Common Alternative Payment Model (APM) Approaches: Reference Guide

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To assist stakeholders in determining which payment methodology may be most appropriate for their care delivery model, the Physician-Focused Payment Model Technical Advisory Committee (PTAC) requested the development of a brief reference guide that summarizes some of the major types of payment methodologies that are typically used in Alternative Payment Models (APMs).[1] This guide is intended to serve as a reference for potential submitters as they are developing physician-focused payment models (PFPMs)—to assist them in identifying model elements that may be appropriate for their proposal, providing as much detail as possible regarding their proposed payment methodologies, and identifying other relevant resources.

This guide is not intended to be comprehensive regarding all possible approaches to value-based payment reform, nor does it recommend or endorse a particular payment model or model element. Rather, it is intended to offer basic information about types of APMs that are commonly submitted to PTAC and illustrate the range of possible approaches in order to be informative for potential proposal submitters.

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Background

The Physician-Focused Payment Model Technical Advisory Committee (PTAC) was created by The Medicare Access and CHIP Reauthorization Act of 2015 (MACRA) which was enacted, in part, to improve how the federal Medicare program pays physicians for the care they provide to Medicare beneficiaries. MACRA also authorized the creation of Medicare Alternative Payment Models (APMs) focused on care for Medicare fee-for-service (FFS) beneficiaries and specifically encouraged the development of certain types of APMs referred to as physician-focused payment models (PFPMs). An APM is a payment approach that gives added incentive payments to provide high-quality and cost-efficient care.[2] MACRA also authorizes payment of a bonus to providers who participate in APMs that have more than nominal risk, which CMS has defined as Advanced APMs (AAPMs) that meet several criteria which have been defined through rulemaking.

PFPMs are APMs in which Medicare is a payer and eligible clinicians[3] play a core role in implementing the payment methodology. PFPMs target the quality and costs of services that eligible professionals participating in the APM provide, order, or can significantly influence. In addition to providing financial incentives to provide high-quality, cost-efficient care, PFPMs may also choose to meet more rigorous criteria that would enable them to also qualify as an AAPM, but they are not required to do so. An AAPM is required to meet additional requirements, especially with respect to risk sharing: AAPMs must bear significant financial risk, either downside risk or penalties.[4] Clinicians who participate in an AAPM are excluded from participation in the Merit-based Incentive Payment System (MIPS), as are clinicians who do not meet MIPS eligibility criteria.

PTAC makes comments and recommendations to the Secretary of the Department of Health and Human Services (the Secretary, HHS) on proposals for PFPMs that are submitted by individuals and stakeholders. PTAC's *Proposal Submission Instructions*, available on the Assistant Secretary for Planning and Evaluation (ASPE) PTAC website describe how individuals and stakeholder entities may submit proposals for new PFPMs to PTAC and provide information on how PTAC evaluates proposals.

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[2] Centers for Medicare & Medicaid Services (CMS), "APM Overview," https://qpp.cms.gov/apms/overview. (accessed June 26, 2020)

[3] Eligible professionals are defined in section 1848(k)(3)(B) of the Social Security Act. In this report, we use "providers" broadly to include all those clinicians (both physicians and non-physician practitioners), hospitals, and others involved in patient care who would participate in an APM.

[4] CMS defines significant ("more than nominal") financial risk in regulations as at least 8 percent of the average estimated total Medicare Parts A and B revenues of all providers and suppliers participating in the APM Entity, or 3 percent of the expected expenditures for which the APM Entity is responsible under the AAPM. For additional information on AAPM requirements, see CMS Quality Payment Program, "Advanced Alternative Payment Models," (https://qpp.cms.gov/apms/advanced-apms#:~:text=UpdatedTo%20become%20a%20QP,the%20determination%20periods%20).

Purpose

PTAC developed this brief reference guide for potential proposal submitters to provide an overview of the major types of APMs that are used, important variations in APM features, and additional factors to consider. This guide is intended to assist potential proposal submitters who are developing proposed PFPMs, to:

- Identify an APM or model elements that could be an appropriate fit for an innovative care delivery idea
- Better describe key aspects of the proposed APM methodology
- Find resources for additional information about the major types of APMs that are currently being used

This guide does not provide a comprehensive review of all possible approaches to value-based payment that could be used in a PFPM; instead, it focuses on types of APMs that are commonly proposed, in order to be informative for submitters. Other groups have also proposed classification systems and resources for APMs that may be useful for submitters,[5] for example, Appendix C includes select references and Appendix D includes the Health Care Payment Learning & Action Network (HCP-LAN) framework used by the Center for Medicare & Medicaid Innovation (CMMI).[6] This guide's summary table (Exhibit 1) crosswalks the five categories that are used in this guide with the HCP-LAN categories. In addition, this guide is intended to be informational in nature. The examples that are described in this guide are only intended to illustrate how other payers and proposal submitters have incorporated a given payment approach and do not represent endorsements of the model, proposed model, or model component that is described. Further, while this guide may be helpful for individuals or stakeholders who intend to submit a proposal for PTAC review, using one of the APM approaches described in this document does not ensure a specific outcome from PTAC review. As discussed in PTAC's *Proposal Submission Instructions*, PTAC will use the information submitted in the proposal, as well as additional information obtained during the review process, to determine whether a proposed PFPM meets the Secretary's criteria.

Potential submitters should note that the evidence base for APMs is limited and evolving in some areas of payment methodology. For this reason, submitters may benefit from drawing on available evidence and knowledge of the strengths and weaknesses of previous models to propose new or improved PFPMs. For example, potential submitters are encouraged to review PTAC's Reports to the Secretary and the Secretary's Responses for more in-depth discussion of the results of their review of the strengths and weaknesses related to the PTAC proposals that are discussed in this reference guide.[7] In addition,

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[5] MedPAC uses three categories to classify AAPMs, population-based payment models, episode-based payment models, and advanced primary care payment models. See slides from MedPAC's October 2020 public meeting, available online at http://medpac.gov/docs/default-source/meeting-materials/a_apm_medpac_oct2020.pdf?sfvrsn=0.

[6] The purpose of the HCP-LAN APM framework was to provide a roadmap to measure progress toward payment reform as well as establish a common nomenclature and a shared set of conventions that can facilitate discussions among stakeholders and expedite the generation of an evidence base for evaluating the capabilities and results of APMs.

[7] The PTAC Reports to the Secretary and Secretary's Responses are available at the PTAC website, https://aspe.hhs.gov/proposal-submissions-physician-focused-payment-model-technical-advisory-committee.

potential submitters may want to use evidence from existing CMMI models and propose ways to build on their strengths and weaknesses.

Organization of the Reference Guide. Exhibit 1 provides an overview of the major types of APM approaches and identifies some examples of CMMI models and of proposed models that have been deliberated and voted on by PTAC that use the payment approach. The following sections provide additional information about key features of the major types of APMs and how these features have been used in selected CMMI models and PTAC proposed models. This guide concludes with a list of considerations that may be useful to guide potential submitters as they develop an APM, together with a list of terms and acronyms, a list of models that are cited in this guide, and a set of additional references and selected resources.

Exhibit 1. Overview of the Major Types of Alternative Payment Model Approaches

Payment Model	Description	Examples of CMS/CMMI Models*	Examples of Proposed Models Voted on By PTAC*	HCP-LAN Category
1. Fee Schedule Payments with a Link to Quality	Medicare Physician Fee Schedule (MPFS) payments with additional payments (or penalties) based on clinicians' meeting certain quality objectives	HRRP	Upstream	2B and 2C
2. Fee Schedule Payments with Accountability for Performance	MPFS payments for clinicians affiliated with an APM entity, often involving multiple specialties or practices, that bears accountability for performance, including spending, utilization, quality, patient experience, or other performance metrics	MSSP	ACEP RPA	3A and 3B
3. Care Management Payment	Per beneficiary per month payments for care management, coordination, or other non-visit functions made in addition to standard FFS. The care management fee may be risk-adjusted to account for complexity of a specific population's care needs.	CPC MAPCP CPC+ OCM	IGG/SonarMD Avera Health UChicago	2A and 3A
4. Population-based Payments	Providers/entities receive fixed, prospective payments for mix and volume of defined activities for a specific population. Capitation may be total or partial, with partial excluding certain services from the capitated payment and separately paying for those services under a different mechanism. Can also include capitation-like payments covering a range of providers operating under a common governance structure. Payments may be risk-adjusted.	PCF DC CPC+ (Track 2) NGACO**	Dr. Antonucci AAFP AAHPM C-TAC	4A, 4B, and 4C
5. Bundled / Episode Payments	Provides a fixed payment to an APM entity to cover a complete set of related services for a clinical episode. A clinical episode can be defined by a health condition or medical intervention that may be delivered by a single provider (e.g., oncology practice) or multiple providers (e.g., oncology practice and hospital outpatient department or cancer center).	BPCI Advanced OCM CJR	Mount Sinai HMH/Cota ACS-Brandeis	3A and 3B 4A

Notes: Models are categorized according to the predominant payment feature. Many models combine elements. Evaluation results from the CMMI models can be accessed online at https://innovation.cms.gov/data-and-reports.
The HCP-LAN framework categories are shown in Appendix D, and more information is available in the HCP-LAN APM Framework, accessible online at https://hcp-lan.org/apm-refresh-white-paper/. *The full names of models referenced in this table and elsewhere in the reference guide are listed in Appendix B. Appendix C provides information on how to access additional information about the CMMI models, as well as the Reports to the Secretary and Secretary's Responses related to the PTAC models.** In NGACO, the population-based payments and all-inclusive population based payments provide capitation-like up-front monthly payments for anticipated FFS spending.

1. Fee Schedule Payments with a Link to Quality

Key Features. In the context of this reference guide, fee schedule payments with a link to quality is defined as an APM that includes Medicare fee schedule payments to health care practitioners coupled with financial incentives based on the ability of the provider or provider organization to meet certain performance standards. These performance standards can address a range of measures including quality, utilization, appropriateness of care, patient experience, patient safety, and others. These performance-based incentive payments are intended to encourage providers to deliver higher-value care. These models, sometimes called "Pay for Performance" or "P4P", typically rely on FFS architecture and often include minimal payment adjustments based on performance, in contrast to other models (see Category 2) that also utilize FFS payments but incorporate greater accountability in the form of risk and potential reward for providers in pursuing value-based care. In this approach, the individual clinician or practice generally operates as the APM entity, and Medicare assesses bonuses or penalties based on that practice's performance.

Because this APM approach continues MPFS billing and payments for service delivery, the models vary primarily in the range of quality measures included and how they are linked to payment, such as:

- ***The definition of the performance period.*** Models may use time to define the performance period, such as performance during the calendar or fiscal year, or they may use an episode framework, which would assess performance on utilization, cost, or quality measures during the period defined by a clinical intervention or the treatment of a particular health condition.
- ***Bonuses versus penalties.*** The link to quality can include rewards (either increases in payments for individual services or lump-sum bonus payments), penalties (such as reductions in payments for services), or both.
- ***The level of bonus or penalty payment.*** Models can vary the magnitude of the bonus or penalty, which adjusts the strength of the incentives that providers face. For example, models may propose a flat bonus or penalty payments, or scale the payment according to performance.
- ***Basis of comparison.*** Models may vary in whether they reward improvement in performance measures relative to a practice's historical performance, achievement of predetermined levels of performance (e.g., "80 percent patient satisfaction"), or comparison with other providers during the same performance period, and whether and how performance measures are adjusted for risk.
- ***Prospective versus retrospective elements.*** A bonus or penalty can be implemented retrospectively—in which a bonus is paid or a penalty is imposed at the end of a performance period—or prospectively—in which future payments to the provider are higher or lower based on performance in a prior period.

Some FFS models with a link to quality that have retrospective penalties avoid the need to collect penalties from providers ("clawbacks") by imposing a withhold on the provider's payments at the beginning of the performance year. A withhold is defined as a percentage of the payment that is held back subject to performance evaluation. A provider with good performance then receives both the withhold amount and a bonus payment, and a provider with poor performance forfeits all or some of the withhold amount.

Examples of CMS Models. The Medicare Hospital Readmission Reduction Program (HRRP) is a value-based purchasing program in Medicare that reduces payments to hospitals for excess readmissions.[8] CMS currently includes six conditions or procedures in the HRRP: Acute Myocardial Infarction (AMI), Chronic Obstructive Pulmonary Disease (COPD), Heart Failure (HF), Pneumonia, Coronary Artery Bypass Graft (CABG) Surgery, and Elective Primary Total Hip Arthroplasty and/or Total Knee Arthroplasty (THA/TKA). For these six conditions, CMS assesses the 30-day risk standardized unplanned readmissions during the hospital-specific three year performance period and adjusts all FFS base operating diagnostic-related group (DRG) payments during the payment year. The adjustment is capped at three percent.

Examples of PTAC Models. The model proposed by Upstream Rehabilitation[9] sought to expand the role of physical and occupational therapists (PTs/OTs) in managing chronic wounds among Medicare beneficiaries. The submitters believed greater utilization of PTs/OTs could reduce Medicare spending, expand access to wound care for beneficiaries, particularly those in rural settings, and improve quality of care and promote faster wound healing. In the model, participating PTs/OTs would be reimbursed using the MPFS for the wound care and therapy services provided to patients who had qualifying wound and therapy diagnoses, with some fee schedule modifications to allow PTs/OTs to bill for advanced therapeutics and to exceed MPFS therapy caps. Participating providers would be held accountable for quality; the proposal required that participating PTs/OTs who did not demonstrate a clinical improvement in patients' functional status would be required to refund the full payment for that patient to CMS.

2. Fee Schedule Payments with Accountability for Performance

Key Features. Like the previous approach, this APM approach relies on MPFS payments coupled with performance-based financial incentives to encourage the delivery of high-value care. This APM approach is distinct in its focus on integrating care across settings, typically through an APM entity involving multiple practices or specialties, and its emphasis on accountability for spending as an element of performance. Accountable Care Organizations (ACOs, described below) are a well-known example of this approach. This APM approach incorporates greater risk and potential reward for providers in pursuing value-based care.

In addition to the variations in performance-based incentives mentioned in the previous category, FFS-based models with accountability for performance can vary regarding:

- ***The extent to which quality measures are included.*** While all models in this category include accountability for spending, the performance-based financial incentives can also incorporate

[8] CMS, Hospital Readmissions Reduction Program, https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/AcuteInpatientPPS/Readmissions-Reduction-Program.

[9] Preliminary Review Team Report to the Physician-Focused Payment Model Technical Advisory Committee (PTAC) on the 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 Payment Model, https://aspe.hhs.gov/system/files/pdf/255731/UpstreamPRTReport.pdf, February 7, 2019. (Accessed online July 29, 2020). The PTAC Report to the Secretary and Secretary's Response are accessible at https://innovation.cms.gov/files/x/ptac-hhsresponse-feb2020.pdf (Accessed online December 4, 2020).

performance incentives based on quality, utilization, patient experience, appropriateness, and other measures. In addition, some approaches include minimum performance thresholds on quality measures in order to receive shared savings payments and differ in the relative balance of quality and cost measures in determining payments.

- ***The scope of clinicians involved in the APM.*** Models in this category can vary based on the range of clinicians involved in the payment model. Some models may include a more narrow set of clinicians focused on one particular area of care, for example primary care providers (PCPs) and specialists treating a particular chronic condition. More integrated models are likely to involve clinicians from a range of specialties involved in patient care. Performance accountability generally corresponds with the scope of the clinicians involved.
- ***Upside versus downside financial risk.*** The accountability for spending in this approach includes upside risk in which providers share in savings when expenditures are lower than the established target. Models that include only upside risk are sometimes referred to as "shared savings" models or "one-sided risk." Models can also include downside risk in which providers share in losses (or expenditures that exceed the target), sometimes called "two-sided risk" or "shared risk" models. Inclusion of significant financial risk would make this approach an AAPM.
- ***The level of financial risk or reward.*** There are a number of ways in which performance-based payment approaches may vary the magnitude of financial risk or reward, within upside-only or two-sided risk frameworks. For example, models may:

    - Vary the accountability basis (e.g., whether performance on cost measures assessed on condition-specific spending versus total cost of care)
    - Include minimum savings or loss thresholds (e.g. actual spending must be at least a certain percentage below the target expenditure before any savings are shared)
    - Impose caps on total shared savings or penalties
    - Vary the distribution of savings or losses between payers and providers

Examples of CMS Models. In the Medicare Shared Savings Program (MSSP),[10] providers (e.g., physicians, hospitals, and others involved in patient care) can come together to create an ACO. An ACO agrees to be held accountable for the quality and cost of an assigned Medicare FFS beneficiary population. There are different tracks for participation in the MSSP, but generally providers continue to bill FFS and receive incentive payments based on performance. In 2020, certain tracks of MSSP (Track 2, Track 3, Level E of the BASIC track, and the ENHANCED track) qualify as advanced APMs.[11]

Examples of PTAC Models. Several proposed models deliberated on by PTAC also proposed using fee schedule payments (MPFS or other fee schedule payments) paired with performance-based financial incentives. The model proposed by the American College of Emergency

[10] Centers for Medicare & Medicaid Services. Shared Savings Program https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/sharedsavingsprogram. (Accessed August 18, 2020)
[11] QPP Advanced APMS, https://qpp.cms.gov/apms/advanced-apms. For details of different MSSP tracks, see CMS Medicare Shared Savings Program Participation Options for Performance Year 2021, https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/sharedsavingsprogram/Downloads/ssp-aco-participation-options.pdf.

Physicians (ACEP)[12] sought to address transitions between the emergency department (ED) and home by incentivizing improved quality and decreased cost associated with the discharge disposition decisions made by ED physicians for defined episodes of care. The proposed ACEP model includes three different options for risk sharing. In each option, if a participant's spending is below the episode target price and meets the specified quality thresholds, then it would be eligible for a reconciliation payment. If a participant's spending is above the target price, then it would be required to reimburse CMS as part of downside risk. The model also includes stop gain and stop loss thresholds that would vary with the quality reporting or performance option chosen by a participant.

In the model proposed by the Renal Physicians Association,[13] which focused on improving the transition to dialysis through an integrated approach involving patient education and care coordination across various types of clinicians, nephrologists would continue to receive FFS payments during a defined clinical episode. During two annual reconciliation periods, the APM Entity could receive shared savings (in the upside-only risk option or the AAPM option) or be required to repay losses (only in the two-sided AAPM option) based on the comparison of the actual episode-adjusted patient cost to a risk-adjusted regional benchmark.

3. Care Management Payment

Key Features. In its simplest form, this payment approach involves a per beneficiary per month (PBPM)[14] payment for activities such as care management, coordination, or other non-visit functions, generally layered on top of another form of payment, which in current models has been the MPFS. The goal of care management payments (CMPs) is to provide resources for care coordination and management to reduce duplicative tests, ED visits, observation stays, and unnecessary hospitalizations. Providers typically receive this payment to help them manage their patients' care and to support their coordination with other providers caring for the patient. The CMP is functionally similar to partial capitation—both typically use PBPM payments for eligible patients—but CMPs tend to be a targeted, incremental amount for particular activities, while capitation (which is discussed later) is a larger base payment for a range of activities with more financial risk for providers.

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[12] PTAC Report to the Secretary of Health and Human Services. Comments and Recommendations on Acute Unscheduled Care Model: Enhancing Appropriate Admissions. https://aspe.hhs.gov/system/files/pdf/255726/ReportToTheSecretary_ACEP_10.20.18.pdf. (Accessed August 17, 2020). The Secretary's Response is accessible at https://downloads.cms.gov/files/ptac-hhssecresponse-sep18-dec18.pdf (Accessed online December 4, 2020).

[13] PTAC Report to the Secretary of Health and Human Services. Comments and Recommendation on Incident ESRD Clinical Episode Payment Model. https://aspe.hhs.gov/system/files/pdf/255906/PTACRecommendationsandCommentsRPA.pdf. Accessed August 17, 2020 The Secretary's Response is accessible at https://aspe.hhs.gov/system/files/pdf/255906/Secretarial_Responses_June_13_2018.508.pdf (Accessed online on December 4, 2020).

[14] PBPM refers to Medicare beneficiaries. Other variations of this acronym include PMPM (per member per month, often used in HMOs) and PPPM (per patient per month or per person per month, used more generically).

Models with care management fees can vary across the following dimensions:

- ***Eligible providers.*** Practice eligibility requirements for receiving PBPM care management fee payments, such as staffing, health information technology, patient accessibility measures (like same day appointments), or willingness to accept financial risk.
- ***Covered services.*** Models can vary according to the range of care management services the fee is intended to cover.
- ***Eligible patients.*** The criteria for which patients trigger care management payments for the practice, such as a particular diagnosis or type of visit, and how patients are assigned to practices (attribution methodology).
- ***Combination with other model elements.*** Models can vary according to whether the care management fee is paired with other performance-based model elements such as quality and cost targets associated with upside or downside risk
- ***Amount and frequency of payment.*** The amount and frequency (e.g., monthly or quarterly) of the care management fee can also vary, including whether the payment is risk-adjusted and the method used for adjustment, and whether the care management fee is adjusted based on performance.

Examples of CMMI Models. Comprehensive Primary Care Plus (CPC+) is a national advanced primary care medical home model established by CMMI in 2017 to strengthen primary care through regionally-based multi-payer payment reform and care delivery transformation. Both tracks of CPC+ provide a non-visit-based PBPM care management fee that is paid on a quarterly basis. This fee gives practices additional financial resources and flexibility to make investments, improve quality of care, and reduce the number of unnecessary services their patients receive. The PBPM amount is risk-adjusted for each practice to account for the intensity of care management services required for the practice's specific population. In CPC+, patients are assigned to one of four risk tiers, with the practice receiving higher care management fees for higher risk patients (the PBPM range is $6 to $33 in 2020). Both tracks of CPC+ also include a performance-based component in which practices receive prospective performance-based incentive payments with retrospective reconciliation based on how well a practice performs on quality (e.g., clinical quality, patient experience) and cost measures (e.g., utilization measures that drive total cost of care). While practices in Track 1 continue to receive regular FFS payments, Track 2 of CPC+ adds another layer of variation by shifting a portion of FFS payments into partially capitated payments that replace a portion of FFS billing.

Where CPC+ has a care management fee targeted for primary care practices, another CMMI AAPM—the Oncology Care Model (OCM)—includes monthly enhanced oncology services (MEOS) payments to assist participating practices in effectively managing and coordinating care for oncology patients during episodes of chemotherapy treatment. The episode begins with the start of administration of certain chemotherapy drugs and ends after 6 months, and providers can bill for the MEOS payment each month during the episode. The $160 MEOS payment covers services tailored to oncology care management, such as 24/7 clinician access; care planning and patient navigation with surgeons, radiologists, and other providers; and use of clinical guidelines. Participating providers continue to bill the MPFS for services during the episode. The

OCM also includes performance-based payments to incentivize practices to lower the total cost of care and improve care for beneficiaries during chemotherapy treatment episodes.

Examples of PTAC Models. The model proposed by Avera Health[15] sought to provide residents of skilled nursing facilities (SNFs) with 24/7 access via telehealth to a geriatrician-led care team providing care management and real-time responses to a patient's change in health status. Under the proposed model, the geriatric care team would render geriatric care management activities such as monitoring beneficiaries' care, risk stratification of the patient population, development of care plans for high-risk patients, medication reconciliation and management, evidence-based disease management, behavioral health support, advance care planning, and transitional care support. Avera Health proposed two possible payment models; in their preferred approach, the geriatric care team would receive a one-time payment of about $250 for each new beneficiary admission to a partnering SNF or nursing facility and a PBPM payment of $55. A team that failed to meet performance standards would receive reduced one-time and PBPM payment amounts in the following year.

4. Population-based Payments

Key Features. Population-based payments are prospective payments that are not directly triggered by a health care service but instead cover health care services and activities anticipated for a defined population over a specified time period. A specific dollar amount, typically paid PBPM (or per quarter), is paid to providers, and in return they provide whatever quantity or types of services are needed to meet their judgment about patients' health needs. Population-based payment models mean that the payment is made per person, or per capita, rather than per service. In population-based payment models, the payment replaces all or some portion of standard fee schedule payments as opposed to per capita care management payments (discussed above), in which the payment generally covers a specific set of services in addition to those covered by the fee schedule. A population-based payment model needs to define the services that are covered by the capitation rate and that are paid separately under the MPFS or a different mechanism, the circumstances that justify a particular provider receiving the payment, which providers are involved, and the accountable entity if multiple providers will be covered by the payment. Population-based payment models generally require risk adjustment in which the amount of payment made for a particular individual differs depending on a measure of the types, volume, or cost of services that the individual is expected to need.

Some major forms of population-based payment model approaches include:

- ***Full capitation (or global capitation)***. The payment for each patient is intended to cover all services the patient needs for all of their health problems. Providers bear full financial risk for service costs that exceed the capitated rate.

[15] PTAC Report to the Secretary of Health and Human Services. Comments and Recommendation on Intensive Care Management in Skilled Nursing Facility Alternative Payment Model. https://aspe.hhs.gov/system/files/pdf/255906/PTACCommentsRecommendationAveraHealth.pdf. Accessed August 18, 2020. The Secretary's Response is accessible online at https://aspe.hhs.gov/system/files/pdf/255906/Secretarial_Responses_June_13_2018.508.pdf (Accessed online on December 4, 2020).

- ***Partial capitation.*** Some but not all services are delivered in return for a capitated payment, while other services are paid through the standard or modified MPFS. While the partially capitated payment covers a subset of services, models may include performance-based incentives that hold providers accountable for total cost of care.
- ***Capitation-like payments.*** PBPM or quarterly payments are made to participating providers based on estimated costs for the attributed population, but actual and expected costs are reconciled at the conclusion of the performance period so providers do not bear full financial risk if costs exceed the estimated amount (for example, advanced payment for non-primary care FFS payments in the Primary Care Capitation track of the Direct Contracting model). Providers may still be accountable for performance relative to the APM's performance measures.

There are multiple types of partially-capitated models, including:

- ***Condition-specific capitation.*** Covers care for a particular health condition or combination of conditions.
- ***Primary care capitation.*** Paid to a primary care physician to cover services delivered by a primary care practice but not to cover any services delivered by other providers.
- ***Professional services capitation.*** Payment for each patient only covers professional services delivered by physicians or other clinicians, not services delivered by hospitals or other institutional providers.
- ***Specialty capitation.*** A fixed PBPM or quarterly payment is made to specialists for services provided to a defined population of members.

Examples of CMMI Models. Primary Care First (PCF) is a CMMI APM (scheduled to be implemented in 2021) focused on supporting advanced primary care at practices that are ready to assume some financial risk in exchange for reduced administrative burden and performance-based payments. PCF adopts a hybrid payment approach that includes a population-based capitated payment for services inside and outside of the office as well as flat primary care visit fees. The PBPM payment is stratified into four tiers ranging from $28 to $175, depending on the average hierarchical condition category (HCC) risk score of attributed beneficiaries. The PBPM payments are or will be calibrated to constitute 60 percent of total primary care payments, with the other 40 percent coming from visit-based flat primary care fees. PCF also includes a performance-based adjustment of the total primary care payment based on historical and regional comparisons on measures of quality (diabetes control, high blood pressure control, advanced care planning, colorectal cancer screening, and patient experience) and cost (i.e., utilization that adds up to total cost).

Direct Contracting (DC) is a new CMMI APM (the first performance period begins in April 2021) that seeks to create opportunities for a broad range of organizations to participate in testing the next evolution of risk-sharing arrangements to produce value-based health care. DC offers two participation options, Professional and Global. The Professional option offers a lower risk-sharing arrangement (50 percent of savings or losses), and provides Primary Care Capitation, which is a capitated, risk-adjusted monthly payment for primary care services. The Global option offers higher risk-sharing (100 percent of savings or losses), and it includes a Total Care

Capitation option in additional to Primary Care Capitation. In DC, the primary care or total care capitated payments are not reconciled against actual expenditures. However, entities participating in the Primary Care Capitation can elect to receive advance payment of their FFS non-primary care claims, which are reconciled against actual expenditures. Shared savings and losses are calculated at the conclusion of the performance year relative to risk-adjusted benchmarks based on the Medicare Advantage rate book and US per capita costs, with financial incentives based on performance on quality measures focused on outcomes and patient experience to incentivize high-quality care.

Examples of PTAC Models. Several PTAC models have proposed partial capitation approaches to payment, including the *Patient and Caregiver Support for Serious Illness* model proposed by the American Association of Hospice and Palliative Medicine (AAHPM).[16] This proposed model sought to address fragmented and uncoordinated care for patients with advanced illness or multiple chronic conditions coupled with functional limitations by developing interdisciplinary Palliative Care Teams (PCTs) who would deliver a comprehensive array of services, such as care management, 24/7 access to a clinician, psychosocial and spiritual care, referrals for social supports, and service delivery in all sites of care (i.e., patient homes, long-term and post-acute facilities, and hospitals). The PCT would receive monthly payments (PBPM) for these services that would replace billing for evaluation and management (E&M) services by the PCT. The proposed model also included performance-based adjustments based on quality and cost measures.

The *Advanced Care Model (ACM) Service Delivery and Advanced Alternative Payment Model*, submitted by the Coalition to Transform Advanced Care, also focused on Medicare patients with serious health conditions in the last 12 months of life. Both models aim to address the limitations in Medicare payment policy that prevent delivery of much needed palliative care to Medicare beneficiaries with serious illnesses. The ACM seeks to address care for patients with advanced illness that is fragmented, uncoordinated, or inadequate to meet patients' growing needs and personal wishes by delivering care through multidisciplinary palliative care teams. The ACM care team would include a nurse, social workers, board-certified palliative care providers, and other clinicians or non-clinicians involved in patient care. The ACM proposed using a partially capitated uniform PBPM payment and the potential for shared savings or shared losses based on performance relative to cost and quality targets. The monthly payment would replace certain Medicare E&M and care management payments to the ACM entity.

[16] PTAC Report to the Secretary of Health and Human Services. Comments and Recommendations on Advanced Care Model (ACM) Service Delivery and Advanced Alternative Payment Model & Patient and Caregiver Support for Serious Illness (PACSSI). https://aspe.hhs.gov/system/files/pdf/255906/PTACCommentsRecommendationAAHPMCTAC.pdf Accessed August 18, 2020. The Secretary's Response is accessible online at https://aspe.hhs.gov/system/files/pdf/255906/Secretarial_Responses_June_13_2018.508.pdf (Accessed online December 4, 2020).

5. Bundled/Episode Payments

Key Features. An episode of care payment covers all care provided to a patient in the course of treatment for a specific condition or medical intervention, such as a procedure or a course of chemotherapy. A payment is described as bundled when it covers multiple services, particularly if those services had previously been paid for separately. A bundled payment can involve one provider or many providers, and it can involve two services or dozens of services. Bundled payments are episode payments when the bundled payment covers all of the care provided to a patient during the course of an episode, but the term bundled payment is also used generally any time services are combined together. For proposal submitters, clarity about which providers and services are included in the bundled/episode payment is important.

Payment models that provide a single bundled payment to health care providers can motivate providers to furnish services more efficiently, to better coordinate care and to improve quality and reduce the cost of care. Health care providers receiving a bundled payment may realize either a gain or loss, depending on how successfully they manage resources and total costs throughout each episode of care. Episode of care payments require a set of definitions, to cover the following: the beginning and end of a given episode of care; which beneficiaries are eligible for the episode; which services are included in the bundled payment; and which services will continue to be paid for separately. Bundled/episode payment approaches are often paired with performance-based payments to ensure quality of care for patients and to reduce costs.

The need for risk adjustment as part of the bundled payment increases as more services are bundled into a single payment and as different kinds of patients are eligible for the payment; different patients may need different combinations of services, for reasons beyond the control of the provider.

PFPMs with bundled payments can vary in several ways, including:

- ***The episode definition.*** The beginning of an episode may be defined based on diagnostic versus procedural triggers and concluded based on time-based or clinical endpoints. It is important to consider the overall length of episode covered by payment and whether episodes can be repeated over time.
- ***Patient eligibility criteria.*** The model may apply different types of patient inclusion or exclusion criteria, such as disease phase, comorbidities, or care setting (e.g., ambulatory, SNF).
- ***Providers and services included.*** Bundled payments may cover services delivered by one practice over time or may cover a range of services delivered by multiple practices. Certain services (such as prescription drugs) may be explicitly included or excluded from the bundle.
- ***Prospective payment versus retrospective reconciliation of bundle.*** The bundled amount may be paid at the onset of the clinical episode. In addition, models can continue to use fee schedule payments during the episode and compare total payments for covered services against the bundled amount for those services at the end of the episode (retrospective reconciliation).
- ***Risk adjustment.*** The bundled payment may be standard across all patients or adjusted for risk; if adjusted, different methodologies may be used to determine the degree of variation in the bundled payment based on risk.

In addition, models that include performance-based components for quality and cost can vary on the many dimensions described above, such as one-sided versus two-sided risk and in the types of performance measures.

Examples of CMMI Models. CMMI's *Bundled Payments for Care Improvement (BPCI) Advanced* model aims to encourage clinicians to redesign care delivery by adopting best practices, reducing variation from standards of care, and providing a clinically appropriate level of services for patients throughout a clinical episode. *BPCI* includes 35 different clinical episodes, all of which begin with either an "anchor" inpatient stay for a condition or outpatient procedure and last for 90 days. *BPCI* uses a retrospective reconciliation approach, meaning that CMS compares FFS billing for covered services during the episode to a target price. CMS may make payments to model participants or model participants may owe a payment to CMS after reconciliation.

Examples of PTAC Models. The proposed *Oncology Bundled Payment Program Using CNA-Guided Care* model submitted to PTAC by Hackensack Meridian Health and Cota Inc. (HMH/Cota) included a bundled payment for oncology-related care for breast, colon, lung, and rectal cancer.[17] The proposed bundle started on the day of pathologic diagnosis of cancer and the duration was one year. The model proposed 27 bundles for the four cancer types using a big-data approach, designed to ensure that payments matched the care needs of subgroups of similar patients. The participating provider would be paid an amount that would be the sum of the bundled price times the number of patients in each bundle, adjusted for case mix. Payments would be prospectively paid to the APM entity at the start of the episode period; the entity would use the payments to compensate providers and pay for care coordination and other uncovered services. Because the payment would be fixed, the APM entity would be at risk for the costs of delivering care if their costs exceeded what they were paid.

The *ACS-Brandeis Advanced Alternative Payment Model* (ACS-Brandeis), proposed by the American College of Surgeons,[18] is an episode-based payment model that identifies more than 100 candidate procedures and conditions (payment episodes) as its focus. The proposed model sought to provide novel incentives and tools for both improving the quality of care and reducing costs. The procedures and conditions are diverse and are defined by an updated version of an episode grouper developed for CMS. In the model, an organizational entity would enter into a risk-based contract for the quality and cost of its contributions to a set of procedure or condition episodes defined in the contract. The contract would involve Medicare payments for every instance of the procedure or condition episodes defined in the contract during a performance period for which the entity's affiliated Qualified Participants (QPs) provide a service paid for by

[17] PTAC Report to the Secretary of Health and Human Services. Comments and Recommendation on Oncology Bundled Payment Program Using CAN-Guided Care. https://aspe.hhs.gov/system/files/pdf/255906/HMHCotaReportSecretary.pdf (Accessed December 4, 2020). The Secretary's Response is accessible online at https://aspe.hhs.gov/system/files/pdf/255906/Secretarial_Responses_June_13_2018.508.pdf (Accessed online on December 4, 2020).

[18] PTAC Report to the Secretary of Health and Human Services. Comments and Recommendation on ACS-Brandeis Advanced Alternative Payment Model. https://aspe.hhs.gov/system/files/pdf/255906/ACSReportSecretary.pdf Accessed August 18, 2020. The Secretary's Response is accessible online at https://aspe.hhs.gov/system/files/pdf/255906/Secretarial_Response_ACS_Sep_07_2017.508.pdf (Accessed December 4, 2020).

Medicare. If spending exceeded the expected amount, the difference would be paid to CMS by the entity.

Additional Considerations When Developing an Alternative Payment Model

This reference guide has provided an overview of five major types of APMs, important variations within each type, and specific examples of how APMs have been incorporated into several CMMI models and proposed models submitted to PTAC. However, potential submitters may want to consider a number of additional factors as they develop their proposed payment methodologies. The following are examples of some of these factors.

Whether an APM is Needed to Achieve Care Delivery Objectives. The timeline to implement an APM is lengthy, and it often takes years for a delivery innovation to grow into a fully implemented APM. In some cases, higher quality or lower cost care might be achieved through regulatory change to Medicare payment systems. A proposed model's care delivery objectives might be achievable through a modification to the MPFS or through additional coding and payment, for example through modifications to the existing chronic care management codes.

Selecting the Type of APM or AAPM Most Appropriate for the Proposed Care Delivery Model. Each proposed care delivery model is likely to have a unique mix of specific goals. For example, some models may strive to expand the scope of APMs available to providers and patients or to focus on encouraging coordination across providers for patients with a specific illness. Other models may emphasize the need for flexible payments to support comprehensive, patient-centered care inside and outside the office setting. Likewise, the payment approaches described above can yield different provider incentives, implementation challenges, and outcomes. A proposal should identify a payment model appropriate for the submitter's care delivery innovation and goals, rather than a model that is common or is chiefly designed to qualify as an AAPM.

Determining Which Variations of the APM are Most Appropriate for the Proposed Care Delivery Model. Considering potential variations in a proposed model design may involve tradeoffs between complexity and simplicity, feasibility and desirability, and predictable payments versus payments that adjust based on performance, among others. In addition, there is a tradeoff between a model design that includes incentives strong enough to change provider behavior and a design that limits providers' exposure to financial risk for factors beyond their control. The five common approaches described above illustrate such variation. One of the Secretary's high priority criteria used to evaluate proposed PFPMs is that of quality and cost—proposals can either improve quality at no additional cost, maintain quality and decrease costs, or improve quality and decrease costs. Consideration of the model's goals as well as the day-to-day implications of the model for participating providers and patients can help to guide decisions about appropriate model design features.

Considering Whether It Is Appropriate to Combine Elements from Multiple APMs into the Proposed Payment Methodology. It may be appropriate to combine elements from different payment methodologies to align incentives for improved quality and reduced costs. For

example, capitated models can create incentives for providers to stint on care for patients; pairing these capitated payments with performance-based payments for quality (particularly patient experience and patient-reported outcomes) can help ensure patients receive necessary care.

Addressing Additional Complexities Associated With Using Each Type of APM. There are a number of technical issues associated with designing a payment methodology that applies a specific type of APM to a specific care delivery idea. For example, each type of APM has different implications relating to the difficulty of choosing services and providers that are part of the episode, the length of the episode, and the complications involved with risk adjustment. In an example from CMMI, in OCM hematologists and oncologists have to work with other providers like surgeons and radiologists whose care decisions are not under their control. Chemotherapy and other drug costs are a large component of spending for cancer patients, and standard care and treatment costs change rapidly and are often outside providers' control. The inclusion or exclusion of these drug costs in the target expenditures could have a large impact on providers' performance and financial exposure. Such coordination and inclusion of the drug costs could be complex, but that is where the savings could be the most achievable and where coordination across provider types most beneficial for achieving high quality care. The OCM also illustrates a condition-specific model with a disease process that often requires coordination of care across specialties and settings.

Potential to Develop Innovations That Seek to Address Weaknesses in Previous APMs. In some areas of care like primary care, oncology, or end-stage renal disease, an APM already exists that has evidence and commentary about its strengths and weaknesses. This presents an opportunity to build upon existing knowledge and propose innovations that improve value-based payment approaches. However, to address the Secretary's Scope criterion (high priority), proposals should also seek to broaden and expand the CMS APM portfolio or include APM entities whose opportunities to participate in APMs have been limited. This may require identifying providers who are not APM participants as well as new patient populations who are not already participants in existing APMs. A model that overlaps with other APMs is likely to be more difficult to evaluate.

Measurement of High-Quality Care. Quality measures can capture different aspects of care delivery, including the processes associated with and the outcomes of such care as well as the structural attributes of how or where such care is delivered. Quality measurement should also include the important dimension of patient and family perspectives through patient reported outcomes and surveys that provide the patient or family's experience of the care provided. At times, patient and family outcomes and experiences may differ from the provider-reported measures. Structural and process measures can have limitations as they do not assess for quality outcomes; rather, the data used in such measures are often self-reported data that provide information about a provider's use of specific policies, procedures and infrastructure that may lead to high quality. In contrast, outcome-based measures provide direct information regarding the quality of care. For this reason, this type of quality measure is often considered the "gold standard" for assessing an APM's impact. For diabetes, an example of a process measure is tracking whether a provider is checking a diabetic patient's feet, but an actual outcomes

measure is the number of foot amputations per 1,000 diabetics. Similarly, prevention programs seeking to avoid Catheter-Associated Urinary Tract Infections (CAUTI) can be assessed with process measures, such as the number of patients with catheters or whether drainage bags are located below the patient's bladder, or outcome measures such as the actual CAUTI rate.[19] Such an outcome measure provides performance information on this particular type of health-care acquired infection. Regardless of the measure type, mechanisms to validate the data used to calculate the measures are always paramount for ensuring the integrity of the information that the measures convey.

Further, APM performance measures including resource use, process and outcome quality measures, and patient experience measures help to assess whether the proposed model is achieving its objectives as well as to identify any unintended consequences. Well-designed, validated and reliable performance measures will assess not only high quality performance but are also a cornerstone for the purposes of overall model or program monitoring and evaluations and essential for detecting stinting, overuse of services, and other unintended effects of the APM. For example, basic FFS payments may be appropriate for minor acute visits to an urgent care provider but can lead to provision of unnecessary services or testing, such as ordering blood tests and cultures for viral sore throats. In FFS transactions, therefore, adherence to evidence-based guidelines and protocols can be a useful measure of quality and can provide incentives to reduce over-utilization or inappropriate care. They can also be used to prevent stinting.

Regardless of the measure type used, the use of validated data and overall program monitoring and evaluation are essential for adequately informing the impacts of a model and whether there has indeed been value-based transformation. Thus, proposed models should consider an appropriate portfolio of meaningful, actionable measures for the APM that can ensure high-quality outcomes and can also serve to inform the model's program monitoring and evaluative requirements.

Addressing Key Factors in Improving Quality. Research highlights the impact of social determinants on health outcomes**.** In some proposed models, particularly population-based payment models, it may be appropriate to consider whether to include an integrated social care model or efforts to address barriers such as lack of housing, or transportation. Payments may also cover non-traditional service providers such as food suppliers or improvements to living accommodations in order to improve quality for participating beneficiaries.

The Complexity Involved in Designing an Operational APM. It is important to note that even after considering the APM approach and care delivery model, there are still a number of complexities involved in combining elements to design a comprehensive APM that can ultimately be operationalized. For example, it will be important to be able to test the proposed PFPM in enough pilot sites to facilitate evaluation. Given that there are a variety of resource requirements and potential operational challenges associated with comprehensive APM development, thoughtful attention to the variety of potential intended and unintended

[19] Agency for Healthcare Research and Quality. Toolkit for Reducing Catheter-Associated Urinary Tract Infections in Hospital Units: Implementation Guide. https://www.ahrq.gov/hai/tools/cauti-hospitals/index.html. Accessed August 17, 2020.

consequences that can occur can be a complex and time-consuming process. Outreach to other affected stakeholders early in the process of model development can help to identify the level of interest in the proposed model, build consensus, and identify potential issues and complications that could potentially arise during APM implementation. In addition, potential proposal submitters can draw upon the emerging body of evidence on APM payment approaches to assist in developing models that can potentially be operationalized.

Potential proposal submitters are encouraged to review the list of resources in Appendix C, as well as the descriptions of existing APMs and proposed PFPMs, for more information about the payment methodologies discussed in this resource guide.

Appendix A: List of Terms and Acronyms

AAPM	advanced alternative payment model
ACO	accountable care organization
APM	alternative payment model
CMMI	Center for Medicare & Medicaid Innovation
CMP	care management payment
CMS	Centers for Medicare & Medicaid Services
E&M	evaluation and management
ED	emergency department
EHR	electronic health record
FFS	fee-for-service
HCC	Hierarchical condition category (risk coding)
HHS	U.S. Department of Health and Human Services
MACRA	The Medicare Access and CHIP Reauthorization Act of 2015
MEOS	monthly enhanced oncology services
MIPS	Merit-based Incentive Payment System
MPFS	Medicare Physician Fee Schedule
PBP	population based payments
PBPM	per beneficiary per month, referring to Medicare beneficiaries
PCT	palliative care team
PFPM	physician-focused payment model
P4P	pay for performance
PMPM	per member per month
PPPM	per patient per month
PTAC	Physician-Focused Payment Model Technical Advisory Committee
QP	qualified participant
SNF	skilled nursing facility

Appendix B: Models and Proposed Models Cited In This Reference Guide

Acronym	Name	Submitter(s)	Type of Model	
			CMMI	PTAC
AAFP	Advanced Primary Care: A Foundational Alternative Payment Model (APC-APM) for Delivering Patient-Centered, Longitudinal, and Coordinated Care	American Academy of Family Physicians		■
AAHPM	Patient and Caregiver Support for Serious Illness	American Academy of Hospice and Palliative Medicine		■
ACEP	Acute Unscheduled Care Model (AUCM): Enhancing Appropriate Admissions	American College of Emergency Physicians		■
ACS-Brandeis	ACS-Brandeis Advanced APM	American College of Surgeons		■
Avera Health	Intensive Care Management in Skilled Nursing Facility Alternative Payment Model (ICM SNF APM)	Avera Health		■
BPCI	Bundled Payments for Care Improvement Advanced		■	
CJR	Comprehensive Care for Joint Replacement		■	
CPC	Comprehensive Primary Care Initiative		■	
CPC+	Comprehensive Primary Care Plus		■	
C-TAC	Advanced Care Model (ACM) Service Delivery and Advanced Alternative Payment Model	Coalition to Transform Advanced Care		■
DC	Direct Contracting		■	
Dr. Antonucci	An innovative model for primary care office payment	Dr. Jean Antonucci		■
HMH/Cota	Oncology Bundled Payment Program Using CNA-Guided Care	Hackensack Meridian Health and Cota, Inc.		■
HRRP	Hospital Readmissions Reduction Program		■	
MAPCP	Multi-payer Advanced Primary Care Practice		■	
MSSP	Medicare Shared Savings Program		■	
Mount Sinai	HaH Plus (Hospital at Home Plus) Provider-Focused Payment Model	the Icahn School of Medicine at Mount Sinai		■

Acronym	Name	Submitter(s)	Type of Model	
			CMMI	PTAC
NGACO	Next Generation Accountable Care Organization		■	
OCM	Oncology Care Model		■	
PCF	Primary Care First		■	
RPA	Incident ESRD Clinical Episode Payment Model	Renal Physicians Association		■
UChicago	Comprehensive Care Physician Payment Model	University of Chicago Medicine		■
Upstream	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		■

Appendix C: References and Selected Resources

References

- American Medical Association and Center for Healthcare Quality and Payment Reform. A Guide to Physician-Focused Payment Models. http://www.chqpr.org/downloads/Physician-FocusedAlternativePaymentModels.pdf.
- Berenson RA, Upadhyay DK, and Delbanco SF. A Typology of Payment Methods. Urban Institute. https://www.urban.org/sites/default/files/publication/80316/2000779-A-Typology-of-Payment-Methods.pdf. Published April 2016.
- Center for Healthcare Quality and Payment Reform. The Payment Reform Glossary: Definitions and Explanations of the Terminology Used to Describe Methods of Paying for Healthcare Services. http://www.chqpr.org/downloads/PaymentReformGlossary.pdf.
- Centers for Medicare & Medicaid Services, Quality Payment Program, "APM Overview", https://qpp.cms.gov/apms/overview.
- Centers for Medicare & Medicaid Services, Quality Payment Program, "MIPS Overview" https://qpp.cms.gov/mips/overview.
- Centers for Medicare & Medicaid Services, Quality Payment Program, "Advanced Alternative Payment Models (APMs)", https://qpp.cms.gov/apms/advanced-apms.
- Health Care Payment Learning & Action Network, "Alternative Payment Model (APM) Framework," (July 2017), http://hcp-lan.org/workproducts/apm-refresh-whitepaper-final.pdf.
- Devers, K., Shartzer, A., Torres, G., and R. Berenson. "A Review of Proposed Models Deliberated and Voted on by the Physician-Focused Payment Model Technical Advisory Committee (PTAC) as of December 2019," NORC at the University of Chicago and Urban Institute, 2020. https://aspe.hhs.gov/system/files/pdf/252376/ProposedModelsDeliberatedandVotedonasofDec2019.pdf. Published March 2020.
- Devers, K., Skopec, L., Torres, G., and R. Berenson. "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," NORC at the University of Chicago and Urban Institute, 2020. https://aspe.hhs.gov/system/files/pdf/252376/VotingPatternsandCommentsonProposedModelsasofDec2019.pdf. Published March 2020.
- Terrell GE and Bobbitt JD. Value-Based Healthcare and Payment Models. American Association for Physician Leadership. 2020.

Selected Resources

CMMI Model Overviews

- Center for Medicare & Medicaid Innovation. Innovation Models. https://innovation.cms.gov/innovation-models#views=models.

PTAC Reports to the Secretary and Secretary's Responses

- PTAC Reports to the Secretary and Secretary's Responses regarding proposed models, accessible online at https://aspe.hhs.gov/proposal-submissions-physician-focused-payment-model-technical-advisory-committee.

CMMI Data and Evaluation Reports

- Center for Medicare & Medicaid Innovation. Innovation Models. https://innovation.cms.gov/innovation-models#views=models.
- Center for Medicare & Medicaid Innovation. Data and Reports. https://innovation.cms.gov/data-and-reports.

Fee Schedule Payments with a Link to Quality

- Centers for Medicare & Medicaid Services. Value-Based Programs. https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/Value-Based-Programs/Value-Based-Programs#:~:text=What%20are%20the%20value%2Dbased,is%20delivered%20and%20paid%20for.

Fee Schedule Payments with Accountability for Performance

- Health Care Payment Learning & Action Network. Accelerating and Aligning Population-Based Payment Models. http://hcp-lan.org/workproducts/pm-whitepaper-final.pdf. Published July 2016.
- Health Care Payment Learning & Action Network. Accelerating and Aligning Population-Based Payment Models: Financial Benchmarking. http://hcp-lan.org/workproducts/fb-whitepaper-final.pdf. Published June 2016.

Care Management Fee

- American Academy of Family Physicians. Care Management Fees. https://www.aafp.org/about/policies/all/care-management.html.
- Davidoff AJ, Prasad S, Patel K, and Polite B. What Is The Oncology Care Model, And Why Is The Evaluation Important? Health Affairs. https://www.healthaffairs.org/do/10.1377/hblog20190212.101448/full/. Published February 2019.

Partial Capitation/Capitation

- Centers for Medicare & Medicaid Services and Center for Medicare & Medicaid Innovation. Next Generation ACO Model: Introduction to All-Inclusive Population-Based Payments (AIPBP).

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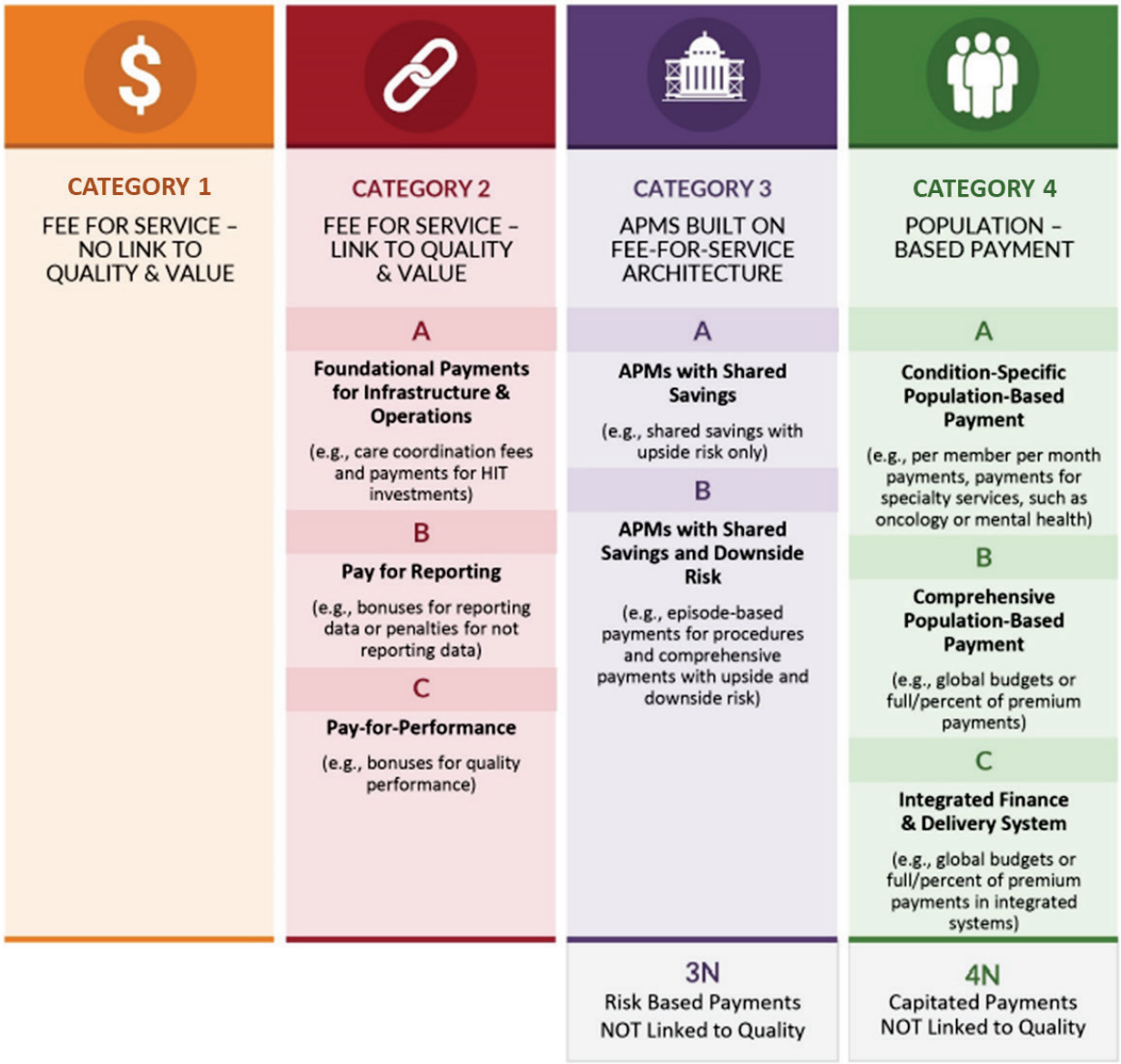
Bundled/Episode Payment

- National Conference of State Legislatures. Episode of Care or Bundled Payments – Health Cost Containment. https://www.ncsl.org/research/health/episode-of-care-payments-health.aspx. Published January 2018.
- Health Care Payment Learning & Action Network. Accelerating and Aligning Clinical Episode Payment Models. http://hcp-lan.org/workproducts/cep-whitepaper-final.pdf. Published August 2016

Appendix D: HCP-LAN APM Framework Categories



* Health Care Payment Learning & Action Network (HCP-LAN) APM Framework (July 2017), *http://hcp-lan.org/workproducts/apm-refresh-whitepaper-final.pdf.*