

# Policy Research Perspectives

Payment and Delivery in 2020: Fee-for-Service Revenue Remains Stable While Participation Shifts in Accountable Care Organizations During the Pandemic

By Apoorva Rama, PhD

## Introduction

This Policy Research Perspective (PRP) assesses participation growth in medical homes and accountable care organizations (ACOs) as well as in a variety of payment methods between 2012 and 2020 using data from the American Medical Association's (AMA) Physician Practice Benchmark Surveys. The first section of the PRP focuses on medical homes and Medicare, Medicaid, and commercial ACOs, examining participation in these models and differences across practice arrangements. The second section focuses on involvement in fee-for-service (FFS) and alternative payment methods (APMs), including pay-for-performance, bundled payments, shared savings, and capitation. Also assessed is the relationship between participation in medical homes and ACOs with payment methods.

In 2020, 32.3 percent of physicians were in practices that participated in medical homes. Forty-three percent of physicians worked in a practice that belonged to a commercial ACO, 36.7 percent to a Medicare ACO, and 29.5 percent to a Medicaid ACO. Although participation in commercial and Medicaid ACOs increased from 2018 (by 4 and 3 percentage points, respectively), participation in Medicare ACOs *decreased* (by almost 2 percentage points) and participation in medical homes remained roughly the same (within half a percentage point). Nonetheless, 54.9 percent of physicians reported participation in at least one ACO type, compared to 53.8 percent in 2018 and 44.0 percent in 2016.

The data also show that 44.5 percent of physicians received at least some payment based on payfor-performance for care that they provided, 40.1 percent received bundled payments, 23.8 percent received capitation, and 21.5 percent received shared savings. Sixty-seven percent of physicians worked in practices that received at least some revenue from an APM for care they provided (up from 63.1 percent in 2018). FFS, however, was still the most prevalent payment method with 88.1 percent reporting at least some payment from this method in 2020. Further, an average of 70 percent of practice revenue came from FFS and 30 percent from APMs. Despite consistency over time in both the receipt of FFS and the average revenue share from FFS, the data show a shift away from complete reliance on FFS for all revenue between 2014 and 2020.

## **Data and methods**

The AMA's Physician Practice Benchmark Surveys include nationally representative data on physicians who provide at least 20 hours of patient care per week, are post-residency, and are not employed by the federal government at the time of the survey. The Benchmark Surveys were conducted in September 2012, 2014, 2016, 2018, and 2020 with approximately 3,500 respondents each year.<sup>1</sup>

This PRP focuses on questions in the survey related to participation in medical homes and ACOs as well as involvement with FFS and various APMs. The Benchmark Surveys serve as one of the few sources of physician level data on this topic. In the survey, physicians were asked if their practice is currently "accredited" or "recognized" as a medical home, and whether their practice participates in a Medicare, Medicaid, or commercial ACO. Additionally, after being given a brief definition of various payment methods (FFS, pay-for-performance, capitation, bundled payments and shared savings), physicians were asked if insurers use any of those payment methods to pay their practice for care they provided. For each payment method that is received by the practice, physicians were then asked to provide their best estimate of the share of practice revenue from that payment method. Physicians can indicate that they "don't know" the answer to any of these questions.

## Physician participation in medical homes and ACOs

Nearly a third of physicians (32.3 percent) were in practices that participated in medical homes in 2020 (Figure 1). Among the three ACO types, participation in commercial ACOs was most prevalent (42.7 percent), followed by Medicare ACOs (36.7 percent) and Medicaid ACOs (29.5 percent).

Most existing research on ACO prevalence focuses on the number of ACO *contracts* or *covered lives*. Data from the start of third quarter of 2019 show that of around 1600 ACO contracts, 55 percent were for commercial ACOs, 38 percent for Medicare ACOs, and 7 percent for Medicaid ACOs (Muhlestein et al., 2019). In terms of the nearly 44 million patient lives covered by these ACO contracts, 60 percent were from commercial ACOs, 30 percent from Medicare ACOs, and 10 percent from Medicaid ACOs (Muhlestein et al., 2019). Although these metrics differ from the physician level data in the Benchmark Survey, the results are similar in that commercial ACOs were the most prevalent and Medicaid ACOs the least.

## Trends in participation and awareness

Participation in medical homes has increased by almost 9 percentage points from 2014 (23.7 percent) to 2020 (32.3 percent) (Figure 2). Most of this growth occurred early on in this period as participation barely shifted from 2018 to 2020.<sup>2</sup>

Data from the Benchmark Survey show that while participation in Medicare ACOs increased by 10 percentage points from 2014 (28.6 percent) to 2018 (38.2 percent), there was a decrease in

<sup>&</sup>lt;sup>1</sup> See Kane (2021) for additional details on survey methodology.

<sup>&</sup>lt;sup>2</sup> The 2012 Benchmark Survey included a differently structured question on medical home participation so estimates from that year are not comparable with those from later years. Questions on ACO participation started in 2014 for Medicare ACOs and 2016 for Medicaid and commercial ACOs.

participation in 2020 (to 36.7 percent) (not statistically significant). Despite the recent decline in Medicare ACO participation, the data also show an increase in Medicaid and commercial ACO participation. From 2016 to 2020, participation increased by 11 and 9 percentage points for commercial ACOs (31.7 percent to 42.7 percent) and Medicaid ACOs (20.9 percent to 29.5 percent); however, the increases from 2018 to 2020 were less substantial than those from 2016 to 2018. The percentage of physicians in practices that were part of at least one of the three ACO types was 54.9 percent in 2020, similar to 53.8 percent in 2018 and up from 44.0 percent in 2016.³ Lastly, the percentage of physicians in practices participating in a single ACO type decreased from 19.4 percent in 2018 to 17.4 percent in 2020, while participation in multiple ACO types increased from 34.4 percent in 2018 to 37.5 percent in 2020 (data not shown).

Many of the patterns found in the Benchmark Surveys are consistent with other research on ACO trends that utilize different metrics. Muhlestein et al. (2021) note that 2010 to 2018 saw rapid growth in the number of ACOs and ACO-covered lives but that both plateaued afterwards when 2019 and 2020 unprecedently saw more ACO exits than entrants. While the number of commercial and Medicaid ACO contracts have steadily increased, Medicare ACO contracts have not and Medicare's share of total ACO contracts decreased from 41 percent in early 2018 to 34 percent in the first quarter of 2021 (Muhlestein et al., 2021). Such reports on recent declines in Medicare ACO participation are consistent with the Benchmark Survey results discussed above. Data from the Medicare Shared Savings Program (MSSP) show that, after steady increases in the number of ACOs from the beginning of 2014 to 2018, there were fluctuations that ultimately resulted in a net decrease in the number of ACOs by the beginning of 2021 (Centers for Medicare and Medicaid Services, 2021b). Declines in participation after 2018 coincide with when greater downside risk requirements were incorporated in the MSSP (Muhlestein et al., 2021). In fact, Bleser et al. (2019) find that bearing downside risk was one of several factors significantly associated with the risk of exiting the MSSP program. As such, its growth may continue to abate due to the push to take on risk as well as other factors (Gaus et al., 2021).

Finally, Figure 2 also shows that roughly a quarter of physicians were unaware of their practice's participation for medical homes (24.3 percent) and each ACO type (22.7 percent for Medicare ACOs, 25.9 percent for commercial ACOs, and 28.5 percent for Medicaid ACOs).<sup>4</sup> Thus, the participation estimates reported in the previous section may understate actual participation in these models. Further, the small changes in these percentages from 2016 to 2020 suggest that changes in awareness were not driving the trend of physicians indicating their practice belonged to an ACO.

## Participation by practice type

Differences in medical home and ACO participation across practice types in 2020 are presented in Figure 3. For medical homes and all three ACO types, solo practitioners were the least likely to participate, followed by physicians in single specialty practices and multi-specialty practices.<sup>5</sup> Twelve

<sup>&</sup>lt;sup>3</sup> T-tests indicate that the difference between 2018 and 2020 in the percentage of physicians in practices participating in at least one ACO type is not statistically significant at the 5% level.

<sup>&</sup>lt;sup>4</sup> Awareness of participation varied greatly by employment status. Fifty-three percent of employees were unaware of their practice's participation for at least one of the three ACO types compared to only 29.0 percent of owners.

<sup>&</sup>lt;sup>5</sup> In 2020, 14.0 percent of physicians were in solo practice, 42.6 percent in single specialty practice, 26.2 percent in multi-specialty practice, and the remaining in other practice types (Kane, 2021).

percent of solo practitioners participated in medical homes compared to 27.3 percent of physicians in single specialty and 43.0 percent of physicians in multi-specialty practices. Similar differences can be seen with the ACO models. Among solo practitioners, 20.0 percent, 13.2 percent, and 24.0 percent participated in, respectively, Medicare, Medicaid, and commercial ACOs. Compared to these solo practitioners, participation rates were substantially higher for physicians in single specialty practices (between 12 and 17 percentage points higher) and multi-specialty practices (between 24 and 28 percentage points higher).

# Participation by specialty mix

There were differences in medical home and ACO participation by whether there were at least some primary care physicians in the practice (Figure 4).<sup>6</sup> Physicians in practices that had primary care physicians were substantially more likely to participate in each of the four models than those that did not have primary care physicians in their practice. For medical home participation, there was over a 20 percentage point difference in 2020 between physicians in practices that had a primary care physician (18.5 percent) compared to those that did not (38.9 percent). This difference was narrower, but still substantial for physicians in each of the three ACO models: 12 percentage points for Medicare ACOs and roughly 7 percentage points for both Medicaid and commercial ACOs.<sup>7</sup> That physicians in practices with primary care physicians had greater ACO participation rates may relate to the fact that high-performing ACOs, where collaboration is key in ensuring continuous patient care (Jabbarpour et al., 2018), are characterized by primary care physicians that can effectively communicate and coordinate patient care and information (D'Aunno et al., 2016).

# Trends in participation by practice ownership

Physicians in physician-owned practices were substantially less likely than those in hospital-owned practices to indicate their practice was involved in medical homes and ACOs (Figure 5).8 In 2020, 21.3 percent of physicians in physician-owned practices compared to 42.3 percent of physicians in hospital-owned practices participated in medical homes, a 21 percentage point difference.9 Although this participation gap was narrower for ACOs, it was still substantial at 18 percentage points for Medicare ACOs, 16 percentage points for Medicaid ACOs, and 12 percentage points for commercial ACOs.

As discussed in Rama (2019), differences in participation rates by practice ownership may relate to the fact that hospital-owned practices were more likely to have primary care physicians (a specialty

<sup>&</sup>lt;sup>6</sup> Fifty-five percent of the physicians included in Figure 4 were either a primary care physician themselves or indicated that their practice included primary care physicians. Primary care specialties include the following: family medicine, general practice, internal medicine, obstetrics/gynecology, and pediatrics.

<sup>&</sup>lt;sup>7</sup> T-tests indicate that the difference in the participation rates for practices with a primary care physician and practices without a primary care physician for medical homes, Medicare ACOs, Medicaid ACOs, and commercial ACOs is significantly different (at the 5% level).

<sup>&</sup>lt;sup>8</sup> Physician-owned practices are practices that are wholly owned by physicians. Hospital-owned practices include practices that are jointly owned between physicians in the practice and a hospital or hospital system or practices that are wholly owned by a hospital or hospital system. See Kane (2021) for the shares of physicians in the 2012-2020 Benchmark Surveys that belong to each practice ownership structure.

<sup>&</sup>lt;sup>9</sup> T-tests indicate that the difference in physician-owned and hospital-owned practice participation rates for medical homes, Medicare ACOs, Medicaid ACOs, and commercial ACOs is significantly different at the 1% level.

mix that has higher participation rates as shown in Figure 4). Additionally, hospitals have the capital and infrastructure to implement quality reporting and data-sharing (Colla and Lewis, 2016), advantages that may influence participation in ACOs and medical homes.

5

Figure 5 also shows the 2014 to 2020 trends in medical home and ACO participation by practice ownership.<sup>10</sup> Participation in medical homes ultimately increased by 6 percentage points for physicians in physician-owned practices from 2014 (15.2 percent) to 2020 (21.3 percent). Participation in medical homes among physicians in hospital-owned practices steadily increased from 2014 (33.0 percent) through 2018 (42.9 percent), before plateauing in 2020 (42.3 percent).

For physicians in physician-owned practices, participation in Medicare ACOs steadily increased between 2014 (21.6 percent) and 2018 (30.3 percent), before dipping by almost 2 percentage points in 2020. For physicians in hospital-owned practices, participation in Medicare ACOs remained stable between 2014 (40.3 percent) and 2016 (39.5 percent) before increasing by over 10 percentage points in 2018 (50.6 percent). As in physician-owned practices, there was a dip in Medicare ACO participation among hospital-owned practices between 2018 and 2020 but one that was more substantial (4 percentage points).

Participation in Medicaid ACOs steadily increased for physicians in physician-owned practices between 2016 (14.8 percent) to 2020 (20.7 percent) – ultimately a 6 percentage point increase. Although physicians in hospital-owned practices initially reported a substantial 10 percentage point increase in participation from 2016 (26.5 percent) to 2018 (36.5 percent) participation plateaued in 2020 (36.5 percent).

Different than Medicare and Medicaid ACOs, participation in commercial ACOs increased for both practice ownership categories between 2016 and 2020. Participation in commercial ACOs for physicians in physician-owned practices steadily increased over this period, with an overall change of 9 percentage points. There was a more substantial 12 percentage point increase in participation for physicians in hospital-owned practices.

## Physician involvement in fee-for-service and alternative payment methods

The vast majority of physicians (88.1 percent) reported that their practice received payment from FFS in 2020 (Figure 6). Nonetheless, 66.8 percent of physicians indicated their practice received at least some payment from APMs (data not shown). Among the APMs, pay-for-performance and bundled payments were most prevalent, with 44.5 percent and 40.1 percent of physicians indicating their practice received at least some payment through these methods. Just under a quarter of physicians indicated their practice received at least some payment through capitation (23.8 percent) and shared savings (21.5 percent).

<sup>10</sup> A factor to consider in the overall change in the percentage of physicians indicating their practice belonged to a medical home or ACO (Figure 2) is that the percentage of physicians who worked in physician-owned practices has decreased by 11 percentage points between 2012 and 2020 (Kane, 2021). As such, both shifts in the physician population across practice ownership categories and shifts in medical home and ACO participation within each practice ownership category may have impacted the overall percentages in medical home and ACO participation.

6

## Trends in participation and awareness

Data from the Benchmark Surveys suggest that the prevalence of FFS has remained consistent over the last decade (Figure 7). In 2012, 89.4 percent of physicians reported at least some payment from FFS similar to 88.1 percent in 2020. During this period, the prevalence of this payment method dipped to a low of 83.6 percent in 2016, still a substantial majority of physicians.

In contrast to the steadiness of FFS involvement, the data suggest an uptick in the prevalence of APMs. Participation in at least one APM has seen a cumulative 9 percentage point increase from 2012 (57.6 percent) to 2020 (66.8 percent) (data not shown). More specifically, involvement in payfor-performance has steadily increased during each iteration of the survey by 2 to 3 percentage points resulting in a cumulative increase of 15 percentage points between 2012 (29.4 percent) and 2020 (44.5 percent), the largest increase of the four APMs surveyed.

Between 2012 and 2020, involvement in shared savings more than doubled from 8.3 percent in 2012 to 21.5 percent in 2020 – a 13 percentage point increase. Although there are fewer published results on commercial arrangements compared to public sector programs in shared savings (Murray et al., 2018), anecdotal reports of commercial payers developing and testing shared savings programs (Beaton, 2018) introduce the possibility that increased participation by commercial payer programs in this payment model might be driving this change and offsetting the recent decreases in MSSP participation discussed earlier.

Involvement in bundled payments has also increased albeit more modestly. In 2012, 32.0 percent of physicians were in practices involved in bundled payments; this increased to 34.8 percent in 2016 and ultimately 40.1 percent in 2020 for a cumulative increase of 8 percentage points. However, it should be noted that bundled payments often reflect episode-based care, which may result in only certain specialties and practices being able to effectively participate.<sup>11</sup>

In contrast to the other APMs surveyed, involvement in capitation has remained at roughly one quarter of physicians. After an initial uptick in involvement between 2012 (21.7 percent) and 2014 (26.1 percent), the percentage of physicians reporting capitation as a payment method in their practice has remained flat or slightly declined (25.1 percent in 2016, 23.9 percent in 2018, and 23.8 percent in 2020).

Figure 7 also shows the percentage of physicians that were unaware of their practice's involvement in each payment method between 2012 and 2020. For FFS, the percentage of physicians that were unaware of their practice's involvement remained low during this period, around 6 percent in most years, and with a high of only 10.6 percent in 2016. Rates of unawareness for other payment methods were higher than for FFS with shared savings consistently having the highest rate (ranging from 21.1 percent in 2012 to 29.8 percent in 2016). A consistent pattern across all payment methods is that the percentage of physicians that were unaware of their practice's participation status was higher in 2016 than in any years before or after that.

<sup>11</sup> For example, the Centers for Medicare and Medicaid Services (2021a) detail specific definitions for episode-based care that qualify for coverage in the Bundled Payments for Care Improvement (BPCI) Initiative. Berg et al. (2019) note that BPCI may be attractive to, for example, orthopedic physicians since many qualified episodes of care can be bundled but the value of available bundles for other specialties may be too low to be an attractive option.

A number of factors may be responsible for this pattern. First, there has been an ongoing shift in the physician population from physicians as owners to physicians as employees (Kane, 2021). Compared to owners, employees have lower awareness of practice participation in APMs (data not shown). Thus, increases in the percentage of physicians that were unaware of their practice's participation status through 2016 may have been partly due to this underlying shift in the physician population. At the same time, new payment programs and policies have required greater involvement at the individual physician level. For example, in the first performance year of the Quality Payment Program (2017), 94 percent of the 777,283 physicians eligible for the Merit-Based Incentive Payment System participated in this track (Quality Payment Program, 2019). Such changes in programs and policies may have also impacted the increases in physician awareness that occurred after 2016. To that point, although there has been increased awareness for both owners and employees since 2016 (data not shown), more substantial increases were present for employees.

## Trends in revenue share

Figure 8 shows the average shares of revenue from FFS and APMs over the 2014 to 2020 period. In each year, roughly 70 percent of practice revenue came from FFS while only 30 percent from APMs. In other words, for every \$1 of revenue coming into the practice, \$0.70 was through FFS and \$0.30 was through an APM. Despite increases in the percentage of physicians indicating their practice received at least some payment from APMs, it appears there has been little impact on the relative share of revenue.

There are several possible reasons for this. First, as discussed in Rama (2019), many APMs build on the FFS models in that practices are likely to be paid via FFS and adjustments are made after the fact to reflect gains from the APMs. Berg et al. (2019) note that existing coding, billing, and payment processes are mostly unaffected since these APMs (i.e., shared savings and losses) are calculated and administered retrospectively, thus building upon the FFS architecture. For example, the Value Modifier program from CMS makes payment adjustments (reward or penalty) of 2 to 4 percent on a claim-by-claim basis (NEJM Catalyst, 2021). In contrast, capitation, which typically involves a fixed amount of money per patient regardless of amount of care used, and bundled payments, which typically involve a single payment per episode of care, do not necessarily fit this structure. Nonetheless, as discussed earlier, the prevalence of capitation has remained relatively steady during this period and there have been only modest increases in the prevalence of bundled payments.

Second, although the average share of revenue from FFS and APMs has remained relatively constant, the distribution of the shares has not been quite as stable (Figure 9). In fact, there has been a shift away from complete reliance on FFS between 2014 and 2020. The percentage of physicians in practices whose revenue came *entirely* from FFS decreased by 5 percentage points, from 33.6 percent in 2014 to 28.6 percent in 2020. Commensurate with this shift away from full payment through FFS is a 1.4 percentage point increase in the percentage of physicians receiving 0% of revenue from FFS (i.e., all revenue comes from APMs), and a 3.6 percentage point increase in the percentage of physicians receiving at least some, but not all, revenue from FFS (i.e., the inclusion of at least some APMs in the revenue stream). This points more towards a general

convergence of using a blend of FFS and APMs rather than APMs acting as a full replacement for FFS.<sup>12</sup>

# Revenue share by ACO participation

The final figure (Figure 10) presents 2020 data on whether payment through FFS is related to participation in medical homes and ACOs. Because the goals of coordinating care to improve patient care and reduce costs are common among most ACO models and various APMs, it is unsurprising that physicians in practices that belonged to a medical home or an ACO reported a lower average share of practice revenue from FFS (roughly 60 percent of revenue) compared to those in practices not participating in those models (roughly 80 percent of revenue). Although this reflects a 20 percentage point difference in FFS revenue share based on the practice's involvement in medical homes and ACOs, it is interesting to note that, even in 2020, the majority of revenue came from FFS regardless of whether or not the practice participated in a medical home or an ACO.

## Conclusion

Using nationally representative data from AMA's Physician Practice Benchmark Surveys, this Policy Research Perspective presents physician level data on participation in medical homes and ACOs as well as involvement in fee-for-service and alternate payment models.

In 2020, 54.9 percent of physicians were in a practice that belonged to at least one ACO, similar to 53.8 percent in 2018 but up from 44.0 percent in 2016. Thirty-two percent of physicians were in a practice that belonged to a medical home, 36.7 percent to a Medicare ACO, 29.5 percent to a Medicaid ACO, and 42.7 percent to a commercial ACO. From 2016 to 2020, participation increased by 11 and 9 percentage points for commercial ACOs and Medicaid ACOs. While participation in Medicare ACOs increased by 10 percentage points from 2014 (28.6 percent) to 2018 (38.2 percent), there was a decrease in participation in 2020 (to 36.7 percent). Participation in medical homes increased by 8 percentage points from 2014 (23.7 percent) to 2018 (31.9 percent) before plateauing in 2020 (at 32.3 percent).

The report also highlights differences in medical home and ACO participation by practice arrangements. Solo practitioners had lower participation rates in ACOs than physicians in single specialty practices (between 12 and 17 percentage point differences) and multi-specialty practices (between 24 and 28 percentage point differences). Physicians in practices that did not have any primary care physicians were less likely to report involvement in each ACO type than physician in practices that included primary care physicians (between a 7 to 12 percentage point difference).

Physicians in hospital-owned practices were more likely to be involved in medical homes and each of the three ACO types compared to those in physician-owned practices (between a 12 and 21 percentage point difference in 2020). Data from 2018 to 2020 show a decline in Medicare ACO participation for both physicians in physician-owned and hospital-owned practices, although there were larger decreases for the latter. The continued increase of Medicaid ACO participation from

<sup>&</sup>lt;sup>12</sup> There were substantial increases in the revenue shares of pay-for-performance from 2014 to 2018 and shared savings and bundled payments from 2018 to 2020 (data not shown) that suggest these APMs were primary drivers in the shift away from all revenue coming from FFS over the 2014 to 2020 period.

2018 to 2020 was driven by increases in participation from physicians in physician-owned practices; participation plateaued for those in hospital-owned practices. Both physicians in physician-owned and hospital-owned practices have seen steady participation increases in commercial ACOs.

In 2020, 88.1 percent of physicians worked in a practice that received at least some revenue from fee-for-service. At the same time, 66.8 percent received revenue from an alternative payment method. Certain alternative payment methods, such as pay-for-performance (44.5 percent) and bundled payments (40.1 percent), had a greater percentage of physicians working in a practice that received revenue from that method than others, such as capitation (23.8 percent) and shared savings (21.5 percent).

Since the Benchmark Survey was first conducted in 2012, the percentage of physicians in practices that received at least some revenue from fee-for-service has been consistent (remaining upwards of 80 percent), while the percentage in practices that received at least some revenue from alternative payment methods has had a cumulative 9 percentage point increase from 2012 (57.6 percent of physicians) to 2020 (66.8 percent). More specifically, participation in pay-for-performance, shared savings, and bundled payments has substantially increased although capitation, in contrast, has decreased in prevalence since 2014.

In 2020, roughly 70 percent of practice revenue was from fee-for-service and 30 percent from APMs. These average shares have been consistent since 2012 in part because many APMs build on the fee-for-service payment architecture rather than replacing it in full. However, the results of the Benchmark Survey also show a shift away from complete reliance on fee-for-service between 2014 and 2020, as the percentage of physicians indicating *all* of their practice's revenue comes from fee-for-service decreased by 5 percentage points. Lastly, similar to previous years, in 2020, physicians in practices that belonged to a medical home or an ACO had a lower share of revenue coming from fee-for-service (roughly 60 percent of revenue) compared to physicians in practices that were not in a medical home or in an ACO (roughly 80 percent of revenue).

Overall, this report shows that, notwithstanding the consistency in the average share of revenue from fee-for-service over the 2012 to 2020 period, physicians were in practices that increasingly engaged in APMs. The results for ACOs were mixed, as participation in commercial and Medicaid ACOs continued to rise through 2020 while participation in Medicare ACOs appears to have plateaued.

## References

Beaton, T. Using a Commercial Shared Savings Program to Reduce Care Costs [Internet]; 2018 [cited 2021 Nov 1]. (Health Payer Intelligence, July 23, 2018). Available from <a href="https://healthpayerintelligence.com/news/using-a-commercial-shared-savings-program-to-reduce-care-costs">https://healthpayerintelligence.com/news/using-a-commercial-shared-savings-program-to-reduce-care-costs</a>

Berg, M., Nuzum, D., Parmar, S. The seven characteristics of successful alternative payment models [Internet]; 2019 [cited 2021 Nov 1]. (McKinsey & Company, January 17, 2019). Available from <a href="https://healthcare.mckinsey.com/seven-characteristics-successful-alternative-payment-models/">https://healthcare.mckinsey.com/seven-characteristics-successful-alternative-payment-models/</a>

Bleser, W., Saunders, R., Muhlestein, D., McClellan, M. Why do accountable care organizations leave the Medicare Shared Savings Program? [Internet]; 2019 [cited 2021 Nov 1]. Health Aff (Millwood). 2019;38(5):794–803. Available from https://www.healthaffairs.org/doi/full/10.1377/hlthaff.2018.05097

Centers for Medicare and Medicaid Services. Bundled Payments for Care Improvement (BPCI) Initiative [Internet]; 2021 [cited 2021 Nov 1]. (Centers for Medicare and Medicaid Services, June 29, 2021). Available from <a href="https://innovation.cms.gov/innovation-models/bundled-payments">https://innovation.cms.gov/innovation-models/bundled-payments</a>

Centers for Medicare and Medicaid Services. Shared Savings Program Fast Facts – As of January 1, 2021 [Internet]; 2021 [cited 2021 Nov 1]. (Centers for Medicare and Medicaid Services, July 28, 2021). Available from <a href="https://www.cms.gov/files/document/2021-shared-savings-program-fast-facts.pdf">https://www.cms.gov/files/document/2021-shared-savings-program-fast-facts.pdf</a>

Colla, C., and Lewis, V. Hospitals participating in accountable care organizations tend to be large and urban, allowing access to capital and data [Internet]; 2016 [cited 2021 Nov 1]. (The Commonwealth Fund, March 8, 2016). Available from

https://www.commonwealthfund.org/publications/journal-article/2016/mar/hospitals-participating-accountable-care-organizations-tend)

D'Aunno, T., Broffman. L., Sparer, M., and Kumar, S.R.. Factors That Distinguish High-Performing Accountable Care Organizations in the Medicare Shared Savings Program [Internet]; 2018 [cited 2021 Nov 1]. (Health Services Research, December 26, 2016). Available from <a href="https://doi.org/10.1111/1475-6773.12642">https://doi.org/10.1111/1475-6773.12642</a>

Gaus, C., and Pittman, D. Evaluation Of Medicare Alternative Payment Models: What The Data Show. [Internet]; 2021 [cited 2021 Nov 1]. (Health Affairs Blog, November 12, 2020). Available from <a href="https://www.healthaffairs.org/do/10.1377/hblog20201106.971990/full/">https://www.healthaffairs.org/do/10.1377/hblog20201106.971990/full/</a>

Jabbarpour, Y., Coffman, M., Habib, A., Chung, Y., Liaw, W., Gold, S., Jackson, H., Bazemore, A., and Marder, W.D. Advanced Primary Care: A Key Contributor to Successful ACOs [Internet]; 2018 [cited 2021 Nov 1]. (Patient-Centered Primary Care Collaborative and the Robert Graham Center, August, 2018). Available from

https://www.pcpcc.org/sites/default/files/resources/PCPCC%202018%20Evidence%20Report.pdf

Kane, C. Recent Changes in Physician Practice Arrangements: Private Practice
Dropped to Less Than 50 Percent of Physicians in 2020 [Internet]. Chicago (IL): American Medical
Association, 2021 [cited 2021 Nov 1]. (Policy Research Perspective 2021-3). Available from
<a href="https://www.ama-assn.org/system/files/2021-05/2020-prp-physician-practice-arrangements.pdf">https://www.ama-assn.org/system/files/2021-05/2020-prp-physician-practice-arrangements.pdf</a>

Muhlestein, D., Bleser W., Saunders, R., Richards, R., Singletary, E., McClellan, M. Spread of ACOs And Value-Based Payment Models In 2019: Gauging the Impact of Pathways to Success. [Internet]; 2019 [cited 2021 Nov 1]. (Health Affairs Blog, October 21, 2019). Available from <a href="https://www.healthaffairs.org/do/10.1377/hblog20191020.962600/full/">https://www.healthaffairs.org/do/10.1377/hblog20191020.962600/full/</a>

Muhlestein, D., Bleser W., Saunders, R., McClellan, M. All-Payer Spread Of ACOs And Value-Based Payment Models In 2021: The Crossroads And Future Of Value-Based Care. [Internet]; 2021 [cited 2021 Nov 1]. (Health Affairs Blog, June 17, 2021). Available from <a href="https://www.healthaffairs.org/do/10.1377/hblog20210609.824799/full/">https://www.healthaffairs.org/do/10.1377/hblog20210609.824799/full/</a>

Murray, R., and Delbanco, S. The evidence on shared savings: do we know enough? [Internet]; 2018 [cited 2021 Nov 1]. (Health Affairs Blog, July 2018). Available from https://www.healthaffairs.org/do/10.1377/hblog20180705.615709/full/

NEJM Catalyst. What Is Pay for Performance in Healthcare? [Internet]; 2018 [cited 2021 Nov 1]. (Massachusetts Medical Society, March 1, 2018). Available from <a href="https://catalyst.nejm.org/doi/full/10.1056/CAT.18.0245">https://catalyst.nejm.org/doi/full/10.1056/CAT.18.0245</a>

Quality Payment Program. 2017 Quality Payment Program Reporting Experience [Internet]; 2019 [cited 2021 Nov 1]. (Quality Payment Program). Available from <a href="https://qpp-cm-prod-content.s3.amazonaws.com/uploads/491/2017%20QPP%20Experience%20Report.pdf">https://qpp-cm-prod-content.s3.amazonaws.com/uploads/491/2017%20QPP%20Experience%20Report.pdf</a>

Rama, A. Payment and Delivery in 2018: Participation in Medical Homes and Accountable Care Organizations on the Rise While Fee-for-Service Revenue Remains Stable [Internet]. Chicago (IL): American Medical Association, 2019 [cited 2021 Nov 1]. (Policy Research Perspective 2019-4). Available from <a href="https://www.ama-assn.org/system/files/2019-09/prp-care-delivery-payment-models-2018.pdf">https://www.ama-assn.org/system/files/2019-09/prp-care-delivery-payment-models-2018.pdf</a>

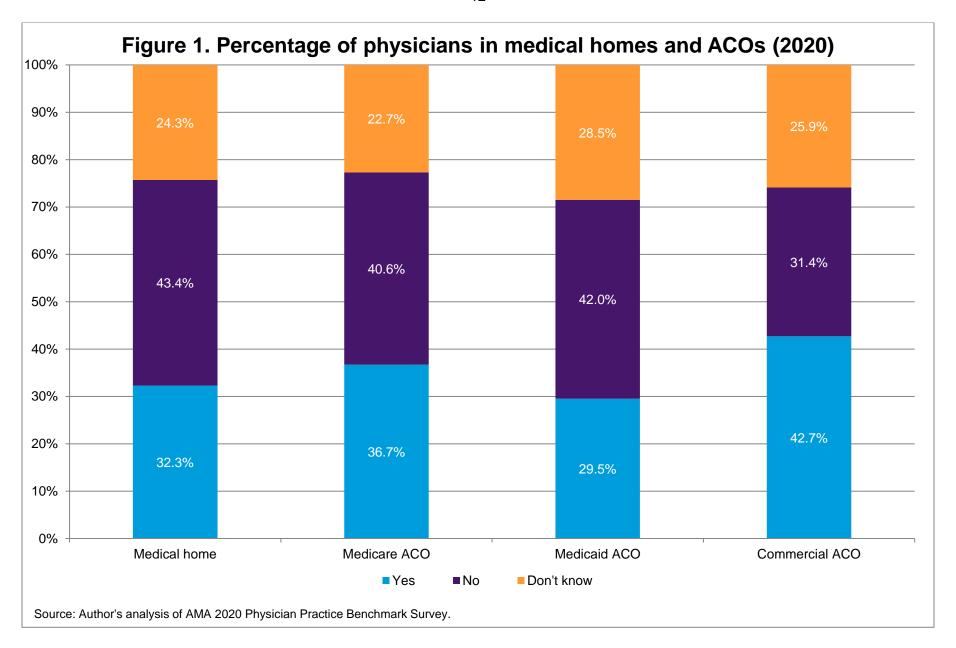
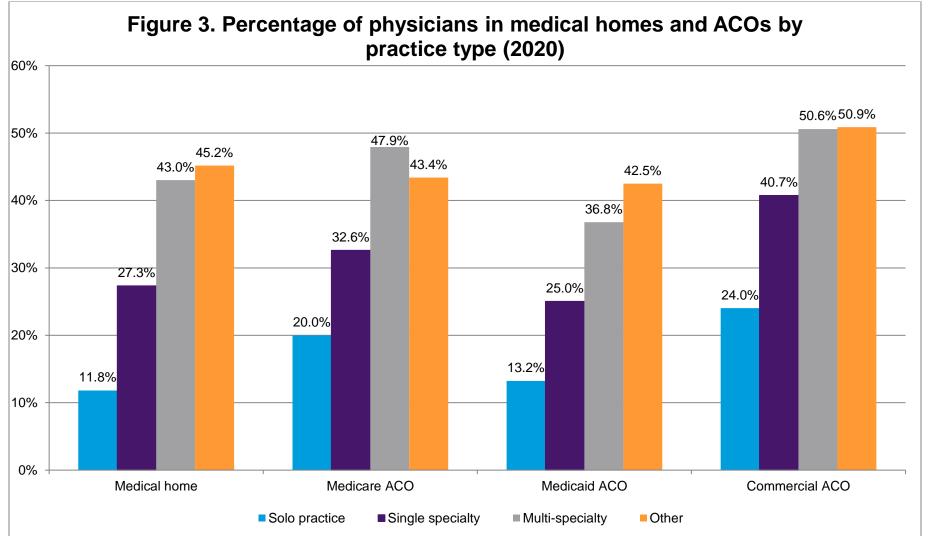


Figure 2. Percentage of physicians in medical homes and ACOs from 2014 to 2020

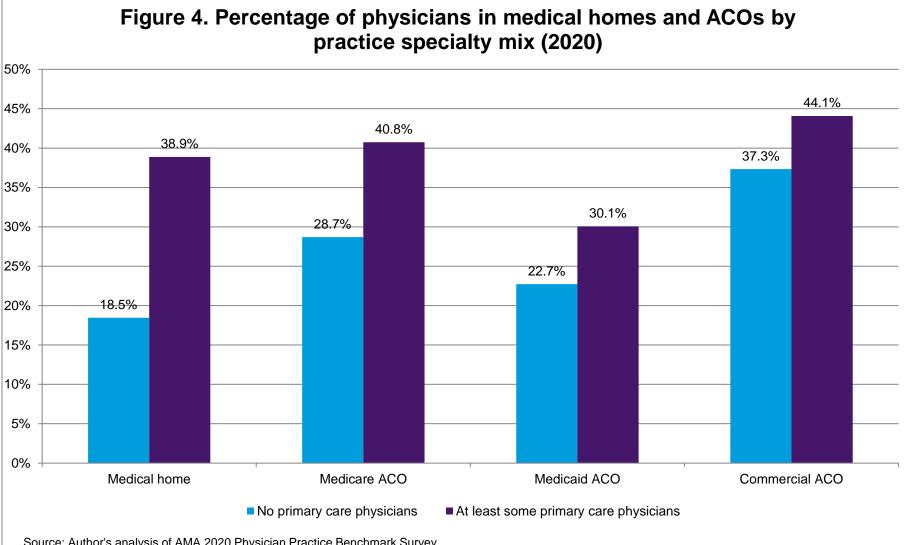
	<b>,</b>				
		2014	2016	2018	2020
	Yes	23.7%	25.7%	31.9%	32.3%
Medical home	No	52.2%	49.4%	45.2%	43.4%
	Don't know	24.1%	24.9%	23.0%	24.3%
	Yes	28.6%	31.8%	38.2%	36.7%
Medicare ACO	No	46.5%	43.7%	40.1%	40.6%
	Don't know	24.9%	24.5%	21.7%	22.7%
	Yes		20.9%	26.3%	29.5%
Medicaid ACO	No		47.2%	44.0%	42.0%
	Don't know		31.9%	29.7%	28.5%
Commercial ACO	Yes		31.7%	39.0%	42.7%
	No		37.6%	32.7%	31.4%
	Don't know		30.7%	28.4%	25.9%
		10000			_

Source: Author's analysis of AMA 2014, 2016, 2018, and 2020 Physician Practice Benchmark Surveys.



Source: Author's analysis of AMA 2020 Physician Practice Benchmark Survey.

Note: Responses to whether part of a medical home or ACO type (yes, no, don't know) are significantly different across practice type (p<0.01) using chi-squared test. The other category consists of physicians who work in faculty practice plans (FPPs), ambulatory surgical centers, urgent care facilities, HMO/managed care organizations, medical schools, as well as those who are direct employees of hospitals and other "fill in" responses. See Appendix Table 1 for t-tests.



Source: Author's analysis of AMA 2020 Physician Practice Benchmark Survey.

Note: Only solo, single specialty, and multi-specialty practices are included. Responses to whether part of a medical home or ACO (yes, no, don't know) are significantly different across practice specialty mix (p<0.01) using chi-squared test. See Appendix Table 1 for t-tests.

Figure 5. Percentage of physicians in medical homes and ACOs by practice ownership from 2014 to 2020

		2014	2016	2018	2020
Medical home	Physician-owned	15.2%	15.6%	20.3%	21.3%
	Hospital-owned	33.0%	37.8%	42.9%	42.3%
Medicare ACO	Physician-owned	21.6%	25.9%	30.3%	28.7%
	Hospital-owned	40.3%	39.5%	50.6%	46.2%
Medicaid ACO	Physician-owned		14.8%	18.6%	20.7%
- Wedicald ACO	Hospital-owned		26.5%	36.5%	36.5%
Commercial ACO	Physician-owned		27.7%	34.1%	36.5%
	Hospital-owned		36.5%	45.3%	48.2%
				. – –	

Source: Author's analysis of AMA 2014, 2016, 2018, and 2020 Physician Practice Benchmark Survey. See Appendix Table 1 for t-tests.

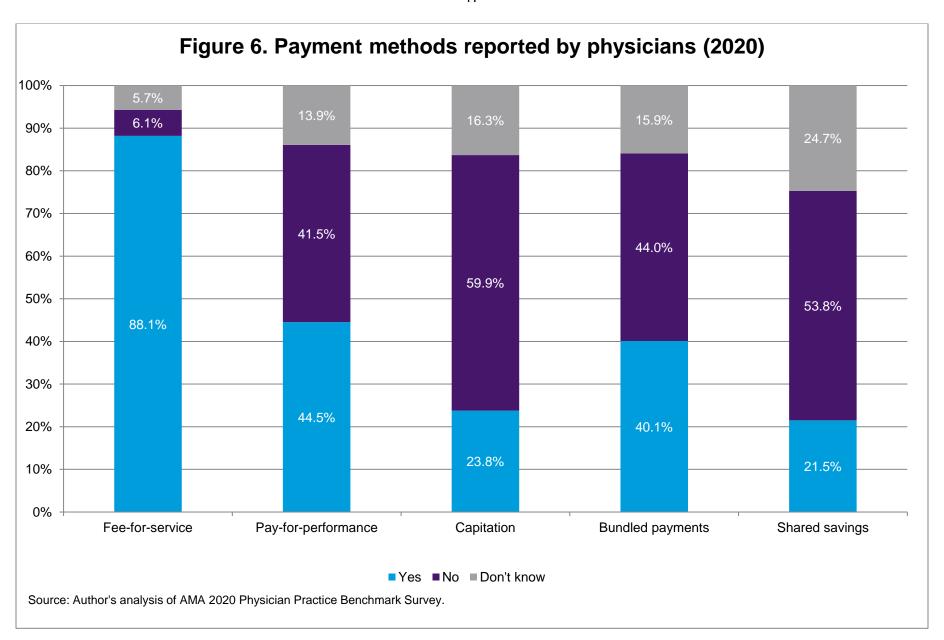
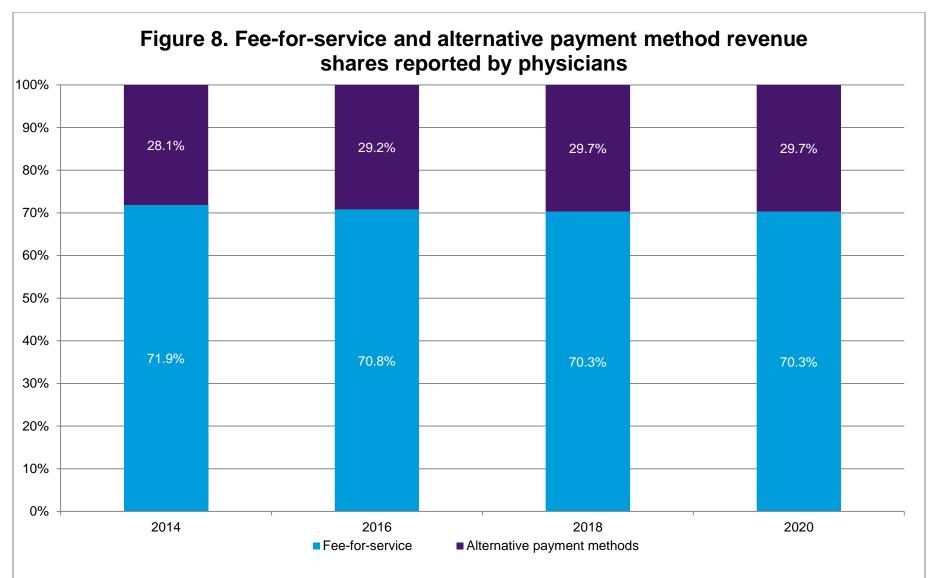


Figure 7. Percentage of physicians in practices that receive fee-for-service and alternative payment methods from 2012 to 2020

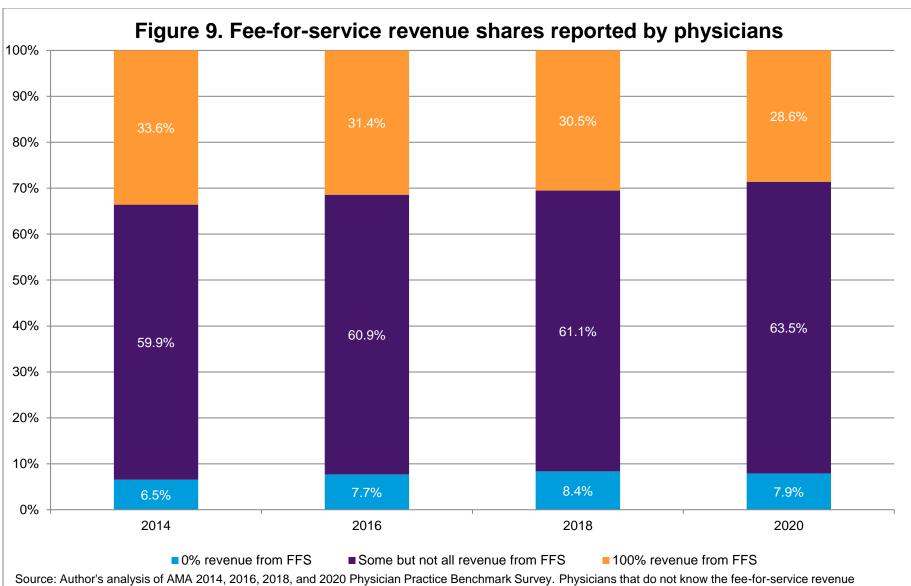
and alternative payment methods from 2012 to 2020							
	2012	2014	2016	2018	2020		
Fee-for-service					_		
Yes	89.4%	85.9%	83.6%	87.0%	88.1%		
No	5.3%	5.2%	5.8%	6.6%	6.1%		
Don't know	5.3%	9.0%	10.6%	6.4%	5.7%		
Pay-for-performance							
Yes	29.4%	32.7%	35.7%	42.3%	44.5%		
No	57.2%	50.5%	44.3%	42.6%	41.5%		
Don't know	13.4%	16.8%	20.1%	15.0%	13.9%		
Capitation							
Yes	21.7%	26.1%	25.1%	23.9%	23.8%		
No	66.9%	57.8%	55.2%	60.0%	59.9%		
Don't know	11.5%	16.1%	19.6%	16.1%	16.3%		
Bundled payments							
Yes	32.0%	34.5%	34.8%	36.2%	40.1%		
No	54.9%	46.6%	44.4%	47.7%	44.0%		
Don't know	13.1%	18.9%	24.6%	16.1%	16.0%		
Shared savings					_		
Yes	8.3%	13.6%	16.7%	18.9%	21.5%		
No	70.7%	59.1%	53.5%	57.3%	53.8%		
Don't know	21.1%	27.3%	29.8%	23.8%	24.7%		

Source: Author's analysis of AMA 2012, 2014, 2016, 2018, and 2020 Physician Practice Benchmark Surveys. See Appendix Table 2 for t-tests.

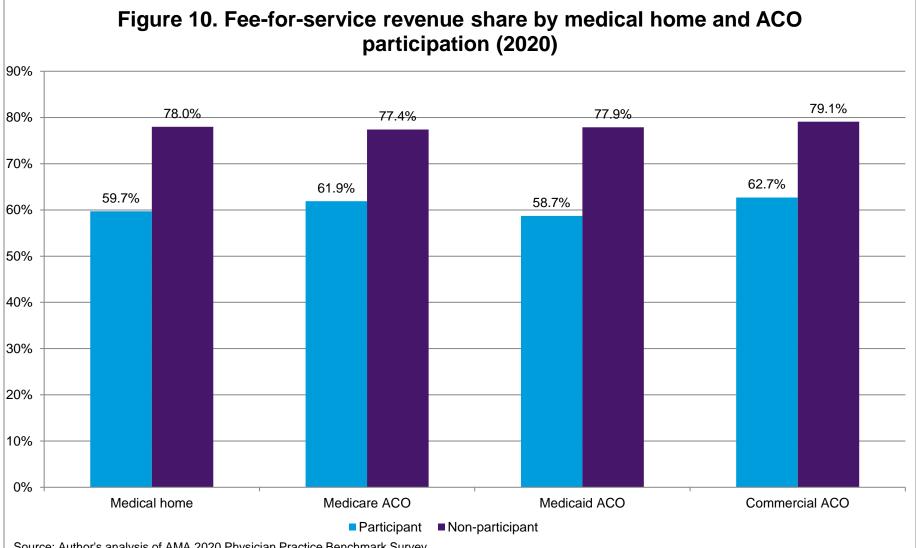


Source: Author's analysis of AMA 2014, 2016, 2018, and 2020 Physician Practice Benchmark Surveys.

Note: Differences in mean revenue share from FFS in 2020 compared to other years are not statistically significant (p<0.05). See Appendix Table 3 for t-tests.



shares (roughly 20 percent in each year) are excluded from this analysis.



Source: Author's analysis of AMA 2020 Physician Practice Benchmark Survey.

Note: Differences in mean revenue share from FFS based in participation status in medical home and ACO type are statistically significant (p<0.01). See Appendix Table 3 for t-tests.

Appendix Table 1. Percentage of physicians in medical homes and ACO by practice characteristics and year

	7.ppoa.x 10.010 1.		edical Ho	me	Me	edicare A	CO	Me	edicaid A	CO	Con	nmercial /	ACO
				Don't			Don't			Don't			Don't
		Yes	No	know	Yes	No	know	Yes	No	know	Yes	No	know
	2014	23.7a	52.2ª	24.1	28.6ª	46.5ª	24.9⁵						
Year	2016	25.7a	49.4ª	24.9	31.8ª	43.7a	24.5°	20.9ª	47.2a	31.9ª	31.7ª	37.6	30.7ª
i <del>C</del> ai	2018	31.9	45.2	23.0	38.2	40.1	21.7	26.3ª	44 <sup>c</sup>	29.7	39.0ª	32.7	28.4 <sup>b</sup>
	2020	32.3	43.4	24.3	36.7	40.6	22.7	29.5	42	28.5	42.7	31.4	25.9
	Solo practice	11.8ª	75.0a	13.2ª	20.0a	70.2ª	$9.9^{a}$	13.2ª	74.5ª	12.3ª	24.0a	61.9ª	14.1ª
Practice	Single specialty	27.3	50.1	22.5	32.6	46.4	21	25.0	47.8	27.2	40.7	34.0	25.3
type (2020)	Multi-specialty	43.0a	28.9ª	28.1ª	47.9ª	27.9ª	24.2°	36.8ª	31.4ª	31.8⁵	50.6a	22.4a	27.0
	Other	45.2ª	23.0a	31.8ª	43.4ª	21.4a	35.3ª	42.5ª	17.4ª	40.2a	50.9ª	13.8ª	35.3ª
Primary care physicians in practice	No primary care physicians At least some primary care	18.5	56.6	24.9	28.7	49.2	22.1	22.7	51.5	25.8	37.3	38.4	24.2
(2020)	physicians	38.9ª	40.2ª	20.9ª	40.8ª	40.8ª	18.5⁵	30.1ª	43.6ª	26.4	44.1ª	32.3ª	23.7
Practice ownership	Physician-owned	21.3	60.2	18.6	28.7	56.0	15.3	20.7	60.1	19.2	36.5	43.8	19.7
(2020)	Hospital-owned	42.3 a	27.8 a	30.0 a	46.2ª	25.9ª	27.8ª	36.5 a	27.2ª	36.3ª	48.2ª	21.7°	30.2ª

Source: Author's analysis of 2014, 2016, 2018, and 2020 AMA Physician Practice Benchmark Surveys.

Notes: Numbers above are percentages. T-tests are run separately for the percentage who said yes, no and don't now to participating in medical homes and ACOs. The table reports pairwise comparisons between 2020 and each of the other years (for year), single specialty practice and each of the other three practice types (for practice type), physicians in practices with at least some primary care physicians and those in practices without any primary care physicians (for practice specialty mix), hospital-owned and physician-owned (for practice ownership). a indicates p<0.01, b indicates p<0.05, c indicates p<0.010

Appendix Table 2. Percentage of physicians receiving payment from feefor-service and alternative payment methods by year

101 001 1100	101 001 1100 and altornative paymont methods by your					
	2012	2014	2016	2018	2020	
Fee-for-service						
Yes	89.4	85.9ª	83.6ª	87.0	88.1	
No	5.3	5.2 °	5.8	6.6	6.1	
Don't know	5.3	9.0ª	10.6ª	6.4	5.7	
Pay-for-performance						
Yes	29.4ª	32.7ª	35.7ª	42.3°	44.5	
No	57.2ª	50.5ª	44.3 <sup>b</sup>	42.6	41.5	
Don't know	13.4	16.8ª	20.1 ª	15.0	13.9	
Capitation						
Yes	21.7⁵	26.1 ⁵	25.1	23.9	23.8	
No	66.9ª	57.8∘	55.2ª	60.0	59.9	
Don't know	11.5ª	16.1	19.6ª	16.1	16.3	
<b>Bundled payments</b>						
Yes	32.0ª	34.5°	34.8ª	36.2ª	40.1	
No	54.9ª	46.6 ⁵	44.4	47.7ª	44.0	
Don't know	13.1ª	18.9ª	24.6ª	16.1	16.0	
Shared savings						
Yes	8.3ª	13.6ª	16.7ª	18.9ª	21.5	
No	70.7ª	59.1ª	53.5	57.3ª	53.8	
Don't know	21.1ª	27.3b	29.8ª	23.8	24.7	

Source: Author's analysis of 2012, 2014, 2016, 2018, and 2020 AMA Physician Practice Benchmark Surveys. Notes: Numbers above are percentages. T-tests are run separately for the percentage who said yes, no and don't now to participating in each payment method. The table reports pairwise comparisons between 2020 and each of the other years. a indicates p<0.01, b indicates p<0.05, c indicates p<0.10.

Appendix Table 3. Share of revenue from fee-for-service by year and participation in medical homes and ACO

participation in modical nomice and 7.00					
		Average fee-for-service share			
Year	2014	71.9°			
	2016	70.8			
	2018	70.3			
	2020	70.3			
Medical Home (2020)	Participant	59.7ª			
	Non-participant	78			
Madisara ACO (2020)	Participant	61.9ª			
Medicare ACO (2020)	Non-participant	77.4			
Medicaid ACO (2020)	Participant	58.7ª			
	Non-participant	77.9			
Commercial ACO (2020)	Participant	62.7°			
Commercial ACO (2020)	Non-participant	79.1			

Source: Author's analysis of 2014, 2016, 2018, and 2020 AMA Physician Practice Benchmark Surveys. Notes: Numbers above are percentages. T-tests are run for average share of revenue from fee-for-service. The table reports pairwise comparisons between 2020 and each of the other years (for year), as well as participating in the model (i.e., medical home, ACO) and not participating in the model. <sup>a</sup> indicates p<0.01, <sup>b</sup> indicates p<0.05, <sup>c</sup> indicates p<0.10.