

CHAPTER

2

**Challenges in maintaining
and increasing savings from
accountable care organizations**

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

- 2** The Secretary should use the same set of national provider identifiers to compute both performance-year and baseline assignment for accountable care organizations in the Medicare Shared Savings Program.

COMMISSIONER VOTES: YES 16 • NO 0 • NOT VOTING 0 • ABSENT 1

Challenges in maintaining and increasing savings from accountable care organizations

Chapter summary

CMS has made it a priority to move more Medicare beneficiaries into alternative payment models in which providers are responsible for the cost and quality of care. One such model is the accountable care organization (ACO). ACOs are now responsible for 23 percent of Medicare beneficiaries with Part A and Part B coverage. Given the rapid growth in ACOs, it is important to evaluate whether ACOs are generating savings for the Medicare program and thus helping make the program more sustainable. Our work evaluates past savings, examines strategies to increase savings, and discusses how the savings are at risk if program vulnerabilities result in unwarranted shared savings payments to ACOs.

ACOs' savings have been modest

To date, ACOs have generated modest savings, with most evaluations estimating 1 percent to 2 percent reductions in spending from existing ACO models. The Medicare ACO savings stem from small reductions in hospital inpatient, hospital outpatient, and post-acute care use. There have also been savings in at least one commercial ACO according to recent evaluations. The Alternative Quality Contract (AQC) ACO in Massachusetts found material gross savings and modest net savings after accounting for incentive payments to ACOs. AQC savings were primarily due to reduced laboratory testing, imaging, and emergency department visits. Some savings were also generated by using lower priced providers. The larger savings in the commercial ACO

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- Potential for unwarranted shared savings from patient selection
- Use of NPI for assignment would improve benchmark validity and reduce unintended incentives

should be expected given that the AQC model evaluated is housed in an HMO that—unlike Medicare ACOs—can use prior authorizations to restrict service use and has the ability to steer patients to lower priced providers.

Some have expressed a concern that the ability of Medicare ACOs to achieve savings has been limited because key constituencies are not sufficiently engaged with ACOs and have incentives that run counter to those of ACOs. CMS and others have expressed an interest in trying to enhance ACOs' ability to generate savings by creating greater engagement with beneficiaries and with specialists, reducing hospital incentives to increase services, and creating incentives for ACOs to control prescription drug use under Part D. However, all four of these strategies involve implementation challenges.

Technical change to reduce unwarranted shared savings from patient selection

Because Medicare savings from Medicare Shared Savings Program ACOs have been relatively small thus far (although still greater than most care coordination demonstrations), there is a risk that those savings could be eroded, or even completely offset, by unwarranted shared savings payments. Unwarranted payments can result if there is patient selection in ACOs, whether intentional or not. For example, if high-cost beneficiaries are disproportionately shifted out of an ACO in its performance year while remaining in the baseline years, performance-year spending will decrease in relation to the ACO's benchmark. This selection can occur if high-cost clinicians are removed from the ACO or if clinicians with high-cost beneficiaries bill under a taxpayer identification number (TIN) that is not part of the ACO. A second means of patient selection involves removing just a portion of a high-cost provider's patients from the ACO. The clinician could bill for patients with low spending under the ACO's TINs and bill for patients with higher spending relative to their risk score under a non-ACO TIN.

The Commission does not believe widespread patient selection occurred in the program's early years. However, the current system allows an ACO to strategically change the composition of its TINs to increase the likelihood of receiving unwarranted shared savings relative to benchmarks, creating a vulnerability for the Medicare program.

To reduce the incentives to select patients and providers, and to reduce the potential mismatch between the clinicians considered in an ACO's baseline years and its performance years, the Commission recommends that the Secretary determine an ACO's historical baseline spending using the same national provider identifiers (NPIs) that are used to compute the ACO's performance-year spending. Properly

matching the clinicians included in an ACO's baseline and performance years will allow a more accurate assessment of an ACO's performance and reduce opportunities for unwarranted shared savings. While there will always be some shared savings payments due to random variation, we should minimize opportunities for unwarranted shared savings payments due to favorable provider or patient selection. In other words, ACOs should be rewarded for achieving real savings due to improving patient outcomes and appropriately managing utilization—not for apparent gains that result from unnecessary mismatches between the clinicians included in performance-year and baseline-year (benchmark) calculations. ■

Background

Organizations of providers that agree to be held accountable for the cost and quality of care are called accountable care organizations (ACOs). The goal of ACOs is to create an incentive for providers to control spending growth and improve quality for a population of Medicare fee-for-service (FFS) beneficiaries. Because ACOs are provided with claims data for their beneficiaries, they can theoretically improve care coordination and encourage their beneficiaries to use more efficient providers—though beneficiaries still have the freedom to choose to receive their care from any Medicare-participating provider. Compared with Medicare Advantage (MA) plans, ACOs have fewer tools to control use (e.g., they cannot limit provider networks, cannot require prior authorization), but they also have lower marketing and administrative costs.

Almost a quarter (23 percent) of Medicare beneficiaries with both Part A and Part B coverage are assigned to ACOs. CMS assigns beneficiaries to an ACO if they have a plurality of primary care visits with clinicians who participate in the ACO. Most of these beneficiaries are assigned to ACOs in the Medicare Shared Savings Program (MSSP), a permanent ACO model established through the Affordable Care Act of 2010 (ACA). Since its inception in April 2012, the MSSP has grown rapidly. In 2020, there are 517 MSSP ACOs responsible for the cost and quality of care provided to 11.2 million FFS beneficiaries. Although this chapter focuses on the MSSP, CMS has also operated a series of ACO-related demonstration programs through the Center for Medicare & Medicaid Innovation (CMMI), including separate programs in Maryland and Vermont. In addition, private insurers (including parent organizations of MA plans and commercial insurers) also operate ACOs.

For each ACO, CMS sets a spending target for a beneficiary population assigned to that ACO. This target is called a benchmark. If Medicare spending for care provided to an ACO's assigned beneficiaries is below this benchmark, the ACO can receive “shared savings” payments, which can range from 50 percent to 100 percent of shared savings in different ACO models. If Medicare spending is above the benchmark, the ACO may share liability, depending on its risk arrangement with Medicare. Under a one-sided risk arrangement, the ACO bears no liability for spending exceeding its benchmark. Under a two-sided risk arrangement, the ACO may be liable for

some share of the difference between actual spending and the benchmark. CMS must strike a balance when setting ACO benchmark rules. If CMS sets benchmarks too low, providers could doubt their ability to generate savings and could therefore avoid participating in the program (especially in two-sided risk arrangements). In contrast, if CMS sets benchmarks too high, providers would be able to keep spending under the benchmarks without appreciably altering the provision of care, thereby receiving unwarranted “shared savings” payments. In this scenario, the ACO program would cause overall Medicare spending to increase rather than decrease.

To date, ACOs have generated relatively small savings, but those savings are nevertheless greater than those achieved in most care coordination models in Medicare. We define Medicare savings from an ACO program as savings evaluated against a counterfactual—that is, what spending would have been if the ACO program did not exist. Performance-year savings can be reduced by “shared savings” payments made to the MSSP's participating ACOs to calculate net savings to Medicare. In contrast, CMS's shared savings payments are evaluated relative to the ACOs' benchmarks, not to a counterfactual. Hence, unwarranted shared savings payments can be made if they result from a mismatch between benchmarks and actual spending. Accordingly, ACO models must be designed to minimize opportunities for ACOs to receive unwarranted shared savings payments.

The ACO program has grown rapidly

The MSSP started in 2012 with 114 ACOs in the initial cohort and grew to 561 ACOs by January 2018. In 2019, CMS introduced new MSSP rules, referred to as “Pathways to Success.” As of July 2019, there were 518 ACOs in the MSSP (Table 2-1, p. 18), making 2019 the first year in which the number of ACOs leaving the program exceeded the number joining the program.¹ By January 2020, there were 517 ACOs in the MSSP. Despite the decline in numbers of participating ACOs since 2018, the number of assigned beneficiaries in the MSSP has continued to increase every year, with 10.9 million beneficiaries in the program in 2019 and 11.2 million as of January 2020. From 2013 to 2020, the average size of an ACO increased from 14,500 beneficiaries to 21,600 (data not shown).

The Pathways to Success introduced in 2019 created new MSSP models designed to move MSSP ACOs more rapidly to two-sided risk. (See the Commission's *Payment*

**TABLE
2-1**

The number of MSSP ACOs increased through 2018 and has since decreased

	2013	2014	2015	2016	2017	2018	2019*	2020
Beginning of year	220	338	404	433	480	561	518	517
New to program	106 **	123	89	100	99	124	66	53
Left program (previous year)	0	5	23	71	52	43	109	54
Beneficiaries (in millions)	3.2	4.9	7.3	7.7	9.0	10.5	10.9	11.2

Note: MSSP (Medicare Shared Savings Program), ACO (accountable care organization).

*Data as of July 1, 2019. Because of the ACO rule change, in 2019, new ACOs joined in July, not January. Sixty-six ACOs joined in July 2019 and 109 ACOs left the program in the previous year or in 2019 before July 1.

**114 ACOs joined in 2012, the first year of the program.

Source: MedPAC analysis of CMS data.

Basics for more detail: http://medpac.gov/docs/default-source/payment-basics/medpac_payment_basics_19_aco_final_sec.pdf?sfvrsn=0.) Nonetheless, in 2020, most MSSP ACOs remain in one-sided models.

ACO models' savings to date have been modest

Evaluation of various Medicare ACO models and one rigorously evaluated commercial model have shown small ACO savings. Gross savings were larger in the largest commercial ACO program that has undergone a thorough evaluation, but net savings (after incentive payments) were still small. These evaluations all define savings as the difference between actual spending and what spending would have been in the absence of the ACO program (this counterfactual approach is not equivalent to the CMS computation of “shared savings” relative to a benchmark).

Medicare program savings from all ACO models generally have ranged from 1 percent to 2 percent

Over the past 15 years, all of the ACO models evaluated by CMS have generated similar savings, despite key differences in assigning beneficiaries, setting benchmarks, determining comparison groups, and adjusting for risk. Even with these differences, the four early ACO models (the Physician Group Practice Demonstration, the Pioneer ACO demonstration, the initial MSSP model, and the Next Generation ACO model) all appear to have generated modest savings for the Medicare program in the range of 1 percent to 2 percent. (See text box for a history of the savings and incentives of the various ACO models,

pp. 20–21.) For example, our estimate of MSSP savings from 2012 to 2016 showed a 1 percent or 2 percent slower rate of growth for spending on beneficiary populations in MSSP ACOs in 2013 (not accounting for shared savings payments) (Medicare Payment Advisory Commission 2019). Although the estimated savings from these models are modest, they surpass those achieved by a wide variety of care coordination models Medicare has tried. Thus, it is important that these opportunities for program savings be preserved in future ACO models.

However, the latest MSSP model, which began in 2019, is designed to be on balance more favorable to certain ACOs and likely will result in larger “shared savings” payments to participating ACOs given any level of performance. If so, the new MSSP model may not generate any net savings for Medicare, unless the new model has a materially larger effect on service use than did previous ACO models. One concern is that the rules for the new MSSP model create incentives for ACOs to direct resources toward increased diagnostic coding (because risk score increases are now allowed to increase benchmarks) and toward seeking a favorable selection of clinicians and patients (which is easier given regional benchmarks) rather than improving care and reducing unnecessary use of services.

Commercial ACO programs have mechanisms for generating savings that may not be available to the Medicare program

ACOs have become more common within commercial insurance payment models. According to Leavitt Partners, there were 876 commercial ACO contracts in 2019, and

the number has been growing (Muhlestein et al. 2019). Although there are many commercial ACO programs in operation, the most extensively studied commercial ACO program has been the Alternative Quality Contract (AQC) between Blue Cross Blue Shield of Massachusetts and ACOs in the Boston area. It has often been cited as a successful example of how ACOs can operate in the commercial sector. The text box on savings from commercial ACOs (pp. 22–23) summarizes the most recent evaluation of the AQC. Although the evaluation found that the AQC resulted in savings even after incentive payments to the ACOs, that level of savings may not be achieved by Medicare ACOs because Medicare ACOs have fewer tools. For example, savings from switching patients from high-priced to low-priced hospitals would be limited in Medicare because Medicare sets relatively uniform rates for all providers of the same type.

Proposed strategies to increase ACO savings

Some stakeholders have expressed a concern that the ability of ACOs to achieve savings has been constrained because key constituencies have not sufficiently engaged with ACOs. CMS and others have expressed an interest in trying to enhance ACOs' ability to generate savings by creating greater engagement with beneficiaries and specialists, reducing hospital incentives to increase services, and aligning incentives for ACOs and prescription drug plans under Part D. Recent changes in Medicare policy are intended to allow two of these strategies—beneficiary engagement and aligning hospital incentives—to be tested.

Increasing beneficiaries' incentives to engage with an ACO

Initially, ACOs had few tools with which to encourage beneficiaries to become engaged with an ACO. (Beneficiaries are often not aware they are in an ACO and could have difficulty understanding the ACO concept. Engagement with an ACO, therefore, usually translates to engagement with their primary care physician's practice.) Historically, ACOs' primary tool was providing high-quality care and thus convincing beneficiaries that they should continue to see the ACO's primary care physicians. However, beneficiaries often change the physicians they see as their health care needs change or they have issues with their current providers, and about 25 percent of ACO beneficiaries were switched out of their ACO in 2017.

Since 2019, the new MSSP and the proposed CMMI Direct Contracting model have created new tools for beneficiary engagement. ACOs can encourage beneficiaries to consistently use the ACO's primary care practice by providing supplementary benefits such as:

- cash payments of up to \$20 for seeing ACO physicians if the beneficiary is in a two-sided ACO model
- paying for transportation services
- vouchers for chronic disease management programs, wellness programs, or meal programs
- items to support management of chronic disease, such as air-filtering systems or air conditioners
- waiving cost sharing (allowed in the CMMI Direct Contracting model)

ACOs can also have beneficiaries name their primary care physician, which will govern enrollment as long as they have recently used that physician. In a recent proposed rule, CMS also discussed allowing beneficiaries to directly enroll in an ACO similar to beneficiary enrollment in an MA plan (Centers for Medicare & Medicaid Services 2018b). However, some commenting on the rule suggested that the ACO concept may be difficult to explain to beneficiaries and could create confusion between ACOs and MA plans (Centers for Medicare & Medicaid Services 2018a).

Given the wide range of tools ACOs can now use to engage beneficiaries, the question is no longer whether ACOs have the tools to engage a beneficiary. The question is whether the ACOs believe the cost of the extra benefits (borne by the ACO) will be offset by savings from reduced service use if the patient continues to use ACO clinicians.

Increasing hospitals' incentive to reduce unnecessary service use

On average, hospital-led ACOs have not generated savings in the MSSP (McWilliams et al. 2018, Medicare Payment Advisory Commission 2019). Some have attributed this result to hospitals' lack of incentive to reduce volume. Hospitals may prefer increasing FFS revenue through increasing volume over the opportunity to achieve shared savings through reduced volume and revenue. In addition to insufficient hospital incentives, hospital-led ACOs may generate less savings because their typically large physician staffs each have a small individual incentive to act efficiently since the savings from their personal efforts

History of Medicare accountable care organizations

2005 to 2010: The Physician Group Practice Demonstration

- **Population:** 220,000 beneficiaries at 10 organizations selected by the Secretary
- **Key design features:**
 - Benchmark based on historical spending; benchmark growth based on local competitors' spending growth
 - Hierarchical condition category (HCC) coding growth increased benchmarks
 - One-sided risk (bonus only)
 - Retrospective assignment
- **Ways to obtain “shared savings”:**
 - Lower spending growth
 - Increase coding
 - Have local competitors with high spending growth
- **Program savings:** Estimated at 1 percent to 2 percent savings in an average year with net savings (after shared savings payments) of less than 1 percent (RTI International 2012)

2012 to 2016: Pioneer ACO (Center for Medicare & Medicaid Innovation (CMMI) demonstration)

- **Population:** Up to 700,000 beneficiaries in 32 organizations selected by the Secretary (most Pioneer accountable care organizations (ACOs) withdrew from the program before it ended)
- **Key design features:**
 - Benchmark based on historical spending; benchmark growth based on national spending growth rates; evolved to adjust for changes in local prices
 - HCC growth did not affect benchmarks

- One-sided risk (first year) evolving to two-sided risk (bonus and penalty)
- Waiver of three-day skilled nursing facility stay rule
- Beneficiaries could voluntarily align with an ACO
- Prospective assignment
- **Ways to generate “shared savings”:**
 - Lower spending growth
 - Opportunities for patient selection were lower in the Pioneer program than in the Medicare Shared Savings Program (MSSP) due to prospective assignment
- **Shared savings:** Initial year savings estimated between 1 percent and 2 percent before shared savings payments and less than 1 percent after shared savings payments (McWilliams et al. 2015)

2012 to 2019: Initial MSSP shared savings model (the MSSP is permanent)

- **Population:** 10.5 million beneficiaries in 561 ACOs by 2018
- **Key design features:**
 - Benchmark based on historical spending, adjusted for national growth in spending and for changes in local prices
 - HCC growth did not increase benchmarks; HCC declines reduced benchmarks
 - Primarily one-sided risk (bonus only)
 - Retrospective assignment
- **Ways to generate “shared savings”:**
 - Lower spending growth
 - Use wellness visits to maintain assignment of beneficiaries with low utilization

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History of Medicare accountable care organizations (cont.)

- Random variation can benefit ACOs in one-sided (bonus-only) models
- **Shared savings:** Savings estimates depend on year and methods, but still are generally in the 1 percent to 2 percent range before shared savings payments; near 1 percent after shared savings payments (McWilliams et al. 2018, Medicare Payment Advisory Commission 2019)

2015 to 2019: Next Generation (NextGen) ACO model (CMMI demonstration)

- **Population:** 500,000 beneficiaries in 18 ACOs in 2016
- **Key design features:**
 - Benchmark is primarily based on historical spending, adjusted for national spending growth and local price changes
 - HCC growth can increase benchmarks by up to 3 percent, but a common coding adjustment across ACOs reduces some of the coding growth for NextGen ACOs
 - Two-sided risk (bonus and penalty)
 - Prospective assignment
- **Ways to generate “shared savings”:**
 - Lower spending growth
 - Increase coding faster than the coding adjustment applied to all ACOs
- **Shared savings:**
 - First year evaluation: 1 percent to 2 percent reduction—relative to fee-for-service (FFS) Medicare—before shared savings and approximately 1 percent after shared savings payments (NORC at the University of Chicago 2018)
 - Second year evaluation: The evaluation compared the NextGen model against all other FFS Medicare (including MSSP ACOs) and

found no net savings, perhaps in part due to MSSP savings (NORC at the University of Chicago 2020)

2019 onward: New MSSP model (MSSP is a permanent program)

- **Population:** Total MSSP population 10.9 million beneficiaries in 518 ACOs in mid-2019
- **Key design features:**
 - Benchmarks are a blend of historical and regional spending, and benchmark growth is a blend of national and regional growth
 - Asymmetric risk and rewards favor ACOs
 - Allows HCC coding to increase benchmarks up to 3 percent; unlike Medicare Advantage and NextGen, there will be no across-the-board coding adjustment
 - Annual choice of retrospective or prospective assignment
- **Ways to generate “shared savings”:**
 - Lower spending growth
 - Begin with spending levels lower than others in the market
 - Improve patient mix by changing choice of prospective or retrospective assignment from one year to the next
 - More complete coding
 - Random variation rewards are larger than penalties; therefore, expected shared savings due to random variation is positive, but providers must take risk or have a partner take risk
 - Use wellness visits to maintain assignment of beneficiaries with low utilization
 - Adjust which national provider identifiers bill to ACO taxpayer identification numbers to improve patient selection ■

Savings from commercial ACOs may be difficult to replicate in Medicare ACOs

Blue Cross Blue Shield (BCBS) of Massachusetts instituted a two-sided population-based global budget (or accountable care organization (ACO)) contract, called the Alternative Quality Contract (AQC), for some of its commercial enrollees. The AQC was launched in 2009 with provider organizations that collectively cared for about 20 percent of BCBS's HMO members; by 2013, 85 percent of HMO members and providers in the BCBS network had entered the AQC. HMO enrollees select a primary care physician (who controls referrals to specialists); HMO enrollees are then assigned to that primary care physician's ACO. By 2016, the program had experienced lower growth in spending on medical claims for HMO enrollees relative to a comparison group of HMO enrollees across eight northeastern states. By the eighth year of the contract, growth in medical spending for AQC members relative to the comparison group was reduced by an average of 11.7 percent for enrollees in organizations that entered in 2009, 11.9 percent for those entering in 2010, 6.9 percent for those entering in 2011, and 2.3 percent for those entering in 2012 (Song et al. 2019). These

savings are computed before incentive payments to providers, which were larger in the initial years of the program than in the later years. Therefore, net savings were modest. On net, however, Song and colleagues estimated that, using unadjusted averages weighted by enrollment, reductions in medical claims relative to the comparison group were about 3 percent larger than incentive payments across the different ACO cohorts (Song 2020).

Following are the key findings from the AQC evaluation:

- The AQC was not associated with a reduction in inpatient services.
- The AQC was associated with a reduction in “laboratory testing, certain imaging tests, and emergency department visits.”
- The AQC was associated with patients using lower priced sites of care, with approximately 29 percent

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will be shared among the whole organization. Finally, even if a hospital has an incentive to reduce volume, the hospital administrators may be reluctant to make the difficult decisions to reduce the size of their organization. In general, reducing an organization's growth is, by nature, counterintuitive and may not be rewarded by the hospital's board.

While historically, ACOs in one-sided models received only 50 percent of shared savings, CMS has moved toward giving hospitals in ACOs larger incentives to reduce hospital volume. Under two-sided models, shared savings rates rose to 75 percent in the enhanced MSSP model, 80 percent in the Next Generation (NextGen) model, and are proposed to go up to 100 percent shared savings in the Direct Contracting model. To the extent that the problem is a lack of institutional incentive, 100 percent shared savings could help solve the problem.

In addition to institutional incentive issues, the hospital's culture may still be influenced by payments for non-ACO Medicare beneficiaries and commercial patients for whom the hospital receives FFS payments. One notable exception is Maryland, where hospitals have had an all-payer global budget since 2014. This payment model reduces the issue of mixed incentives. However, a recent analysis of Maryland's hospital global budget model suggests that although inpatient use was reduced, it was not clear that net Medicare spending was reduced (Haber et al. 2018, Roberts et al. 2018). In addition, Maryland is unique in that the level of Medicare payments under the global budget is far higher than what Medicare payments would have been under traditional FFS rates. Expanding the Maryland model to other states would be difficult, and it is not clear that overall spending would decline, given the high level of spending in Maryland and the lack of clear findings on changes in Maryland's overall Medicare spending.

Savings from commercial ACOs may be difficult to replicate in Medicare ACOs (cont.)

of savings resulting from using lower priced services rather than fewer services.

- For most ACO cohorts, the savings from reduced service use began to exceed the incentive payments provided to the ACO in the later years.
- Quality of care process measures improved as did outcome measures for hypertension and diabetics' control of glycated hemoglobin.
- A study of differences in AQC performance among lower and higher socioeconomic status groups found: "Quality improved for all enrollees in the Alternative Quality Contract after their provider organizations entered the contract. Process measures improved 1.2 percentage points per year more among enrollees in areas with lower socioeconomic status than among those in areas with higher socioeconomic status. Outcome measure improvement was no different between the subgroups; neither were changes in spending" (Song et al. 2017).

While the results from the AQC are promising, Song and colleagues warned that they may not be generalizable for other ACO arrangements such as Medicare because 29 percent of the AQC savings in early years resulted from using lower cost providers (a price effect) rather than using fewer services (a quantity effect). For example, savings could occur when volume shifts from a higher priced hospital to a lower priced hospital. Similar savings may be more difficult to achieve in Medicare in part because Medicare sets prices administratively. In addition, some have noted that the model is more easily implemented with an HMO population than in more open coverage arrangements, such as preferred provider organizations (PPOs) or Medicare ACOs. In 2016, the AQC expanded to include Massachusetts's BCBS PPO members, and providers have continued to accept two-sided risk for both HMO and PPO members under these contracts. A formal evaluation of results in the PPO context, similar to the evaluation conducted on the HMO model, is under way. ■

Increasing specialist engagement with ACOs

Some stakeholders contend that ACOs need to meaningfully engage specialists in efforts to practice conservatively. Several factors can influence specialists' participation in ACOs, such as the potential to increase their referrals from the ACO's primary care physicians, to share in savings if the ACO reduces spending below its benchmark, and to receive a 5 percent incentive payment from Medicare if the ACO qualifies as an advanced alternative payment model (A-APM) (clinicians with substantial participation in an A-APM receive a payment worth 5 percent of their professional services payments in a lump sum from 2019 through 2024).²

ACOs might want to include specialists as participating physicians because, through incentives, they can influence specialists to practice conservatively and avoid unnecessary services. However, ACOs may not see a need to include specialists because beneficiaries are

mainly assigned to ACOs based on their primary care visits with primary care clinicians. Even if specialists do not participate in an ACO, the ACO can still influence specialists' practice patterns if the ACO's primary care physicians influence referrals to specialists.

Interviews with ACO leaders and focus groups with physicians provide insights into whether ACOs seek to include specialists and how these organizations manage the use of specialty services. These findings come from two sources: (1) interviews that Commission staff conducted in 2018 with leaders of 17 ACOs in 3 states that were participating in the MSSP and NextGen programs and (2) focus groups conducted by Commission staff in 2019 with physicians in markets that have Medicare ACOs.³

Among the ACOs we interviewed, the share of participating specialists varied widely. ACOs led by primary care physician groups may be more selective about their participating physicians than other ACOs and

may not include any specialists, but many of the health system–affiliated ACOs (and one led by a multispecialty group practice) include more specialists than primary care physicians. Health system–affiliated ACOs tend to include all their employed physicians in their organization, which might explain why these ACOs have more specialists than primary care physicians. ACOs that include specialists told us that participating specialists may be less aware than primary care physicians that they are part of an ACO. According to the physician focus groups we conducted, specialists who participate in an ACO may or may not receive a bonus when their ACO produces shared savings. Some specialists felt frustrated that they were not financially rewarded when their ACO reduced spending.

The ACOs interviewed said they use various approaches to manage referrals to specialists. One technique is to encourage primary care clinicians to refer patients to lower cost specialists. For example, one ACO gives its primary care physicians data on how specialists are ranked based on their use of services. According to ACOs, when specialists know that information on their cost and use of services will be shared with primary care clinicians, it gives specialists a strong incentive to change their behavior. Another tool to reduce the cost of specialty care is to give specialists information about their service use (e.g., the number of tests, procedures, and follow-up visits).

Our analysis of physician participation in ACOs found that the share of specialists participating in MSSP and NextGen ACOs in 2018 was similar to the share of specialists among all physicians participating in Medicare. Of physicians participating in MSSP ACOs and NextGen ACOs, specialists accounted for 63 percent and 60 percent, respectively. By comparison, in 2018, 64 percent of all physicians participating in Medicare were specialists. The share of specialists is generally higher in hospital-affiliated ACOs than physician-led ACOs. Among MSSP ACOs in 2018, 65 percent of physicians in hospital-affiliated ACOs were specialists, compared with 50 percent of physicians in physician-led ACOs. The gap is larger among NextGen ACOs: In 2018, in hospital-affiliated ACOs, 63 percent of physicians were specialists, compared with 36 percent in physician-led ACOs. One explanation for the higher share of specialists in hospital-affiliated ACOs could be that these types of ACOs tend to include all of a hospital's employed physicians.

To explore whether MSSP ACOs that earn shared savings share the savings with specialists, we looked at public

websites for a sample of 200 MSSP ACOs from the 2018 performance year. Of those ACOs, 69 (35 percent) had easily searchable websites that listed how they distributed shared savings. On average, those ACOs distributed 58 percent of their savings to providers, although the share distributed to providers varied widely. The remaining ACOs' shared savings went to administration and infrastructure. Only eight ACOs reported how they distributed shared savings among provider types. Six ACOs distributed 60 percent of their shared savings to providers, all of which went to primary care clinicians. One ACO reported that, of the 75 percent of shared savings distributed to providers, 60 percent went to physicians (whether the physicians were primary care physicians or specialists was not specified) and 40 percent went to hospitals. Another ACO reported that it distributed 70 percent of its shared savings to providers; 60 percent went to primary care physicians, 35 percent to specialists, and 5 percent to hospitals.

Although few studies examine the impact of specialists' participation in ACOs on volume and spending, one study found that MSSP ACOs with a high share of primary care physicians were more likely to reduce the number of visits with specialists than ACOs with a high share of specialists (Barnett and McWilliams 2018). These results are consistent with the authors' hypothesis that ACOs with more primary care physicians have a stronger incentive than other ACOs to reduce the use of specialty care because they do not lose FFS revenue when they provide less specialty care. Another study found that independent primary care group ACOs in the MSSP reduced total Medicare spending but independent multispecialty group ACOs did not (McWilliams et al. 2016a, McWilliams et al. 2016b).

Challenges in bringing Part D drug spending into ACO benchmarks

Medicare ACOs are held accountable only for the cost of Part A and Part B services. Notably absent are the costs of outpatient prescription drug spending, even though ACO clinicians directly prescribe medications for their patients.

Despite the important role pharmaceuticals play in treating many conditions, Part D, Medicare's program for outpatient drugs, operates separately from Part A and Part B. Not all beneficiaries in FFS Medicare enroll in Part D, but those who do are enrolled in one of the typically dozens of privately run stand-alone prescription drug plans (PDPs) that operate in their geographic region, and they can change their enrollment decision annually.

Plan sponsors that operate PDPs usually have no direct relationship with prescribers. PDPs must provide access to a broad set of drugs most commonly needed by enrollees as recognized in national treatment guidelines, but the specific medicines included on each plan's formulary or drugs that are assigned preferred cost sharing vary. Part D's payment and enrollment systems are distinct from those of FFS Medicare, and although PDP sponsors bear financial risk for prescription drug spending, they are not at risk for medical spending.

Unlike Medicare ACOs, formal integration of medical and drug spending is common among ACOs with commercial contracts. According to one national survey of ACO executives conducted between 2012 and 2014, 76 percent of ACOs that had at least one commercial contract were held responsible for drug costs in their largest contract (Colla et al. 2015).

Approaches toward integrating medical and drug services

Increased alignment of ACOs and Part D has the potential to create a more comprehensive approach to improving the efficiency of care delivery. However, carrying out such integration would be complex. For example, CMS could include Part D spending in ACO benchmarks without formal collaboration between ACOs and PDPs. Alternatively, CMS could encourage Part D plans to contract with ACOs to reduce drug spending. Both approaches are challenging.

Approach 1: Add Part D spending to the ACO benchmark

Under the first approach, CMS would use past Part D claims for each ACO assignee to project a drug spending benchmark to add to the ACO's Part A and Part B benchmark. ACOs would have the opportunity to share savings if actual spending for combined medical and drug benefits were lower than the projected benchmark. The approach has advantages, notably giving ACOs stronger incentives to evaluate prescription use and spending in their decision-making. However, not every FFS beneficiary chooses to enroll in Part D, so CMS would not have drug claims for all ACO assignees to add to benchmarks. Because Medicare already holds PDPs accountable for some Part D spending through capitated payments, this approach of adding drug spending to the ACO benchmark would separately compensate two sets of providers (PDPs and ACOs) for bearing the same risk. In addition, projecting Part D benchmarks would be difficult. The agency would need to develop methods to attribute

rebates and discounts to individual beneficiaries to reflect their historical net drug spending, and then project forward expected future rebates. A further problem is that this model would not integrate ACO and PDP providers' decision-making regarding formularies and benefit design.

Approach 2: Encourage ACOs to contract with Part D plans

Under a second approach, CMS would encourage and support private collaboration between ACOs and PDPs. In recent years, Medicare ACOs have built partnerships with a number of entities related to prescription drug spending, including PDP sponsors such as CVS Caremark and pharmacy chains such as Walgreens. While they have had mixed success, the general goals of these collaborations include filling gaps in care (e.g., administering flu shots), sharing data, and helping to set targets for and monitor prescription drug adherence. In 2014, SilverScript, CVS Caremark's (now CVS Health) brand of stand-alone Part D plans, announced that it was entering into a shared savings arrangement with several ACOs to lower Part D drug spending for its enrollees (Avalere Health 2014).⁴ The arrangement provided ACO partners with financial incentives to reduce drug spending through one-sided shared savings for Part D costs. According to the announcement, SilverScript would benefit only from lower drug spending, not from lower FFS spending, even if those savings were a consequence of improved medication adherence. SilverScript's collaborations with ACOs appear to have continued at least through 2017 (Brennan 2017). CVS Caremark continues to promote its potential role in improving health outcomes and lowering costs by leveraging its data and the ability to screen for evidence of nonadherence or safety concerns. CVS Caremark's enthusiasm for ACO collaborations suggests that SilverScript reaped some benefits through these partnerships. However, there are currently no published studies on how effective SilverScript's ACO collaboration has been. To the extent that this model works, there may be little for CMS to do other than facilitate the exchange of information.

Potential for unwarranted shared savings from patient selection

Because Medicare savings from MSSP ACOs have been modest thus far (although still greater than most care coordination demonstrations), those savings need to be protected from unwarranted shared savings payments to

Beneficiary assignment in the MSSP

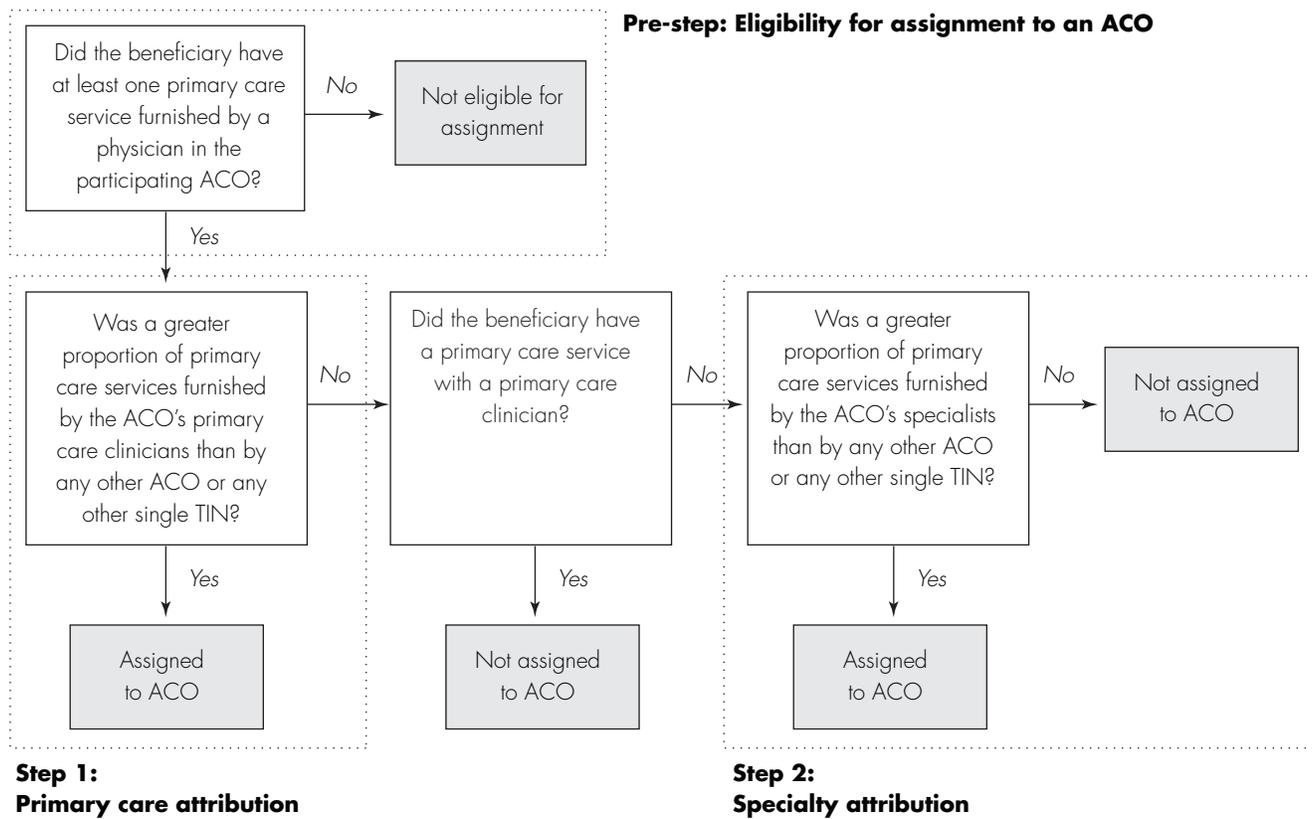
In the Medicare Shared Savings Program (MSSP), beneficiaries are assigned to MSSP accountable care organizations (ACOs) in a multistep process, as shown in Figure 2-1.

In general, the claims history of beneficiaries who are eligible for ACO assignment is reviewed. Beneficiaries are eligible for assignment if they meet certain criteria, including having been in Part A and Part B of Medicare

(continued next page)

FIGURE 2-1

ACO assignment in the Medicare Shared Savings Program



Note: ACO (accountable care organization), TIN (taxpayer identification number). According to regulations found in 42 CFR §425.20, an ACO is identified by a Medicare-enrolled TIN that alone or together with one or more other ACO participants constitutes the ACO. The proportion of primary care services is measured by Medicare-allowed charges. Specialty attribution occurs only for beneficiaries who did not have a primary care service with a primary care clinician but did have a service with an ACO specialist.

Source: Centers for Medicare & Medicaid Services. Financial and beneficiary assignment specifications Versions 3-6. <https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/sharedsavingsprogram/program-guidance-and-specifications.html>.

ACOs. There will always be some unwarranted shared savings payments due to random variation, but there could also be unwarranted shared savings payments due to intentional favorable patient selection. For example, if high-cost beneficiaries are disproportionately shifted

out of an ACO in the performance year—but not in the baseline years—performance-year spending will decrease in relation to the ACO's benchmark, which could result in unwarranted shared savings.

Beneficiary assignment in the MSSP (cont.)

for 12 months (so that they have a claims history) and not having been enrolled in Medicare Advantage during that time.

To be assigned to an MSSP ACO, a beneficiary must have at least one primary care service furnished by a physician in the participating ACO. Services are designated primary care services by regulation and must be furnished by an ACO physician in certain

specialties (e.g., family practice, internal medicine, cardiology, endocrinology, gynecology, nephrology, psychiatry, and oncology) but not by a nonphysician. Visits with primary care physicians take precedence in assignment. (More detail on definitions of primary care services and ACO physicians and nonphysicians can be found in online-only Appendix 6-A to the Commission's June 2019 report, available at <http://www.medpac.gov>.) ■

Under Medicare billing rules, providers bill Medicare using taxpayer identification numbers (TINs). TINs can be used to identify the source of Medicare's billings; CMS uses TINs to identify the billings that are associated with each ACO. However, TINs are not unique to each clinician. Rather, a single TIN can comprise a sole physician in one office or a multistate integrated delivery system with many clinicians. Favorable selection of physicians could occur if an ACO stopped providers with high-cost beneficiaries from billing under the ACO's TINs and had those providers bill under a non-ACO TIN. Selection could also occur if an ACO removed just a portion of a high-cost provider's patients from the ACO. The provider could bill for patients with low spending under the ACO's TINs and bill for patients with higher spending relative to their risk score under a non-ACO TIN. While we do not have evidence of widespread patient selection at this time, we did find evidence that ACOs with large shared savings payments benefited from disproportionately high-cost patients being assigned out of their ACO.

An alternative to removing high-cost patients from the ACO would be to retain low-cost patients in the ACO. ACOs appear to achieve this objective through the use of wellness visits. Whether the wellness visits are designed to retain low-cost patients, to improve quality metrics, or to better manage care, the data suggest they result in ACOs achieving a favorable selection of patients, at least when retrospective assignment is used.

ACOs appear to have generated savings for the Medicare program. However, a future risk of provider and patient selection remains. This type of selection can become more problematic if CMS does not address vulnerabilities in the

current system for assigning physicians and beneficiaries to ACOs. Even if a minority of ACOs engage in selection activities, it could diminish the program's ability to generate Medicare program savings in total. For that reason, we investigate how to make the ACO assignment mechanism less susceptible to mismatches between providers' patient spending history used to set spending benchmarks and providers' actual patient spending used to compute ACO spending in performance years.

Use of TINs for assignment in the MSSP raises concerns

To compute MSSP shared savings and losses, CMS compares actual spending for beneficiaries assigned to an ACO with a benchmark that estimates what spending was expected to be for those beneficiaries. To protect both the Medicare program and ACO participants, ACO benchmarks should be computed in a way that most accurately reflects the health care needs of the beneficiaries assigned to an ACO.

Beneficiaries are assigned to an ACO based on a list of TINs that an ACO annually submits to CMS; this collection of TINs represents the clinicians who will be the ACO's participants for the performance year.⁵ As noted above, a single TIN can range from a sole physician in one office to a multistate integrated delivery system with many clinicians (each individual clinician does have a unique national provider identifier (NPI)). To determine the beneficiaries assigned to an ACO, CMS follows a multistep process described in the text box on beneficiary assignment in the MSSP. In short, claims for each beneficiary are grouped by TINs, and if the ACO (defined as a collection

of TINs) provides the plurality of primary care for the beneficiary compared with any other ACO or individual TIN, the beneficiary is assigned to that ACO.

CMS computes an ACO's spending in the baseline years (i.e., the three years before the ACO's first performance year of its MSSP contract) and combines them to create the historical portion of the benchmark.⁶ That historical spending and regional spending are then blended and trended to the performance year to compute the benchmark against which spending in the performance year will be compared. To establish the historical portion of an ACO's benchmark, CMS computes an ACO's historical spending based on the beneficiaries who would have been assigned to the ACO in the ACO's baseline years. Assignment in the baseline years uses the same list of TINs submitted by the ACO for the performance year and uses the same claims-based multistep assignment process shown in Figure 2-1 (p. 26).⁷ (Between baseline and performance years, assigned beneficiaries are not fixed, but TINs are fixed.)

However, the NPIs associated with an ACO's TINs are not fixed—creating a potential mismatch in the calculation of ACO benchmarks. Mismatches of ACO TIN clinicians can occur when NPIs are removed from a TIN, added to a TIN, or associated with more than one TIN—including TINs in a different ACO and TINs outside of an ACO.⁸ We examined the removal of individual primary care physicians (PCPs) (as specified by their NPIs) from TINs participating in the same ACO in 2016 and 2017.⁹ Among the nearly 103,000 TIN–NPI combinations of PCPs in 2016, 7 percent were removed from ACOs in 2017. TIN-level historical benchmarks did not capture the removal of PCPs from these TINs.¹⁰ We also examined the PCP NPIs added to TINs participating in the same ACO in 2016 and 2017. Among TIN–NPI combinations of PCPs in the MSSP in 2017, 29 percent were added to ACO TINs from the previous year. These PCPs were not participants under any of the ACOs' other TINs in 2016. The NPI removals from and additions to TINs capture only the mismatch in TIN clinicians between 2016 and 2017. There was likely a greater mismatch of TIN clinicians between ACOs' performance year and baseline years, which would have spanned at least four years (the performance year and three baseline years). If ACOs manipulate these mismatches to increase the likelihood of receiving shared savings payments without lowering their growth in spending (or avoiding shared losses when increases in spending growth occur), the result creates vulnerabilities in the MSSP.

Three vulnerabilities

The reliance on TINs to compute the benchmark against which an ACO's financial performance is measured creates three vulnerabilities that could result in unwarranted shared savings.

Clinicians removed from TINs One vulnerability is that an ACO's historical benchmark (based on TINs) is not adjusted when clinicians (and their patients) are removed from its TINs in later years. An ACO could unjustifiably receive “shared savings” by removing high-cost providers from TINs in the ACO. The beneficiaries who would have been assigned to those high-cost providers would remain in an ACO's benchmark but would be removed from the ACO's performance-year spending. The illustration in Figure 2-2 shows this vulnerability in hypothetical ACOs. Before the performance year, ACO₂ removes NPI₅, who has beneficiaries with relatively high spending, from participant TIN_D. The high cost of NPI₅ continues to be in ACO₂'s baseline, which is used to calculate the ACO's benchmark. However, the ACO is not liable for NPI₅ in its performance year, leading to unwarranted shared savings.

The hypothetical example in Figure 2-2 illustrates how the assignment algorithm is vulnerable to shifting the TINs under which NPIs bill. See the text box on anomalous results using TINs (pp. 30–31) for an example of how the current assignment mechanism using TINs could have contributed to some of the anomalous shared savings payments that have been made.

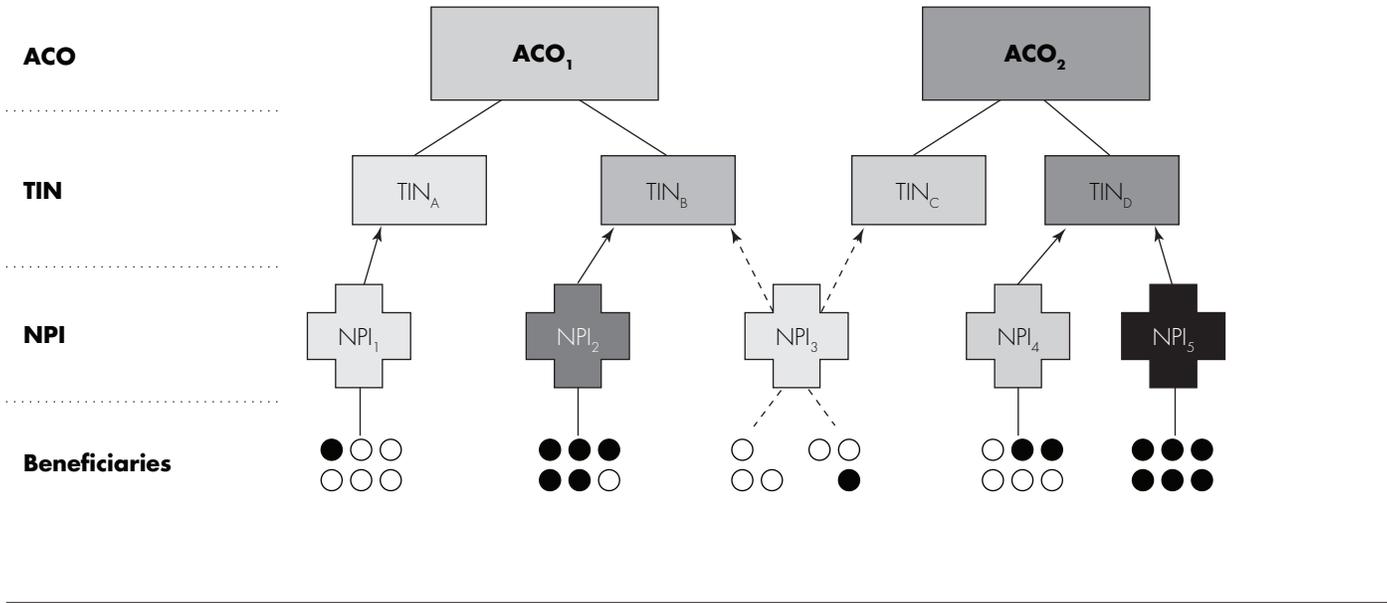
Clinicians added to TINs A second vulnerability resulting from TIN-level benchmarks can occur when providers are added to TINs. In this case, the benchmark may not reflect the historical claims of those providers. In particular, primary care physicians could be added under TINs with which they have no historical claims data (that is, in the baseline years, they billed under a different TIN). An ACO could receive unwarranted shared savings by adding low-cost providers who previously billed Medicare using TINs outside of the ACO's current participant list. The low-cost providers' claims would not be included in the ACO's benchmark calculation but would be included in the ACO's performance-year spending.

Billing high-cost patients under non-ACO TINs A third vulnerability resulting from the use of TIN-level benchmarks is that providers can opt to bill high-cost patients under TINs outside of the ACO's participant list, through referrals or through directly billing to a separate

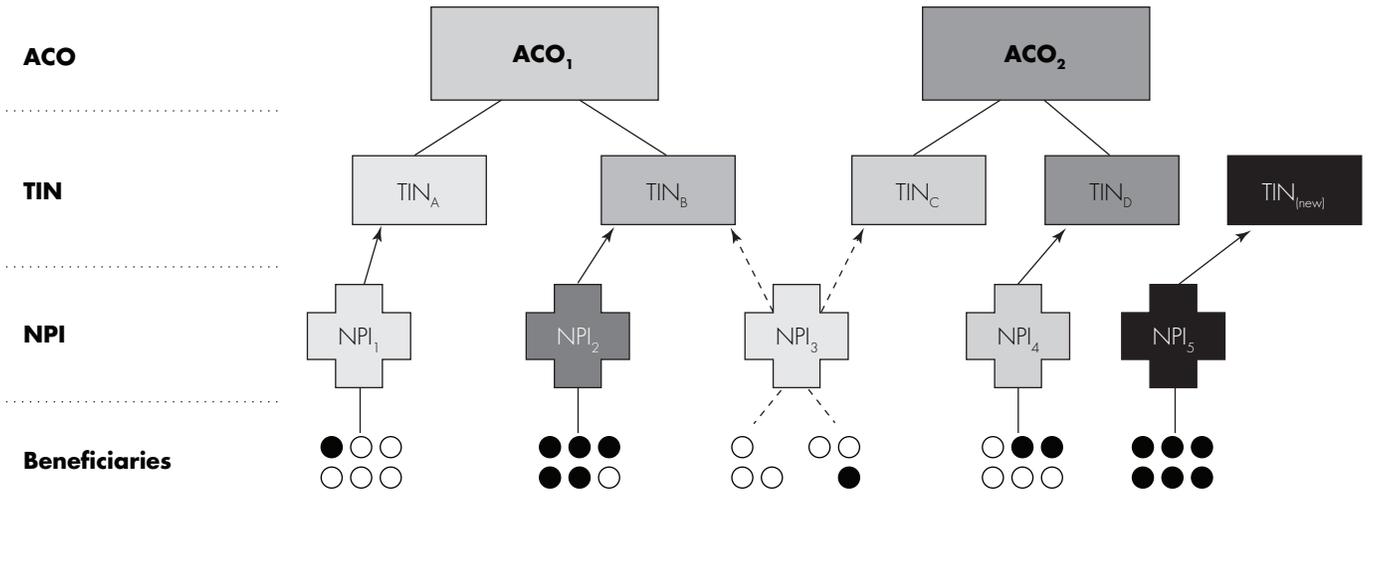
FIGURE 2-2

Illustrative example of selection resulting from changing the TIN under which an NPI bills

Baseline ACO-TIN configuration used for ACO benchmarks



Performance-year ACO-TIN configuration



Note: ACO (accountable care organization), NPI (national provider identifier), TIN (taxpayer identification number). Each dot represents 1,000 beneficiaries. Black dots represent beneficiaries with relatively high spending; white dots represent relatively low-spending beneficiaries. Lines connect beneficiaries to the NPIs through which their ACO assignment is determined.

Source: MedPAC analysis of Medicare Shared Savings Program assignment algorithm.

Example of anomalous results using identification of ACO participants at the level of taxpayer identification numbers

To illustrate how the movement of providers' national provider identifiers (NPIs) in and out of an accountable care organization's (ACO's) taxpayer identification numbers (TINs) can be associated with anomalous results, we look at an ACO that had large savings relative to its benchmarks in 2016, 2017, and 2018 (Table 2-2). This ACO also exhibited a great deal of volatility in its roster of participating clinicians and the risk profile of its beneficiaries. There is a notable change

in the number and mix of clinicians in the ACO between 2015 and 2016. In those years, the number of primary care physicians declined from 265 to 154, and the number of specialists declined much more, from 565 to 103. This dramatic change in clinicians coincided with the renewal of the ACO's Medicare Shared Savings Program (MSSP) contract. The new contract recalculated the ACO's benchmarks based on beneficiaries assigned to the ACO's TINs from 2013 through 2015.

(continued next page)

**TABLE
2-2**

Example of an ACO with volatile enrollment and clinician participation

	2015	2016	2017	2018
PCPs	265	154	187	240
Specialists	565	103	125	154
Nonphysician providers	89	81	244	294
Assigned beneficiaries	8,597	6,051	5,742	5,451
Risk score	1.35	1.10	1.07	1.06
Benchmark per capita	\$19,859	\$20,720	\$23,181	\$22,929
Spending	\$22,987	\$15,836	\$16,262	\$15,800
Difference	-\$3,127	\$4,884	\$6,919	\$7,130

Note: ACO (accountable care organization), PCP (primary care physician). Shared savings are calculated as a percentage of the difference between the ACO's benchmark and spending. Components may not sum to totals due to rounding.

Source: MedPAC analysis of CMS Medicare Shared Savings public use files.

TIN. At least one ACO reported creating a separate TIN for physicians serving certain high-cost patients to avoid having those patients assigned to the ACO (RAND Corporation 2018). Under these scenarios, more high-cost beneficiaries would be assigned to an ACO's historical benchmark—before providers billed high-cost beneficiaries outside the ACO's TINs—compared with the ACO's performance year.

Use of TIN–NPI combinations for assignment has shortcomings

In the NextGen and Direct Contracting demonstrations, providers are identified at the TIN–NPI level rather than at the TIN level. That approach avoids the problem of the TIN-based benchmarks staying constant even if clinicians are removed. However, benchmarks based on TIN–NPI combinations remain vulnerable to inaccuracies if PCPs are added to ACO TINs. In addition, unlike TIN-based

Example of anomalous results using identification of ACO participants at the level of taxpayer identification numbers (cont.)

At the same time, the number of assigned beneficiaries changed as well, with a 30 percent drop from 2015 to 2016. Many of those beneficiaries had likely been assigned to the ACO through the providers who left. This drop was accompanied by a change in the average risk score for the beneficiaries in the ACO. Between 2015 and 2016, the average risk score dropped from 1.35 to 1.10 and then leveled off in 2017 and 2018.

The 2016 drop in risk score did not correspond with a decrease in the benchmark because the historical spending of beneficiaries assigned to the ACOs TINs did not decrease. The remaining physicians belonged

to TINs with historically high spending and risk scores (from 2013 to 2015) relative to the ACO's performance years (from 2016 to 2018). As a result, the ACO's spending compared with its benchmark switched from being substantially greater than the benchmark in 2015 to being substantially below the benchmark in 2016, 2017, and 2018 (\$4,884 per capita, \$6,919 per capita, and \$7,130 per capita, respectively). After collecting over \$35 million in shared savings from 2016 to 2018, this ACO discontinued its MSSP participation in 2019—when benchmarks would have been based on historical spending from 2016 to 2018. ■

benchmarks, TIN–NPI combination benchmarking would be vulnerable to unwarranted shared savings when an ACO moves an NPI between two of its TINs. In this scenario, an NPI could have spending under one of the ACO's TINs in the baseline years, but that spending would not be captured in the benchmark if the NPI began billing under a new TIN within the same ACO during the performance year. Under TIN–NPI benchmarking, an ACO could unjustifiably receive shared savings by moving low-cost providers between two of its TINs. The low-cost providers would not be in the ACO's benchmark but would be included in the ACO's performance year spending. In the NextGen demonstration, the substantial changing of TIN–NPI combinations between the first and second year of the program prompted methodological changes to how CMS's contractor evaluated the second year of the program. To evaluate quality and spending relative to a comparison group, the evaluator of the NextGen ACO demonstration in its most recent evaluation used NPI-only assignment to create a better match between baseline-year beneficiaries and an ACO's performance-year beneficiaries (NORC at the University of Chicago 2020).

Opportunities to select healthy patients

The savings achieved by ACOs for the program thus far (1 percent or 2 percent) could be vulnerable if ACOs can engage in patient selection that is not reflected in their

benchmarks and subsequently leads to unwarranted shared savings payments. This benchmarking problem could result from having low-cost patients enter into the ACO without changing the benchmark or having high-cost patients exit the ACO without changing the benchmark. We have not seen evidence of pervasive selection thus far, but we are concerned about the incentives as ACO experience matures and shared savings become more reliant on risk adjustment and regional spending.¹¹

One strategy is to use annual wellness visits (AWVs) for assigning patients to an ACO. Patients who have AWVs are generally low cost in the year of the visit. This strategy is easier to pursue under a system of retrospective assignment rather than prospective assignment. Retrospective assignment is technically known as preliminary prospective assignment with retrospective reconciliation. It is also sometimes referred to as concurrent assignment. In its MSSP assignment specifications, CMS most commonly uses the term *retrospective assignment*.

A review of retrospective and prospective assignment

As described earlier, beneficiaries are assigned to an ACO based on which ACO provided the plurality of their qualifying primary care services. Assignment can be based

Retrospective and prospective assignment of beneficiaries to accountable care organizations

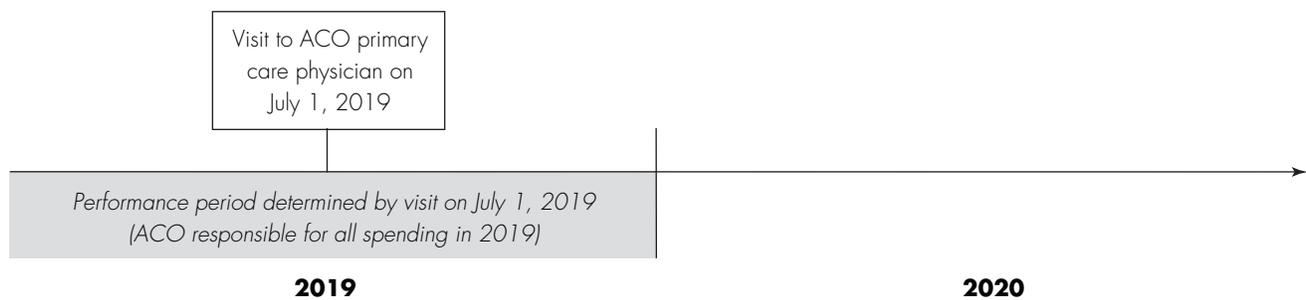
To illustrate the difference between prospective and retrospective assignment, the first two figures show an example of a patient assigned to an accountable care organization (ACO) based on a single primary care visit to an ACO primary care physician on July 1, 2019, under first retrospective and then prospective assignment. As Figure 2-3 shows, under retrospective assignment, the ACO would be responsible for all spending that occurs in 2019, including the six months before the July 1 visit and the six months after the visit, and could include care from non-ACO clinicians in 2019.

Figure 2-4, by contrast, uses the same example of a patient assigned to an ACO based on a single primary care visit to an ACO primary care physician on July 1, 2019, to show that under prospective assignment, the ACO would be responsible for all spending in 2020 (for all applicable months that the beneficiary was in fee-for-service Medicare). All of that care would occur after seeing an ACO clinician, and it could include care from non-ACO clinicians in 2020.

(continued next page)

**FIGURE
2-3**

Performance period under retrospective assignment



Note: ACO (accountable care organization).

on as little as one primary care visit with a physician. Different ACO programs have different rules about which primary care services determine assignment. Most ACOs in the MSSP have used retrospective assignment. Under this approach, a beneficiary is preliminarily assigned to an ACO based on primary care visits during the prior year (e.g., 2018), but the final assignment is determined retrospectively by examining the plurality of primary care visits during the performance year (e.g., 2019). The list of preliminarily assigned beneficiaries will differ from the list of finally assigned beneficiaries to the extent that patients switch clinicians over the two-year period. The difference in assignment lists can be substantial. For example, in

2017, 21 percent of beneficiaries assigned to an ACO preliminarily were not assigned at the end of the year, and 27 percent of those assigned finally were not on the preliminary assignment list.¹²

Under prospective assignment (as used in the NextGen ACO model), beneficiaries' final assignment is made based on their primary care visits during the fiscal year before the performance year.¹³ In other words, under prospective assignment, ACOs know with almost certainty which beneficiaries they are responsible for at the start of the year. By contrast, in retrospective assignment, an ACO ends up responsible for many beneficiaries whom the ACO will not know it is responsible for until well into

Retrospective and prospective assignment of beneficiaries to accountable care organizations (cont.)

If patients see the same primary care physician over multiple years, prospective and retrospective assignment will not differ. However, which assignment mechanism is used has substantial assignment implications for beneficiaries who switch primary care providers from one year to the next. On the one hand, one could argue that it makes sense in the example for the ACO under retrospective assignment to have responsibility for 2019 spending because an ACO physician saw the patient in 2019 and would have some influence over his or her care in the last half of the year. On the other hand, the patient could have had high

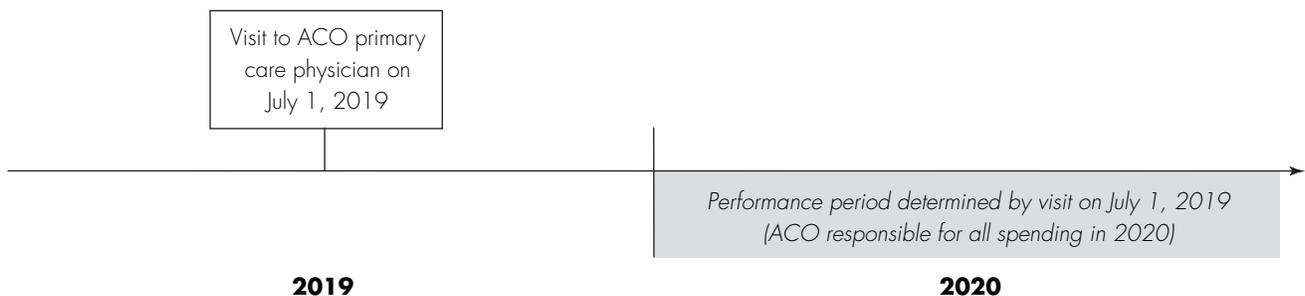
spending before July 1, 2019, and it would be unfair for the ACO to be accountable for spending that occurred before ever seeing the patient.

Under prospective assignment, in which the ACO is responsible for 2020 spending, one could argue that the ACO should have at least a small influence over 2020 spending because it will occur after an ACO physician has seen the patient, and the ACO will receive updates on the beneficiary's health status and medical services received in 2020, even if the beneficiary switches to a physician outside of the ACO.

(continued next page)

**FIGURE
2-4**

Performance period under prospective assignment



Note: ACO (accountable care organization).

the performance year, and the ACO will lose a share of patients it thought it would be responsible for, but is not. The text box on retrospective and prospective assignment (pp. 32–35) illustrates the mechanics of these approaches.

Opportunities to use wellness visits to retain low-spending beneficiaries in ACOs

While patient selection did not appear to have a significant net effect on shared savings in the initial years of the program, patient selection could represent a vulnerability for the ACO program going forward. We first consider

the potential for selection of low-spending beneficiaries in ACOs through AWVs. Currently, ACOs use AWVs more than traditional FFS, AWV patients at their initial AWV tend to have had lower historical spending than other patients, and AWVs have not resulted in Medicare savings. Second, we consider the possibilities for selection against high-spending beneficiaries. The selection of beneficiaries based on their spending patterns could result in unwarranted shared savings payments to ACOs.

Our June 2019 report explored ACOs' use of AWVs and described how AWVs could result in a favorable

Retrospective and prospective assignment of beneficiaries to accountable care organizations (cont.)

Under both retrospective and prospective assignment, the ACO of the physician who saw the patient in the prior year should receive updates on the patient's health status, up until three months after the patient starts to see another physician. In a hypothetical example shown in Figure 2-5, a beneficiary received a September 1, 2019, visit with a primary care provider (PCP) who participates in ACO 1. The patient then has a hospital admission in February 2020 followed by a primary care visit on July 1, 2020, with a different PCP, who participates in ACO 2. In this example, under prospective assignment, ACO 1 would have responsibility for the beneficiary's spending in 2020. Under retrospective assignment, ACO 2 would have

responsibility for the beneficiary's spending in 2020. In both cases, the performance year in question is 2020.

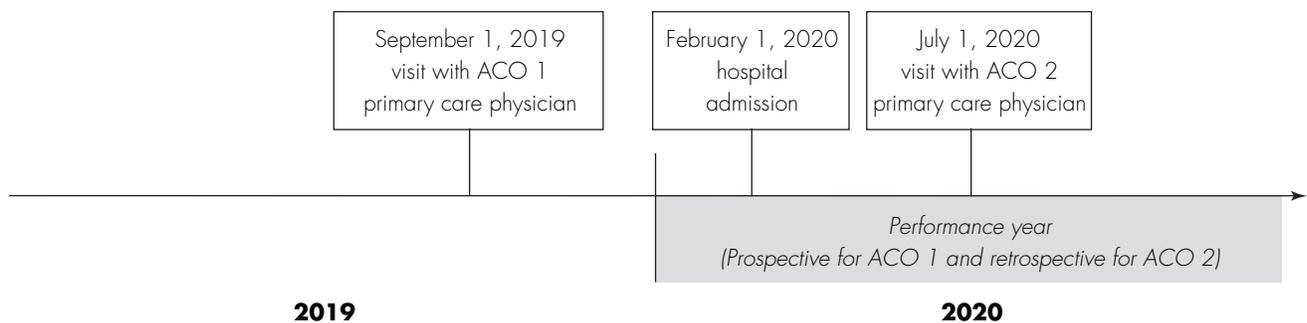
Given this illustrative example of the timing of physician visits, we contrast the Medicare Shared Savings Program's retrospective assignment and information flow with Next Generation ACOs' fully prospective assignment under this scenario (Table 2-3).

The assignment method used can make a difference in which ACO is responsible for a beneficiary's spending in a given year. Under prospective assignment, ACO 1 is responsible for Beneficiary A's spending in 2020; under retrospective assignment, ACO 2 is responsible.

(continued next page)

**FIGURE
2-5**

Assignment under retrospective and prospective assignment for Beneficiary A



Note: ACO (accountable care organization).

selection of patients. While ACOs' motivation for AWVs could be care coordination or improvements on MSSP quality metrics (e.g., to document counseling on smoking cessation or screening for clinical depression), they could also result in keeping relatively healthy beneficiaries assigned to the ACO and receiving higher risk scores from the health risk assessments performed during the wellness visit. In a study of motivations for AWVs, ACOs mentioned patient care needs, performance on quality metrics, assignment, revenue, and Medicare's

hierarchical condition category (HCC) coding of patients (Briggs et al. 2019). However, the study did not find any better performance on cost or quality among ACOs using AWVs as a care management strategy. In addition, the Commission has noted the use of health risk assessments—an essential element of AWVs—to increase HCC scores and has recommended that diagnoses stemming only from these services be excluded from risk score calculations both in FFS and in MA (Medicare Payment Advisory Commission 2016).

Retrospective and prospective assignment of beneficiaries to accountable care organizations (cont.)

There are advantages to prospective assignment. First, under prospective assignment, the ACO that receives information on the patient's health status and health care services at the start of the year will be the ACO responsible at the end of the year. This approach (which mirrors the Medicare Advantage approach) makes population health analytics easier (Table 2-3). Second, prospective assignment makes it easier to construct algorithms to work with other payment policies. For

example, to avoid paying twice for the same savings, CMS would want to know at the beginning of the year whether a patient is in an ACO and not allow that patient to be in a bundled payment initiative in the same year. Making this determination requires prospective assignment so that whether the patient is in an ACO is known with certainty. (An ACO could still initiate its own bundled payment initiative with physicians if it wanted.) ■

**TABLE
2-3**

Information flow under prospective and retrospective assignment

	Under prospective assignment (e.g., NextGen) (Beneficiary A assigned to ACO 1)	Under retrospective reconciliation (e.g., MSSP) (Beneficiary A assigned to ACO 2)
Early January 2020	ACO 1 is told it is responsible for all health care costs in 2020 for Beneficiary A.	ACO 2 receives information on patients it saw in 2019, but receives no information on Beneficiary A because it did not see the beneficiary in 2019.
January	ACO 1 is told about Beneficiary A's historical spending during 2019.	
February 1	If ACO 1 has a relationship with the hospital, the hospital lets ACO 1 know Beneficiary A was admitted.	
April	ACO 1 is told by CMS that Beneficiary A was admitted to the hospital.	
July 1	ACO 1 is initially unaware of the visit to a PCP in ACO 2.	ACO 2 knows that Beneficiary A was seen by one of its doctors and it may be responsible for all costs during 2020.
October	ACO 1 gets an updated report on all spending in the prior quarter including the visit to the PCP in ACO 2 on July 1.	ACO 2 is told by CMS that Beneficiary A may be assigned to it because ACO 2 has the most 2020 PCP-visit allowed charges. ACO 2 first learns about Beneficiary A's 2019 and 2020 spending.
January 2021	ACO 1 is held responsible for all Beneficiary A spending during 2020 (despite being assigned on the basis of a visit in September 2019).	ACO 2 is held responsible for all Beneficiary A spending during 2020 (including during the six months before having any information on the patient).

Note: NextGen (Next Generation), ACO (accountable care organization), MSSP (Medicare Shared Savings Program), PCP (primary care physician).

The possibility of AWVs resulting in patient selection is particularly concerning in light of patients' relative health status before receiving their initial AWV. We examined the historical risk scores of patients continuously assigned to the same ACO from 2014 to 2016 who had been eligible for ACO assignment since 2012. We compared patients who received their first AWV in 2015 with those who did not.¹⁴ Although both sets of patients were about the same average age (74 years in January 2015), the average risk score of patients who received their initial AWV was relatively lower before receiving the visit. In addition, patients with wellness visits (particularly in the second half of the year) tended to have relatively low spending in the year of the visit, even after adjusting for risk using HCC scores. This finding implies that beneficiaries who are relatively healthy (even adjusting for risk scores) may be more likely to receive wellness visits compared with beneficiaries who need more resource-intensive care.

Support for AWVs is rooted in the assumption that the visits are important elements of care coordination and early intervention that could lead to reduced future spending. However, a November 2019 study found that AWVs did not result in improvements in care or reductions in Medicare spending in FFS from 2008 to 2015 (Ganguli et al. 2019).

It is possible that some ACOs have leveraged AWVs to improve care coordination and patient outcomes. However, the limited evidence thus far suggests that AWVs have had no overall effect on appropriate screening rates, low-value screening rates, referrals for neuropsychiatric and functional issues, emergency department visit rates, or hospitalization rates (Ganguli et al. 2019). While some suggest that AWVs improve patient satisfaction, our beneficiary focus groups suggest that patients have not found AWVs useful for their own care needs. A number of beneficiaries noted the long list of questions that they were asked to answer. Many said they were given the questions in written form, or even online, to fill out before the visit. Some beneficiaries felt that most of the questions did not apply to them. Beneficiaries who spoke favorably of the AWV did not feel the AWV was personally useful to them but spoke of the visit's potential usefulness to high-risk beneficiaries (e.g., those with dementia, home safety issues, or food security issues).

The lack of evidence that AWVs result in Medicare savings exacerbates concerns about their future impact on patient selection and diagnostic coding. The modest savings that ACOs have achieved thus far may have

resulted from care management methods outside of the AWV (e.g., extended office hours) or from eliminating unnecessary care. If most ACOs continue to outpace non-ACO providers in their use of AWVs without any corresponding savings for Medicare or improvement in patient outcomes, the selection of patients through AWVs—even if unintentional—will be an overall vulnerability to the MSSP and could result in unwarranted shared savings.

Opportunities to select against high-spending beneficiaries in ACOs

As with opportunities to select low-spending beneficiaries, there is the potential for selection against high-spending beneficiaries. To determine this potential, we observed characteristics of high-spending beneficiaries that affected their assignment to ACOs and assessed ways the program could be vulnerable to selection against such beneficiaries.

As discussed in our June 2019 report, the assignment of beneficiaries to ACOs and the loss of their assignment often occurs because of changes in beneficiaries' health status; individuals who change health status tend to have rapidly increasing spending compared with those who are continuously assigned (Medicare Payment Advisory Commission 2019). Beneficiaries whose assignments are changed are more likely to have had a hospitalization and use post-acute care during the year their assignment changed. If assignment entry and exit were consistent in the baseline and performance years, such changes would not be an issue. However, if exit of high-spending beneficiaries increases in the performance year and the difference in spending among beneficiaries continuously assigned and those who lose assignment is large, it could improve an ACO's performance relative to its benchmark and lead to unwarranted shared savings.

Techniques to increase the exit of high-spending beneficiaries could include actions at the ACO level, such as moving clinicians with high-spending patients from the ACO to a different TIN, or actions at the PCP level, such as billing those patients under a TIN outside the ACO or counseling patients to seek care elsewhere (presumably from a colleague or other PCP providing care of a similar quality). We found that the shared savings of individual PCPs could be relatively high—providing a material incentive to adjust backroom operations to improve patient selection. We examined earned "shared savings" for each ACO and divided that bonus payment by the number of the ACO's participating PCPs. We found

that 50 ACOs had earned shared savings per PCP of over \$50,000. (The highest was over \$300,000.) Although these ACOs may have used some of the shared savings for ACO administrative costs or shared them with other clinicians, it appears that some ACOs could have had a material incentive to take actions to select against high-spending patients.

Use of NPI for assignment would improve benchmark validity and reduce unintended incentives

Basing benchmarks directly on the individual NPI claims data of an ACO's participating clinicians would be the most accurate method of validly capturing historical spending for purposes of calculating benchmarks and reducing undesirable incentives. Using NPIs' claims data would improve the comparability of beneficiaries assigned in baseline years to those assigned in performance years—reducing opportunities to manipulate shared savings. Because all of an NPI's applicable claims would be used for beneficiary assignment, providers who would be added to or removed from TINs would not affect NPI assignment. Similarly, NPI assignment would not be affected by providers who changed their TIN billing patterns for particular services or beneficiaries. Consequently, the potentially negative incentives associated with TIN-level assignment do not apply to NPI-based assignment.

Implementation of NPI-based assignment for benchmarks could largely follow the same processes as MSSP's TIN-level assignment in which CMS recalculates benchmarks based on an ACO's most recent participant list. Assignment by NPI rather than TIN would not require any change to an ACO's structure, the relationships that ACO clinicians have with other providers, or the billing arrangements of ACO clinicians. MSSP participant lists would continue to consist of TINs (or CMS certification numbers when applicable), but MSSP historical benchmarks would be based on a collection of NPIs that billed to ACO TINs during the performance-year assignment period. All of an NPI's claims in the ACO's market—irrespective of the TIN—would be included in assignment computations. For purposes of calculating benchmarks and performance-year assignment, each clinician's NPI would be associated with only one ACO. For clinicians who bill under TINs spanning multiple

ACOs, the clinician's longest standing participation in an ACO could take precedence. CMS would remove the clinician's NPI from assignment calculations for all other ACOs. Further, assignment would continue to be based on a beneficiary's plurality of primary care visits (using the collection of NPIs that billed under the ACO's TINs during the performance-year assignment period).

Implementing these changes would require that clinicians' claims be used for assignment to only one ACO (providers could continue to see any FFS beneficiary regardless of that beneficiary's ACO assignment or nonassignment). The MSSP currently allows clinicians (through their NPIs) to be listed as participants under TINs in multiple ACOs.¹⁵ Consequently, clinicians with a disproportionately wide range of TIN billing arrangements could be reluctant to participate in the MSSP. Physicians can see patients from multiple ACOs, but if their claims are being used for assignment, their NPI would be used only to assign patients to a single ACO. However, in 2017, 90 percent of ACO assignment was determined by PCP visits, and 95 percent of these clinicians were assigned to one ACO.¹⁶

One potential concern about using NPI-based benchmarking is that ACOs may have more opportunities to engage in within-practice selection—potentially sending beneficiaries with higher needs to clinicians in the same practice who are not part of the ACO but still bill under the same TIN. However, this issue could be addressed by having MSSP participant lists continue to consist of TINs, and require that all NPIs under a TIN in a performance-year assignment period automatically be designated as ACO participants—limiting opportunities for ACOs to benefit from changing the profile of clinicians' patient panels within a practice. Any changes to the case mix between clinicians under the same TIN during the performance year would not reduce the accuracy of the calculation of ACO spending in the baseline years used for the ACO's benchmark.

A second concern about NPI-level assignment relates to movement of clinicians from one geographic area to another. If the clinician joins an ACO or leaves an ACO midway through the performance-year assignment period, his or her Medicare claims history from outside the ACO's market should not be used to compute the ACO's assignment for the performance or baseline years. Doing so would be problematic if the clinician's non-ACO practice area was one with higher or lower payment rates or utilization rates relative to the ACO's market.

**TABLE
2-4**

Methods of defining providers for ACO historical benchmarks

ACO assignment	Current use	Potential inaccuracies	Unintended incentives
Collection of TINs	MSSP	<p>Providers removed from TINs are not accounted for in historical benchmarks.</p> <p>Benchmarks may not reflect the historical claims of providers added to TINs.</p> <p>Providers can use TINs outside an ACO for high-cost beneficiaries without affecting the benchmark.</p>	<p>An ACO could receive unwarranted shared savings by:</p> <ul style="list-style-type: none"> • Removing high-cost providers from TINs. The high-cost providers would remain in an ACO's benchmark but would be removed from performance-year spending. • Adding low-cost providers who previously used TINs outside the ACO. The low-cost providers would not be in the ACO's benchmark but would be included in performance-year spending. • Using TINs outside the ACO for high-cost beneficiaries. High-cost beneficiaries would disproportionately remain in the ACO's benchmark but would not be included in performance-year spending.
Collection of TIN-NPI combinations	Next Generation ACO Model	Providers added to TINs do not necessarily reflect the historical claims of those providers.	An ACO could unjustifiably receive shared savings by adding low-cost providers to TINs. Claims histories of the low-cost providers would not be included in the ACO's benchmark but would be included in performance-year spending.
Collection of NPIs	N/A	When clinicians move from one geographic area to another, they would bring historical spending from their former area unless those claims were excluded.	Physicians used for assignment would have all their patients assigned to a single ACO, meaning that specialists working with two ACOs would have to choose which ACO to assign their patients to in the rare case that the specialist consultation determines assignment.

Note: ACO (accountable care organization), TIN (taxpayer identification number), MSSP (Medicare Shared Savings Program), NPI (national provider identifier), N/A (not applicable). There is no current use of NPI-level historical benchmarks.

Source: Analysis of MSSP provider data and CMS program rules for benchmark calculations.

For example, if a physician moved from San Francisco to Tulsa, CMS would not want to include historical claims from patients who received most of their care in San Francisco when computing assignment for the Tulsa ACO's benchmarks because claims for San Francisco beneficiaries would reflect higher payment rates and different utilization patterns and thus would be a poor predictor of likely spending for similar patients in Tulsa. To address this problem, CMS would base assignment only on claims from within the ACO's (performance-year) market.

Our findings show that the use of NPI data for benchmarks would reduce the potential for unwarranted shared savings and that under TIN-level definitions, changes in the clinicians who make up an ACO's TINs weaken the utility of historical assignment and benchmarks. Table 2-4 is an abbreviated list of the potential methods of and concerns about defining providers when calculating historical benchmarks.

To address (1) the potential mismatch between the clinicians considered in an ACO's baseline years and its

performance years and (2) the incentives to select low-spending patients and exclude high-spending patients, CMS should use NPIs to identify ACO clinicians' claims for assignment in the performance year and those same clinicians' claims for assignment in the baseline year. Properly matching the clinicians included in an ACO's baseline and performance years will allow a more accurate assessment of an ACO's performance and reduce opportunities for unwarranted shared savings.

RECOMMENDATION 2

The Secretary should use the same set of national provider identifiers to compute both performance-year and baseline assignment for accountable care organizations in the Medicare Shared Savings Program.

The set of NPIs used would be those of the clinicians responsible for the ACO's performance-year spending. The recommendation would make the baseline and performance-year spending better reflect the practice patterns of the ACO's performance-year clinicians.

Three corollaries to this recommendation would need to be included:

- If an NPI is used to bill under an ACO's participating TIN during the performance-year assignment period, CMS should use all primary care visits in the ACO's market billed from that NPI (regardless of what TIN the visits are billed under) to assign beneficiaries to that ACO in its performance year and baseline years. Doing so would prevent the ACO from allocating high-spending patients to a TIN not in the ACO. Thus, it would partially address selection against high-spending patients.
- Claims occurring outside the ACO's current market should be removed from assignment calculations to prevent claims from other areas being considered if clinicians either join the ACO after moving from a different market or leave the ACO midway through the performance assignment period and move to a different market.

- Clinicians' claims would be used only for assignment to a single ACO to prevent selection among patients by a clinician billing under multiple TINs.

RATIONALE 2

The integrity of using historical benchmarks requires reliably matching the ACO's performance-year clinicians with the ACO's historical primary care visits. The risk is that allowing ACOs to benefit from changing NPI participation in TINs creates potentially perverse incentives and could produce unwarranted shared savings. ACOs should be rewarded for improving patient outcomes and achieving real savings due to appropriately managing utilization—not for apparent gains that result from mismatches between performance-year and benchmark-year clinicians (whether intentional or unintentional). The recommendation would help reduce unwarranted shared savings by using the same NPIs to compute baseline spending as are used to compute performance-year spending. ACOs that shift providers to TINs outside the ACO would not be able to benefit from a mismatch of NPIs used to create benchmarks and NPIs used to evaluate performance.

IMPLICATIONS 2

Spending

- The recommendation is expected to generate a small reduction in Medicare spending due to reduced shared savings payments. The Congressional Budget Office estimates savings of less than \$50 million over one year and less than \$1 billion over five years.

Beneficiaries and providers

- The recommendation is not expected to affect beneficiaries' care. The recommendation will affect ACOs' shared savings payments only to the extent that ACOs shift NPIs into or out of the TINs under which the ACO submits claims. ■

Endnotes

- 1 In 2019, new ACOs joined the program in July, not January as they had in other years.
- 2 Clinicians with a minimum share of professional services payments (or patients) coming through an A-APM qualify for the 5 percent incentive payment. To qualify for the incentive payment in 2020, for example, clinicians must have received at least 25 percent of their Medicare professional services payments through an A-APM in 2018 or delivered services to at least 20 percent of their patients through an A-APM in 2018. A-APMs include Next Generation ACOs and MSSP ACOs in the highest level of the basic track and in the enhanced track.
- 3 The ACOs we interviewed included physician-led and health system-affiliated ACOs, and the states were in the Southwest, South, and Midwest.
- 4 CVS Caremark has previous partnerships with five other Medicare ACOs through its SilverScript PDP. In 2014, it expanded its ACO collaborations to include an additional seven ACOs (Pioneer and MSSP ACO partners all located in California, Florida, or New Jersey) (Avalere Health 2014).
- 5 In lieu of TINs, the MSSP assigns beneficiaries based on a CMS certification number for ACO participants that are federally qualified health centers, rural health clinics, critical access hospitals, and electing teaching amendment hospitals. For these types of providers in the NextGen ACO demonstration, CMS assigns beneficiaries using a combination of a CMS certification number and a national provider identifier.
- 6 Historical expenditures from the first and second baseline years are trended forward to the third baseline year. Expenditures from the first and second baseline years are also adjusted based on their average risk score differential (represented by a ratio of average risk scores relative to baseline year 3). In computing the historical portion of the benchmark, the third baseline year (most recent) is weighted at 60 percent, the second baseline year is weighed at 30 percent, and the first baseline year is weighted at 10 percent.
- 7 CMS annually recalculates historical benchmarks based on the updated list of TINs submitted by the ACO. The list of participating TINs in each ACO can differ markedly from year to year. We examined the consistency of TINs participating in MSSP ACOs in 2016 and 2017. Among the TINs that were reported as participating in MSSP ACOs in 2016, 15 percent were removed from the ACOs' participant lists in 2017. The share of TINs removed in 2017 was higher for physician-only ACOs (20 percent) than for ACOs with a hospital (12 percent). Among MSSP TINs in 2017, 22 percent were added to ACOs from the previous year. ACOs with a hospital added a slightly greater share of TINs (24 percent) compared with physician-only ACOs (21 percent).
- 8 NPIs included in multiple ACOs also create potential ambiguity in assignment for beneficiaries who voluntarily align themselves with an ACO through their designation of a primary care clinician on the MyMedicare.gov website. At any time during the year, a beneficiary may log into MyMedicare.gov and designate a primary care clinician who they believe is responsible for coordinating their overall care. However, to date, this option has seldom been used by beneficiaries.
- 9 PCPs were identified by specialty codes for general practice, family practice, internal medicine, pediatric medicine, and geriatric medicine. To be eligible for assignment, beneficiaries must have an office visit from at least one of these specialties. The determination of assignment—as measured by the plurality of primary care visits—includes nonphysician providers such as physician assistants and nurse practitioners. However, these providers do not currently report a specialty, which raises some issues such as those who work for an orthopedist being assumed to be providing primary care. The Commission has recommended that these practitioners use their own NPI for billing and report a specialty (Medicare Payment Advisory Commission 2019).
- 10 Among ACOs in the MSSP in 2017, 16 ACOs removed more than 20 percent of the TIN-NPI combinations of PCPs from the previous year.
- 11 For ACOs starting a second MSSP agreement in 2017 or later and for any MSSP ACOs starting any agreement as of July 2019 or later, benchmarks are calculated using a blend of the ACO's own historical spending and the ACO market's regional spending. Each subsequent MSSP agreement requires benchmarks to place greater weighting on regional spending (up to a cap of 50 percent). Before January 2019, ACOs could not increase their risk scores for continuing enrollees beyond the average increase for assignment-eligible beneficiaries with the same demographic characteristics. As of July 2019, ACOs can increase their risk scores by up to 3 percent relative to the assignment-eligible beneficiaries with the same demographic characteristics.
- 12 When examining 2017 preliminary and final assignment, we included only beneficiaries who (1) resided in the same county from 2016 to 2017, (2) did not have any 2017 enrollment in MA, and (3) had at least one month of enrollment in Medicare Part A and Part B in 2017.

- 13 There is a third type of assignment that is partly prospective. Under MSSP prospective assignment, the patient is preliminarily assigned to the ACO based on the prior year's visits. But to maintain that assignment, the patient needs to receive some kind of primary care visit with the ACO (but not necessarily the plurality of visits). Some commercial ACOs apply prospective assignment differently from the NextGen program. For example, under the AQC HMO model in Massachusetts, enrollees pick a primary care physician and then are prospectively assigned based on that choice of primary care physician.
- 14 To compare patients who received their first AWV in 2015 with those who did not, we included only markets where the ACO had at least 100 assigned beneficiaries that received an AWV in 2015. Markets were defined as urban metropolitan statistical areas within a state or all rural counties within a state.
- 15 "Any ACO participant, as identified by the taxpayer identification number (TIN), that has a specialty used in assignment (42 CFR §425.402) and bills Medicare for primary care services must be exclusive to a single Shared Savings Program ACO. However, individual practitioners, identified by individual National Provider Identifiers (NPIs), are free to participate in multiple ACOs if they bill under several different TINs" (<https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/sharedsavingsprogram/for-providers>).
- 16 PCPs and eight specialties accounted for nearly all MSSP assignment in 2017. Cardiology and hematology accounted for about half of the beneficiaries assigned through specialties.

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