deliberation on Track 1 and Track 2 proposals will then be summarized in a report to the Secretary.

Exhibit 5: Changes in PTAC Approach to Voting on Overall Recommendations*

One Best Vista 40 Bressessia	Two-Pa	rt Vote, 9 Proposals (post-September 2018)			
One-Part Vote, 19 Proposals (through-September 2018)	Round One	Round Two (If Recommended)			
Not Applicable: The proposed model does not meet requirements for a PFPM (N=2)	Do not recommend	Implementation: Same as prior "recommended for implementation" category (N=0)			
Do not recommend: PTAC recommends against implementation of the proposed model (N=3)	(N=3) Recommend (N=4)	Further development and implementation: PTAC believes the proposed model would benefit from further development in coordination with HHS prior			
Recommend for Limited-scale testing: PTAC recommends the Secretary consider testing the proposed model in a limited geographic area or on another limited basis	Referred for attention by HHS (N=2)	to implementation (N=2) Testing: PTAC recommends testing the proposed model as specified in the report to the Secretary to inform model development (N=2)			
to collect data to inform payment levels and payment approach and to assess any operational issues prior to full implementation (N=8)		Implementation through Another Center for Medicare and Medicaid Innovation (CMMI) Model: PTAC recommends implementation of proposal but as part of an existing or planned CMN			
Recommend for Implementation: PTAC believes the proposed model is ready for full		APM model (N=0)			
implementation by HHS (N=5)	Two-Track Voting Process (post-April 2021)				
Recommend for Implementation as a High Priority: PTAC believes the proposed model	Track	Recommendation Category			
is ready for full implementation by HHS (N=0) Additional Recommendation Category Added in September 2018	Track 1	Recommend Full Proposal: Proposal substantially meets the Secretary's criteria for PFPMs. PTAC recommends implementing proposal as a payment model as described in PTAC's comments.			
Recommend for Attention by HHS: Allows PTAC to draw the Secretary's attention to payment issues identified by a submitter,		Recommended Components: Proposal includes attributes and/or components for attention by the Secretary as described by PTAC's comments.			
without recommending the proposed model		Not Recommended			
for implementation or testing. (N=1)	Track 2	The full Committee will not vote on an overall recommendation because there is insufficient information for PTAC to be able to fully and comprehensively deliberate on the proposal.			

^{*} PTAC begins by deliberating and scoring each on each criterion established by the Secretary of HHS. Where appropriate, PTAC also votes on an overall recommendation for each proposal.

NOTE: The number of proposed models is noted in parentheses: for example, N=2 means two proposed models.

Exhibit 6: PTAC Overall Recommendations to the Secretary, by Proposal

PTAC Recommendation Category (Number of Proposals)	Proposal Abbreviated Name			
One-Part Vote, 19 Proposals (through Septemb	per 2018)			
Not Applicable (N=2)	Dr. Yang Mercy ACO			
Do Not Recommend (N=3)	LUGPA NYC DOHMH PMA			
Recommend for Attention by HHS (N=1)	Dialyze Direct			
Recommend for Limited-Scale Testing (N=8)	AAFP AAHPM ACS C-TAC Dr. Antonucci HMH/Cota IGG/SonarMD UChicago			
Recommend for Implementation (N=5)	ACEP Avera Health Mount Sinai RPA PRC			
Two-Part Vote, 9 Proposals (post September	2018)*			
Do Not Recommend (N=3)	Seha UMass Upstream			
Referred for Attention by HHS (N=2)	ACAAI ASCO			
Recommend for Testing (N=2)	ACP-NCQA Hopkins/Stanford			
Recommend for Further Development and Implementation (N=2)	IOBS UNMHSC			

NOTE: This table includes the 28 proposals that were deliberated and voted on during a PTAC meeting; it does not include seven proposals that were submitted to PTAC but withdrawn prior to Committee deliberation.

*PTAC deliberated on 9 proposed models (Hopkins/Stanford, IOBS, Seha, UNMHSC, Upstream, ACAAI, ACP-NCQA, ASCO, and UMass) after a change in voting approach approved in September 2018. For the two-part voting approach implemented after the September 2018 PTAC public meeting, two options for round two had not yet been selected as of December 2020 namely, for a proposed model to be recommended for implementation or recommended for implementation through another CMMI model.

Data and Methods

Two analyses were conducted—one focused on PTAC and PRT voting patterns and the other on PTAC comments as discussed in the reports to the Secretary (RTSes). Methods used for both analyses are described below. To analyze PTAC and PRT voting patterns, a database of PTAC votes across the 10 scoring criteria for each proposal (as recorded in each RTS), as well as PRT votes across the 10 scoring criteria for each proposal(as recorded in each PRT report), was developed. Voting tables in an RTS show the number of Committee members voting for each score (1–6) on each criterion, as well as voting for the overall recommendation. The PRT reports show the conclusion of the PRT members, as well as whether that conclusion was unanimous (three of three members) or majority (two of three members). Exhibit 7 shows an example of a voting table, as reproduced in a typical RTS.

Exhibit 7: Example of PTAC Voting Table

Criteria Specified by the Secretary			Prio Consid					
(at 42 CFR §414.1465)	Applicable	1	2	3	4	5	6	Rating
Scope (High Priority)	0	0	0	0	2	0	5	Meets Criterion and Deserves Priority Consideration
Quality and Cost (High Priority)	0	0	0	4	2	1	0	Meets
Payment Methodology (High Priority)	0	0	2	4	1	0	0	Meets
4. Value over Volume	0	0	0	3	3	0	1	Meets
5. Flexibility	0	0	0	2	4	1	0	Meets
6. Ability to Be Evaluated	0	0	0	3	3	1	1	Meets
7. Integration and Care Coordination	0	0	0	4	3	0	0	Meets
8. Patient Choice	0	0	0	2	3	1	1	Meets
9. Patient Safety	0	0	0	1	4	1	1	Meets
10. Health Information Technology	0	0	0	0	3	1	3	Meets Criterion and Deserves Priority Consideration

The second analysis focuses on PTAC comments about proposed models, as summarized in 26 reports to the Secretary. The qualitative analysis software package NVivo 12 was used to facilitate analysis through coding of text to identify and categorize all PTAC comments on proposed PFPMs. ASPE staff advised on the development of several overarching domains to categorize PTAC comments, prior to the initiation of

coding. Initial domains were tested by coding text from three proposals and then adjusting the domains to more accurately capture PTAC comments across proposals. In addition, subdomains were developed to allow for greater specificity in describing themes.

The final domains and subdomains include the following:

- PTAC recommendation
- Scope and Scalability Domain: Subdomains include importance to the Medicare program, types
 of providers included in the proposed model, and relationship to other APMs.
- Quality Measurement Domain: Subdomains include the types of quality measures proposed, link between quality measures and payment, and quality assurance.
- Payment Model Domain: Subdomains include payment amount calculations, financial risk and shared savings, incentives created by the proposed model, relationship of the proposed payment model to the proposed care model, risk-adjustment methodology, shared savings calculations, accountability, and need for an APM to implement the care model.
- Evidence and Evaluability Domain: Subdomains include existing evidence for the proposed model, prior model evaluations, and potential barriers to future model evaluation.
- Care Coordination, Care Integration, and Shared Decision-Making Domain: Subdomains include integration and care coordination, shared decision-making and patient choice, and eligibility.
- Health Information Technology Domain: Subdomains include interoperability, proprietary technology, and effects of new technology on beneficiaries and providers.

For each domain, the subdomains guided identification of themes that frequently occurred in at least three reports to the Secretary. These key themes reflect PTAC comments about proposed models. Findings generally exclude the two proposals for which PTAC concluded that the criteria for PFPMs established by the Secretary were not applicable, unless otherwise noted.

Findings

Findings are reported for each of two analyses: 1) a description of voting patterns for PRTs and PTAC; and 2) an analysis of key themes in PTAC comments, derived from the content analysis of the RTSes.

PTAC Voting Patterns

This section describes PTAC voting patterns for the 10 review criteria, with a focus on the three priority criteria. PTAC concluded that the criteria for PFPMs established by the Secretary are not applicable to two of the 28 proposals, and these two proposals are excluded from all analyses of voting patterns and comments. This analysis first describes PTAC scores by criterion, then assesses variations in voting among Committee members, and finally considers differences in voting between PRTs and PTAC.

PTAC Scores by Criterion

Exhibit 8 shows PTAC voting on the 10 criteria for each of the 26 proposed models considered in this analysis. Among the three high priority criteria, the Committee found that 22 proposed models met the scope criterion, 20 met the quality and cost criterion, and 12 met the payment methodology criterion. Among the other seven criteria, the Committee found that six of these criteria were met by at least 21 of the 26 proposed models (the exception being the integration and care coordination criterion), and all 26 proposed models met the flexibility criterion. Exhibit 8 groups proposed models by the Committee's overall recommendation to the Secretary. Within each group, proposed models are sorted alphabetically. Overall, among the 26 proposed models for which PTAC made an overall recommendation to the Secretary, the major differentiating criteria are quality and cost (20 were found to meet) and payment methodology (12 were found to meet) and integration and care coordination (16 were found to meet).

Exhibit 8: Overall PTAC Voting by Criterion

		Scoring Criteria										
		High P	riority									
Proposal	Scope	Quality and Cost	Payment Methodology	Value over Volume	Flexibility	Ability to Be Evaluated	Integration and Care Coordination	Patient Choice	Patient Safety	Health Information Technology		
				Recomme	nd for Imple	mentation						
ACEP	•	•	•	•	•	•	•	•	•	•		
Avera Health	•	•	•	•	•	•	•	•	•	•		
Mount Sinai	•	•	•	•	•	•	•	•	•	•		
PRC	•	•	•	•	•	•	•	•	•	•		
RPA	•	•	•	•	•	•	•	•	•	•		
	Recommend for Further Development and Implementation											
IOBS*	•	•	•	•	•	•	•	•	•	•		
UNMHSC*	•	•	•	•	•	•	•	•	•	•		

Scoring Criteria										
	High Priority									
Proposal	Scope	Quality and Cost	Payment Methodology	Value over Volume	Flexibility	Ability to Be Evaluated	Integration and Care Coordination	Patient Choice	Patient Safety	Health Information Technology
Recommend for Testing										
ACP-NCQA*	•	•	•	•	•	•	•	•	•	•
Hopkins/Stanford*	•	•	0	•	•	•	0	•	•	0
			Re	commend	for Limited-	Scale Testing	g			
AAFP	•	•	•	•	•	•	•	•	•	•
AAHPM	•	0	0	•	•	•	•	•	•	•
ACS	•	•	•	0	•	•	•	•	•	•
C-TAC	•	•	•	•	•	•	•	•	•	•
Dr. Antonucci	•	0	0	•	•	•	0	•	0	•
HMH/Cota	•	•	•	•	•	•	•	0	•	•
IGG/SonarMD	•	•	0	•	•	•	0	•	•	•
UChicago	•	•	0	•	•	•	•	•	•	•
				Recom	mend for At	tention				
ACAAI*	0	•	0	0	•	0	0	•	•	•
ASCO*	0	0	0	•	•	0	•	•	•	•
Dialyze Direct*	0	0	0	•	•	0	0	•	•	0
				Do N	Not Recomm	end				
LUGPA	•	•	0	•	•	•	0	•	•	•
NYC DOHMH	•	•	0	•	•	0	•	•	•	•
PMA	•	•	0	•	•	•	0	•	•	•
Seha*	•	0	0	0	•	0	0	•	0	0
UMass*	0	•	0	•	•	•	0	•	0	•
Upstream*	•	0	0	•	•	•	0	•	•	0

SOURCE: Authors' analysis of 26 proposals deliberated and voted on by PTAC as of December 31, 2020. Excludes two proposals for which PTAC concluded that the criteria for PFPMs established by the Secretary were not applicable.

NOTES: Proposals are sorted alphabetically within each category. Votes are identified as follows: ○ = Does Not Meet; • = Meets; • = Meets Criterion and Deserves Priority Consideration. *PTAC deliberated on 10 proposed models (Dialyze Direct, Hopkins/Stanford, IOBS, Seha, UNMHSC, Upstream, ACAAI, ACP-NCQA, ASCO, and UMass) under a new voting approach that was approved in September 2018.

Variations in Voting Among Committee Members

PTAC scores for each criterion mask significant variation in voting among members for some proposed models; see Exhibit 9 below, as well as Appendix Exhibits 1 and 2 for full set of scores analyzed. In the

section below, findings are presented regarding variations in voting by overall PTAC recommendation to the Secretary, focusing first on proposed models that were recommended for implementation, then on proposed models recommended for testing or limited-scale testing. (Two proposed models deemed not applicable as PFPMs by PTAC are excluded from this analysis.)

Exhibit 9: PTAC Voting on Priority Criteria for Proposed Models Recommended for Implementation, Further Development and Implementation, Testing, or Limited-Scale Testing

	S	Scope	Quality a	nd Cost	Payment Me	thodology						
Proposal	PTAC Score	PTAC Vote Range	PTAC Score	PTAC Vote Range	PTAC Score	PTAC Vote Range						
Recommended for I	mplementa	ation										
ACEP	Priority	3–6	Meets	2–5	Meets	2–5						
Avera Health	Priority	3–6	Meets	3–5	Meets	2–4						
Mount Sinai	Priority	4–6	Meets	3–5	Meets	2–6 [†]						
PRC	Meets	3–6	Meets	2–6 [†]	Meets	2–6 [†]						
RPA	Meets	3–6	Meets	3–6	Meets	3–4						
Recommended for Further Development and Implementation												
IOBS*	Priority	4–6	Meets	3–5	Meets	2–4						
UNMHSC*	Priority	3–6	Priority	3–6	Meets	1–4						
Recommended for	Testing											
ACP-NCQA*	Meets	3-6	Meets	3-4	Meets	2-4						
Hopkins/Stanford*	Priority	3–6	Meets	3–5 [†]	Does not meet	2–3						
Recommended for I	Limited-Sc	ale Testing										
AAHPM	Priority	3–6	Does not meet	2–6 [†]	Does not meet	1–4						
AAFP	Priority	3–6	Meets	3–5	Meets	3–5						
ACS	Priority	3–6	Meets	2–3	Meets	1–5 [†]						
C-TAC	Priority	4–6	Meets	3–5	Meets	3–4						
Dr. Antonucci	Meets	2–6 [†]	Does not meet	1–3	Does not meet	2–5						
HMH/Cota	Meets	3–5	Meets	3–5	Meets	2–5						
IGG/SonarMD	Meets	1–6 [†]	Meets	1–6 [†]	Does not meet	1–5 [†]						
UChicago	Meets	1–6 [†]	Meets	1–5 [†]	Does not meet	1–5 [†]						

SOURCE: RTS for those proposals recommended for implementation, further development and implementation, further development and testing, testing, or limited-scale testing as of December 31, 2020.

NOTES: Priority=Meets Criterion and Deserves Priority Consideration. Proposals are sorted alphabetically within each PTAC recommendation category.

Variations in Voting for Proposed Models that Were Recommended for Implementation. All proposed models that were recommended for implementation or further development and implementation received scores of "meets" or "priority" from PTAC for each of the three high priority criteria (see

[†] Orange color cell indicates wide variation (of at least 4 points) in PTAC voting.

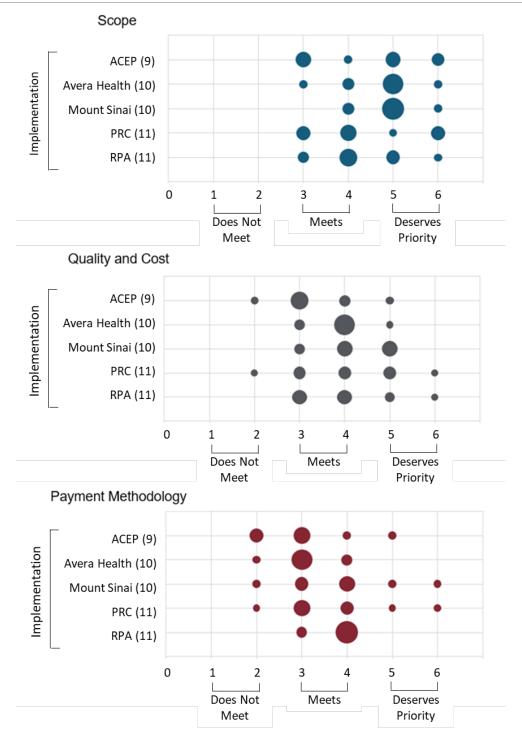
^{*} PTAC deliberated on 10 proposed models (Dialyze Direct, Hopkins/Stanford, IOBS, Seha, UNMHSC, Upstream, ACAAI, ACP-NCQA, ASCO, and UMass) under a new voting approach made in September 2018.

Exhibit 8 above). However, Committee members varied in their scores for the three priority criteria for these proposed models. For example, among the proposed models recommended for implementation:

- ACEP: One-third of voting Committee members found the proposed model did not meet the
 payment methodology criterion. However, two-thirds of members found the model met or
 deserved priority for this criterion.
- **Mount Sinai:** One Committee member found the proposed model did not meet the payment methodology criterion, while another member gave the proposed model the highest possible rating for payment methodology. Seven of 10 PTAC voting members found that the proposed model met the payment methodology criterion but did not warrant priority consideration.
- **PRC:** One member found the proposed model did not meet the quality and cost criterion; another found the proposal deserved the highest possible rating. In addition, one member found that the proposed model did not meet the payment methodology criterion, while another member indicated the proposed model deserved the highest possible rating for payment methodology. For both criteria, the bulk of Committee members found that the proposal met the criteria but did not warrant priority consideration (8 of 11 for payment methodology and 6 of 11 for quality and cost).

See Exhibit 10 for summaries of PTAC voting patterns for proposed models recommended for implementation and the Appendix for detailed lists of votes by priority criterion (Appendix Exhibit 1) and by non-priority criteria (Appendix Exhibit 2) for all of the proposed models included in this analysis.

Exhibit 10: PTAC Voting on Priority Criteria: Proposed Models Recommended for Implementation



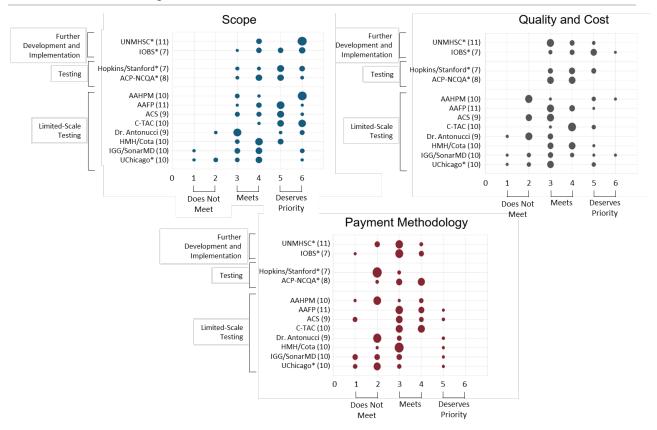
NOTES: Bubble sizes represent the share of Committee members voting for each score. Number of voters is shown after the proposal submitter name. Number of voters varies according to the number of Committee members present and the number of Committee members recusing themselves due to conflicts. Within each overall recommendation group, proposals are sorted alphabetically.

Variations in Voting for Proposed Models Recommended for Further Development and Implementation, Testing, or Limited-Scale Testing. Proposed models recommended for further development and implementation, testing, or limited-scale testing were more likely than others to have greater variation among Committee members in their scores for the three priority criteria; see Exhibit 9 above. Overall, Committee members found that all proposed models recommended for further development and implementation, testing, or limited-scale testing met the scope criterion; ten of twelve met the quality and cost criterion; and seven of twelve met the payment methodology criterion. However, for six of the proposed models, one-third or more of PTAC voting members found that the proposed model did not meet the payment methodology criterion (Exhibit 11). Only one of these proposed models (ACEP) was found to meet the payment methodology criterion by the full Committee. In that instance, two-thirds of the Committee members found the proposal met the criterion, compared to one-third who found it did not meet the criterion. Additionally, for two of the proposed models, there were differences among Committee members about whether the proposed model met any of the priority criteria, including:

- IGG/SonarMD: One member found that the proposal did not meet the scope criterion, while two members found that it deserved priority consideration for this criterion. Three members found that the proposal did not meet the quality and cost criterion, while two members found that it deserved priority consideration for this criterion. Six members voted that the proposal did not meet the payment methodology criterion, while four members voted that it deserved priority consideration.
- UChicago: Three Committee members found that the proposal did not meet the scope criterion, while one member voted for priority consideration. Three members found that the proposal did not meet the quality and cost criterion, while two members voted that it deserved priority consideration. Seven members found the proposal did not meet the payment methodology criterion, while one voted it deserved priority consideration.

See Exhibit 11 for summaries of PTAC voting patterns for proposed models recommended for further development and implementation, testing, or limited-scale testing. Among the eight proposals recommended for limited-scale testing, there were also differences among Committee members on scores for the seven non-priority criteria (see Appendix Exhibit 2). In particular, *Committee members varied in their scores for the value over volume, integration and care coordination, and patient safety criteria.*

Exhibit 11: PTAC Voting on Priority Criteria: Proposed Models Recommended for Further Development and Implementation and Proposed Models Recommended for Limited-Scale Testing



NOTES: Bubble sizes represent the share of Committee members voting for each score. Number of voters is shown after the proposal submitter name. Number of voters varies according to the number of Committee members present and the number of Committee members recusing themselves due to conflicts. Within each overall recommendation group, proposals are sorted alphabetically. *PTAC deliberated on 10 proposed models (Dialyze Direct, Hopkins/Stanford, IOBS, Seha, UNMHSC, Upstream, ACAAI, ACP-NCQA, ASCO, and UMass under a new voting approach that was approved in September 2018.

Variations in Voting Between PRTs and Full PTAC

Full PTAC voting patterns for the priority criteria frequently were consistent with PRT voting patterns. However, in some cases, the PTAC score for a criterion was higher than the PRT score (Exhibit 12), as follows:

- Scope: Many of the voting differences between PRTs and the full PTAC were for the scope criterion. For scope, PTAC scores were higher than PRT scores for 11 proposed models: AAFP, ACEP, ACS, Avera Health, Dr. Antonucci, Hopkins/Stanford, IGG/SonarMD, LUGPA, Mount Sinai, NYC DOHMH, and UChicago.
- Quality and Cost: PTAC scores were higher than PRT scores for five proposed models: ACAAI, ACS, IGG/SonarMD, IOBS, and UChicago.

Payment Methodology: PTAC scores were higher than PRT scores for two proposed models: ACEP and IOBS. However, the LUGPA proposed model was the only proposed model to receive a lower score from PTAC than from the PRT on this or any criterion.

Exhibit 12: PRT and PTAC Voting on Priority Criteria, by Proposal

	Sco	ppe	Quality a	nd Cost	Payment Methodology							
Proposal	PRT	PTAC	PRT	PTAC	PRT	PTAC						
Recommend fo	r Implementatio	n										
ACEP	Meets [‡]	Priority [‡]	Meets	Meets	Does not meet [†]	Meets [†]						
Avera Health	Meets [‡]	Priority [‡]	Meets	Meets	Meets	Meets						
Mount Sinai	Meets [‡]	Priority [‡]	Meets	Meets	Meets	Meets						
PRC	Meets	Meets	Meets	Meets	Meets	Meets						
RPA	Meets	Meets	Meets	Meets	Meets	Meets						
Recommend for Further Development and Implementation												
IOBS*	Priority	Priority	Does not meet†	Meets [†]	Does not meet [†]	Meets [†]						
UNMHSC*	Priority	Priority	Priority [†]	Priority [†]	Meets†	Meets†						
Recommend for Testing												
ACP-NCQA*	Meets	Meets	Meets	Meets	Meets	Meets						
Hopkins/ Stanford*	Meets [‡]	Priority [‡]	Meets	Meets	Does not meet	Does not meet						
Recommended for Limited-Scale Testing												
AAFP	Meets [‡]	Priority [‡]	Meets	Meets	Meets	Meets						
AAHPM	Priority	Priority	Does not meet	Does not meet	Does not meet	Does not meet						
ACS	Meets [‡]	Priority [‡]	Does not meet [†]	Meets [†]	Meets	Meets						
C-TAC	Priority	Priority	Meets	Meets	Meets	Meets						
Dr. Antonucci	Does not meet [†]	Meets [†]	Does not meet	Does not meet	Does not meet	Does not meet						
HMH/Cota	Meets	Meets	Meets	Meets	Meets	Meets						
IGG/SonarMD	Does not meet [†]	Meets [†]	Does not meet [†]	Meets [†]	Does not meet	Does not meet						
UChicago	Does not meet [†]	Meets [†]	Does not meet [†]	Meets [†]	Does not meet	Does not meet						
Recommend fo	r Attention											
ACAAI*	Does not meet	Does not meet	Does not meet [†]	Meets [†]	Does not meet	Does not meet						
ASCO*	Does not meet	Does not meet	Does not meet	Does not meet	Does not meet	Does not meet						
Dialyze Direct*	Does not meet	Does not meet	Does not meet	Does not meet	Does not meet	Does not meet						
Do Not Recomm	mend											
LUGPA	Does not meet [†]	Meets [†]	Meets	Meets	Meets [†]	Does not meet [†]						
NYC DOHMH	Does not meet [†]	Meets [†]	Meets	Meets	Does not meet	Does not meet						
PMA	Meets	Meets	Meets	Meets	Does not meet	Does not meet						
Seha*	Meets	Meets	Does not meet	Does not meet	Does not meet	Does not meet						
UMass*	Does not meet	Does not meet	Meets	Meets	Does not meet	Does not meet						
Upstream*	Meets	Meets	Does not meet	Does not meet	Does not meet	Does not meet						

SOURCE: Authors' analysis of 26 proposals deliberated and voted on by PTAC as of December 31, 2020; excludes two proposals for which PTAC concluded that the criteria for PFPMs established by the Secretary were not applicable.

NOTES: Proposals are sorted alphabetically within each recommendation category. Cell colors indicate differences in voting between the PRT and the full PTAC:

- † Maroon means PRT score was "Does not meet" while PTAC score was "Meets" or PRT score was "Meets" while PTAC score was "Does not meet."
- [‡]Blue means PRT score was "Meets" while PTAC score was "Priority."
- *PTAC deliberated on 10 proposed models (Dialyze Direct, Hopkins/Stanford, IOBS, Seha, UNMHSC, Upstream, ACAAI, ACP-NCQA, ASCO, and UMass) under a new voting approach developed in September 2018.

Common Themes in PTAC Comments

Key themes or areas for Committee member focus are documented in the 24 RTSes analyzed for this report (relating to 26 proposed models, which does not include the two proposed models for which PTAC concluded that the criteria for PFPMs established by the Secretary were not applicable). ¹¹ These themes are presented below organized by analytic domain as described earlier.

Scope and Scalability

Most PTAC comments on scope and scalability were positive, noting opportunities for new specialties to participate in APMs and the potential for provision of new services to Medicare beneficiaries. Overall, PTAC found that 22 of the proposed models met the related criterion (scope), and four did not (ACAAI, ASCO, Dialyze Direct, and UMass).

Provide new opportunities for APM participation. PTAC noted that seven proposed models would provide APM opportunities to specialty areas that currently have limited opportunity to participate in an APM, namely: 1) emergency medicine physicians in ACEP (recommended for implementation); 2) multiple kinds of specialists in ACP-NCQA (recommended for testing); 3) geriatricians in Avera Health (recommended for implementation); 4) gastroenterologists in IGG/SonarMD (recommended for limited-scale testing); 5) pulmonologists and other asthma specialists in PMA and ACAAI (not recommended and recommended for attention, respectively); 6) optometrists and ophthalmologists in UMass (not recommended); and 7) rural physicians, neurologists, and neurosurgeons in UNMHSC (recommended for further development and implementation). In addition, two proposed models that were not recommended would provide APM opportunities in wound care (Seha and Upstream). PTAC found that three proposed models focused on primary care and end-stage renal disease (ESRD) could expand the ability of primary care physicians and nephrologists, to participate in APMs beyond currently existing models, under AAFP (recommended for limited-scale testing), Dr. Antonucci (recommended for limited-scale testing), and RPA (recommended for implementation).

Provide new services for Medicare beneficiaries. PTAC comments expressed support for the approaches to providing new (currently uncovered) services to Medicare beneficiaries proposed by six proposed models, including two home hospitalization proposed models (Mount Sinai and PRC, both recommended for implementation), two serious illness proposed models (AAHPM and C-TAC, both

¹¹ This report updates a prior analysis of PTAC voting patterns and comments to include RTS submitted between December 2019 and December 2020. See Devers K, Skopec L, Williams Torres G, Berenson R. *A Review of Physician-Focused Payment Model Technical Advisory Committee (PTAC) Voting Patterns and Comments on Proposed Physician-Focused Payment Models as of December 2019*. Office of the Assistant Secretary for Planning and Evaluation, Department of Health and Human Services; 2020:40.

https://aspe.hhs.gov/sites/default/files/private/pdf/252376/VotingPatternsandCommentsonProposedModelsasofDec2019.pdf

recommended for limited-scale testing), one proposed model focused on improving safety and independence in the home (Hopkins/Stanford, recommended for testing), and one proposed model using telemedicine to provide access to neurological and neurosurgical consultations for rural beneficiaries (UNMHSC, recommended for further development and implementation).

Identify issues in Medicare's payment structure. PTAC highlighted how several proposed models focused on perceived issues in the current traditional Medicare payment structure. For example, PTAC noted that the Hopkins/Stanford proposed model (recommended for testing) would address an important gap in Medicare FFS by providing medical and non-medical services, including improvements to beneficiaries' physical environment, that enable beneficiaries to live safely and independently at home. In addition, PTAC noted that the UNMHSC proposed model (recommended for further development and implementation) identified gaps in access to specialty care for rural beneficiaries experiencing neurological emergencies. PTAC also acknowledged the efforts of the Seha and Upstream proposed model submitters (both not recommended) for identifying gaps in the payment structure for wound care and putting forward the idea of allowing new provider types, including physical and occupational therapists, to provide and bill for wound care (Upstream). Similarly, PTAC acknowledged the Dialyze Direct proposed model (recommended for attention) for its efforts to draw attention to the need for home hemodialysis for Medicare patients residing in skilled nursing facilities (SNFs).

Avoid non-generalizable care delivery approaches. PTAC observed that five proposed models focused narrowly on particular provider types, care delivery approaches, or patient populations. For example, PTAC indicated that both the Seha and Upstream wound care proposed models were too limited to be recommended to the Secretary for implementation and suggested that the submitters develop a more comprehensive wound care model. Committee members similarly found that the Dialyze Direct proposed model was too narrowly focused on one particular approach to dialysis delivery and recommended the proposed model for attention and further work. For two proposed models, PTAC noted that the eligible patient population may be too small to encourage and support provider participation (ACAAI and UMass, which focused on newly diagnosed asthma and eye care emergencies, respectively).

Address interaction with existing CMMI models, including potential opportunities to add additional services to existing models. Several of the proposed models that PTAC recommended for implementation, further development and implementation, testing, limited-scale testing, or attention could potentially overlap, expand on, improve, or provide add-on services to existing CMMI models. For example, PTAC noted that the three proposed oncology care models (ASCO, HMH/Cota, and IOBS) could address what some members perceived as gaps in CMMI's Oncology Care Model (OCM) by broadening its scope to address prescription drug costs (ASCO) and individualizing payment levels to bring precision payment to precision medicine (HMH/Cota and IOBS). Similarly, for two proposed primary care models recommended for limited-scale testing, PTAC noted that one proposed model (AAFP) was more flexible than CMMI's Comprehensive Primary Care Plus (CPC+) Model and that another (Dr. Antonucci) used a significantly different approach to risk stratification of payments and quality measurement than CPC+, including extensive use of patient surveys to measure quality. PTAC also commended the ACP-NCQA proposed model for building on the existing CPC+ and Primary Care First (PCF) models to incorporate specialists into APMs; however, PTAC indicated that strengthening patient attribution may prevent duplication of shared savings payments to providers for the same beneficiaries.

Committee members also indicated that the RPA proposed model would have broader applicability than CMMI's Comprehensive ESRD Care (CEC) Model, as most nephrologists will be unable to participate in CEC but could participate in the RPA model. PTAC also noted that several of the proposed models, such as UChicago and Avera Health, potentially overlap with Accountable Care Organizations (ACOs), which would need to be resolved. Finally, PTAC indicated that the Hopkins/Stanford proposed model could be developed as an optional addition to existing models, such as Independence at Home, CPC+, ACOs, or other shared savings arrangements with full risk-sharing.

Quality

PTAC provided detailed comments on quality of care in the RTSes for all 26 proposed models, although quality is not a standalone voting criterion. Overall, PTAC found that 20 of the proposed models met the related quality and cost criterion and 23 met the related patient safety criterion. Key insights include comments on specific quality measures as well as more general discussion of likely effects of the proposed models on care quality, regardless of measurement.

Design care models to improve quality. PTAC noted that many of the proposed models had quality improvement as an important goal. For example, PTAC indicated that ASCO's and IOBS' approach to requiring or rewarding adherence to cancer treatment pathways, respectively, would improve the quality of care. Similarly, for AAFP, PTAC observed that a risk-adjusted monthly payment in place of fees for office visits would give practices the flexibility to deliver high-value services for which physicians currently cannot bill or have difficulty billing, like responding to patient calls and emails and providing patient education and self-management support. In the RTS summarizing comments on Dr. Antonucci's proposed model, PTAC indicated that the proposed model's flexibility and focus on improving performance on patient-centered quality measures would enable physicians to deliver more responsive, higher quality care. PTAC also indicated that ACEP is expected to improve quality by supporting appropriate emergency department (ED) discharge and monitoring post-discharge events. In ACP-NCQA, PTAC noted that the enhanced communication and coordination between primary care physicians and specialists could improve quality outcomes while reducing costs. Finally, PTAC indicated that the Hopkins/Stanford proposed model is expected to improve patients' functional status, likely leading to improved long-term outcomes.

Link payment with quality. PTAC praised the specific approach that two proposed models would take to link payment to quality—specifically for ACEP, which was recommended for implementation, and NYC DOHMH, which was not recommended. In particular, PTAC supported the ACEP proposed model's measures that would hold emergency physicians accountable for post-discharge complications, as well as the NYC DOHMH proposed model's link between payment and the share of patients completing treatment for hepatitis C.

For three additional proposed models, PTAC noted that shared savings were linked with quality performance, but Committee members noted improvements or refinements to the specific set of quality measures proposed by the submitters (ACP-NCQA, ASCO, and UMass). PTAC recommended the ACP-NCQA proposed model for testing and noted that the testing period could be used to develop quality measures appropriate to each type of specialty practice eligible for the model. For the ASCO proposed model, PTAC praised linking performance incentive payments to quality metrics, adherence to clinical

pathways, and reducing cost of care, but noted that flexibility in measure selection and weighting for local Oncology Steering Committees could undermine quality. Finally, for the UMass proposed model, PTAC indicated that while quality thresholds for earning shared savings payments provide a financial incentive to deliver high-quality care, limitations in the shared savings approach and the small number of eligible patients could complicate the proposed payment model.

In contrast, for nine proposed models (ACS, Avera Health, HMH/Cota, IGG/SonarMD, Mount Sinai, PMA, PRC, RPA, and Seha), PTAC recommended a more explicit linkage of payment to quality measures—for example, by using minimum quality thresholds for shared savings and incentive payments or conditioning payment on outcomes. Of these proposed models, four were recommended for implementation, three for limited-scale testing, and two were not recommended. For ACS (recommended for limited-scale testing) and RPA (recommended for implementation), PTAC noted that payment was only linked with reporting of quality measures, not to performance on outcomes, and suggested improving the models by creating outcome thresholds or adjusting weights of quality measures.

Measure patient experience. PTAC discussed including quality measures focused on patient experience or patient goals for nine proposed models. PTAC stated that Dr. Antonucci proposed model's approach to patient experience data collection could be an example for other payment models. However, PTAC noted that patient surveys can increase patient burden and create disparities in care if response rates are substantially lower for vulnerable patient groups. PTAC noted that the ACP-NCQA proposed model had a robust approach to maintaining patient safety, including a CAHPS survey of patient experience. In contrast, for the ACAAI proposed model, PTAC noted that the proposed patient experience measures were very subjective and had not been validated. For the UMass proposed model, PTAC praised the inclusion of a patient experience survey but noted that it might not be sufficient to ensure high-quality care and evaluators may struggle to find an appropriate comparison group to assess the effects of the proposed model on patient experience. PTAC recommended adding or emphasizing patient experience measures in four proposed models (AAFP, ACS, C-TAC, and RPA) and clearly capturing patient goals in one proposed model (Avera Health).

Address quality assurance. For 15 proposed models (AAFP, AAHPM, ACP-NCQA, ASCO, Avera Health, C-TAC, Dialyze Direct, Dr. Antonucci, Hopkins/Stanford, Mount Sinai, PRC, RPA, UChicago, UMass, and UNMHSC), PTAC recommended improving quality assurance through approaches such as additional quality measures, tracking use of particular types of care (such as hospitalizations, referrals for specialist care, or off-pathway cancer treatment), review of credentials or certification of consulting providers (UNMHSC), training or minimum competency standards for model participants (particularly non-physician participants in serious illness proposed models and handy workers in the Hopkins/Stanford proposed model), and ensuring appropriate screening and triage (ACP-NCQA and UMass). In general, these proposed models included two-sided risk, capitated payments, bundled payments, or new approaches to delivering care (e.g., home hospitalization, serious illness, telemedicine consultations for neurological emergencies, home modifications) that could inadvertently incentivize stinting on care or otherwise diminish quality.

Payment Model

The payment model is at the core of PFPMs and varied widely across the proposed models. PTAC comments varied depending on the type of care (e.g., SNF care versus primary care), the payment approach (e.g., episode payments, DRG-like payments, or care management fees), and the risk-adjustment approach. The RTSes provided detailed comments on the proposed payment model for all 26 proposed models with recommendations to the Secretary, as well as one proposed model for which PTAC concluded that the criteria for PFPMs established by the Secretary were not applicable. Overall, Committee members found that 12 proposed models met the related payment methodology criterion, 14 proposals did not meet the payment methodology criterion. PTAC concluded that the payment methodology criterion was not applicable to one proposal.

Explore a fee schedule change. For 10 proposed models (including one for which PTAC concluded that the criteria for PFPMs established by the Secretary were not applicable), Committee members discussed whether the desired care model could be accommodated under the current payment system or with relatively minor changes to the current payment system. Of these 10 proposed models, the Committee found that one was not applicable (Mercy ACO), three were not recommended (LUGPA, NYC DOHMH, and UMass), three were recommended for limited-scale testing (UChicago, IGG/SonarMD, and ACS), two were recommended for testing (ACAAI and Hopkins/Stanford), and one was recommended for further development and implementation (UNMHSC). Some Committee members indicated that the proposed care models proposed by IGG/SonarMD, LUGPA, NYC DOHMH, and UMass could be achieved with an expansion of currently available care management codes in the Medicare physician fee schedule. For the LUGPA proposed model, PTAC noted that expansion of care management codes, or even new Medicare codes to support active surveillance, could be faster to implement than a new APM. For the UMass proposed model, PTAC stated that bundled payments or care coordination fees could be more effective for achieving the proposed model's goals than the proposed APM. Finally, Committee members noted that the ACAAI proposed model did not clearly demonstrate how the fee schedule fell short in supporting the types of care described in the model.

Justify payment amounts. PTAC commented on the payment amounts for 19 of the proposed models. PTAC noted that data did not support the payment amounts or payment approach for three proposed models (LUGPA, PMA, and UChicago). For example, PTAC "expressed almost uniform concern about why the [UChicago] payment model was structured as proposed and whether a PBPM payment model added to FFS payment for other services would be able to reproducibly result in the desired care approach and outcomes." Also, in the case of four proposed models (AAFP, ACAAI, ACEP, and IOBS) PTAC noted that the calculation of site-, diagnosis-, or division of labor-specific payment amounts could be difficult or burdensome to participants. Specifically, PTAC noted that the AAFP proposed payment model was overly complex and burdensome, and, at the same time, the proposed model did not include critical information like actual payment amounts. PTAC also indicated that the payment amounts should likely be lower for three proposed models—Dr. Antonucci, Mount Sinai, and PRC—and that the payment amount should potentially be higher for Dialyze Direct to adequately address barriers that discourage broader use of home hemodialysis in SNFs.

For the ASCO proposed model, PTAC noted that care management fees were two to three times higher than current payments for evaluation and management (E&M) codes and higher than payments under the

existing OCM model and were not case-mix or risk-adjusted. For UNMHSC, PTAC noted that the set of services included in the bundle and the appropriate payment amounts required further development and revision. Finally, PTAC indicated that the ACP-NCQA proposed model's attribution methodology needs further refinement to ensure that specialists do not receive duplicate payments for the same patient from different CMMI models.

Clarify or refine approach to accountability. For eight proposed models, PTAC noted a lack of clarity about where accountability resides for operationalizing the care model, ensuring quality, or reducing costs. For example, in reviewing the ACS proposed model, PTAC raised "questions about where and how accountability for quality of care resides in the model and how it would be implemented." In one case (UNMHSCO, PTAC indicated that the proposed model's approach to payment may benefit from refinement. The proposed would provide bundled payments to the rural hospital rather than to the specialists providing the telemedicine consultations. This would make it difficult for Medicare to ensure the services being provided were high-quality and payment was adequate but not excessive. For the ACAAI proposed model, PTAC noted that excluding patients who failed to stop smoking or modify other lifestyle behaviors from quality measures could limit provider accountability for improving asthma control. Finally, PTAC sought greater clarity on the APM entity that would be responsible for initiating and receiving payments in the ACAAI and Hopkins/Stanford proposed models. Three of these eight proposed models were not recommended for implementation (LUGPA, NYC DOHMH, and PMA).

Consider whether two-sided risk is appropriate. PTAC generally supported the approach to shared savings and financial risk in four proposed models—ACEP (recommended for implementation), ASCO (recommended for attention), IGG/SonarMD (recommended for limited-scale testing), and PMA (not recommended). Overall, PTAC's views on the appropriateness of two-sided risk depended on the proposed model setting and practitioner type. For example, PTAC expressed concern that the ACP-NCQA proposed model (recommended for testing) did not include initial downside risk, but Committee members noted that this feature could be added to the model after it is refined through testing. PTAC also expressed concerns about the stability of two-sided risk for small physician practices and about the appropriateness of shared savings if it introduces incentives to inappropriately limit care, such as in cases of treating beneficiaries with serious illness and or those receiving SNF care (AAHPM, C-TAC, and Avera Health). Additionally, PTAC suggested a very gradual approach to shared savings and financial risk in the two home-hospitalization related proposed models (Mount Sinai and PRC). For the UMass proposed model, PTAC noted that the level of downside risk, combined with the small patient population, could deter providers from participating.

Consider whether shared savings and penalties based on total cost of care are appropriate. For two proposed models (C-TAC and LUGPA), PTAC expressed concern about the appropriateness of calculating shared savings based on total cost of care. For example, in the LUGPA proposed model, PTAC noted that holding urologists responsible for total cost of care with shared risk for patients under active surveillance for prostate cancer did not accurately reflect urologists' role in overall patient care. In addition, PTAC questioned whether the C-TAC proposed model, which would hold APM entities accountable for total cost of care in the last 12 months of an enrollee's life, was appropriate because patients may not receive appropriate care for serious illnesses from the APM entity during that entire period and because shared savings could create incentives to stint on care at the end of life.

PTAC discussed alternatives to total cost of care proposed in three cancer care models (ASCO, HMH/Cota and IOBS). PTAC praised the ASCO proposed model for holding hematology/oncology providers responsible for the quality and cost of the care over which they have control. HMH/Cota left open the possibility of shared savings based on either total cost of care or cost of oncology care, and PTAC ultimately recommended that the approach to shared savings for HMH/Cota be tested by CMMI. In addition, while PTAC praised IOBS for holding oncologists accountable only for cancer-related expenditures rather than total cost of care, Committee members noted that isolating cancer care expenditures will be challenging and may raise implementation challenges.

PTAC also expressed concern about the approach to bonuses and penalties in NYC DOHMH, which proposed basing bonuses on estimated lifetime savings from curing hepatitis C. PTAC noted that this approach is unprecedented in Medicare and that it would reward providers for cost savings that were attributable primarily to prescription drugs.

Committee members noted several alternatives for calculating shared savings based on reductions in total cost of care, including measuring utilization like avoidable emergency department visits and avoidable hospitalizations (Avera Health), focusing on the costs of care related to the targeted condition (LUGPA) and avoiding shared savings entirely (Avera Health, C-TAC).

Identify positive and negative incentives created by the proposed model. PTAC expressed concern about the incentives created by most of the proposed models (22 of the 26), including four recommended for implementation (Avera Health, Mount Sinai, PRC, and RPA); two recommended for further development and implementation (IOBS and UNMHSC); one recommended for testing (ACP-NCQA); seven recommended for limited-scale testing (AAFP, AAHPM, ACS, C-TAC, Dr. Antonucci, HMH/Cota, and UChicago); two recommended for attention (ACAAI and ASCO), and six that were not recommended (IGG/SonarMD, LUGPA, NYC DOHMH, Seha, UMass, and Upstream).

In general, PTAC noted that capitated and bundled payments may create incentives for cherry-picking patients if not adequately risk-adjusted and could create incentives to stint on needed care. In addition, capitated approaches for primary care could increase specialist referrals. Similarly, eligibility and enrollment processes that allow provider-driven, post-diagnosis enrollment could encourage cherry picking of patients most likely to have lower costs (ACAAI). PTAC also cautioned about potential unintended consequences of new approaches to care (like the home hospitalization proposals that were recommended for implementation and the UNMHSC proposal that was recommended for further development and implementation) and complex proposed models like the ACS proposal, which was recommended for limited-scale testing.

For six proposed models, PTAC questioned whether and how the proposed payment model would produce the desired changes in clinical practice. For example, Committee members were unsure whether Dr. Antonucci's proposed model would lead to significantly better or different results than other primary care models, ultimately advising that it be tested as one track of a broader primary care model. For the ACAAI proposed model, which was recommended for attention, PTAC noted that it was unclear whether the proposed model would drive more value than the current fee schedule already attains. Similarly, for the ACP-NCQA proposed model, Committee members were unsure whether the payment model would incentivize further quality improvements and better care coordination than currently achieved under

related APMs (CPC+ and PCF). Among the other three proposed models, one was recommended for attention (Dialyze Direct) and the other two proposed models (LUGPA and NYC DOHMH) were not recommended.

Finally, some Committee members questioned whether a new payment model was even needed to incentivize different practice patterns for six proposed models, one that was recommended for further development and implementation (UNMHSC), two recommended for testing (ACAAI and Hopkins/Stanford), two recommended for limited-scale testing (UChicago and IGG/SonarMD), and one not recommended (UMass). Committee members noted the possibility of a fee schedule change as an alternative.

For ACAAI, UMass, and UNMHSC, PTAC briefly discussed whether the goals of the proposed model could be achieved through fee schedule changes (for example, for codes relating to care management fees). In addition, PTAC noted that additional work was necessary to determine whether traditional Medicare payments could be modified to support the in-home services proposed in the Hopkins/Stanford model. For UChicago, some Committee members indicated that paying more for existing codes could adequately incentivize comprehensive care for high-risk patients in both inpatient and outpatient settings without the need for a new APM. For IGG/SonarMD, some Committee members questioned whether the proposed model was needed to drive physician behavioral change or if an updated chronic care management code would be sufficient.

Use risk adjustment. PTAC generally supported efforts to risk-adjust PBPM payments and episode-based payments to avoid incentives to cherry-pick healthier Medicare beneficiaries and questioned proposed models that included these payment types but lacked a risk-adjustment approach. PTAC suggested improvements to the risk-adjustment approach for 15 proposed models. For six proposed models, PTAC suggested that risk-adjustment and risk-stratification methodologies be developed and/or tested before full-scale implementation (AAFP, AAHPM, ACP-NCQA, C-TAC, Dr. Antonucci, and PMA). One proposed model was recommended for testing and four for limited-scale testing. The remaining proposed model was not recommended, with PTAC recommending that CMMI work with the submitters to develop and test risk-adjustment approaches.

For seven proposed models (ACS, Avera Health, Hopkins/Stanford, LUGPA, NYC DOHMH, Seha, and Upstream), PTAC expressed concern that the model did not propose a risk-adjustment approach that would adequately support care for more complex patients. For two of these proposed models (ACAAI and UMass), PTAC noted that the proposed model did not specify a risk-adjustment methodology. The Committee recommended one of these proposed models for implementation (Avera Health), one for testing (Hopkins/Stanford), one limited-scale testing (ACS), and four were not recommended) LUGPA, NYC DOHMH, Seha, and Upstream).

Evidence and Evaluability

PTAC provided detailed comments on evidence and evaluability for 23 of the 26 proposals analyzed (all except for AAHPM, C-TAC, and Dr. Yang). PTAC found that most of these proposed models met the related ability to be evaluated criterion (all except for ACAAI, ASCO, Dr. Antonucci, PMA, and Seha).

Key insights included approaches for incorporating existing evidence for the proposed model, assessing of the strength of evidence for the model, and developing a feasible evaluation plan.

Describe how the proposed model can be evaluated. For most proposals, PTAC indicated that Medicare claims data could successfully be used to conduct an evaluation. However, PTAC noted that it could be difficult to identify a comparison group for complex proposed models like ACAAI that allow providers to select participants into the model. In addition, Committee members expressed concern that the flexibility to vary quality measures and clinical pathways in the ASCO proposed model could make evaluation difficult.

Provide evaluation results and CMMI input for previously tested models. PTAC supported including previous evaluation results or relevant studies in proposal materials. For three proposed models based on CMMI Health Care Innovation Awards (HCIAs), PTAC noted that HCIA final evaluation reports were not yet available. Members emphasized that input from CMMI on HCIA models, including any information on preliminary evaluation results, effectiveness of services, and feasibility of payment models would be helpful for PTAC deliberations.

Strengthen evidence for the proposed model. PTAC supported the inclusion of any evidence regarding the effectiveness of the proposed model. When such evidence was available, Committee members assessed its strength, noting some deficiencies in available evidence for nine proposed models. For example, PTAC said that the ACAAI proposal likely overestimated potential savings by basing calculations on observational studies of effectiveness in younger asthma patients.

For Dr. Antonucci's proposed model, PTAC observed that evidence is mixed regarding how much savings can be achieved by increasing payments to primary care practices. In addition, for the UChicago proposed model, PTAC noted that the savings indicated in the proposal were not supported by the HCIA evaluation, and the proposed payment model had not yet been tested. For LUGPA, Committee members indicated they did not have sufficient evidence to understand where payment changes were needed to support surveillance over intervention for prostate cancer. PTAC indicated that evidence for the NYC DOHMH proposed model may not be generalizable, as the proposed model had only been implemented in large, integrated health systems in New York.

For Hopkins/Stanford, PTAC cited evidence indicating that the proposed model can improve functional status but noted that the effect on costs is unclear. Committee members commented that the UMass proposed model did not provide sufficient evidence to demonstrate the ability of the model to achieve the desired objectives. Finally, PTAC indicated that it is unclear how many Medicare beneficiaries could benefit from the UNMHSC proposed model.

For one proposed model, ASCO, PTAC noted that emerging evidence from CMMI indicates that care management payments did not reduce total Medicare spending for cancer patients enrolled in OCM.

Conduct real-world testing. PTAC stated that six proposed models would likely need real-world testing to develop evidence and/or finalize a payment model, including ACP-NCQA (recommended for testing), UChicago (limited-scale testing), Dialyze Direct (recommended for attention), HMH/Cota (limited-scale testing), IGG/SonarMD (limited-scale testing), and Hopkins/Stanford (recommended for testing). In

addition, PTAC cited mixed evidence on cost savings for two primary care—focused proposed models (Dr. Antonucci and UChicago) and noted—similar to its concerns regarding the NYC DOHMH proposed model—that evidence from small-scale testing in a limited geographic area may not be generalizable. For ACP-NCQA, PTAC indicated that further refinement of the patient attribution approach and exploration appropriate specialties for inclusion in the proposed model are needed during the testing phase.

Ensure sufficient sample sizes and relevant comparison groups. For some proposed models that were not recommended for testing, limited-scale testing, or attention, PTAC discussed approaches to ensure sufficient sample size, an adequate comparison group, or sufficient test sites to allow for a thorough evaluation of the proposed model. In addition, for three proposed models that were recommended for implementation (Mount Sinai, PRC, and RPA), PTAC indicated that the evaluation could include a focus on the effectiveness and feasibility of the proposed model for small practices/organizations. Further, PTAC noted that the two home hospitalization proposed models (Mount Sinai and PRC) would need to collect data about patients' home environment to develop adequate comparison groups. For the ACAAI and ACP-NCQA proposed models (recommended for attention and testing, respectively), PTAC noted that small samples sizes at some specialty practices may discourage participation and make evaluation difficult.

Care Integration, Care Coordination, and Shared Decision-Making

The RTSes for each of the 26 proposed models provided detailed comments on three criteria related to care models: integration and care coordination, patient choice, and patient safety. Unlike the proposed payment model, however, there is not a PTAC voting criterion that requires an overall assessment of the care model being proposed. Therefore, this analysis could not consistently assess PTAC's views on the quality or innovation of the proposed care models overall. However, as noted in the Scope and Scalability section, PTAC praised submitters for developing proposed care models that would provide new services to Medicare beneficiaries, would give new provider types opportunities to participate in APMs, or would identify perceived issues in the current payment and delivery system.

Overall, Committee members found that 16 proposed models met the integration and care coordination criterion, 25 met the patient choice criterion, and 23 met the patient safety criterion. Key insights emphasized the level of specificity for care integration and coordination as well as aspects of patient engagement and shared decision-making. The environmental scans prepared for the theme-based discussions on Care Coordination, Improving Care Delivery and Specialty Integration, and Improving Management of Care Transitions include in-depth reviews of relevant care coordination contexts, objectives, and payment approaches in the 16 proposed models that were found to meet the care coordination criterion. ^{12,13,14}

¹² See Section VII (p. 35) of Environmental Scan on Care Coordination in the Context of Alternative Payment Models (APMs) and Physician-Focused Payment Models (PFPMs). May 2021. https://aspe.hhs.gov/sites/default/files/private/pdf/261946/Jun-2021-CC-Escan.pdf

¹³ See Section XI (p.43) of Environmental Scan on Improving Care Delivery and Integrating Specialty Care in Population-Based Models. March 2023. https://aspe.hhs.gov/sites/default/files/documents/b1b55986cfe3016f83b8f48ca2c9b154/PTAC-Mar-2-Escan.pdf

¹⁴ See Section XIII (p. 50) of *Environmental Scan on Improving Management of Care Transitions in Population-Based Models*. June 2023. https://aspe.hhs.gov/sites/default/files/documents/61e603e1beb3f5eb4d528b1e91fadf12/PTAC-Jun-12-Escan.pdf

Describe formal integration and care coordination approach. PTAC identified two proposed models as having particularly strong, detailed approaches to integration and care coordination: Mount Sinai and PRC, which both focused on providing hospital-like services in the home. PTAC praised both proposed models for using the same team to manage both the acute and post-acute care phases in the home, as well as for their explicit mechanisms for ensuring connections to the patients' usual providers.

For other proposals, Committee members requested more explicit details on formal care coordination and integration approaches, particularly with primary care providers and specialists managing different comorbidities not covered under the proposed payment model. For example, in Avera Health, which were recommended for implementation, PTAC noted the absence of guaranteed integration and coordination between the "on call" geriatrician providing telemedicine services and a patient's primary care physician. In addition, PTAC noted that the two serious illness proposed models (AAHPM and C-TAC) needed explicit standards and requirements for care coordination with the patients' primary care providers. Further, in NYC DOHMH, PTAC noted that many of the eligible patients would have significant comorbidities and would likely benefit from care coordination before and after hepatitis C treatment, but the proposal only addressed care coordination during prescription drug treatment. For the ACAAI and ACP-NCQA proposed models, which both focused on specialty care, PTAC indicated that the proposed models did not provide details about care coordination processes between specialists and the primary care team. Finally, in Hopkins/Stanford, PTAC recommended further testing of the proposed model to assess how to best integrate the model with primary care, including formal communication and data-sharing procedures.

Explain how integration and care coordination will be incentivized and ensured. Committee members noted a lack of measures, requirements, resources, and/or processes to ensure and incentivize care coordination in several proposals recommended for attention or limited-scale testing. For example, PTAC observed that the ACS proposed model did not include any minimum threshold for the level of integration required among the group of physicians providing a bundled service, and it did not encourage or require coordination with physicians who were not part of the proposed model. Similarly, PTAC indicated that the AAFP primary care proposed model also did not include any requirements or measures of care coordination for individual patients. For ACAAI, PTAC noted that the proposed model did not describe how providers would work together, how payments would be shared, or how care coordination would change over the course of a patient's disease.

Ensure that integration and care coordination focuses on the whole patient, not just the targeted disease. PTAC noted significant problems with care coordination approaches for three of the proposed models that were not recommended for implementation. For example, Committee members expressed concern that the LUGPA proposed model did not include integration and coordination with physicians responsible for patients' conditions beyond *prostate* cancer, despite a proposed payment model that held urologists responsible for patients' total cost of care. PTAC raised similar concerns about the PMA proposal, which did not include integration and coordination with primary care providers in the proposed care model. Finally, PTAC noted that the NYC DOHMH proposed model focused only on care coordination during active treatment for hepatitis C, potentially limiting the effectiveness of the model, given significant mental health comorbidities among the target population.

Describe how patient preferences and individual needs would be considered. PTAC identified promising approaches in many proposed models. For example, PTAC praised the new choices provided to Medicare beneficiaries under several proposed models—including Avera Health, Hopkins/Stanford, Mount Sinai, PRC, and UNMHSC—that all aimed to keep beneficiaries in their homes or communities and out of the hospital. However, PTAC observed that two proposed models (Avera Health and Dr. Antonucci) could be improved with a description of how patient preferences would be considered.

For example, PTAC noted that the Dr. Antonucci proposed model did not describe how patients would be informed about differences between the model and the current payment system or what information patients would receive about the types of services and quality of care they would receive under the model. Further, PTAC indicated that the Avera Health proposed model, which would provide telemedicine in SNFs, could be improved by documenting patient goals to ensure geriatricians providing telemedicine services take patient preferences and advanced care plans into account. Finally, PTAC commended the ASCO proposed model for allowing patients and oncologists to choose off-pathway treatments, but Committee members identified a need for close monitoring of the pathway adherence thresholds to ensure both high-quality care and consideration of individual patient preferences and needs.

Develop formal shared decision-making processes. PTAC comments were largely positive regarding proposed models' commitment to pursuing shared decision-making. For example, PTAC supported the Hopkins/Stanford proposed model's focus on patient-centered care, including patient-directed care goals and training to improve patients' skill at communicating with their providers. PTAC also noted that UNMHSC would add treatment options for patients without imposing new constraints, reduce avoidable transfers, and allow more patients to receive care in their local communities, which may align with patient and family preferences.

PTAC also supported the inclusion of a shared decision-making quality measure in the LUGPA proposed model, which was ultimately not recommended for implementation. PTAC also noted that two proposed models—IGG/SonarMD and PMA—could improve patient engagement in their own care through remote monitoring and regular self-assessment. For the ACAAI proposed model, PTAC supported the emphasis on shared decision-making and provider-patient conversations for patients with asthma.

In five other proposed models, PTAC noted that it would be beneficial to have additional detailed, formal shared decision-making processes that go beyond the general processes described in the proposal to ensure that patient preferences were accounted for and patients and families were fully engaged in care decisions. These proposed models were focused on critical areas of care that are significantly affected by patient preferences, including serious illness care (AAHPM and C-TAC, both recommended for limited-scale testing) and oncology care (ASCO, recommended for attention; IOBS, recommended for further development and implementation; and HMH/Cota, recommended for limited-scale testing).

Reducing Disparities. Among the 26 proposals, nine included components related to social determinants of health (SDOH) and/or equity (AAFP, ACP/NCQA, ASCO, C-TAC, Dr. Antonucci, Hopkins/Stanford, LUGPA, NYC DOHMH, and PRC). ¹⁵ Some of the proposed models aimed to advance equitable access to

¹⁵ See Section VII. Incorporation of SDOH and Equity in Selected PTAC Proposals (p. 43) in *Background Information Related to Optimizing Efforts to Address Social Determinants of Health and Equity in the Context of Alternative Payment Models (APMs)*

care by reducing barriers to access, participation, and engagement in the care delivery process. Others aimed to address equity by incorporating social risk factors into risk adjustment (thereby preventing the adverse selection of patients by providers). Additionally, a few of the proposed models discussed using interdisciplinary teams for organizing and coordinating medical and non-medical services to meet health-related social needs for individuals requiring complex care. However, PTAC was concerned that these proposed models did not provide sufficient details regarding how they would address potential access issues and stinting of care. Concerns were also raised regarding access to effective channels of communication with providers outside the immediate care team, and access to an emergency reporting mechanism such as a 1-800 line or some other form of 24/7 access to a provider—especially for the home-based proposed models. For all nine of the proposed models, PTAC raised concerns around patient safety that were related to potential barriers to equitable patient-centered care.

Health Information Technology

PTAC provided detailed comments on technology used in 17 of the 26 proposed models: ACAAI, ACP-NCQA, ACS, ASCO, Avera Health, Dialyze Direct, Dr. Antonucci, HMH/Cota, Hopkins/Stanford, IOBS, IGG/SonarMD, PMA, PRC, Seha, UMass, UNMHSC, and Upstream. Overall, 13 of these proposed models were found to meet the related health information technology criterion, and four did not (Dialyze Direct, Hopkins/Stanford, Seha, and Upstream). For the nine other proposed models, PTAC comments were limited.

Use novel technological approaches where appropriate. PTAC expressed support for novel technological approaches included in six proposed models: ASCO, Avera Health, Dr. Antonucci, IGG/SonarMD, PMA, and UNMHSC. In particular, PTAC supported remote patient monitoring through Bluetooth peak-flow meters included in PMA, as well as the patient-facing self-assessment included in IGG/SonarMD.

PTAC also noted that direct data collection through peer-reviewed, validated online patient surveys (as used in the Dr. Antonucci proposed model) was innovative and could be applied to other models, potentially substituting for other forms of risk adjustment. PTAC supported expanded use of advanced telemedicine in the Avera Health proposed model. PTAC also praised the central role of health information technology in the UNMHSC proposed model, which combined remote specialist consultations via videoconferencing with integration (including sharing of test results) across multiple providers' electronic health record (EHR) systems. Finally, PTAC noted that the transparency and datasharing infrastructure ideas in the ASCO proposed model could benefit future payment models.

Among the 26 proposed models, 16 included telehealth as a component of their models—either as a central feature of the model (four, Avera Health, IGG/Sonar MD, PMA, and UNMHSC); an aspect of the care delivery and/or payment model (eight, AAHPM, ACEP. C-TAC, HMH/Cota, IOBS, Mount Sinai, NYCDOMH, and PRC); or as an optional component and/or the potential for adoption under the model (four, AAFP, Dr. Antonucci, COA, and Seha). PTAC made positive remarks about the inclusion of telehealth services in these proposed models. PTAC emphasized the data-sharing opportunities created by

and Physician-Focused Payment Models (PFPMs). September 2021. https://aspe.hhs.gov/sites/default/files/documents/bc3335d23de446d835f6a5617f2cba1e/PTACProposalCMMIModel-Analysis.pdf

health information technology and telehealth; and noted the potential use of telehealth to create efficiencies for providers, support higher quality care, allow for earlier intervention, and support reductions in ED visits, hospitalizations, and mortality. PTAC also made comments regarding the need to more clearly articulate and specify the element of telementoring in one of the proposed models (NYC DOHMH) and how the use of proprietary software could impact the scalability of some of the proposed models.

Describe beneficiary and provider burden. While PTAC praised innovative approaches to data collection and patient monitoring, Committee members expressed concerns about Medicare beneficiaries' willingness and ability to use new technologies for remote monitoring (IGG/SonarMD and PMA) and providers' willingness to log into multiple systems to view the resulting data (IGG/SonarMD). In addition, PTAC noted that direct data collection from beneficiaries, as proposed in the Dr. Antonucci proposed model, could be burdensome for patients.

For the ACP-NCQA proposed model, PTAC indicated that requirements for data-sharing and use of certified electronic health records could be costly for small practices, discouraging model participation. PTAC expressed similar concerns about the ASCO proposed model, noting that the proposed model may be limited to certain communities, payers, and practices with access to health information exchanges and all payer claims databases. Finally, for the Avera Health proposed model, PTAC noted that participating geriatricians would need to be able to provide privacy-compliant, real-time, two-way audio/visual assessments and that SNFs may lag behind acute care settings in adoption of electronic health records, making it difficult to provide virtual access to health records.

Avoid proprietary technology. Nine proposed models included mention of proprietary technology, such as physician-facing software and algorithms (ACS, HMH/Cota, IOBS, UNMHSC, and PRC); devices and patient-facing applications to collect and share patient data and with the care team (IGG/SonarMD and PMA); and proprietary certification programs and pathways (ACP-NCQA and ASCO). Of these, seven were recommended for implementation, further development and implementation, testing, or limited-scale testing. Within this context PTAC suggested broadening the proposed models to allow use of competing technologies, make details of algorithms public, develop open-source certification programs, or otherwise not require the use of a specific proprietary technology. The remaining two proposed models were not recommended.

Describe how health information technology will be used. Four of the proposed models were found not to meet the health information technology criterion. For these proposed models (Dialyze Direct, Hopkins/Stanford, Seha, and Upstream), PTAC noted that the submitters provided insufficient information on how health information technology would be used. In addition, PTAC noted that the Hopkins/Stanford proposed model did not require the use of health information technology.

Conclusion

Among the 26 proposed models for which PTAC provided an overall recommendation to the Secretary, more than 80 percent were found to meet the scope, value over volume, flexibility, ability to be evaluated, patient choice, patient safety, and health information technology criteria. In fact, all of the proposals were found to meet the flexibility criterion, and all but one were found to meet the patient choice criterion. In addition, there was broad agreement between PRT and PTAC voting on most criteria, though the full PTAC tended to provide higher scores than the PRT for the scope criterion.

Among the remaining three criteria, Committee members found that only 12 proposed models met the payment methodology criterion, 16 met the integration and care coordination criterion, and 20 met the quality and cost criterion. Committee members also differed in how they scored proposals for each of these criteria, underscoring the attention Committee members gave to these criteria in the deliberative process. The payment methodology criterion, in particular, was a significant source of voting variation among Committee members.

These three criteria were also frequently addressed in PTAC comments, and this report describes several themes emerging from those comments. The following is a summary of several key points implied by PTAC comments on each of these criteria.

Payment Methodology: This criterion generated substantial comments from Committee members and raised the following key questions across multiple proposals:

- Could the desired approach to care be achieved through a fee schedule change?
- Does the proposed payment model sufficiently incentivize or require the desired care model?
- Who is accountable for operationalizing the proposed care model? Who is accountable for producing savings?
- How are payments distributed among the care team?
- Is total cost of care an appropriate savings metric for the proposed model? For example, it may be inappropriate for specialists be accountable for total cost of care when their specialty area accounts for a small portion of total spending for their patients (e.g., urologists in the LUGPA proposed model). Do the proposed model participants have control over the quality and cost measures for which they are responsible?
- Is two-sided risk appropriate for the patient population, and does it create appropriate incentives for participating providers?
- What might be unintended consequences of the proposed model's incentives?
- How does the proposed model protect against incentives to cherry-pick healthier patients?

Quality and Cost: Key questions raised by PTAC across proposals included the following:

- Are well-validated, appropriate quality measures available?
- Are incentive payments and shared savings linked with performance on quality measures?
- Is additional quality assurance needed to mitigate adverse incentives created by the proposed model, such as incentives to stint on care or to refer patients unnecessarily to specialists?

• Can validated patient experience measures be added or emphasized in the quality measurement framework?

Integration and Care Coordination: Key questions raised by PTAC across proposed models included the following:

- Is there a formal approach to care coordination and integration?
- Does the proposed model have formal procedures for integrating and coordinating with primary care physicians and specialists managing patients' comorbidities that are not targeted by the model?
- Does the care coordination and integration approach match the proposed payment model? For example, if total cost of care is used to measure savings, does the proposed model appropriately incentivize/require participants to coordinate and integrate care as needed to influence total cost of care?

The assessment of PTAC voting and comments on the extent to which proposed models were found to meet the Secretary's criteria for PFPMs revealed both areas of consensus (e.g., flexibility) and relative disagreement (e.g., payment methodology) within PTAC. In addition, Committee members' voting patterns showed that certain criteria are more difficult to meet than others, particularly quality and cost, payment methodology, and integration and care coordination. Finally, PTAC's comments based on the Committee's review and deliberation on the proposed models provide important insights regarding key strengths and areas for potential improvement across proposed models.¹⁶

¹⁶ Starting in 2021, PTAC has held a series of theme-based meetings to further inform Committee members and the Secretary on pertinent issues related to effective payment model innovation in APMs and PFPMs that have been addressed in the proposals that stakeholders have submitted to the Committee. Topics that have been addressed include: Telehealth and APMs, Care Coordination and APMs, Social Determinants of Health and Equity and APMs, Population-Based Total Cost of Care (PB-TCOC) Models, Improving Care Delivery and Integrating Specialty Care In Population-Based Models, and Improving Management of Care Transitions in Population-Based Models. Additionally, PTAC's September 18-29, 2023 public meeting will focus on Encouraging Rural Participation in PB-TCOC Models. PTAC has prepared environmental scans and other documents that provide additional information related to these topics, including insights from relevant previously submitted proposals, and insights from the Committee's review of these proposals. These documents are available on the ASPE PTAC website at https://aspe.hhs.gov/collaborations-committees-advisory-groups/ptac/ptac-resources.

Appendix Exhibit 1: PTAC Voting Through December 2020, for Criteria One, Two, and Three (High Priority)

			Sco	pe		G	Quality a	nd Cost		Payment Methodology			
Proposal	Report Date	PTAC Score	PTAC Vote Range	# of Does Not Meet Votes	# of Meets or Priority Votes	PTAC Score	PTAC Vote Range	# of Does Not Meet Votes	# of Meets or Priority Votes	PTAC Score	PTAC Vote Range	# of Does Not Meet Votes	# of Meets or Priority Votes
Recommend for Ir	nplement	ation											
ACEP	3/6/18	Priority	3–6	0	9	Meets	2–5	1	8	Meets	2–5	3 [‡]	6 [‡]
Avera Health	2/22/18	Priority	3–6	0	10	Meets	3–5	0	10	Meets	2–4	1	9
Mount Sinai	8/16/17	Priority	4–6	0	10	Meets	3–5	0	10	Meets	2–6 [†]	1	9
PRC	2/23/18	Meets	3–6	0	11	Meets	2–6 [†]	1	10	Meets	2–6 [†]	1	10
RPA	11/16/17	Meets	3–6	0	11	Meets	3–6	0	11	Meets	3–4	0	11
Recommend for Further Development and Implementation													
IOBS*	10/3/18	Priority	4–6	0	7	Meets	3–5	0	7	Meets	2–4	2 [‡]	5 [‡]
UNMHSC*	11/25/19	Priority	3–6	0	11	Priority	3–6	0	11	Meets	1–4	1	10
Recommend for Testing													
ACP-NCQA*	11/19/20	Meets	3-6	0	8	Meets	3-4	0	8	Meets	2-4	1	7
Hopkins/Stanford*	9/6/19	Priority	3–6	0	7	Meets	3–5	0	7	Does not meet	2–3	6	1
Recommended fo	r Limited-	Scale Testing											
AAHPM	2/12/18	Priority	3–6	0	10	Does not meet	2–6 [†]	6 [‡]	4 [‡]	Does not meet	1–4	7 [‡]	3 [‡]
AAFP	11/15/17	Priority	3–6	0	11	Meets	3–5	0	11	Meets	3–5	0	11
ACS	3/22/17	Priority	3–6	0	9	Meets	2–3	4 [‡]	5 [‡]	Meets	1–5 [†]	2	7
C-TAC	2/13/18	Priority	4–6	0	10	Meets	3–5	0	10	Meets	3–4	0	10
Dr. Antonucci	8/9/18	Meets	2–6 [†]	1	8	Does not meet	1–3	6 [‡]	3 [‡]	Does not meet	2–5	6 [‡]	3 [‡]
HMH/Cota	8/14/17	Meets	3–5	0	10	Meets	3–5	0	10	Meets	2–5	1	9
IGG/SonarMD	3/22/17	Meets	1–6 [†]	1	9	Meets	1–6 [†]	3 [‡]	7 [‡]	Does not meet	1–5 [†]	6 [‡]	4 [‡]
UChicago	8/14/18	Meets	1–6 [†]	3 [‡]	7 [‡]	Meets	1–5 [†]	3 [‡]	7 [‡]	Does not meet	1–5 [†]	7 [‡]	3 [‡]
Recommend for A	ttention												
ACAAI*	9/3/2020	Does not meet	1-4	5 [‡]	3 [‡]	Meets	1-3	3 [‡]	5 [‡]	Does not meet	1-4	6	2
ASCO*	11/19/20	Does not meet	2-5	5 [‡]	4 [‡]	Does not meet	2-5	6 [‡]	3 [‡]	Does not meet	2-5	7	2
Dialyze Direct*	8/7/18	Does not meet	1–3	7 [‡]	3 [‡]	Does not meet	0–3	7	2	Does not meet	0–2	8	0
Do Not Recomme	nd												
LUGPA	11/16/17	Meets	2–5	2	9	Meets	2–4	2	9	Does not meet	1–3	7 [‡]	4 [‡]
NYC DOHMH	11/15/17	Meets	1–3	4 [‡]	6 [‡]	Meets	2–4	1	9	Does not meet	1–3	9	1
PMA	3/22/17	Meets	2–5	1	9	Meets	2–4	2	8	Does not meet	1–3	8	2

			Scope					nd Cost		Payment Methodology			
Proposal	Report Date	PTAC Score	PTAC Vote Range	# of Does Not Meet Votes				# of Does Not Meet Votes		PTAC Score		# of Does Not Meet Votes	
Seha*	5/17/19	Meets	2–6	2	9	Does not meet	1–2	11	0	Does not meet	1–2	11	0
UMass*	9/3/20	Does not meet	1-3	7	1	Meets	3-4	0	8	Does not meet	1-2	8	0
Upstream*	5/17/19	Meets	2–6	1	9	Does not meet	2–4	9	1	Does not meet	2–4	7 [‡]	3 [‡]

SOURCE: Authors' analysis of 26 proposals deliberated and voted on by PTAC as of December 31, 2020. Excludes two proposals for which PTAC concluded that the criteria for PFPMs established by the Secretary were not applicable.

NOTES: Proposals are sorted alphabetically within each section.

Appendix Exhibit 2: PTAC Voting Through December 2020, for Criteria Four Through Ten

	Value over	Value over Volume		Flexibility		Ability to Be Evaluated		Integration and Care Coordination		Choice	Patient Safety		Health Info	
Proposal	PTAC Score	PTAC Vote Range	PTAC Score	PTAC Vote Range	PTAC Score	PTAC Vote Range	PTAC Score	PTAC Vote Range	PTAC Score	PTAC Vote Range	PTAC Score	PTAC Vote Range	PTAC Score	PTAC Vote Range
Recommend for Implementation														
ACEP	Meets	3–5	Meets	3–6	Meets	3–5	Meets	2–5	Meets	3–5	Meets	2–5	Meets	3–4
Avera Health	Meets	3–5	Meets	3–5	Meets	3–4	Meets	2–5	Meets	3–5	Meets	3–5	Meets	3–6
Mount Sinai	Meets	3–5	Meets	3–5	Meets	3–4	Priority	3–6	Priority	4–6	Meets	3–4	Meets	3–4
PRC	Meets	3–6	Meets	2–6	Meets	3–6	Meets	3–6	Priority	3–6	Meets	2–5	Meets	3–5
RPA	Meets	4–5	Meets	3–5	Meets	3–4	Meets	2–5	Meets	3–5	Meets	3–6	Meets	3–4
Recommend for	r Further De	evelopme	nt and Im	plementa	tion									
IOBS*	Meets	3–6	Meets	3–5	Meets	3–6	Meets	3–4	Meets	3–6	Meets	3–6	Priority	4–6
UNMHSC*	Meets	3–5	Meets	3–5	Meets	3–5	Meets	2–6 [†]	Meets	4–5	Meets	4–6	Priority	3–6
Recommend for	r Testing													
ACP-NCQA*	Meets	3-5	Meets	3-4	Meets	3-5	Meets	3-6	Meets	3-5	Meets	3-5	Meets	3-5
Hopkins/ Stanford*	Meets	3–4	Meets	3–5	Meets	3–5	Does not meet	2–3	Priority	4–6	Priority	4–6	Does not meet	1–3

[‡] Blue color cell indicates criteria for which at least one-third of PTAC votes were that the proposal *did not meet* the criterion and at least one-third of PTAC votes were that the proposal *met* the criterion.

[†] Maroon color cell indicates wide variation in PTAC voting.

^{*} PTAC deliberated on 10 proposed models (Dialyze Direct, Hopkins/Stanford, IOBS, Seha, UNMHSC, Upstream, ACAAI, ACP-NCQA, ASCO, and UMass) under a new voting approach developed in September 2018.

	Value over	· Volume	Flexi	bility	Ability t Evalua		Integration Care Coord		Patient C	Choice	Patient S	Safety	Health Info	
Proposal	PTAC Score	PTAC Vote Range	PTAC Score	PTAC Vote Range	PTAC Score	PTAC Vote Range	PTAC Score	PTAC Vote Range	PTAC Score	PTAC Vote Range	PTAC Score	PTAC Vote Range	PTAC Score	PTAC Vote Range
Recommend fo	r Limited-Sc	ale Testi	ng											
AAHPM	Meets	2–6 [†]	Meets	3–6	Meets	3–6	Meets	3–6	Priority	2–6 [†]	Meets	2–5	Meets	2–3
AAFP	Meets	3–5	Meets	4–5	Meets	2–4	Meets	2–5	Meets	3–5	Meets	2–4	Meets	3–4
ACS	Does not meet	1–3	Meets	2–4	Meets	2–4	Meets	2–6 [†]	Meets	2–4	Meets	2–3	Meets	3–6
C-TAC	Meets	4–5	Meets	4–5	Meets	3–4	Meets	4–6	Meets	3–6	Meets	3–4	Meets	3–5
Dr. Antonucci	Meets	2–6 [†]	Meets	2–6 [†]	Meets	2–4	Does not meet	2–3	Meets	2–5	Does not meet	2–6 [†]	Meets	3–5
HMH/Cota	Meets	2 -5	Meets	2–5	Meets	2–4	Meets	1–4	Does not meet	2–3	Meets	2–5	Priority	3–5
IGG/SonarMD	Meets	1–5 [†]	Meets	3–5	Meets	3–5	Does not meet	1–3	Meets	1–4	Meets	3–6	Meets	2–4
UChicago	Meets	3–5	Meets	2–6 [†]	Meets	2–5	Meets	1–5 [†]	Meets	3–5	Meets	2–6 [†]	Meets	3–4
Recommend fo	r Attention												T	
ACAAI*	Does not meet	1-4	Does not meet	3-4	Does not meet	1-3	Does not meet	1-5 [†]	Meets	3-4	Meets	3-4	Meets	3-4
ASCO*	Meets	3-5	Meets	3-4	Does not meet	1-4	Meets	3-4	Meets	3-4	Meets	3-5	Meets	3-4
Dialyze Direct*	Meets	1–4	Meets	2–3	Does not meet	0–3	Does not meet	1–3	Meets	3–6	Meets	1–6 [†]	Does not meet	1–3
Do Not Recomm	nend													
LUGPA	Meets	3–4	Meets	3–5	Meets	2–4	Does not meet	1–4	Meets	2–5	Meets	3–4	Meets	1–5 [†]
NYC DOHMH	Meets	3–5	Meets	2–4	Does not meet	1 -4	Meets	1–6 [†]	Meets	3–4	Meets	2–4	Meets	3–4
РМА	Meets	3–4	Meets	2–4	Meets	3–4	Does not meet	1–5 [†]	Meets	3–5	Meets	2–4	Meets	2–4
Seha*	Does not meet	1–2	Meets	2–4	Does not meet	1–3	Does not meet	1–3	Meets	2–4	Does not meet	1–3	Does not meet	1–3
UMass*	Meets	2-4	Meets	3-4	Meets	2-3	Does not meet	1-3	Meets	3-4	Does not meet	1-4	Meets	2-4

	Value over Volume		Value over Volume		over Volume Flexibility		Ability to Be Evaluated		Integration and Care Coordination		Patient Choice		Patient Safety		Health Information Technology	
Proposal	PTAC Score	PTAC Vote Range	PTAC Score	PTAC Vote Range	PTAC Score	PTAC Vote Range	PTAC Score	PTAC Vote Range	PTAC Score	PTAC Vote Range	PTAC Score	PTAC Vote Range	PTAC Score	PTAC Vote Range		
Upstream*	Meets	3–4	Meets	3–4	Meets	2–5	Does not meet	2–5	Meets	3–5	Meets	2–3	Does not meet	1–3		

SOURCE: Authors' analysis of 26 proposals deliberated and voted on by PTAC as of December 31, 2020. Excludes two proposals for which PTAC concluded that the criteria for PFPMs established by the Secretary were not applicable. NOTES: Proposals are sorted alphabetically within each section.

[†] Maroon color cell indicates wide variation in PTAC voting.

^{*} PTAC deliberated on 10 proposed models (Dialyze Direct, Hopkins/Stanford, IOBS, Seha, UNMHSC, Upstream, ACAAI, ACP-NCQA, ASCO, and UMass) under a new voting approach developed in September 2018.