

CHAPTER

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**Streamlining CMS's  
portfolio of alternative  
payment models**

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## R E C O M M E N D A T I O N

- 2** The Secretary should implement a more harmonized portfolio of fewer alternative payment models that are designed to work together to support the strategic objectives of reducing spending and improving quality.

**COMMISSIONER VOTES: YES 17 • NO 0 • NOT VOTING 0 • ABSENT 0**

# Streamlining CMS's portfolio of alternative payment models

## Chapter summary

In 2021, CMS expects to operate 12 alternative payment models (APMs) offering 25 distinct tracks for providers to choose from that involve different payment options and risk arrangements. Most of CMS's APMs are operated by its Center for Medicare and Medicaid Innovation (CMMI), which was established in 2010 by the Affordable Care Act (ACA) to implement and study new payment and care delivery models. CMS's largest APM, however, is the Medicare Shared Savings Program (MSSP), which was created as a permanent program by the ACA and is not operated by CMMI; providers serving about 20 percent of Medicare beneficiaries participate in this APM. Interest in APMs likely increased when the Congress created a 5 percent bonus in the Medicare Access and CHIP Reauthorization Act of 2015 (MACRA) for clinicians who participate in APMs that involve some financial risk—known as advanced APMs (A-APMs).

CMMI's APMs are temporary demonstrations that can be expanded into permanent programs only if they are found to reduce spending in Medicare, Medicaid, or the Children's Health Insurance Program while preserving care quality, or found to improve care quality without increasing spending. In CMMI's first 10 years, almost all of its accountable care organization (ACO) and episode-based payment models generated gross savings for the Medicare program before model payments (e.g., performance bonuses) were taken into account. This promising indicator suggests that the models' incentives

## In this chapter

- Background
- The impacts of alternative payment models
- Why pursue APMs?
- Factors that may be limiting the success of APMs
- Unintended consequences of implementing multiple concurrent APMs
- Recommendation

encouraged provider organizations to induce clinicians to alter their care patterns—changing the quantity or the mix of health care services they furnish or prescribe. Many APMs implemented so far have yielded sufficiently promising results or sufficiently actionable lessons learned that they have been refined and relaunched as successor models under new names.

After bonuses are paid to model participants, gross savings are reduced, and in some cases Medicare expenditures in APMs exceed, what they would have been otherwise. However, some of the APMs that have generated gross savings have also generated net savings for Medicare even after model payments are taken into account. Models that have yielded net savings include two early ACO models, the MSSP (in some years, at least), and a track of the ACO Investment Model (AIM) that helped new MSSP ACOs form in areas with few other ACOs. The Comprehensive Care for Joint Replacement Model for hip and knee replacements also yielded net savings.

In many cases, providers participate in multiple CMS APMs simultaneously, and Medicare beneficiaries are attributed to multiple models at the same time. This overlapping participation can have unintended consequences. For instance, savings that are generated for a beneficiary served by different sets of providers participating in different APMs can be allocated to providers in only one of these models, thus diluting financial incentives in the other models. Overlapping participation can also make it difficult for evaluators to accurately assess the impact of a given payment model on program spending and quality.

The Commission has a long record of supporting efforts to improve and expand value-based care, and CMS is to be commended for the vigor with which it has approached its mandate of implementing a wide variety of APMs over the last 10 years. The agency's ability to test innovative models was constrained before the creation of CMMI, so the strategy of implementing a plethora of models over the last decade has given the agency an opportunity to build up the evidence base about what works and what does not. While this strategy has yielded valuable information, the Commission contends that continuing to test a large number of independent APMs is likely to inhibit the ability of APMs to reach their full potential. We therefore recommend that CMS now take a more holistic approach that involves implementing a smaller, more harmonized portfolio of APMs that are designed to work together.

A smaller portfolio of models could result in less overlap between different models; where overlap does exist, models should be designed to have incentives that do not

diminish in strength when combined with other models. To minimize complexity, the payment models in CMS's portfolio could use consistent model parameters (e.g., consistent methods for calculating spending targets and measuring quality). This smaller portfolio would need to include the MSSP, which is the largest alternative payment model in Medicare. The Secretary has wide discretion in setting and changing the features of this permanent program, so changes could be made administratively, if needed, to bring MSSP in line with the features of the new smaller set of coordinated payment models.

Operating a smaller portfolio of more harmonized models, with more consistent parameters and clearer and more aligned incentives, should more successfully encourage providers to furnish care efficiently across the continuum of care, which could, in turn, decrease Medicare spending. Beneficiaries could also benefit from a streamlined, more harmonized suite of models if this approach causes providers to better manage their care and results in improved quality and health outcomes. ■



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## Background

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Established by Section 3021 of the Affordable Care Act (ACA) of 2010, the Center for Medicare and Medicaid Innovation (CMMI) effectively replaced CMS’s Office of Research, Development, and Information, which had been created several decades earlier to develop demonstrations to test alternative payment arrangements and other initiatives (Cassidy 2008). CMMI is charged with testing “innovative payment and service delivery models” to reduce spending in Medicare, Medicaid, or the Children’s Health Insurance Program (CHIP) while preserving or enhancing the quality of care furnished to beneficiaries in these programs.

CMMI is directed to develop models where there is evidence of “deficits in care leading to poor clinical outcomes or potentially avoidable expenditures” and to “focus on models expected to reduce program costs ... while preserving or enhancing the quality of care” (Public Law 111–148). Within these parameters, CMMI has wide latitude in the types of models it implements, although the law includes some optional guidance to CMMI: descriptions of 27 potential models that CMMI could implement (e.g., paying providers to use decision-support tools to improve patients’ understanding of treatment options) and a set of 8 features that could be considered for inclusion in models (e.g., using a regular process to monitor and update patient care plans).

CMMI’s life cycle for models (shown in Figure 2-1, p. 46) begins with soliciting ideas from internal and external stakeholders, and it includes evaluating concepts for proposed models in the context of the current portfolio of models, getting draft models approved by the Department of Health and Human Services and the White House’s Office of Management and Budget, and contracting with organizations to support implementation of the model (e.g., through learning systems that may be offered to participating providers), among other steps (Government Accountability Office 2018).

CMMI is directed to release public reports that evaluate the performance of each model, including analyses of changes in the quality of care and in spending on Medicare, Medicaid, or CHIP. The law is largely silent about how these evaluations should be conducted, other than to require inclusion of quality measures that reflect “national priorities for quality improvement and patient-centered care.”

In its first decade, CMMI approached its mandate with alacrity, building up the evidence base on innovative payment and care delivery models by operating 54 models over this period (Smith 2021). Some of the models that CMMI has implemented are required by specific provisions in statute (e.g., the Independence at Home demonstration), while most others have been developed by CMMI through its model development authority contained in the ACA. CMMI is able to implement so many models at once because it is funded through a mandatory appropriation of \$10 billion every 10 years, in perpetuity, and all unused funds remain available until expended. CMMI’s first \$10 billion in funding covered 2011 to 2019, and it gained access to its second \$10 billion in 2020.

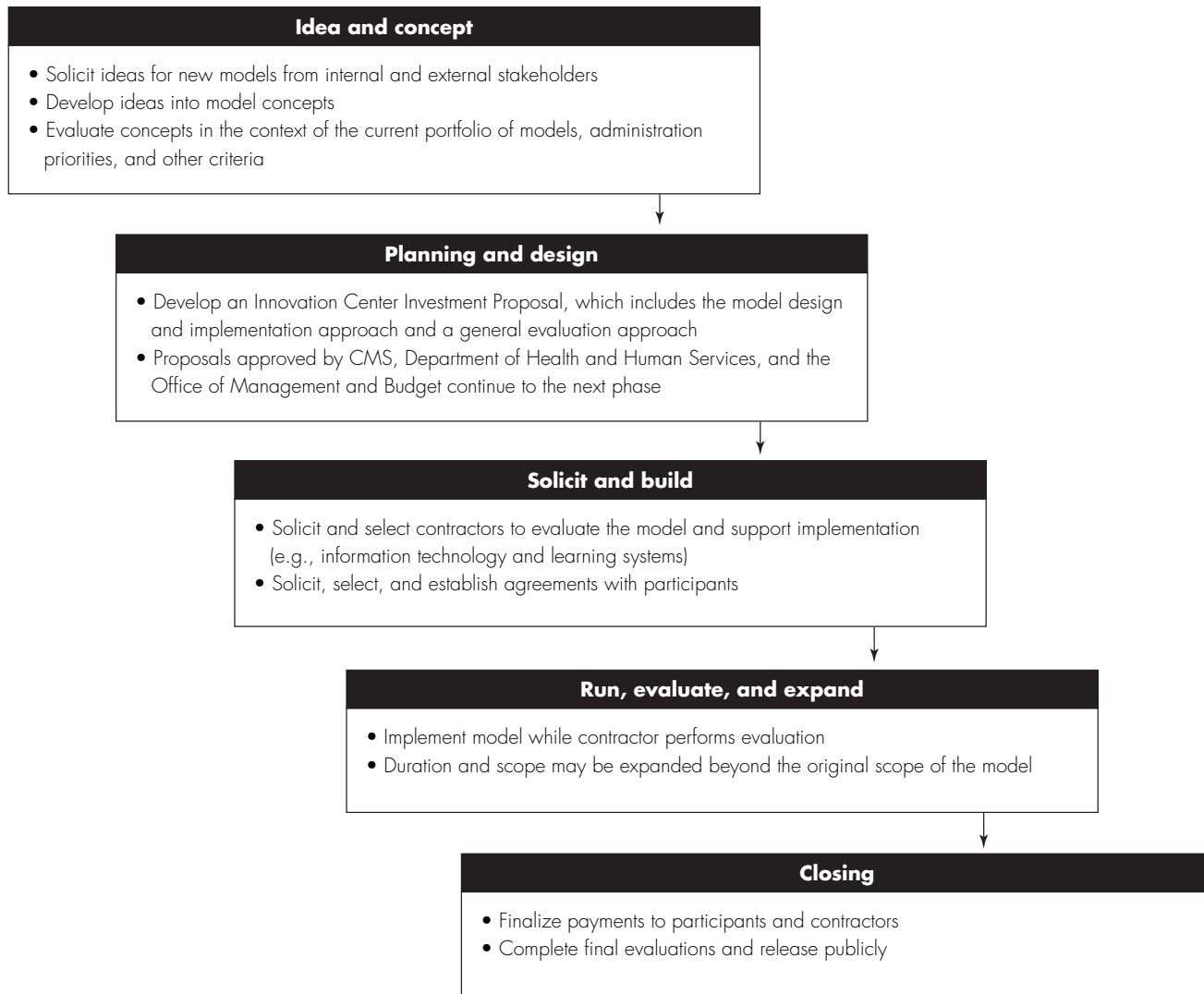
The basic paradigm reflected in CMMI’s authorizing statute is that models should be “tested” on a temporary basis before being expanded into larger, permanent programs (Public Law 111–148). CMMI’s statute specifies that only those models that meet the following criteria can be expanded in duration or scope:

- the Secretary determines that such expansion is expected to—
  - reduce spending without reducing the quality of care or
  - improve quality without increasing spending;
- the Chief Actuary of CMS certifies that model expansion would reduce (or would not increase) net program spending under Medicare, Medicaid, or CHIP; and
- the Secretary determines that model expansion would not deny or limit the coverage or provision of benefits to Medicare, Medicaid, or CHIP beneficiaries.

CMMI is permitted to modify or terminate a model during its implementation period if the model is not expected to improve quality without increasing spending, or is not expected to reduce spending without reducing quality, or is not expected to improve quality while reducing spending. Mid-course changes can be burdensome for providers to keep track of and adjust to, and substantial mid-course changes can complicate model evaluations. Yet mid-course changes can accomplish many worthwhile objectives. Changes can help prevent participating providers from exiting a model; they can increase payment accuracy, such as by giving providers partial credit for managing

**FIGURE  
2-1**

**CMMI process for model development, implementation, and evaluation**



Note: CMMI (Center for Medicare and Medicaid Innovation).

Source: Government Accountability Office 2018.

a beneficiary’s care for part of a year; they can correct unforeseen problems with the way model parameters were designed; and they can reduce Medicare’s financial losses by limiting problematic behavioral responses caused by unintended consequences of models’ designs.

CMMI’s general practice has been to operate a model for about five years and then either abandon the approach or relaunch a revised version of the model under a new name. Deploying second-generation models enables CMMI to continue operating, and apply lessons learned

from, a model that has hit the five-year mark but has not met the law’s criteria for expansion. It also allows CMMI to identify flaws with a model that can subsequently be addressed to produce a more successful model. For example, after the Advance Payment Accountable Care Organization (ACO) Model generated net losses for Medicare, CMMI launched a successor called the ACO Investment Model that generated some of the largest net savings per beneficiary of any CMMI model to date (see Table 2-1, pp. 51–53).<sup>1</sup> Because CMMI’s authorizing statute does not require models to meet particular criteria



before they are relaunched as revised models, CMMI can assess a model's promise holistically—taking into account not only spending and quality results but also other metrics such as findings from provider surveys, interviews, and beneficiary focus groups, as well as whether participating providers opted to remain in the model throughout its duration or dropped out midway.

CMMI organizes its models and initiatives into seven categories based on delivery and payment approaches and program beneficiaries who are covered. The first three of these categories—accountable care models, episode-based payment models, and primary care transformation models—are what are typically thought of as alternative payment models (APMs) because they alter the way clinicians are paid. In 2021, CMS expects to operate 12 APMs offering 25 distinct tracks for providers to choose from that involve different payment options and risk arrangements. A few other APMs were previously announced but are now under review by the new administration or have been otherwise delayed. CMMI's four other categories of initiatives include technical assistance to providers, studies of new care models supported through grants or fee-for-service (FFS) billing codes, and efforts to incentivize better management of beneficiaries dually enrolled in Medicare and Medicaid or those in Medicaid or CHIP. CMMI's seven categories of models and initiatives are:

- **Accountable care models**—models that hold groups of providers accountable for the total cost and quality of care furnished to a defined population of patients (e.g., the Next Generation ACO Model);
- **Episode-based payment models**—models that hold providers accountable for the cost and quality of care received by beneficiaries during a limited period of time following a triggering clinical event (e.g., the Bundled Payments for Care Improvement Advanced Model);
- **Primary care transformation models**—models that use advanced primary care practices (e.g., the patient-centered medical home model of care) to emphasize prevention, care coordination, and shared decision-making between patients and providers (e.g., the Comprehensive Primary Care Plus Model);
- **Initiatives to speed the adoption of best practices**—models in which CMMI collaborates with providers, federal agencies, and other stakeholders to test ways

to disseminate evidence-based practices (e.g., the Partnership for Patients, which offered hospitals technical assistance aimed at reducing hospital-acquired conditions);

- **Initiatives to accelerate the development and testing of new payment and service delivery models**—models in which CMMI works with stakeholders to test state-based and locally developed models (e.g., the State Innovation Models initiative, which funded states' efforts to develop multipayer models, and the Emergency Triage, Treat, and Transport Model, which allows ambulances to bill for treatment-in-place by a health care practitioner or transport patients to low-acuity settings);
- **Initiatives focused on beneficiaries who are dually enrolled in Medicare and Medicaid**—models focused on serving in a cost-effective manner those individuals eligible for both Medicare and Medicaid (e.g., the Financial Alignment Initiative for Medicare-Medicaid Enrollees, which tests models that aim to better integrate the two programs); and
- **Initiatives focused on the Medicaid and CHIP populations**—models administered by states to reduce spending and improve quality for Medicaid and CHIP beneficiaries (e.g., the Strong Start for Mothers and Newborns Initiative, which tested enhanced prenatal and maternity care models).

Providers typically must apply to participate in an APM implemented by CMMI, and CMMI does not necessarily accept all applicants into its models. CMMI's APMs are sometimes available only to providers in particular geographic regions, while other models are available nationwide. APMs are usually voluntary, since CMMI has experienced resistance from providers when it has tried to make provider participation mandatory.

### **MACRA's influence on alternative payment models**

In the Medicare Access and CHIP Reauthorization Act of 2015 (MACRA), Congress created new incentives for clinicians to participate in payment models that qualify as advanced APMs (A-APMs). A-APMs are distinct from other payment and delivery models in that they:

- require providers to bear “more than nominal” financial risk if their patients' actual spending exceeds their expected spending;

## CMS's 2021 advanced alternative payment models

Even of CMMI's alternative payment models (APMs) include model tracks that qualify as advanced APMs (A-APMs) and thus allow their participating clinicians to earn the annual 5 percent bonus payment available under the Medicare Access and CHIP Reauthorization Act of 2015 (MACRA).<sup>2</sup>

- **Medicare Shared Savings Program (MSSP).**

Several tracks (or levels of tracks) qualify as A-APMs:

- **Track 1+ Model.** Time-limited model under which organizations assume less downside risk than other, more advanced tracks.
- **Level E of the Basic track.** Final level of the Basic track's glide path that transitions accountable care organizations (ACOs) to a higher level of downside risk and potential reward, designed to be the same as the level of risk and potential reward as under the Track 1+ Model.

- **Enhanced track (formerly Track 3), Legacy Track 2.** Participating ACOs take on more downside risk than other MSSP tracks or levels and can share in a higher portion of savings.

- **Next Generation ACO Model.** ACO model that involves more financial risk than the MSSP, with participating providers subject to either 80 percent or 100 percent shared savings and losses.

- **Global and Professional Direct Contracting Model.** Successor to the Next Generation ACO Model offers primary care capitation payments coupled with 50 percent shared savings or losses (in the "professional" option) or choice of primary care capitation or full capitation coupled with 100 percent shared savings or losses (in the "global" option) (for more on this new model, see text box on direct contracting, p. 50).

(continued next page)

- require providers to use electronic health record (EHR) technology certified by the Office of the National Coordinator for Health Information Technology (ONC); and
- use quality measures comparable with those used in the Merit-based Incentive Payment System (MIPS), which was also created in MACRA.

Clinicians with a certain share of patients or payments in A-APMs qualify for an annual 5 percent bonus that is temporarily available from Medicare from 2019 through 2024 and are exempt from MIPS's reporting requirements and positive or negative payment adjustments. The A-APMs operating in 2021 are shown in the text box (Centers for Medicare & Medicaid Services 2020). CMS estimates that A-APM bonus payments will be worth an average of \$3,636 per clinician in 2021 (Centers for Medicare & Medicaid Services 2018). Starting in 2026, clinicians in A-APMs will qualify for higher annual

updates to their physician fee schedule payment rates (0.75 percent) than clinicians not in A-APMs (0.25 percent).

Not every APM operated by CMS is designed and implemented by CMMI. The largest APM, the Medicare Shared Savings Program (MSSP), was established as a permanent program by the ACA and is not administered by CMMI. About a third of traditional FFS Medicare beneficiaries with both Part A and Part B are attributed to a provider participating in the MSSP (Medicare Payment Advisory Commission 2020). The broad reach of the MSSP means CMMI must consider how each of its APMs will interact with this larger program, which is complicated by the fact that the MSSP has numerous tracks for providers to choose from, and its features can change from year to year.

MACRA's 5 percent bonus and higher payment updates for clinicians in A-APMs likely increased clinician interest in A-APMs, and in the development of more A-APMs suitable for specialists. (Primary care providers

## CMS's 2021 advanced alternative payment models (cont.)

- **Comprehensive ESRD Care Model—Two-sided risk tracks.** Shared savings model for dialysis clinics, nephrologists, and other providers treating beneficiaries with end-stage renal disease (ESRD).
- **Comprehensive Care for Joint Replacement Model.** Episode-based payment model for hip and knee replacements.
- **Bundled Payments for Care Improvement (BPCI) Advanced Model.** Episode-based payment model for a variety of inpatient and outpatient procedures and conditions.
- **Oncology Care Model—Two-sided risk track.** Hybrid payment model for chemotherapy involving elements of episode-based payment and primary care transformation models.
- **Comprehensive Primary Care Plus (CPC+)** Model. Primary care transformation model that pays primary care providers partial capitation plus small performance bonuses.
- **Primary Care First Model.** Successor to CPC+, involving larger performance bonuses.
- **Maryland's Primary Care Program & Care Redesign Program.** Maryland's Primary Care Program is modeled after CPC+. The state's Care Redesign Program includes an option modeled after BPCI Advanced, as well as an option allowing hospitals to pay their care partners incentive payments for engaging in care redesign interventions (e.g., care coordination, discharge planning, improving clinical quality and patient experience).
- **Vermont ACO Initiative.** Modeled after the Next Generation ACO Model, this multipayer shared savings model is intended to use the same payment structure for a majority of the state's providers. ■

already had several A-APMs to choose from at the time of MACRA's passage.) To help CMMI identify additional payment models to launch, MACRA created the Physician-Focused Payment Model Technical Advisory Committee (PTAC), to review prospective payment models submitted by the public and make recommendations to CMMI about whether to implement them (Assistant Secretary for Planning and Evaluation 2020). In the end, CMMI did not implement any models recommended by the PTAC, and the public stopped submitting models to the PTAC for review (Assistant Secretary for Planning and Evaluation 2021).

### The impacts of alternative payment models

CMMI is required by statute to evaluate each model it operates to determine models' impacts on care quality and

on spending for Medicare, Medicaid, or CHIP. CMMI typically contracts with independent research firms to perform in-depth, multiyear, mixed-methods evaluations. Evaluators analyze claims data and commonly conduct interviews, surveys, and focus groups of participating providers and beneficiaries. Evaluators usually produce interim reports on an annual basis to give CMMI an early read on participants' experiences and models' effects, including any unintended consequences that may have developed. If a model generates favorable results before the planned implementation period has concluded, CMMI can end the model early and convert the model into a permanent, nationwide program—as it did with the Pioneer ACO Model (which became a track of the MSSP).

Table 2-1 (pp. 51–53) summarizes the impacts that CMMI's APMs have had on gross spending, net spending, and quality metrics according to model evaluation reports. These evaluations use difference-in-difference estimates to compare changes achieved by model participants relative

## CMS's newest population-based models: Direct contracting

CMS's most recent population-based accountable care initiatives—the Global and Professional Direct Contracting Model and the Geographic Direct Contracting Model—aim to build on lessons of other advanced payment models (APMs) and include aspects of the Medicare Advantage (MA) program in a fee-for-service (FFS) Medicare APM. These direct contracting models allow a wider range of organizations to participate (including private-payer organizations, such as sponsors of MA plans and Medicaid managed care organizations). Under both direct contracting models, the Center for Medicare and Medicaid Innovation (CMMI) will pay partial or full capitation payments to participating organizations, which can in turn pay providers using their own payment arrangements or rates. Both models also give participating organizations enhanced operational flexibilities not typically available in FFS Medicare, such as the ability to subsidize beneficiaries' cost sharing and offer supplemental benefits such as meal programs or dental benefits. A criticism of the direct contracting models is that they may disrupt existing care relationships and put accountable care organizations (ACOs) participating in other models at a disadvantage (National Association of ACOs 2020).

***Global and Professional Direct Contracting (GPDC) Model.*** Under the GPDC Model, participants are at risk for either 100 percent or 50 percent of the shared savings and losses they generate relative to their annual spending targets. In an effort to attract a variety of health care organizations to join the model, including

those that have never operated an ACO, the GPDC Model offers different features (e.g., different minimum numbers of attributed beneficiaries) to participating organizations, depending on their sophistication level and the complexity of their patients. GPDC's first performance year began in April 2021 and the model is scheduled to run through 2026, but CMS has announced that no new organizations will be able to join the model in 2022.

***Geographic Direct Contracting (Geo) Model.*** Under the Geo Model, all FFS Medicare beneficiaries who live in a geographic region selected by CMS to take part in the model will be aligned to one of several participating organizations. These organizations' annual spending targets for their attributed beneficiaries will be set based on bids they submit to CMS, rather than spending targets determined by CMS (as is the case for other APMs). Participating organizations will be responsible for 100 percent of the shared savings or losses they generate, but will have more control over utilization and benefit design than is normally available in FFS Medicare APMs, such as the use of prior authorization and claim reviews. Because all FFS beneficiaries living in regions selected for the model will be aligned to an organization participating in the Geo Model (including those already attributed to an ACO or other APM), the potential for issues arising from model overlap will be especially high in those areas. The Geo Model was scheduled to begin in 2022 but is now under review by CMMI and may not be implemented as planned. ■

to changes observed for comparison group providers who generally do not participate in other comparable Medicare FFS APMs (but may be participating in comparable APMs offered by other payers, such as Medicare Advantage plans). This statistical approach allows evaluators to isolate the effects that are attributable to a model, as opposed to external trends reflecting broader changes in the delivery of health care. Federal evaluations usually analyze the full universe of participating providers and beneficiaries over models' full duration and assess models' impacts on

numerous cost, utilization, and quality measures. Although we report the overall findings for each model, there is often important heterogeneity in results for subsets of participating providers (e.g., variation in the results for hospital-led and physician-led ACOs, and variation in the results of episode-based payment models for different types of medical procedures and conditions).

Other researchers have also evaluated some of these models. Findings from their studies, which are sometimes



**TABLE  
2-1**

**Evaluation findings for CMS’s key Medicare APMs** *(continued next page)*

CMMI model	Years operated <i>(and years evaluated, if different)</i>	Beneficiaries or episodes in model	Model payments to providers	Savings or losses * = statistically significant		Main impacts on quality	Successor model
				Gross <i>(excluding model payments)</i>	Net <i>(including model payments)</i>		
<b>Population-based models (ACOs)</b>							
Physician Group Practice Demonstration	2005–2010	221,000 beneficiaries	\$102 PBPY	<b>Savings*</b> \$171 PBPY (2%)	<b>Savings*</b> \$69 PBPY (1%)	Reduced rates of hospital admissions and ED visits, and increased delivery of four diabetes tests and exams	MSSP
Independence at Home Demonstration	2012–2020 <i>(first 5 years evaluated)</i>	10,000 beneficiaries (per statutory cap)	\$1,091 PBPY	<b>Savings</b> \$2,400 PBPY (5%)	<b>Savings</b> \$1,309 PBPY (3%)	Quality generally did not change	
Pioneer ACO Model	2012–2016 <i>(first 2 years evaluated)</i>	608,000 beneficiaries	\$112 PBPY in 1st year; \$91 PBPY in 2nd year	<b>Savings*</b> \$427 PBPY in 1st year; \$134 PBPY in 2nd year	<b>Savings*</b> \$316 PBPY in 1st year; \$43 PBPY in 2nd year	Improvements in rates of hospital admissions for COPD, older-adult asthma, or heart failure in 2nd year; physician follow-up within a week of discharge in both years	MSSP’s Track 3
Next Generation ACO Model	2016–2021 <i>(first 3 years evaluated)</i>	1,399,000 beneficiaries	\$150 PBPY	<b>Savings*</b> \$112 PBPY (1%)	<b>Losses</b> \$38 PBPY (0.3%)	Quality generally did not change	Global and Professional Direct Contracting Model
<b>Models that facilitate participation in population-based models (ACOs)</b>							
Advance Payment ACO Model	2012–2015 <i>(first 2.5 years evaluated)</i>	284,000 beneficiaries	\$30 million in unrecouped advance payments over 2.5 years	<b>Savings</b> \$14 million in first 1.5 years; <b>Losses*</b> \$71 million in 3rd year	<b>Losses*</b> \$87 million	Quality generally did not change	ACO Investment Model
ACO Investment Model	2015–2018	447,000 beneficiaries	\$58 PBPY in 1st year; \$81 PBPY in 2nd year; \$197 PBPY in 3rd year	<b>Savings*</b> \$339 PBPY (3%) in 1st year; \$443 PBPY (3.5%) in 2nd year; \$465 PBPY (4%) in 3rd year	<b>Savings*</b> \$280 PBPY (2%) in 1st year; \$362 PBPY (3%) in 2nd year; \$268 PBPY (2%) in 3rd year	Reduced hospitalizations, ED visits, post-acute skilled nursing facility care	Community Health Access and Rural Transformation Model

**TABLE  
2-1**
**Evaluation findings for CMS's key Medicare APMs (continued)**

CMMI model	Years operated (and years evaluated, if different)	Beneficiaries or episodes in model	Model payments to providers	Savings or losses * = statistically significant		Main impacts on quality	Successor model
				Gross (excluding model payments)	Net (including model payments)		
<b>Population-based models for kidney disease</b>							
Comprehensive ESRD Care Model	2015–2021 (first 4 years evaluated)	142,000 beneficiaries over 4 years	\$1,284 PBPY	Savings* \$984 PBPY	Losses \$300 PBPY	Reduced hospital stays and readmissions; increased various recommended primary care services	Kidney Care Choices Model
<b>Episode-based payment models</b>							
Acute Care Episode Demonstration	2009–2013 (first 3 years evaluated)	12,500 episodes over 3 years	Not identified	Savings* \$319 per episode	Not determined	Quality generally did not change	
BPCI Model 2	2013–2018	1,260,000 episodes over 5 years	\$1,279 per episode	Savings* \$947 per episode (4%)	Losses* \$332 per episode (1%)	Quality generally did not change	BPCI Advanced Model
BPCI Model 3	2013–2018	154,000 episodes over 5 years	\$2,217 per episode	Savings* \$1,503 per episode (7%)	Losses* \$714 per episode (3%)	Quality generally did not change	
Comprehensive Care for Joint Replacement Model	2016–2024 (first 3 years evaluated for mandatory hospitals)	115,000 episodes over 3 years	\$787 per episode	Savings* \$1,323 per episode (5%)	Savings* \$536 per episode (2%)	Reduced rates of unplanned readmissions and certain complications	
BPCI Advanced Model	2018–2023 (first 10 months evaluated for 13 most common hospital-initiated episodes)	208,000 episodes over 10 months	\$1,407 per episode for the episodes studied	Savings* \$646 per episode (2%)	Losses* \$761 per episode (2%)	Mortality rates increased slightly for some types of episodes and decreased slightly for others; no changes in readmission rates or functional status	
<b>Primary care transformation models</b>							
Multipayer Advanced Primary Care Practice Demonstration	2011–2016 (2011–2014 evaluated)	725,000 beneficiaries	\$90 PBPY	Losses \$40 PBPY	Losses \$130 PBPY	No consistent impacts	Comprehensive Primary Care Initiative

**TABLE  
2-1**

**Evaluation findings for CMS’s key Medicare APMs (continued)**

CMMI model	Years operated (and years evaluated, if different)	Beneficiaries or episodes in model	Model payments to providers	Savings or losses * = statistically significant		Main impacts on quality	Successor model
				Gross (excluding model payments)	Net (including model payments)		
<b>Comprehensive Primary Care Initiative</b>	2012–2016	321,000 beneficiaries	\$180 PBPY	<b>Savings</b> \$108 PBPY (1%)	<b>Losses</b> \$72 PBPY (1%)	Reduced growth in rates of hospitalizations, ED visits, and ED revisits; increased follow-up after hospitalization	Comprehensive Primary Care Plus
<b>Comprehensive Primary Care Plus Model</b>	2017–2021 (first 3 years evaluated)	1,900,000 beneficiaries	\$162 PBPY (Track 1 practices); \$294 PBPY (Track 2 practices)	<b>Losses</b> \$36 PBPY (0.3%) (Track 1); \$19 PBPY (0.2%) (Track 2)	<b>Losses*</b> \$198 PBPY (2%) (Track 1); \$313 PBPY (3%) (Track 2)	Slight decreases in ED visits; slight increases in diabetes services, breast cancer screenings, and follow-up after hospitalization	Primary Care First

**Hybrid models for cancer care (combines elements of episode-based payment + primary care transformation models)**

<b>Oncology Care Model</b>	2016–2022 (first 3 years evaluated)	133,000 beneficiaries per 6-month period	\$862 per 6-month episode	<b>Savings*</b> \$297 per episode (1%)	<b>Losses*</b> \$591 per episode	No changes on most quality measures, but slight decrease in end-of-life hospitalizations
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Note: APM (alternative payment model), CMMI (Center for Medicare and Medicaid Innovation), ACO (accountable care organization), PBPY (per beneficiary per year), ED (emergency department), MSSP (Medicare Shared Savings Program), COPD (chronic obstructive pulmonary disease), ESRD (end-stage renal disease), BPCI (Bundled Payments for Care Improvement). Models in gray are no longer active. “Beneficiaries or episodes in model” is the number of beneficiaries in a model in the most recent year evaluated, rounded to the nearest thousand, unless otherwise noted. “Model payments to providers” refers to supplemental payments available through an APM that are paid in addition to usual fee-for-service payments. Results reflect the average impact detected over the entire period evaluated, unless otherwise noted, and are estimated using a difference-in-difference regression model relative to a comparison group of providers. In most cases, providers in comparison groups are not known to be in another advanced APM. However, comparison group practices in the Comprehensive Primary Care Initiative (CPCI) evaluation included practices that had been recognized as patient-centered medical homes, and comparison group practices in the CPC+ (Comprehensive Primary Care Plus) Model evaluation also had prior experience with primary care practice transformation interventions. In the Independence at Home Demonstration, gross savings were driven by one large practice, which later stopped offering home-based primary care once under new ownership and exited the model. In the Pioneer ACO Model row, our estimates of model payments PBPY and net savings PBPY draw on data on model payments separately released by CMS (listed in the sources below). The ACO Investment Model row refers to the Test 1 cohort of ACOs in this model (i.e., those that were new MSSP ACOs formed in areas with few other ACOs, which were the majority of the ACOs in this model). For BPCI, only Model 2 and Model 3 are shown because 99 percent of BPCI episodes were one of these two model types. The Comprehensive Care for Joint Replacement Model row reflects results for hospitals for whom model participation is mandatory; results for voluntary participants have not been released. In the Multipayer Advanced Primary Care Practice Demonstration row, the model payment amount shown is an average of the eight participating states, each of which designed their own payment model. The CPC+ Model row shows results for the first of the two cohorts of practices in this model, which accounted for 95 percent of practices in this model. Model payments shown for CPC+ include the MSSP shared savings payments to practices that were participating in CPC+ and the MSSP concurrently, since such practices were eligible for performance bonuses only through the MSSP and not through CPC+. The Oncology Care Model row reflects our estimates of model payments paid to providers and net savings based on data in appendix section B.4 of that model’s evaluation report (listed in the sources below). The MSSP is not shown in the table because it is a permanent nationwide program that has not had a federally funded evaluation of its impacts, although we describe results from other researchers’ analyses of this program elsewhere in this chapter.  
\*Indicates savings or losses were statistically significantly different than \$0.

Source: MedPAC analysis of data in the most recent report by federally funded evaluators of each of the above models, and in some cases an accompanying peer-reviewed journal article or CMS data on model payments (Centers for Medicare & Medicaid Services 2021a, Centers for Medicare & Medicaid Services 2021b, Dummit et al. 2021, Fout et al. 2020, Hassol et al. 2021, Kautter et al. 2012, L & M Policy Research 2016a, L & M Policy Research 2016b, L & M Policy Research 2015, Lewin Group 2020, Li et al. 2020, Lowell 2020, Marrufo et al. 2021a, Marrufo et al. 2021b, Marrufo et al. 2021c, Nichols et al. 2017, Peikes et al. 2021, Peikes et al. 2018, Pope et al. 2014, Urdapilleta et al. 2013).

more limited in scope, are included in a later section that reviews the broader literature on APMs.

## **Impacts of CMS's Medicare Shared Savings Program**

The MSSP is not included in Table 2-1 (pp. 51–53) because it is not a CMMI model, but rather a permanent, nationwide program serving 10.7 million beneficiaries. Unlike CMMI's models, the MSSP has not had a federally funded evaluation of its impacts. Academic researchers who have studied this program have found that, relative to comparison groups, the MSSP has generated some net savings for Medicare in at least some of the years that have been studied.

In the MSSP's first year (2013), the program generated gross savings, but ultimately net losses once shared savings payments by Medicare were factored in (McWilliams 2016a). In its second year (2014), the MSSP generated net savings of \$67 per beneficiary per year (0.7 percent savings) (McWilliams 2016a). In its third year (2015), the MSSP achieved gross savings, but generated net savings only from physician-group ACOs (\$256 million) and not from hospital-integrated ACOs, leading to total net savings across all participants of \$145 million that year (McWilliams et al. 2018). The Commission's analysis of the MSSP's first four years found that Medicare spending growth slowed by 1 percentage point to 2 percentage points for participants over those four years (equivalent to 0.25 percentage point to 0.5 percentage point of gross savings per year); net savings were not calculated (Medicare Payment Advisory Commission 2019). McWilliams has argued that the MSSP's impacts in later years "cannot be estimated" due to providers selectively entering and exiting the MSSP, comparison group contamination by other payment models, and increases in coding intensity that have complicated risk adjusting a comparison group of beneficiaries, among other issues (McWilliams and Chen 2020a, McWilliams and Chen 2020b). Nevertheless, an industry-funded study that looked at the MSSP's first five years found the program generated gross savings of 1 percent to 2 percent over this period (over \$100 per beneficiary per year, or \$3.5 billion over five years); net savings over this five-year period were equivalent to about a fifth of this amount (\$755 million) (Dobson et al. 2019).

Studies of the impact of the MSSP on quality have produced mixed findings. Some have found small improvements on a few quality measures—such as rates of readmissions (Borza et al. 2019, Kim et al. 2020) and colonoscopies (Cole et al. 2019). Other studies have found

no impacts on other quality metrics studied (Borza et al. 2018, Cole et al. 2019, Kim et al. 2020, Markovitz et al. 2019, McWilliams et al. 2017, Modi et al. 2019) or slight worsening of quality (McWilliams et al. 2017).

## **Summarizing the impact of Medicare's APMs**

Some notable trends emerge from Table 2-1 (pp. 51–53) and studies of the MSSP. First, almost all of CMS's accountable care and episode-based payment models have generated relatively small gross savings for the Medicare program, before model payments (e.g., performance bonuses) are taken into account. This trend suggests that these models' incentives may have led provider organizations to induce changes in their clinicians' behavior, perhaps through investment in new care management infrastructure, provider education initiatives, or other strategies that may affect the quantity or the mix of health care services delivered. Many APMs tested so far have yielded sufficiently promising results or sufficiently actionable lessons learned that they have been refined and relaunched as successor models under new names.

After bonuses are paid to model participants, gross savings are reduced and in some cases Medicare expenditures in APMs have exceeded what they would have been otherwise. However, some of the models that have generated gross savings have also generated net savings for Medicare even after model payments are taken into account. The models that have yielded net savings include two early ACO models, some years of the MSSP, and a track of the ACO Investment Model (AIM) that helped new MSSP ACOs form in areas with few other ACOs. The Comprehensive Care for Joint Replacement (CJR) Model for hip and knee replacements also yielded net savings. While the newer Bundled Payments for Care Improvement (BPCI) Advanced Model has not yet generated net savings in aggregate across its various types of clinical episodes, certain episodes (i.e., for hip and knee replacements, other hip and femur procedures, and urinary tract infections) have generated net savings (Dummit et al. 2021).

CMMI's two most successful APMs both targeted providers who might not otherwise have been interested in participating in an APM: CJR initially mandated participation among hospitals in certain geographic areas (rather than allow hospitals who expected to financially benefit from the APM to self-select into the model); AIM financially incentivized the formation of ACOs in geographic areas with low ACO penetration through up-front and monthly payments (which were expected to be



paid back once the ACOs earned shared-savings payments through the MSSP).

In contrast to CMS's accountable care and episode-based payment models, its primary care transformation models have generated small gross losses for Medicare. Yet primary care models have also generated some small improvements in care quality: The two most recent models reduced emergency department (ED) visits, and beneficiaries in these models were more likely to report timely follow-up after a hospitalization than comparison beneficiaries (Peikes et al. 2021, Peikes et al. 2018).

## Summarizing the broader APM literature

### Population-based models (ACOs)

Federally funded evaluations summarized in Table 2-1 (pp. 51–53) and the broader literature reviewed below suggest that population-based payment models (e.g., ACOs) have generated the most consistently favorable financial results among APMs. However, one summary of the literature characterized the savings generated by Medicare, Medicaid, and private payers' ACOs as only “nominal” and cautioned that ACOs could increase costs once bonuses and the costs of new technology and infrastructure are factored in (Kaufman et al. 2019). Most Medicare ACO models have generated gross savings of up to a few percentage points, and some models also generate net savings once model payments are factored in. CMS's most successful ACO model is the ACO Investment Model, which generated net savings of 2 percent to 3 percent once model payments were included (Fout et al. 2020). (This model gave ACOs pre-paid shared savings to encourage the formation of new ACOs in rural and underserved areas.)

Outside of Medicare, there is limited evidence of the impact of ACOs implemented by other payers (McClellan et al. 2017). A notable exception is Blue Cross Blue Shield of Massachusetts' ACO-style Alternative Quality Contract. Researchers have found that providers who entered into this HMO commercial payer model in 2009 and 2010 generated gross savings of 9 percent through the end of 2012 and received new model payments worth 16 percent to 17 percent of their total spending, leading to net losses for the payer. Subsequently, from 2013 to 2016, these providers produced gross savings of 14.2 percent and received model payments worth 13 percent to 14 percent, yielding small net savings. Later cohorts of providers that joined the model in 2011 and 2012 generated gross savings of 4.7 percent through 2013 and earned new model payments worth 2 percent to 3 percent

of their total spending, leading to small net savings for the payer. Subsequently, these later cohorts generated gross savings of 2.0 percent from 2014 to 2016 and received model payments worth 1 percent to 2 percent of their total spending, yielding potential net savings for the payer (Song et al. 2019).<sup>3</sup>

Another study of a commercial HMO ACO (this one covering public employees in California) found that this model generated gross losses in its first two years and then no changes in spending in the subsequent three years. It did, however, increase delivery of various screenings and immunizations (Zhang et al. 2019).

Pulling back to the broader literature, one review of Medicare, Medicaid, and private payers' ACOs found that the results most consistently produced by ACOs were reduced inpatient and ED use and increased delivery of preventive services and chronic disease management (Kaufman et al. 2019). A second review summarized the literature as suggesting that ACOs reduce gross spending without reducing quality (Wilson et al. 2020).

### Episode-based models

Episode-based payment models also tend to generate gross savings, but have had less success generating net savings. An exception to this rule, however, is episode-based payment models for hip and knee replacements, which have generated net savings for Medicare under multiple APMs. When this type of clinical episode was tested in the CJR Model, it yielded net savings of 2 percent among those hospitals that were mandated to participate in this model (evaluators have not yet released results for voluntary participants) (Lewin Group 2020). Episodes for hip and knee replacements also generated net savings in the subsequent BPCI Advanced Model (along with episodes for other hip and femur procedures, and for urinary tract infections) (Dummit et al. 2021). Both of these models reduced rates of readmissions following a hip or knee replacement, and the CJR Model also reduced rates of certain complications (Dummit et al. 2021, Lewin Group 2020). An earlier model, the BPCI Model, also would have generated net savings from hip and knee replacement episodes (as well as gastrointestinal hemorrhage episodes and medical noninfectious orthopedic episodes) if that model had been implemented as intended and downside risk had not been eliminated (which was done by CMS due to implementation errors that affected target prices and episode attribution) (Marrufo et al. 2021a, Marrufo et al. 2021b).

Private payers have also had success with joint replacement episodes. A recent analysis of an episode-based payment model offered by self-insured employers for working-age adults found that it reduced episode spending for major joint replacement, spinal fusion, and bariatric surgery by 10.7 percent in its first two years. The model was offered only to clinicians who met quality standards and who agreed to accept lower episode prices (in some cases, as much as \$29,000 lower) than they would have garnered through an FFS payment system. Patients were incentivized to use participating clinicians through waived cost sharing. Participating clinicians, in turn, could require patients to lose weight or get their diabetes under control before operating on them, and could decline to perform surgeries on patients (which they did for about 30 percent of patients); a separate nonsurgical bundle applied to such patients (Whaley et al. 2021).

As for the broader literature, a 2020 review of the literature on episode-based payment models implemented by payers in the U.S. and other high-income countries found that such models produced modest savings in about two-thirds of the studies it identified; a little more than half of the studies found small quality improvements on most evaluated measures (Struijs et al. 2020).

### **Primary care transformation models**

Primary care transformation models have been tested and evaluated extensively but have produced very inconsistent findings across studies, which may in part be due to heterogeneity in the models tested (Sinaiko et al. 2017). No clear trend emerges from the literature as to primary care transformation models' ability to generate savings. Evaluations find that these models sometimes generate gross losses and sometimes generate gross savings; outside of federal evaluations, they often do not assess whether models generate net savings (Cuellar et al. 2016, Hebert et al. 2014, Kahn et al. 2016, Maeng et al. 2016, Maeng et al. 2015, Peikes et al. 2021, Peikes et al. 2018, Sinaiko et al. 2017, Werner et al. 2013). Savings are often more likely for high-risk subsets of patients with chronic conditions such as diabetes or cancer (Christensen et al. 2013, Cole et al. 2015, David et al. 2015, Fillmore et al. 2014, Wang et al. 2014, Waters et al. 2019).

The latest results from Medicare's large-scale primary care transformation model, Comprehensive Primary Care Plus (CPC+), finds this model generated small net losses, but slight improvements in the mix of services delivered—with more preventive services and fewer ED visits occurring (Peikes et al. 2021). The 2 percent to 3 percent

net losses generated by CPC+ have translated into a net financial loss for Medicare of \$4.5 billion so far, since CMMI tested this model with an unusually large number of participating providers—over 3,000 practices serving nearly 2 million FFS Medicare beneficiaries (Peikes et al. 2021, Smith 2021).

Primary care transformation models commonly have little to no effect on quality (Kahn et al. 2016, Peikes et al. 2021, Peikes et al. 2018, Rosenthal et al. 2013, Sinaiko et al. 2017, Werner et al. 2013). When a model does improve quality, it tends to consist of increased delivery of some preventive services (e.g., cancer screenings) and decreases in rates of ED visits (David et al. 2015, Kicingner et al. 2019, Peikes et al. 2021, Peikes et al. 2018, Pines et al. 2015, Rosenthal et al. 2016a, Rosenthal et al. 2016b, Rosenthal et al. 2013, Sinaiko et al. 2017, Swietek et al. 2020, Werner et al. 2013). The evaluators of CPC+ and its predecessor, the Comprehensive Primary Care Initiative, have also found that practices that participated in these back-to-back initiatives reduced hospitalizations in their fifth and sixth years of participation (Peikes et al. 2021).

Notably, a few private insurers have found success with primary care transformation models. For example, a model offered by Geisinger Health Plan generated gross savings of 8 percent within eight years and reduced rates of inpatient admissions and readmissions within four years (Gilfillan et al. 2010, Maeng et al. 2015). The plan embedded nurse case managers into primary care practices to identify and manage medically complex patients and offered practices shared savings payments tied to quality and spending performance for their elderly Medicare Advantage enrollees.

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## **Why pursue APMs?**

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Beyond the modest gross spending and quality improvements mentioned above, there are other reasons to pursue APMs. First and foremost, APMs allow CMS to experiment with changing how Medicare pays providers—to create stronger incentives to control overall costs than exist in traditional FFS payment systems, while maintaining or improving quality. At their core, well-designed APMs can give providers who are interested and able to provide care more efficiently the opportunity to do so with some financial reward. By holding providers accountable for total cost of care (for a population of beneficiaries or a set of clinical episodes), Medicare rules

intended to limit overutilization can be relaxed—allowing more flexibility for providers and, perhaps, savings on administrative costs. For example, APMs can allow Medicare to experiment with waiving certain Medicare requirements—such as the requirement that a beneficiary have a three-day hospital stay before they receive skilled nursing facility care or the requirement that beneficiaries reside in certain geographic areas to access telehealth—to see whether dropping these requirements allows providers to develop more cost-effective care patterns.

There are other reasons to pursue APMs. Reductions in net spending produced by Medicare’s ACOs and other APMs could lead to lower spending in Medicare Advantage (MA) since FFS spending levels are used to set CMS’s prospective payments to MA plans (McWilliams 2016b, Mechanic and Gaus 2018). Positive changes to how a provider delivers care that are prompted by one payer’s APM could spill over and lead to changes in the way that same provider treats patients who are not part of that APM (Einav et al. 2020, McWilliams 2016b, Mechanic and Gaus 2018, Sahni et al. 2020, Wilcock et al. 2019). Some have even posited that widespread pursuit of APMs might slow the growth in national health care spending (Navathe et al. 2020a). And some have pointed out that ACOs generate larger savings the longer they operate, so the small savings generated so far might grow to become larger savings in the future (Chernew et al. 2017, Mechanic and Gaus 2018).

In particular, the fact that so many of Medicare’s accountable care models and episode-based payment models have generated gross savings is a promising indicator—suggesting that Medicare’s APMs are succeeding in incentivizing providers to make new investments in their care management infrastructure, and may be incentivizing clinicians to change their care patterns—prescribing a more efficient mix of services, putting more emphasis on prevention, and referring to lower cost providers.

The challenge going forward is to design models that can build on the modest success of APMs and more meaningfully influence expenditures and quality. In the absence of APMs, FFS payment approaches would likely have fewer incentives to promote efficiency. That said, APMs introduce their own challenges and associated operational costs, such as how to optimize risk adjustment and beneficiary attribution. Other potential issues with APMs include the risk of unwarranted shared savings

being paid to providers, which can happen when providers shift from treating sicker patients to healthier patients, change their billing structure, or more thoroughly code patients’ diagnoses over time.

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## Factors that may be limiting the success of APMs

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As the Commission explores ways to help CMMI’s models achieve greater success, certain barriers that can prevent models from generating larger savings or quality improvements for Medicare may need to be considered:

- ***Providers in APMs can continue to have incentives to maximize utilization.*** Most APMs layer bonuses and other payments on top of traditional FFS payment systems, many of which have financial incentives to increase the volume of services delivered. Many APMs attempt to counter these FFS incentives by rewarding providers who reduce total spending per beneficiary while maintaining quality. But because FFS systems are used to pay for services in many of these APMs, and any performance payments earned are usually paid several years after any savings are generated, those models can send mixed signals to APM participants. APM clinicians can also face mixed incentives when they furnish care to a combination of beneficiaries attributed to an APM and some who are fully under FFS. The features of an APM itself can also create mixed incentives: When an APM’s spending targets are based on prior-year spending levels, providers have a disincentive to deeply reduce spending since doing so would make future spending targets lower and harder to beat.
- ***Payment models’ incentives can be hard to understand.*** FFS incentives are relatively easy for providers to understand, and their entire care delivery approach is built around responding to these incentives. Meanwhile, many APMs’ specifications can run more than 100 pages and require substantial changes in provider workflow, infrastructure, and behavior to be successful. It is perhaps not surprising, then, that clinicians in APMs have described these models as having “incomprehensible” incentives that often require significant investments of time or consultants to understand (Friedberg et al. 2018).



In particular, APMs' complex parameters can make it difficult for providers to forecast whether they will earn a bonus or owe a financial penalty if they participate in a model. This challenge is compounded by the fact that CMMI can make unexpected changes to models that alter participants' model payments. In addition, it is possible that any individual clinician participating in an APM may not fully understand how their actions contribute to the APM's success. Consequently, there is a risk that the complexity of models may be suppressing provider participation and limiting the effectiveness of incentives for providers to change their behavior.

- ***Clinicians' employers may shield them from models' incentives.*** Some providers participating in new payment models work for health care organizations that pay them primarily based on the volume of services they provide, to shield them from the complexity and constant changes in APMs (Friedberg et al. 2018). Depending on how that organization chooses to respond to a model's incentives, providers could have no direct incentive to change their behavior and could even be unaware that they are participating in a new payment model. Incentives to improve performance on the specific spending, utilization, or quality measures in any one APM are also likely to be weak if only a small portion of a provider's patients are in that particular model.
- ***It may take more time for APMs' impact to materialize than CMMI currently allows.*** Some studies have found that APMs' impact grows over time and sometimes takes more than five years to materialize. It can take providers several years to change their practice culture and develop new care approaches, and it can take time for improved management of patients' conditions to result in savings for the Medicare program or improvements in quality and health outcomes. If CMMI were to test models for longer periods of time—say, 8 or 10 years—more models could ultimately prove to be successful.
- ***Voluntary payment models allow selection bias among participants.*** In voluntary models, providers who are likely to owe Medicare financial penalties (e.g., shared losses) may be less likely to participate, while those who are likely to receive bonuses (e.g., shared savings) may be more likely to participate. This lopsided participation can lead to models

paying more in performance bonuses and generating more net losses for Medicare than might occur if the models were mandatory and implemented in a more representative sample of providers. Similar problems related to selection bias can arise when APM participants that are not successful in generating savings are permitted to exit a model part-way through its implementation period.

- ***Some clinicians may be unable to make the infrastructure investments needed to succeed in new payment models.*** Some observers posit that certain providers, especially small or under-resourced providers, may not participate in new models because of a perception that they do not have the resources to be successful (e.g., data infrastructure, training and compliance staff, care management tools) (American Medical Association 2017, Friedberg et al. 2018). Some providers may also be reluctant to make infrastructure investments if they believe the amount of time needed to realize improvements in performance will take longer than the payment model's implementation period, thus limiting the return on their investments.
- ***Beneficiaries' financial incentives are not aligned with those of providers.*** Beneficiaries attributed to providers in a new payment model are typically not aware that they are participating in a new model (Catterson et al. 2020). This lack of awareness combined with the absence of incentives to change their own behavior put the onus for change entirely on the provider.

To promote the long-term success of APMs, CMS needs to consider how it can address some of these issues, which can affect providers' responses to incentives in APMs and contribute to underperformance of models.

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## **Unintended consequences of implementing multiple concurrent APMs**

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CMS's model-testing approach usually treats each model as independent of other models being implemented at the same time, yet CMS also allows providers and beneficiaries to be in multiple Medicare APMs at once. Although allowing overlapping participation maximizes participation in APMs, it can lead to some problematic interactive effects.

## **Allowing providers to participate in multiple APMs can dilute each model's incentives**

In 2019, of the 580,000 clinicians who participated in at least one Medicare APM, 20 percent participated in multiple Medicare APMs simultaneously or multiple tracks of the same Medicare APM at once. For example, providers in at least some tracks of the MSSP are allowed to participate in most other non-ACO A-APMs (e.g., CPC+, Primary Care First, CJR, BPCI Advanced, Oncology Care Model). When a provider participates in multiple APMs, each covering a different subset of a provider's patient panel, it can dilute each individual APM's incentives. Participating in multiple models at once can increase the chances that a provider will be faced with different payment methods, different care processes they are encouraged to implement, and different reporting requirements. For example, one model may tie bonuses to reducing total spending, whereas another may tie bonuses to increasing delivery of primary and preventive services. Since only a subset of a provider's patients may be in any one of these models, the financial rewards attached to each of these models' performance measures may be small.

When clinicians are in multiple models at once, the question for the person who determines their compensation arrangement becomes how to reconcile these different payment approaches (and resulting incentives) when structuring clinician compensation schemes. For a majority of clinicians, their incomes are still based, at least in part, on the quantity of services they deliver per year, so they may have relatively weak incentives to reduce the volume of services they furnish (Rama 2020, Sullivan Cotter 2020).

## **Attributing beneficiaries to multiple APMs can also weaken incentives**

Beneficiaries can also be attributed to multiple APMs at once. One study found that one-quarter of beneficiaries attributed to the BPCI Model were also attributed to the MSSP, and that 1 out of every 10 beneficiaries attributed to the MSSP had at least 1 episode under BPCI (Navathe et al. 2020b).

To avoid paying duplicative bonuses, CMS has model overlap policies that specify how costs and savings are allocated between different models when a beneficiary receives care from two sets of providers participating in two different APMs. These rules have been developed for each combination of APMs and effectively specify which model gets priority when CMS is awarding performance-based payments. These overlap policies can result in

shared savings payments being paid to participants in one APM, even if providers in another APM helped reduce costs for that beneficiary. Model overlap policies can also result in model payments made to providers in one APM being counted as spending for which providers in another APM are held accountable. By preventing providers from getting credit for all of the beneficiaries they treat, and making it harder to stay within spending targets, these model overlap policies reduce the amount of model payments providers might otherwise expect to receive from APMs—thus reducing the strength of financial incentives in these models. The number of APMs operating right now is an issue because it may increase how often these model overlap policies are triggered.

## **Contaminated comparison groups may reduce the likelihood of finding impacts**

Allowing providers and beneficiaries to participate in multiple APMs at once complicates evaluators' efforts to accurately assess the effect of a given APM. One important goal of fielding models is to empirically measure whether a given approach results in significant reductions in Medicare spending or improvements in quality compared with a group of nonparticipating providers. However, the presence of so many models in the environment—offered not only by traditional FFS Medicare but also by MA plans, Medicaid, and private insurers—reduces the likelihood that evaluators will be able to construct a comparison group of providers that are not participating in any other APM. This abundance of models can then lead to a situation where evaluators find favorable results among both the APM's providers and the comparison group's providers (which could be participating in an unknown mix of other APMs)—prompting the evaluators to erroneously conclude that the APM being studied had little or no effect on spending or quality (Navathe et al. 2020a). Comparison groups can also become contaminated when some comparison group beneficiaries receive care from treatment group providers—for example, when a comparison group beneficiary who is not attributed to an ACO receives care from a specialist participating in that ACO.

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## **Recommendation**

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CMS is to be commended for the vigor with which it has approached its task of developing and testing new payment models. It has implemented a wide variety of models over

the last decade—many of which have generated gross reductions in Medicare expenditures. These spending reductions are an indication that APMs can successfully motivate providers to deliver care more efficiently. Furthermore, some models have been shown to modestly improve the quality of care.

CMMI's first 10 years were marked by an approach that tested many types of models so that lessons could be learned about what worked and what did not. Many of those lessons have been incorporated into second-generation and third-generation models now being implemented or planned. While this progress is encouraging, continuing to test a large number of independent APMs may inhibit the ability of these models to reach their full potential. The Commission contends the time has come for CMS to adjust its approach to designing and implementing APMs. APMs may have a better chance of succeeding if the number of such models is reduced and the remaining models are more deliberately designed to work together to improve care quality and reduce spending, such as through more consistent model features.

## RECOMMENDATION 2

**The Secretary should implement a more harmonized portfolio of fewer alternative payment models that are designed to work together to support the strategic objectives of reducing spending and improving quality.**

## RATIONALE 2

Much has been learned from the APMs implemented over the last 10 years, which should be applied to the next generation of APMs. An important lesson of the last decade is that implementing a large group of models that operate more or less independently of one another can have unintended consequences that dampen incentives for providers to furnish care more efficiently.

Addressing this situation will require a change in the way Medicare approaches APM design and implementation. Instead of operating a series of APMs that are effectively developed independent of one another, the agency should seek to deploy a more parsimonious portfolio of models that are designed to work together. It is especially important to ensure that financial incentives presented by different models are complementary and do not weaken one another when combined.

The Commission's recommendation could be carried out in any number of ways. One way could be to focus on a single population-based model with different tracks by

provider type or beneficiary population. For instance, there could be separate, but aligned, tracks for integrated health systems, multispecialty physician practices, ESRD facilities, and so on. Other types of models, such as those that focus on episodes of care or primary care transformation, could be added to the portfolio to act as an extension of the main population-based model, although model overlap rules would need to carefully consider how best to incentivize optimal management of beneficiaries treated by two sets of providers in two different models. Accounting for interaction between an ACO and an episode-based payment model is especially important, since both models can hold participants accountable for the cost of care of a common set of beneficiaries during the same period of time.

A second approach that could be considered would be to take a geographic approach to testing models, which CMMI has done for some models (e.g., CPC+) but not others (e.g., BPCI Advanced). CMMI could limit all of its models to particular geographic areas of the country, to more actively control how many models are operating in any given region at once. For instance, certain geographic regions could have access to the MSSP only, with no other Medicare APMs operating in those areas. Other regions could have access to other combinations of APMs: For example, certain areas could have access to the MSSP plus some other competing accountable care model, while other areas could have access to the MSSP plus an episode-based model; other areas could have access to the MSSP and a primary care transformation model, while others could have access to the MSSP plus an episode-based payment model and a primary care transformation model. This approach could reduce the potential for patients to be attributed to multiple models (although it would not eliminate this problem) and could allow researchers to identify the additive impact of coupling certain models compared with implementing some models by themselves.

In either of the approaches just mentioned, the agency could foster greater harmonization among models by using more consistent model parameters (e.g., for calculating spending targets and measuring quality performance). Reducing the number of APMs would make the task of standardizing model parameters a more manageable undertaking for CMS. If models were less complex, they could also attract more independent providers, since such providers might no longer need to hire consultants to help them understand different models, enroll in a model, and excel in that model. It would also be important to account

for the MSSP, which is the largest alternative payment model in Medicare and not implemented by CMMI. The Secretary has wide discretion in setting and changing the features of this program, so changes could be made administratively to improve alignment between the MSSP and other APMs.

A third approach that could be contemplated would be to encourage more states to follow Maryland and Vermont's lead by pursuing waivers that allow them to operate a smaller set of state-specific versions of CMMI's APMs within their borders. Maryland couples its unique global payment model for hospitals with state-specific versions of BPCI Advanced and CPC+ and an additional state-specific model that lets hospitals design their own payment incentives for providers in their communities (e.g., to encourage care coordination, discharge planning, and improving clinical quality and patient experience). Meanwhile, Vermont has adopted a tighter focus, operating only a state-specific version of the Next Generation ACO Model. CMS could work with other states to implement different combinations of customized versions of its payment models in an effort to identify the combination of models that will best engage the widest range of providers to produce the largest impacts on spending and quality.

### Spending

- The Congressional Budget Office estimates this recommendation would have no effect on net Medicare spending over the next five years. However, since APMs have shown promise in reducing gross Medicare expenditures, the Commission believes that a smaller set of APMs—with better aligned incentives to reduce volume and costs—could increase the degree to which providers change their behavior in response to the models and could lead to reductions in spending over a time frame of longer than five years.

### Beneficiaries and providers

- The recommendation could have a positive impact on beneficiaries and providers. An improved suite of APMs could be more likely to improve care coordination, quality of care, health outcomes, and other factors important to beneficiaries. A smaller, more harmonized portfolio of models could also have benefits for providers, including more predictable financial incentives. Fewer, more harmonized models could also reduce providers' administrative burden if the models had more consistent features, and could lead to other payers adopting models with these common features. ■

## Endnotes

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- 1 The new Community Health Access and Rural Transformation (CHART) model is a successor to the ACO Investment Model.
- 2 The one APM that is not considered an A-APM is the Value in Opioid Use Disorder Treatment Demonstration Program, which does not involve significant financial risk and does not require the use of a certified EHR.
- 3 Ranges are reported for model payments to protect the confidentiality of contracts between the payer and provider organizations.



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