

Tracking Health Reform

A Decade of ACOs in Medicare: Have They Delivered on Their Promise?

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Abstract Accountable care organizations (ACOs) were envisioned as a way to address both health care cost growth and uneven quality in US health care. They emerged in the early 2000s, with the 2010 Affordable Care Act (ACA) establishing a Medicare ACO program. In the decade since their launch, ACOs have grown into one of Medicare's flagship payment reform programs, with millions of beneficiaries receiving care from hundreds of ACOs. While great expectations surrounded ACOs' introduction into Medicare, their impacts to date have been modest. ACOs have achieved some savings and improvements in measured quality, but disagreement persists over the meaning of those results: Do ACOs represent important, incremental steps forward on the path toward a more efficient, high-quality health care system? Or do their modest achievements signal a failure of large-scale progress despite the substantial investments of resources? ACOs have proven to be politically resilient, largely sidestepping the controversies and partisan polarization that have led to the demise of other ACA provisions. But the same features that have enabled ACOs to evade backlash have constrained their impacts and effectiveness. After a decade, ACOs' long-term influence on Medicare and the US health care system remains uncertain.

Keywords accountable care organizations, Medicare, health care costs, Medicare Shared Savings Program

Accountable care organizations (ACOs) were envisioned as a way to address the dual challenges in US health care of unsustainable cost growth and uneven quality. After ACOs emerged as an idea in the early 2000s, the 2010 Affordable Care Act (ACA) established a Medicare ACO program. In the decade since their launch, ACOs have grown into one of Medicare's

flagship payment reform programs, with hundreds of ACOs providing care to millions of beneficiaries. While great expectations surrounded ACOs' introduction into Medicare, the impacts of ACOs to date have been modest. ACOs have achieved some savings and improvements in measured quality, but disagreement persists over the meaning of those results: do ACOs represent incremental but important steps forward on the path toward a more efficient, high-quality health care system? Or do their modest achievements signal a failure of large-scale progress despite the substantial investments of resources?

ACOs have proven to be politically resilient, finding support across both Democratic and Republican administrations in Washington and thus largely sidestepping controversies and partisan polarization that have led to the demise of other ACA provisions. However, the same features that have enabled ACOs to evade backlash, such as the voluntary nature of the program and incremental changes to payment, have also constrained their impacts. After a decade, ACOs' long-term influence on Medicare and the US health care system remains uncertain. This article assesses the implementation, performance, and impacts of Medicare ACOs both in Medicare and in the larger US health care system. We begin with background on ACOs, including their origins, major features, how they came to Medicare, and patterns in provider participation. We then assess ACOs' impacts on spending, quality, and equity, and we review what is known about the mechanisms behind those impacts. Next, we consider the consequences of Medicare ACOs for provider consolidation and other value-based payment programs. Finally, we conclude by looking ahead to the future of ACOs.

Background

Entering the 2000s, two of the most prominent issues involving Medicare were rapidly increasing health care costs and significant variation in the quality of medical care delivered to beneficiaries (Fisher et al. 2003a, 2003b; Oberlander 2007). Many analysts attributed cost and quality challenges, at least in part, to how health care was paid for, which in traditional Medicare was largely (though not entirely) based on fee-for-service payments. Economic theory posited that paying for volume led to increased costs because providers had financial incentives to deliver more (and more expensive) care, with no incentives to provide high-quality care (Miller 2009). Critically, around this time, research demonstrated that higher health care spending was not routinely associated with better quality (Anderson and

Chalkidou 2008; Solberg et al. 2002; Yasaitis et al. 2009). These findings, along with the continued increases in US health care spending, which rose from 13.8% of gross domestic product in 2000 to 17.9% in 2010 (Martin et al. 2012), opened a window for policy makers to propose alternative payment models with an explicit focus on reducing costs.

These challenges were not new, but politically, they required novel solutions. During the 1990s, managed care had emerged as a set of reforms to tackle rising health care costs, most prominently through the spread of health maintenance organizations (HMOs). Managed care was credited with slowing down the rate of increase in health spending (Cutler and Sheiner 1998). However, it faced significant resistance from providers—who resented intrusion into clinical medicine, erosion of professional autonomy, and constraints on their payments—and from much of the public, who disliked limits on physician choice, explicit rationing, and the involvement of health plans in their doctors' decision making (Mechanic 2004; Reinhardt 1999). Such opposition led to the strongest forms of managed care, such as group- and staff-model HMOs, mostly giving way to more diluted forms, including preferred provider organizations that did little to manage care and relied on reduced fee-for-service payment and selective contracting with providers (Anthony and Banaszak-Holl 2003; Hurley, Strunk, and White 2004). As a result, many employers moved away from managed care and embraced high-deductible insurance plans and health savings accounts under the rubric of consumer-directed health care. Following this experience of managed care, some policy makers and health policy researchers sought a new arrangement that could decelerate spending growth, allow for greater patient and provider autonomy, and place more emphasis on quality.

For many, the aspiration was to achieve the benefits of HMOs—including care coordination and incentives to restrain spending—while avoiding their more contentious features. Proponents also looked to create a heightened focus on quality as well as provider-driven organizations that need not confront the organizational and financial challenges inherent in establishing and operating a vertically integrated HMO (Burns and Pauly 2012; Fisher and Shortell 2010; Fisher et al. 2007; Robinson and Casalino 1996). Early proponents of the concept of accountable care, such as Don Berwick, former administrator of the Centers for Medicare and Medicaid Services (CMS), suggested it would be feasible to hold groups of providers responsible for the cost and quality of care delivered to their patients through new payment arrangements (Berwick 2011b). ACOs were conceptualized as a group of providers collectively held responsible for the

costs and quality of care delivered to a defined set of patients. The goal was to put financial incentives in place for providers to work toward reducing costs and meeting quality targets for their patient population. In the lead-up to enactment of the 2010 ACA, ACOs were embraced by CMS (Berwick, Nolan, and Whittington 2008; Berwick 2011b) as well as many health services researchers (Bynum et al. 2007; Fisher et al. 2007; McClellan et al. 2010; Shortell and Casalino 2008) and were included in the final ACA bill, giving them a new foothold in Medicare.

As described in table 1, CMS has established several ACO demonstration projects targeted at different subsets of medical providers through the Center for Medicare and Medicaid Innovation. We focus this article on the Medicare Shared Savings Program (MSSP), as it is the flagship ACO program in Medicare and still continues to operate, unlike many of the smaller demonstrations, which are time-limited.

The MSSP is a voluntary program that allows ACOs to share in the savings from reduced Medicare spending, as compared to a benchmark calculated by Medicare (HHS 2011). Put simply, an ACO is a collection of clinicians who have agreed as a group to enter the program and be held accountable for the costs and quality of care of a defined group of patients (Merlis 2010). All ACOs have some network of primary care physicians. In addition, ACOs are held responsible for all costs of their assigned patients, including hospital and specialty care, but ACOs do not need to include specialists and hospitals. As a result, they can be led by physicians or hospitals, or they can be jointly sponsored (Colla et al. 2014; Shortell et al. 2014). ACO providers continue to be paid according to traditional Medicare arrangements including fee-for-service payments to physicians, and at the end of the year a cost accounting assesses the total amount paid by Medicare for parts A and B for their attributed patients against the ACO's benchmark. The benchmark is calculated using a combination of historical and projected costs. In other words, the benchmark functions as a spending target for ACOs, and it provides financial incentives for an ACO to keep costs for its assigned patient population under that target (HHS 2018; McWilliams and Chen 2020a, 2020b). This reverses traditional incentives, whereby a greater volume of delivered services results in higher payments to hospitals and physicians. If ACOs come in under the spending benchmark, they are eligible to share in 50%–70% of the savings they generate, depending on the particular program they participate in (Medicare offers multiple tracks, with varying levels of risks and financial incentives), and Medicare keeps the rest. CMS determines which patients are assigned to which ACO as a function of where each patient receives a plurality of their primary care.

Table 1 Types of Medicare ACO Programs

ACO program	Years implemented	Target organizations	Level of risk sharing	Number of participants in first year	Current participants
Medicare Shared Savings Program	2012–Ongoing	All organizations	Multiple options with different levels of upside and downside risk	220	483
Next-generation ACO model	2016–2021	ACOs open to much stronger financial risk (80%–100% of savings/losses)	Upside and downside	18	41
ACO investment model	2015–2018	ACOs in rural or low-penetration areas	Upside and downside	41	N/A
Pioneer ACO model	2012–2016	Organizations with experience in earlier ACO-like arrangements willing to take on higher financial risk	Multiple options with different levels of upside and downside risk	32	N/A
ACO advance payment model	2012–2014	Small physician-based organizations	Upside	20	N/A

Note: ACO = accountable care organization.

Although it has changed over time, the initial Medicare ACO program allowed providers to enter into upside-only arrangements, in which they could share in savings but were not responsible to cover any losses if their costs came in above their benchmark. In contrast, ACOs that took on downside risk were responsible for paying back a portion of any overspending and shared in a greater proportion of any savings generated. In 2019, CMS revised the rules so that all ACOs in the program had to agree to downside risk by the end of five years of participation in the MSSP (Verma 2018), a move whose implications are discussed later in this article. In addition to cost, providers are measured on roughly three dozen quality measures such as patient and caregiver experience, preventive screenings and vaccines, blood sugar control in diabetes patients, and unplanned readmissions. Performance on these measures is aggregated to a quality composite score that determines the proportion of savings an ACO retains (HHS 2018). In this way, cost savings are necessary but insufficient to meet ACO performance targets; success in the ACO contract depends on cost savings paired with performance on designated quality measures.

In its original formation, an ACO patient population was determined at the end of the year (retrospective assignment) as the set of patients who received the plurality of their primary care from ACO providers.¹ Medicare beneficiaries are thus often unaware they are attributed to an ACO since there is no active enrollment process, and the ACO is typically invisible to patients (MedPAC 2019). Moreover, the ACO is one of many payment contracts providers have instead of a separate health plan or care delivery model. In contrast to HMOs, patients in an ACO retain freedom of provider choice and face no additional requirements for referrals or preauthorization of services. For example, patients can see providers and seek care outside of the ACO. ACO proponents argued “the best fence is a good pasture” (Meyer 2012: 2365), implying that delivering high-quality, coordinated care would be the best way to keep patients within a set of ACO providers, compared to the explicit limitations that were central to HMOs.

ACO Adoption

Medicare’s ACO model has grown rapidly. In 2012, the first year of the MSSP, 220 ACOs participated with 1.7 million assigned Medicare beneficiaries, rising to 483 ACOs serving 11 million assigned beneficiaries in 2022 (fig. 1) (CMS 2021). The program initially attracted many groups of

1. The 2018 Pathways to Success program provided ACOs with the option to select between retrospective and prospective assignment.

providers because it offered a palatable option with upside-only risk built on existing fee-for-service payments, and because it carried the cachet of innovation. In ensuing years, the MSSP maintained its appeal, especially to new entrants (Muhlestein et al. 2019), likely as a result of a constellation of factors, including a standardized program that makes it simpler for providers to participate; the generally nonpartisan nature of ACOs that made it more likely ACOs were here to stay (Reichard 2010); and Medicare's increased push toward ACOs, as evidenced by their prominence in the 2015 Medicare Access and CHIP Reauthorization Act (Spivack, Laugesen, and Oberlander 2018). In contrast, for example, providers that wish to enter private-payer or even Medicaid ACO contracts often must negotiate many details of the contract that require specific knowledge and expertise, such as financial benchmarking methodology, assignment methods, and quality measurement. This makes these contracts much harder to pursue, especially for smaller physician organizations.

Participation in Medicare ACOs is voluntary; clinicians choose to join and exit ACO contracts as they wish. One major implication of the voluntary program is that providers' participation is influenced by Medicare ACO program requirements regarding financial risk. Initially, ACOs were allowed to take on only upside risk, or earning shared savings without paying back any shared losses, for a three-year contract period—which was subsequently extended to 2 three-year contracts (six years total)—before they were required to take on downside risk, or responsibility for shared losses (HHS 2011). As a result, until 2016 almost all ACOs participating in the MSSP assumed only one-sided risk (upside only) (fig. 1). A 2018 revamp of MSSP rules by CMS called “Pathways to Success” required all participating ACOs to transition to a two-sided risk model (upside and downside) by the end of their first five-year contract in the program (Verma 2018). The proportion of ACOs accepting two-sided risk has increased each year since, with more than half of ACOs assuming two-sided risk in 2022 (fig. 1). However, requiring two-sided risk for a voluntary program like the MSSP can dampen provider participation, and this policy is likely one reason the number of ACOs participating in the MSSP declined from 561 in 2018 to 483 in 2022 (McWilliams and Chen 2020a).

ACO participation also has varied by provider and market characteristics. Initial ACOs formed disproportionately along the coasts, in urban areas, and in regions with lower poverty rates, and these patterns remain today (CMS 2021; Lewis et al. 2013). In addition, early ACOs formed in areas with relatively high quality and high health care costs. These findings suggested early ACOs were composed of providers primed for success because the high financial benchmarks likely allowed a good deal of

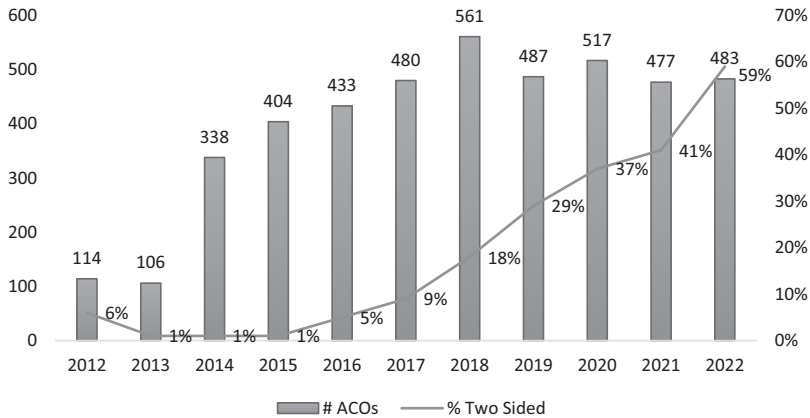


Figure 1 Number of MSSP ACOs and percentage assuming one- or two-sided risk (2012–2022).

Notes: MSSP= Medicare Shared Savings Program; ACO= accountable care organization. Data are derived from CMS’s Fast Facts documents, accessible at <https://www.cms.gov/files/document/2022-shared-savings-program-fast-facts.pdf>.

potential savings to be earned and because the providers likely had more confidence in their ability to meet quality benchmarks (Lewis et al. 2013). Over time, as ACOs began to exit the program, a similar pattern emerged (Bleser et al. 2019). Exiting ACOs had higher-risk patients, participated in contracts with downside risk, and were situated in a more difficult financial context. They often had lower financial benchmarks, making it harder for them to achieve any savings in the program. Thus, ACO participation became less attractive after the program reduced excess spending and improved quality to the point that additional incremental gains became more challenging to achieve. All of this may help to explain why only half of the ACOs that entered the MSSP in the first three years of the program remained enrolled in the MSSP in 2018 (McWilliams et al. 2019).

Impact of ACOs

Spending

Perhaps ACOs’ most prominent aim is to reduce the growth of health care spending, a goal that early proponents believed ACOs would achieve because “doing things right is less costly” (Berwick 2011a: 1). ACOs’ financial arrangements—with eligibility for shared savings payments from Medicare dependent on restraining expenditures below benchmarks—were

expected to reverse traditional incentives to increase volume to generate more revenues and instead motivate participating providers to constrain spending. The Obama administration was quick to credit ACOs as partly responsible for slowing the increase of health care costs during the early 2010s (Furman and Fiedler 2014). But other health policy researchers contend this slowdown was the result of a combination of factors that had little to do with ACOs, most notably the 2008 recession (Cutler and Sahni 2013). More recently, CMS has claimed that the MSSP generated \$1.2 billion in savings for Medicare in 2019 (Gonzalez-Smith et al. 2020). However, the actual impact of ACOs on Medicare spending remains much debated. Here, we focus on spending within the traditional Medicare program; we address spending outside the traditional Medicare program (including in Medicare Advantage) later in the article.

One source of contentiousness over the magnitude of ACO savings is differential emphasis placed on the role of benchmarks set by CMS versus counterfactual scenarios used in research to model cost savings. CMS benchmarks compare ACOs' actual spending to a predetermined spending target set by CMS, and the program rewards providers based on that difference. In contrast, researchers modeling cost savings use counterfactuals that compare actual spending for ACO enrollees to what spending would be in a hypothetical world where ACO programs did not exist. Benchmarks are intended to determine savings for each individual ACO, which serves to establish incentives and induce program participation. In contrast, counterfactuals are meant to assess how ACO policy influenced overall spending and outcomes.

In practice, CMS has updated its benchmarking methodology over the course of its ACO programs to improve incentives, such as moving to adjust for region so as not to penalize providers in low-spending regions. Additional adjustments have been proposed that would induce greater participation, such as moving away from rebasing an ACOs' benchmark every three years, which penalizes providers for progress they have in reducing spending under ACO programs (McWilliams and Chen 2020a, 2020b). These changes in benchmarks will impact which ACOs receive savings but will not mathematically influence research estimates, which use a counterfactual comparison. Some researchers contend that calculations of savings against benchmarks may have initially underestimated ACO savings for several reasons. They argue that MSSP participation originally occurred in areas with greater Medicare spending growth; earlier iterations of the benchmarking formula meant that ACOs that saved money had lower benchmarks the next year, making it harder to meet spending targets even if

some savings were achieved; and providers likely lowered spending not only for Medicare beneficiaries attributed to their ACO but also nonattributed patients (Chernew, Barbey, and McWilliams 2017; McWilliams 2016). However, more recent work has demonstrated that benchmarks may overestimate savings in later years of the MSSP because the two-sided risk model requirements meant that ACOs with the most room to cut spending were more likely to participate (McWilliams and Chen 2020a).

Overall, many research studies using counterfactuals instead of benchmarking have demonstrated that ACOs are associated with reduced costs when comparing spending for enrollees assigned to ACO versus non-ACO participating providers, especially among ACOs that enrolled in the program earlier (McWilliams et al. 2020; Nyweide et al. 2015; Colla et al. 2016). Medicare ACOs experienced modest cost savings in the first years of the MSSP, and subsequent studies found that savings grew over the time participants were in ACO programs (McWilliams et al. 2015). These savings are generally attributed to reductions in acute-care spending (e.g., hospitalizations) and postacute care spending as well as some modest reductions in outpatient care in hospital-owned facilities (McWilliams et al. 2018). Savings were not uniform across participants. ACOs with hospitals have generally not achieved cost savings, even several years in; savings are concentrated mainly among ACOs led by primary care physician groups (McWilliams et al. 2018; McWilliams et al. 2015). This finding reflects the conflicting incentives facing hospitals, which can suffer negative financial consequences if admissions (and associated revenue) drop because of ACO efforts to reduce hospital use. Such losses may exceed the potential gains of shared savings available through ACOs.

Researchers also debate the role of selection in estimates of ACO savings. Because ACO programs are voluntary both for entry and exit (even before completion of a contract), it is methodologically challenging to assess whether savings represent the achievement of real cost reductions, or if savings are in fact attributable to providers with different cost profiles entering and exiting the program. One group of researchers has concluded that most ACO effects are attributable to differential selection of ACO providers *out* of ACO programs (Markovitz et al. 2019b), meaning that ACOs have not actually reduced costs; instead, high-cost providers selectively exiting the program artificially create the appearance of ACOs achieving savings in statistical models that do not account for this selection. Another group has concluded that selection is not the reason for these differences (McWilliams et al. 2020). While most policy makers and the health services research community have accepted results showing that

savings are real (and not an artifact of selection), the intricacies of methodological differences leave even many discerning readers challenged to identify the source of the differences.

Finally, there is also disagreement over how to interpret the contribution of generally modest savings. Critics note that even if we assume the larger savings estimates generated by ACOs, they still represent a minuscule fraction of the nearly \$700 billion spent by Medicare in 2021 (KFF 2022). In other words, they contend ACOs have done little to curb Medicare spending. Alternatively, ACO proponents claim that even modest savings are important and that spillover effects (whereby ACO incentives end up influencing providers' care of non-ACO patients) mean that the savings to US health care writ large are greater than often assumed (McWilliams and Chen 2020a).

Quality of Care

Another goal of ACOs is to improve the quality of care for Medicare beneficiaries. The backlash against managed care in the 1990s was driven by the perception that health care providers stunted on important care to achieve cost savings. Creating a dual emphasis on quality alongside cost served to differentiate ACOs in hopes of avoiding a similar fate (Emanuel 2012; Marmor and Oberlander 2012; Frakt and Mayes 2012). Consequently, Medicare ACOs must perform well on quality metrics set by CMS to retain shared savings they generate. These quality measures focus on patient experience, care coordination, patient safety, preventive health, and management of chronic conditions.² In addition, proponents argue that ACOs' incentives to keep costs under spending benchmarks can encourage activities such as better coordination across settings of care and improved disease management for patients with chronic conditions (Berwick 2011c; Emanuel 2012). But a decade into the Medicare ACO experiment, the evidence on the role of ACOs in promoting high-quality care is mixed. ACOs have not worsened quality because of incentives related to reducing spending growth (Kaufman et al. 2019). Evidence suggests that ACOs have achieved improvements in some processes of care, but there are few data to show that ACOs have influenced more distal outcomes, such as lower mortality rates or reduced disease burden.

The clearest evidence of Medicare ACOs improving quality comes from earlier studies of ACOs (2013–2016) and their influence on processes of

2. A full list of quality measures can be found at <https://www.cms.gov/medicare/medicare-fee-for-service-payment/sharedsavingsprogram/downloads/aco-shared-savings-program-quality-measures.pdf>.

care, including screening and prevention measures (Kaufman et al. 2019; Wilson et al. 2020). Processes of care for chronic conditions such as diabetes improved with ACOs (McWilliams et al. 2015), as did preventive services such as increased pneumococcal vaccination rates and screening for depression or fall risk (Bleser et al. 2018). Moreover, ACOs appeared to improve these measures year after year (Bleser et al. 2018). Other studies cite lower emergency department and inpatient utilization rates among ACOs as evidence that these organizations are responsible for higher-quality care, although these are not indications of quality in and of themselves (Nyweide et al. 2015; Trombley et al. 2019).

In contrast, there is little evidence that ACOs are realizing significant population health gains via better health outcomes, lower disease burden, or greater emphasis on social determinants of health (Fisher and Shortell 2010). Seminal studies on ACOs have not found any effect on mortality or even on more proximal outcomes such as hospital readmission rates or complication rates (McWilliams et al. 2017; McWilliams et al. 2016; Nyweide et al. 2015). In addition, systematic reviews have concluded that there is little evidence that ACOs significantly improved mortality, safety, or patient experience outcomes (Kaufman et al. 2019; Wilson et al. 2020; Diana et al. 2019; L&M Policy Research 2016; Bleser et al. 2018). Fundamentally, the incremental nature of ACO quality payments and the short time horizons (single-year assessment of cost and quality) likely mean ACOs are not nearly enough of a shock to the US health care system to move such distal outcomes. Finally, research has generally shown that ACOs are not able to focus far upstream toward issues such as social determinants of health even when providers are motivated and committed to the work, because the ACO incentive structures are simply not nearly enough of an overhaul of existing health care payment frameworks to overcome the formidable hurdles to working across sectors to improve social determinants of health (Brewster et al. 2020; Murray, Rodriguez, and Lewis 2020).

Disparities

While ACOs are intended primarily to address health care quality and costs, some researchers have raised concerns around equity. Early concerns focused on the role of voluntary participation and whether organizations disproportionately treating more vulnerable patients (e.g., Black, Indigenous, and patients of color or living in poverty) would form ACOs (Pollack and Armstrong 2011; Anderson et al. 2014; Lewis et al. 2012).

Some were also concerned that these organizations might perform worse and subsequently have fewer resources to invest in quality (Pollack and Armstrong 2011). Despite widespread interest, studies on disparities have been sparse. Evidence on outcomes that does exist is mixed. For example, early results suggested that ACOs were less likely to form in areas with high poverty and that the proportion of Black patients was slightly smaller in ACOs (Epstein et al. 2014; Lee et al. 2020; Yasaitis et al. 2016), but subsequent studies found no differences (Werner, Kanter, and Polsky 2019). Few studies have been published on critical issues such as patient dumping, due in large part to formidable methodological challenges in estimating these effects with available data and methods.

Medicare ACOs serving higher proportions of Black, Indigenous, and patients of color do perform worse across a wide array of quality measures than those serving a lower proportion of people of color. About half of this disparity was attributable to these ACOs caring for sicker patients, but the rest appears to be the result of other factors (Lewis et al. 2017). These ACOs were also more likely to exit the program during the initial years of the MSSP (Markovitz et al. 2019a). These findings, though sparse, suggest structural racism is likely at play among ACOs, perhaps connected to the fact that health care providers serving a higher share of Black, Indigenous, and patients of color have fewer financial resources, more difficulty recruiting and retaining providers, and fewer resources to invest in quality-improvement activities (Bach et al. 2004; Gaskin et al. 2008; Gaskin et al. 2016; Jha and Epstein 2012; Jha, Orav, and Epstein 2011; Jha et al. 2007; Jha et al. 2008; Joynt, Orav, and Jha 2011; Lopez and Jha 2013). As ACOs take on more financial risk as part of the Pathways to Success program, it will be important to ensure that ACOs caring for more socially vulnerable populations are not subject to a negative feedback loop wherein worse performance leads to lower payments, sparking a death spiral that could increase dropout rates for these organizations.

Mechanisms of ACOs

Compared to some payment reforms that are very prescriptive in nature, such as patient-centered medical homes that dictate a set of activities providers must engage in, ACO contracts generally stipulate very little. Providers have a great amount of leeway to pursue strategies as they see fit to achieve cost and quality goals. This flexibility is both an advantage and a disadvantage of the model: flexibility allows providers to tailor what they are doing, but it also means there is often little guidance for providers newly entering ACOs on how to achieve savings and quality goals.

Strikingly, a decade into the Medicare ACO experiment, little comprehensive evidence exists on *how* ACOs achieve success, or what differentiates ACOs that reduce spending from those that do not. Such evidence would provide critical aid not only to providers entering ACOs looking for guidance on where to start but also to policy makers looking to refine and improve ACO program design. For example, a better understanding of mechanisms could allow policy makers to target technical or financial assistance to efforts that would result in greater success among participants, or to refine ACO models to better focus on different types of providers with myriad needs (Lewis, Fisher, and Colla 2017). Similarly, while much discussion has centered around how incentives from ACOs are passed on to individual clinicians or organizations participating in ACOs, little clear evidence has emerged on whether this plays a role in the modest gains ACOs have achieved (Ganguli et al. 2020; Rosenthal et al. 2019).

Quantitative studies have generally found few ACO activities that are associated with successful achievement of cost and quality outcomes (Ganguli et al. 2020; Ouayogode, Colla, and Lewis 2017). Instead, the only aspects of ACOs consistently associated with better performance is their structure: ACOs without hospitals perform better on cost (McWilliams et al. 2018) and quality measures, and ACOs that are more primary care–centric perform better on some measures, as do ACOs that formed from preexisting organizations (Albright et al. 2016; Lewis et al. 2017). Qualitative studies on ACOs have similarly found that some key organizational factors underlie success, such as levels of collaboration with local hospitals (e.g., those external to the ACO) and a history of effectiveness and leadership in physician group organizations (D’Aunno et al. 2018). Partnership with hospitals is posited to help with coordinating care between outpatient and inpatient settings. Similarly, a successful history of effectiveness likely positions an ACO to do well compared to newly formed organizations or coalitions that will require time to coalesce around governance, processes for compliance, and ACO activities (Lewis, Fisher, and Colla 2017; Lewis et al. 2017).

A plethora of qualitative or mixed-methods literature has examined the implementation of ACOs, documenting a very wide range of activities that ACOs are engaged in (Hilligoss, McAlearney, and Song 2019; Lewis et al. 2014b; Lewis et al. 2019a, 2019b; Murray, Rodriguez, and Lewis 2020; Shortell et al. 2015; Hilligoss, Song, and McAlearney 2016). However, this literature generally is unable to speak to the question of whether these activities are associated with ACO success, or how to test hypotheses generated by these studies in a broader sample of ACOs.

Consolidation and ACOs

A longstanding critique of ACOs is that their spread could lead to increased consolidation among health care providers, which could raise prices, lead to higher costs, and reduce consumer choice. The volatility in health care utilization for individual patients translates to unpredictability in total costs that health care providers are responsible for under ACO contracts; a larger patient base reduces this volatility (Richman and Schulman 2011), as seen in circumstances such as smaller ACOs merging to produce an ACO serving 200,000 beneficiaries (Caravan Health 2019). Similarly, this may prompt formal consolidation among providers.

Beyond the drive to manage volatility through consolidation, particular types of providers have additional and distinct incentives to merge. Hospitals, which are accustomed to making money from more inpatient admissions and by providing more services, face challenging incentives under ACOs. They generally seek to expand their primary care base when participating in ACOs because of the primary-care focus of ACOs in both assignment methodology and in quality measures emphasizing primary care, such as preventive screenings, vaccinations, and chronic disease management (Colla et al. 2016; Lewis et al. 2014a; Lewis et al. 2017). This may lead them to seek vertical integration by acquiring local outpatient practices. Hospitals and health systems portray such consolidation as fundamentally driven by a desire to better coordinate care; however, observation from the field belies that claim. In fact, vertical integration is largely focused on controlling patient flow and preventing leakage of a system's patients (and their revenue) to other local competitors as well as leveraging price increases with commercial payers (Baker, Bundorf, and Kessler 2014, 2016).

In contrast to hospitals, independent medical practices face different incentives and challenges. These groups are often not as prepared to shoulder the financial burdens associated with ACOs (e.g., startup costs, downside risk) and are usually less experienced in other population health management tools, such as sophisticated data analytics, performance feedback to physicians, or practice transformation coaching (Muhlestein, Tu, and Colla 2020; Shields et al. 2011). In addition, the shift in Medicare ACO programs toward greater downside risk creates even more challenging currents for independent medical groups, which may be hard-pressed to cover any financial losses that occur. As a result, these practices often pursue one of two routes to participation that have implications for the larger US health care system.

First, independent medical groups may join a health system in an ACO, either through a form of soft consolidation such as a joining a clinically integrated network (a legal structure that allows independent providers to negotiate jointly with insurers provided they demonstrate particular capabilities around integrated care coordination and data analytics), or through a formal merger or acquisition with a health system. Second, some medical groups—acting either alone or in combination with other medical groups—work with a management partner to pursue an ACO. “Management partners” is a catch-all term for organizations that have arisen in this space, including firms in the data and analytic space (e.g., Optum), insurance company subsidiaries that are reminiscent of management services organizations of the managed care era (e.g., Universal American), and new companies created to work in this space (e.g., Aleade, Caravan Health, Evolent). Roughly a third of ACOs work with one of these management partners (Lewis et al. 2018). Policy and regulation have largely been silent on the role of these organizations, and research is similarly sparse (D’Aunno et al. 2018; Lewis et al. 2018; Murray, D’Aunno, and Lewis 2021; Brewster et al. 2020). We do not know if these organizations are adding value in US health care and whether their presence dilutes the incentive and leadership dimensions of ACO programs. Furthermore, policy makers and stakeholders have not engaged directly with questions such as whether it would be advisable to entrench these organizations in the fabric of US health care by structuring payment policy so that involvement of small or independent physician groups is predicated on working with management partners.

Any form of consolidation generally reduces patient choice and competition between health care providers in Medicare and can also lead to increased prices in commercial insurance products as newly consolidated providers hold improved negotiating positions against insurers (Richman and Schulman 2011; Greaney 2011; Goldsmith 2011). Data on the early period of Medicare’s ACO program demonstrated that counties with higher rates of ACO penetration experienced significant consolidation, as measured by increasing size of physician practices, especially in hospital-owned and specialty practices (Kanter, Polsky, and Werner 2019), although it is unclear how much of this is attributable to ACOs compared to other market forces (Neprash, Chernew, and McWilliams 2017). In addition, recent research has also raised the specter of “softer” consolidation. In one study, claims data showed commercial price increases among independent medical practices that joined health system–led Medicare ACOs, even when they were not formally acquired; the practices appeared to experience increased payments as an extension of the health systems’ existing

pricing power (Lyu, Chernew, and McWilliams 2021). All these results raise concerns over the effects of ACOs on consolidation as well as health care prices and costs outside of Medicare, and they warrant additional study.

Overall, the conundrum policy makers have not adequately faced is that ACOs composed of independent, primary care–focused medical groups are consistently most successful at achieving cost reductions, but these same medical groups are also least structurally suited to participation in ACO programs. This phenomenon is only heightened by a push toward downside risk, likely forcing these organizations either out of ACO programs or into arrangements with other organizations. Policy makers have not directly pursued other alternatives, such as varied tracks for these organizations in Medicare ACO programs. Greater attention to the question of what we can reasonably expect provider organizations to do or learn (e.g., through technical assistance) and what might better be done elsewhere may be an important step to charting a clearer path forward for accountable care.

Consequences of ACOs for Other Value-Based Payment Programs

ACOs remain a flagship Medicare program, but they now sit within a wide array of other payment reforms pursued by CMS, such as bundled payments, care-setting specific programs (e.g., hospital and skilled nursing facility value-based payment programs), comprehensive primary care initiatives, direct contracting, and more as well as the Medicare Advantage program. While there is potential for synergy across models, in practice both the implementation and the evaluation of these models have become complicated for both stakeholders and researchers as many organizations participate in some, or all, of these programs, making it challenging to isolate results from a single intervention. Moreover, ACOs have been lumped in with several of these other value-based payment reforms, which are all categorized by CMS as alternative payment models as part of the 2015 Medicare Access and CHIP Reauthorization Act (MACRA). Insufficient understanding of how these models are interacting with and influencing one another is likely an obstacle to greater efficiency and impact for any one of these reforms.

Medicare Advantage is also an important context for ACOs. Roughly 40% of Medicare beneficiaries are now in Medicare Advantage, and this proportion is estimated to soon be more than 50% (Freed et al. 2021). Medicare ACOs may in fact have a spillover effect to the Medicare

Advantage program, as spending reductions in traditional Medicare influence regional spending used to set Medicare Advantage payment rates. Thus, effects of Medicare's ACO efforts are difficult to quantify more broadly but likely are resulting in lower Medicare Advantage spending (McWilliams 2016; McWilliams and Chen 2020a, 2020b).

Finally, Medicare ACOs are only one slice of ACOs in the United States. Commercial payers and state Medicaid programs have also aggressively pursued ACO contracts over the last decade (Muhlestein et al. 2021). While Medicare's size as a purchaser leads to some institutional isomorphism and coalescing around elements of programs implemented by CMS, this has not been the case for ACOs. Instead, Medicaid and commercial payer contracts have a variety of forms and differ on any number of key dimensions, including financial benchmarking, quality measurement and payment, underlying financial reimbursement models, risk arrangements, and beneficiary assignment. The disparate nature of these contracts is blunting the potential for synergy and efficiency and may also underlie the modest or sluggish accrual of savings to Medicare ACO programs. CMS so far has limited tools to address this challenge, particularly in highly competitive payer markets.

Potential Influence of ACOs in US Health Care

While other innovations ushered in by the ACA were never implemented or have been subsequently repealed, Medicare ACOs have proven to be politically resilient. That resilience reflects the incremental nature of change both proposed and returned by these models, which makes ACOs palatable to providers and patients. At the same time, ACO programs in Medicare do not carry nearly large enough of an incentive to shock the health care system into transformational change, despite initial hopes of many health policy makers and analysts that the model might facilitate wider-scale improvements in both cost and quality. Savings returned to date have been modest. Some researchers have questioned whether the amount of money at risk is large enough to induce participation or lead to significant change in care delivery (McWilliams et al. 2019) and whether ACOs' focus on financial incentives negatively influences nonfinancial motivators, such as autonomy (Phipps-Taylor and Shortell 2016; Rosenbaum 2022). There is no agreement on the minimum incentive size needed to change provider behavior and improve performance, and it is also unclear how ACO incentives should flow to individual clinicians versus the organizations employing them (Emanuel et al. 2016; Lewis, Fisher, and Colla 2017). Moreover, the investments

needed to form successful ACOs can outweigh the potential shared savings generated through the program (Goldsmith 2011).

Similarly, ACOs may not be structured to target the root cause of rising health care spending. ACOs are still based in large part on fee-for-service reimbursement, and some critics contend that until this changes, we will not see any meaningful impact on Medicare spending (Goldsmith 2011). ACOs arguably embody an effort to rely on payment and delivery reforms to control spending while evading the more politically daunting policies—such as price regulation and budgetary targets—that have worked in other countries (Anderson, Hussey, and Petrosyan 2019; Anderson et al. 2003; Marmor and Oberlander 2012; Oberlander 2011). However, others argue that although the savings are modest, they are a step forward, and the emergence of additional alternative payment models will help to accelerate the movement toward a more value-based payment system (Burwell 2015). In this vein, a range of modifications have been proposed to the existing structure and regulation of ACOs that are intended to promote even greater participation and savings among providers, including changes to how financial benchmarks and risk adjustment are calculated, increasing savings rates, limiting downside risk, and developing a long-term vision for both ACOs and the broader payment reform portfolio at Medicare (McWilliams and Chen 2020b, 2020a).

Conclusion

ACOs have had a meteoric rise. At the time of this writing, roughly 500 ACOs operate in Medicare. The rapid ascendance of ACOs reflects their substantial political appeal. They do not infringe as harshly on physician independence or patient choice as did the HMOs of the 1990s, and they promise to reduce spending while increasing quality. The aspiration toward more accountable care is difficult to oppose (Marmor and Oberlander 2012). Even as Democrats and Republicans have fought over much of the ACA, ACOs have largely sidestepped partisan challenges and have maintained strong bipartisan support.

Yet the spread of ACOs in Medicare is also the result of factors that constrain long-term impacts: the program is entirely voluntary and represents an incremental change from traditional models of payment that were largely based on fee-for-service payments. While proponents lauded many potential benefits of ACOs, from controlling costs to encouraging care coordination and population health management, in practice ACOs have achieved modest cost savings and quality improvements. Moreover,

engaged stakeholders have found little evidence to suggest how ACOs achieve savings, with most policy action focused on levying a heavier hand on financial risk despite data suggesting this might simultaneously stifle participation, even among successful ACOs.

Moving forward, one key issue is whether the voluntary nature of provider participation in the MSSP will be revisited, as dropout rates among provider organizations are very high (Bleser et al. 2019; Muhlestein et al. 2019). The structure of the program incentivizes ACOs with high original spending benchmarks to join the program, since they have ample room for improvement. MACRA contained provisions designed to encourage provider participation in Medicare ACOs. Under MACRA, clinicians will be required to either participate in alternative payment models, such as ACOs, or to join the merit-based incentive payment system and face the potential of significant payment reductions (Spivack, Laugesen, and Oberlander 2018). However, ACOs are only one of several alternative payment models, and health care organizations participating in ACOs may also determine that other models such as bundled payments, direct contracting, or comprehensive primary care programs are more attractive.

Is the large-scale investment in the Medicare ACO program by both CMS and participating provider organizations worth this incremental scale of improvement? Some observers say no, arguing the ACO experiment has yielded little, and stakeholders should move on to other strategies to improve US health care. Other analysts contend that ACOs are a meaningful step toward a more efficient US health care system that will be built on small, incremental changes, and policy makers have tools to improve the performance of ACO programs, such as better benchmarking and allowing upside-only risk paths for some ACOs. Yet their ultimate impact on Medicare and US health care remains uncertain.

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