



# Policy Research Perspectives

## **Payment and Delivery in 2018: Participation in Medical Homes and Accountable Care Organizations on the Rise While Fee-for-Service Revenue Remains Stable**

By Apoorva Rama

### **Introduction**

This Policy Research Perspective (PRP) uses data from the American Medical Association's (AMA) Physician Practice Benchmark Surveys to assess changes in involvement with various care delivery models and payment methods reported by physicians between 2012 and 2018. The Benchmark Surveys serve as one of the few sources of physician level data on this topic. The first section of the PRP focuses on participation in medical homes and Medicare, Medicaid, and commercial accountable care organizations (ACOs), and the second on involvement in fee-for-service (FFS) and alternative payment methods (APMs), including pay-for-performance, bundled payments, shared savings, and capitation. The extent to which involvement in the four care delivery models and in FFS varies across practice characteristics is discussed. In addition, the relationship between participation in care delivery models and payment methods is explored.

In 2018, 31.9 percent of physicians worked in a practice that belonged to a medical home, 38.2 percent to a Medicare ACO, 26.3 percent to a Medicaid ACO, and 39.0 percent to a commercial ACO. Participation in each of the four care delivery models increased significantly from 2016 by 5 to 7 percentage points. Overall, 53.8 percent of physicians reported participation in at least one ACO type in 2018, up from 44.0 percent in 2016.

The data also show that physicians reporting at least some payment from APMs such as pay-for-performance and shared savings has been on the rise. Overall, 63.1 percent of physicians worked in practices that received at least some revenue from an APM. However, because many APMs build on the FFS model, an average of 70 percent of practice revenue comes from FFS while only 30 percent comes from APMs; these shares have been consistent since the Benchmark Survey was first conducted in 2012.

### **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, and 2018 with approximately 3,500 respondents each year. See Kane (2019) for additional details on survey methodology.

The Benchmark Surveys collect detailed information about physicians' practice arrangements and payment methodologies. This PRP focuses on questions in the survey related to participation in care delivery models (i.e., medical homes and ACOs) as well as involvement with various payment methods (i.e., FFS and APMs). In the survey, physicians are 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. The survey also collects information about payment methods. Physicians are provided a brief definition of various payment methods (FFS, pay-for-performance, capitation, bundled payments and shared savings) and are asked if insurers use any of those payment methods to pay their practice. For each payment method that is received by the practice, physicians are 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**

Many estimates on ACO prevalence focus on the number of ACO contracts or covered lives. Leavitt Partners tracks ACOs and provides regular updates on ACO-related developments. Although their estimates are not from the physician perspective, they point to an upswing in ACO participation consistent with the findings from the Benchmark Surveys. As of the end of the first quarter in 2018, 32.7 million patients (i.e., 10 percent of the U.S. population) were covered by an ACO, up by 2 million from the end of the first quarter in 2017 (Muhlestein et al. 2018). The majority of ACO covered lives were under commercial ACO contracts, 37 percent under Medicare ACO contracts, and 10 percent under Medicaid ACO contracts. When examining the number of ACO contracts, 48 percent of contracts were with commercial ACOs, 46 percent with Medicare ACOs, and only 5 percent with Medicaid ACOs.

### Prevalence of medical homes and ACOs over time

Data from the Benchmark Survey show that thirty-two percent of physicians in 2018 were in practices that belonged to a medical home (Figure 1). This is up from 25.7 percent in 2016 and 23.7 percent in 2014.<sup>1,2</sup> Participation in Medicare ACOs increased from 28.6 percent in 2014 and 31.8 percent in 2016 to 38.2 percent in 2018. Although participation in both models has been on an upward trend since the data was first collected in 2014, the increase from 2016 to 2018 was larger than the increase from 2014 to 2016. There was also an increase in both Medicaid ACO participation (from 20.9 percent in 2016 to 26.3 percent in 2018) and commercial ACO participation (from 31.7 percent in 2016 to 39.0 percent in 2018).<sup>3</sup>

The percentage of physicians in practices that were part of at least one of the three ACO types was 53.8 percent in 2018, up from 44.0 percent in 2016. More specifically, in 2018, 19.4 percent of

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<sup>1</sup> Questions on Medicare ACOs and medical homes were not asked prior to the 2014 Benchmark Survey.

<sup>2</sup> T-tests indicate that the increases in medical home, Medicare ACO, Medicaid ACO, and commercial ACOs between the different year pairings were statistically significant at the 5% level.

<sup>3</sup> Questions on Medicaid and commercial ACOs were not asked prior to the 2016 Benchmark Survey.

physicians participated in one of the three ACO types, 19.1 percent in two of the three ACO types, and 15.3 percent in all three ACO types. Twenty-five percent of physicians participated in both a Medicare ACO and commercial ACO (data in this paragraph not shown).

McAlearney et al. (2017) note that early adoption of the ACO model occurred within the Medicare sector, although the private sector was quick to launch similar models and has greater flexibility in developing contracts (i.e., contracts can extend across multiple payers, offer broader coverage, and capture more segments of the population). In contrast, the launch of Medicaid ACOs has been relatively more limited, as the Center for Health Care Strategies (2018) finds only 12 states have active Medicaid ACOs with 10 more pursuing such programs. In the 2018 Benchmark Survey, Medicaid ACO participation was almost always paired with participation in either a Medicare or commercial ACO; 91.8 percent of physicians whose practice participated in a Medicaid ACO also participated in one of the other two ACO types (data not shown). Consistent with the evolution of the ACO model, the Benchmark Survey results suggest that providers might first pursue ACO participation with the more established Medicare and commercial ACO models before implementing the less established Medicaid ACO model. Similar results were noted in the 2016 data (see Rama, 2017).

#### Awareness of participation in medical homes and ACOs

The percentage of physicians who were unaware of their practice's participation in 2018 (Figure 1) was much higher for Medicaid ACOs (29.7 percent) and commercial ACOs (28.4 percent) compared to Medicare ACOs (21.7 percent) and medical homes (23.0 percent). Overall, 43.1 percent of physicians were unaware of their practice's participation in at least one of the three ACO types (data not shown). Thus, it is possible that the participation estimates reported in the previous section understate actual participation in these models. Compared to 2016, the percentage of physicians indicating they were unaware of their practice's participation status for medical homes and each of the three ACO types was slightly less in 2018 (by around 2 to 3 percentage points).<sup>4</sup>

#### Differences across practice type

Participation in medical homes and ACOs varied by practice type (Figure 2). Solo practitioners were the least likely to participate in each of the four care delivery models while physicians in multi-specialty practices had the highest participation rates.<sup>5,6</sup> Among physicians in solo practices, 11.1 percent belonged to a medical home, 22.6 percent to a Medicare ACO, 14.6 percent to a Medicaid ACO, and 27.2 percent to a commercial ACO. Participation rates for each model were between 6 and 14 percentage points higher for physicians in single specialty practices compared to solo practices – the difference was greatest for medical homes and Medicare ACOs. Participation rates for each model were between 13 and 22 percentage points higher for physicians in multi-specialty

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<sup>4</sup> Awareness of participation varied greatly by employment status. Fifty-six percent of employees were unaware of their practice's participation for at least one of the three ACO types compared to only 28.0 percent of owners.

<sup>5</sup> In 2018, 14.8 percent of physicians were in solo practice, 42.8 percent in single specialty practice, 25.2 percent in multi-specialty practice, and 17.2 percent in other practice types (Kane, 2019).

<sup>6</sup> The other category in Figure 2 consists of physicians who worked in faculty practice plans (FPPs), ambulatory surgical centers, urgent care facilities, HMO/managed care organizations, medical schools, as well as those who were direct employees of hospitals and other "fill in" responses.

practices compared to those in single specialty practices. Again, the difference was greatest for medical homes and Medicare ACOs.

#### Differences across specialty mix

Participation in medical homes and ACOs among physicians in solo, single, and multi-specialty practices varied based on whether their practice had at least some primary care physicians (Figure 3).<sup>7</sup> Participation in medical homes and each type of ACO was significantly higher among physicians in practices that had at least some primary care physicians. The greatest difference was observed in medical home participation. Participation was 26 percentage points higher among physicians in practices that had at least some primary care physicians (40.8 percent) compared to those in practices without any primary care physicians (14.5 percent).<sup>8</sup> This gap is smaller but still substantial for Medicare ACOs (18 percentage points), Medicaid ACOs (11 percentage points) and commercial ACOs (12 percentage points). Overall, the data suggest that whether a practice has primary care physicians is a critical factor in the decision to participate in care delivery models such as medical homes and ACOs, a finding which is consistent with literature on this topic. The Patient-Centered Primary Care Collaborative (2018) posits that primary care is the foundation of a successful ACO and the Kaiser Family Foundation (2019) points out that Centers for Medicare and Medicaid Services (CMS) typically attributes beneficiaries to ACOs based on their primary care physician.

#### Differences across practice ownership

Medical home and ACO participation according to whether a physician's practice was physician-owned or hospital-owned is presented in Figure 4.<sup>9</sup> Participation in medical homes and Medicare ACOs was over 20 percentage points higher among physicians in hospital-owned practices compared to those in physician-owned practices.<sup>10</sup> Participation in Medicaid and commercial ACOs was 18 and 11 percentage points higher.

The differences in participation rates by practice ownership may be due to several factors. In a study on hospitals in ACOs, Colla and Lewis (2016) note that hospitals have the capital and infrastructure to implement quality reporting, data-sharing, and engagement across practices. Practices owned by hospitals may also benefit from these advantages, which is perhaps why they have higher participation rates in the Benchmark Survey data. Another possibility is that the differences across practice ownership are related to the fact that practices with primary care physicians are more likely

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<sup>7</sup> Only solo, single specialty, and multi-specialty practices are included in the practice specialty mix analysis. Fifty-four percent of these physicians 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>8</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, and commercial ACOs is significantly different (at the 1% level). The difference is statistically significant for Medicaid ACOs only at the 10% level.

<sup>9</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. Physicians that indicated they were a direct hospital employee are also included in this category.

<sup>10</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.

to be hospital-owned and, as illustrated in Figure 3, have higher participation rates than practices without any primary care physicians. While that may be an explanatory factor, there are still differences in participation across ownership status when separately examining practices with and without primary care physicians (data not shown).

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

Existing estimates on FFS and APMs use data from a variety of sources. Zuvekas and Cohen (2016) use the Medical Expenditure Panel Survey, where data on the number of visits reimbursed by fee-for-service and capitation was collected from the physician's billing office. They found that in 2013, 94.7 percent of all physician office visits were covered under FFS arrangements. These results suggest that payments/reimbursements *received* by the practice are primarily through FFS. More recently, the Department of Health and Human Services reported on payments *administered* by health plans, specifically Medicare. They found that while roughly zero percent of Medicare payments were tied to APMs prior to the Affordable Care Act of 2010 (ACA), this reached roughly 20 percent in 2014 and more than 30 percent in 2016 (U.S. Department of Health and Human Services, 2016). This would suggest that a substantial portion of payments are still through FFS, although APMs are on the upswing. Nonetheless, it is important to note that APMs differ from each other and in how they relate to FFS; some APMs function as a substitute for FFS while others build on FFS.

The current study is unique in that it assesses physician reports of whether any payment was received through each method as well as the share of practice revenue from FFS and APMs. Also explored are trends in FFS and APM involvement from 2012 to 2018 and whether FFS involvement differs across practice characteristics.

### Prevalence and awareness of payment methods

In 2018, 87.0 percent of physicians reported that their practice received payment through fee-for-service for care that they provided, making it by far the most commonly reported payment method (Figure 5). Nonetheless, receiving revenue through APMs was not uncommon. Forty-two percent of physicians reported at least some payment through pay-for-performance, up from 32.7 percent in 2014 (Kane, 2015). Thirty-six percent of physicians reported at least some payment through bundled payments. Although shared savings was reported by the fewest physicians (18.9 percent in 2018) compared to the other APMs, its prevalence has been on the rise, and was up from 13.6 percent in 2014 (Kane, 2015). In contrast, participation in capitation has been stable if not decreasing; 23.9 percent of physicians reported at least some payment through capitation in 2018 compared to 26.1 percent in 2014 (Kane, 2015). Overall, 63.1 percent of physicians reported payment through at least one of the four APMs (data not shown) – thus, the majority had some involvement with payment methods other than FFS.

Physician awareness of participation varied by payment method. While only 6.4 percent of physicians did not know if their practice received FFS, the don't know percentages ranged between 15.0 and 23.8 percent for each of the APMs. Due to the relatively high uncertainty surrounding participation in APMs, it is possible that physician participation in them is understated. Physicians who were uncertain about participation tended to be younger and employed.

### Changes in payment methods over time

The Benchmark Surveys also collect data on the share of revenue coming from FFS and APMs (Figure 6).<sup>11</sup> In 2018, an average of 70.3 percent of practice revenue came from FFS compared to only 29.7 percent from APMs. These shares have remained the same since the Benchmark Survey was first conducted in 2012.<sup>12</sup> Specifically, since 2014, approximately one-third of physicians reported that all their revenue came from FFS and another 45 percent that more than half (but not all) came from FFS. In contrast, less than a quarter reported that more than half came from APMs (data not shown).

Despite the uptick in pay-for-performance and shared savings participation and the fact that most physicians reported participation in at least one APM, FFS is still the primary component of practice revenue. Although these facts may seem at odds with each other, they are not. As already noted, the structure of many APMs build on FFS. Both pay-for-performance and shared savings function as payment adjustments or a “bonus” that physicians can earn on top of their FFS payments for meeting performance metrics or financial standards.<sup>13,14</sup> Other APMs are small in scope. Bundled payments, for instance, are typically limited to specific episodes; for example, three of the four models in CMS’s Bundled Payments for Care Improvement Initiative limit participation to 48 episodes of care types (Centers for Medicare and Medicaid Services, 2019). Capitation, especially “full capitation,” is the only APM surveyed that can function as a substitute for FFS because it replaces payment per service with a fixed payment per-member-per-month. However, as noted earlier, capitation has seen stable participation since 2014.

### Differences in fee-for-service shares across practice characteristics

Similar to the findings for medical homes and ACOs, differences in FFS and APM involvement can be seen across practice characteristics such as practice type, practice specialty mix, and practice ownership. The first panel of Figure 7 shows that physicians in solo practices clearly have the largest average share of revenue from FFS (82.7 percent). This is higher than that of single specialty practices (76.2 percent), multi-specialty practices (59.1 percent) and other practice types (55.5 percent).

The middle panel examines participation according to whether the physician’s practice had at least some primary care physicians or none. On average, 66.1 percent of revenue comes from FFS in practices that include primary care physicians compared to 80.1 percent in practices that do not.

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<sup>11</sup> Due to the relatively lower percentage of “don’t knows” reported for FFS, the shares calculated in Figure 6 are based on the reported share of revenue from FFS. The share of revenue from APMs is calculated as 1 minus the share of revenue from FFS.

<sup>12</sup> The average share of revenue from FFS does not significantly differ when comparing the 2014, 2016, and 2018 data. Only the 2012 share of revenue from FFS is significantly lower (at the 5% level) than the other years. The 2012 Benchmark Survey only included questions on FFS, and not on APMs.

<sup>13</sup> See James (2012) for comprehensive discussion on the pay-for-performance model.

<sup>14</sup> For example, Medicare track 1 ACOs that meet or exceed the minimum savings rate and quality performance standards can share up to 50 percent of the difference between the actual expenditures and the updated historical benchmark; these shared savings are capped at 10 percent of the updated historical benchmark expenditures (Center for Medicare and Medicaid Services, 2018).

This indicates that practices with primary care physicians depend more heavily on APMs as a revenue source than practices without.

The data also shows differences in revenue shares across practice ownership. From the third panel of Figure 9, the average share of revenue from FFS for physician-owned practices is 15 percentage points higher than that for hospital-owned practices.

### **Relationship between involvement in payment models and participation in medical homes and ACOs**

This final section examines whether payment through FFS is related to participation in medical homes and ACOs. Care delivery models, specifically ACOs, are built on the principle of coordinating care to increase quality and reduce costs – goals that are also evident among various APMs, including pay-for-performance, shared savings, and bundled payments.<sup>15</sup> Thus, it is unsurprising to see that physicians in practices that belonged to a medical home or an ACO reported a lower average share of revenue from FFS (by 17 to 21 percentage points) compared to those in practices not participating in those models (Figure 8). However, it is important to note that even in practices participating in medical homes or ACOs roughly 60 percent of revenue came from FFS.

### **Conclusion**

This Policy Research Perspective presents results from the AMA's Physician Practice Benchmark Surveys on physician involvement in medical homes and ACOs as well as the prevalence of FFS and alternate payment models (APMs) in the practice's revenue stream.

For the first time since the Benchmark Survey collected data on this topic, the majority of physicians worked in a practice that belonged to an ACO. Fifty-four percent of physicians reported participation in at least one ACO type in 2018, up from 44.0 percent in 2016. Thirty-two percent of physicians were in a practice that belonged to a medical home, 38.2 percent to a Medicare ACO, 26.3 percent to a Medicaid ACO, and 39.0 percent to a commercial ACO. Depending on the care delivery model, between 22 percent and 30 percent of physicians indicated that they did not know their practice's participation status.

There were differences in medical home and ACO participation by practice characteristics. Physicians in solo and single specialty practices reported lower participation rates compared to those in multi-specialty practices. Among these three practice types, physicians in practices that had primary care physicians were more likely to report involvement in a medical home and each of the three ACO types compared to those in practices without any primary care physicians. Similarly, physicians in hospital-owned practices were more likely to report involvement in medical homes and each of the three ACO types compared to those in physician-owned practices.

The Benchmark Surveys also collect data on payment methods. In 2018, 87.0 percent of physicians reported that their practice received revenue through FFS and 63.1 percent reported payment from at least one APM. Certain APMs, such as pay-for-performance and shared savings, saw an increase

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<sup>15</sup> Murray and Delbanco (2018) note that, in 2016, Leavitt Partners found that shared savings was involved in about 61 percent of ACO contracts.

in participation rates over the 2012 to 2018 period. However, in part because many APMs build on FFS rather than replace FFS, roughly 70 percent of practice revenue still came from FFS in 2018; this share has been stable since the first Benchmark Survey was conducted in 2012.

The current study also found differences in the FFS revenue share across practice characteristics. The average share of revenue from FFS was highest among solo practitioners, followed by physicians in single specialty and then multi-specialty practices. Physicians in practices without any primary care physicians had higher FFS revenue shares compared to those in practices with at least some primary care physicians. Physicians in physician-owned practices had higher FFS revenue shares compared to those in hospital-owned practices. Lastly, physicians in practices that belonged to a medical home or an ACO had lower FFS revenue shares compared to those in practices that did not belong to that care delivery model. For example, physicians in practices that were part of commercial ACOs reported that 61.4 percent of practice revenue came from FFS compared to 80.5 percent for those that were not part of a commercial ACO.

The results of the Benchmark Surveys provide unique insight from physicians on their practices' participation in medical homes and ACOs as well as their dependence on FFS and APMs. Overall, the data show that physician reports of practice participation in medical homes and ACOs is on the rise – a finding consistent with existing reports of increasing volume of ACO contracts and covered lives. The data also suggest that, although the majority of physicians work in a practice that belongs to an ACO or receives some payment through APMs, FFS remained the principal component of practice revenue over the 2012 to 2018 period; this is likely due to the structure of APMs, many of which rely on FFS as a base to build on rather than to replace.



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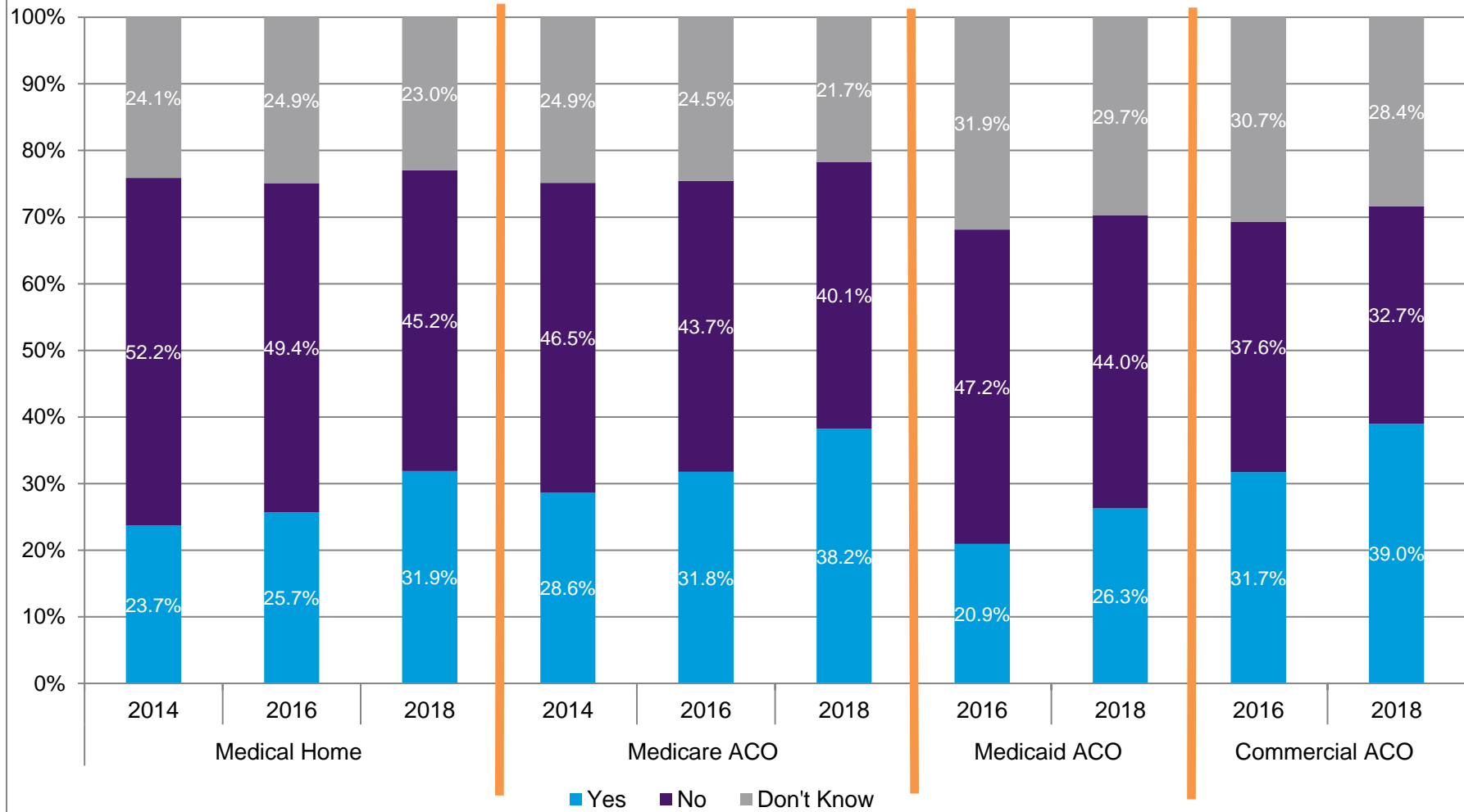
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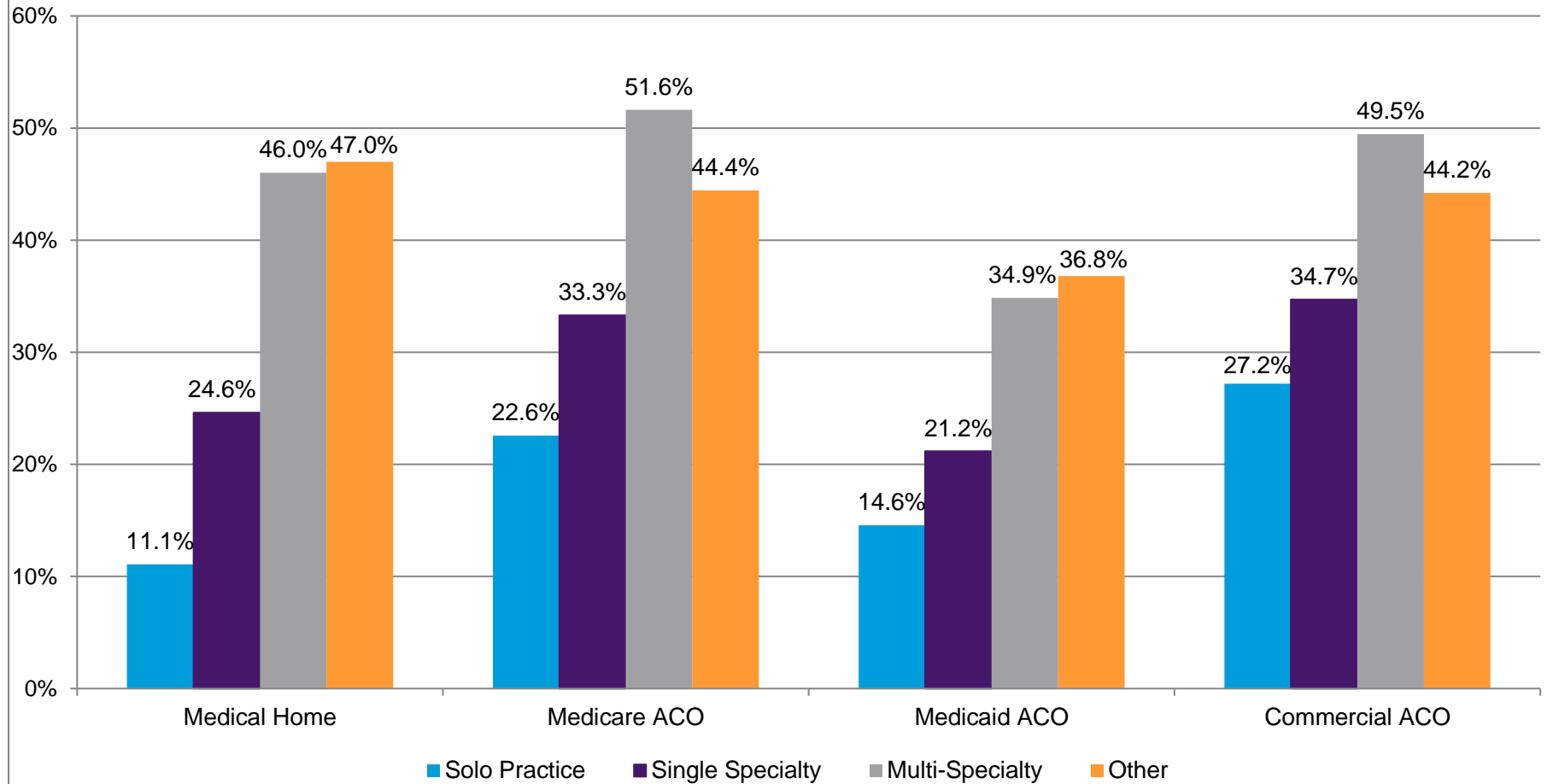
**Figure 1. Percentage of physicians in medical homes and ACOs**



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

Note: The difference in participation rates from 2014 to 2016, 2016 to 2018, and 2014 to 2018 is significant ( $p < 0.05$ ) for medical homes, Medicare ACOs, Medicaid ACOs, and commercial ACOs.

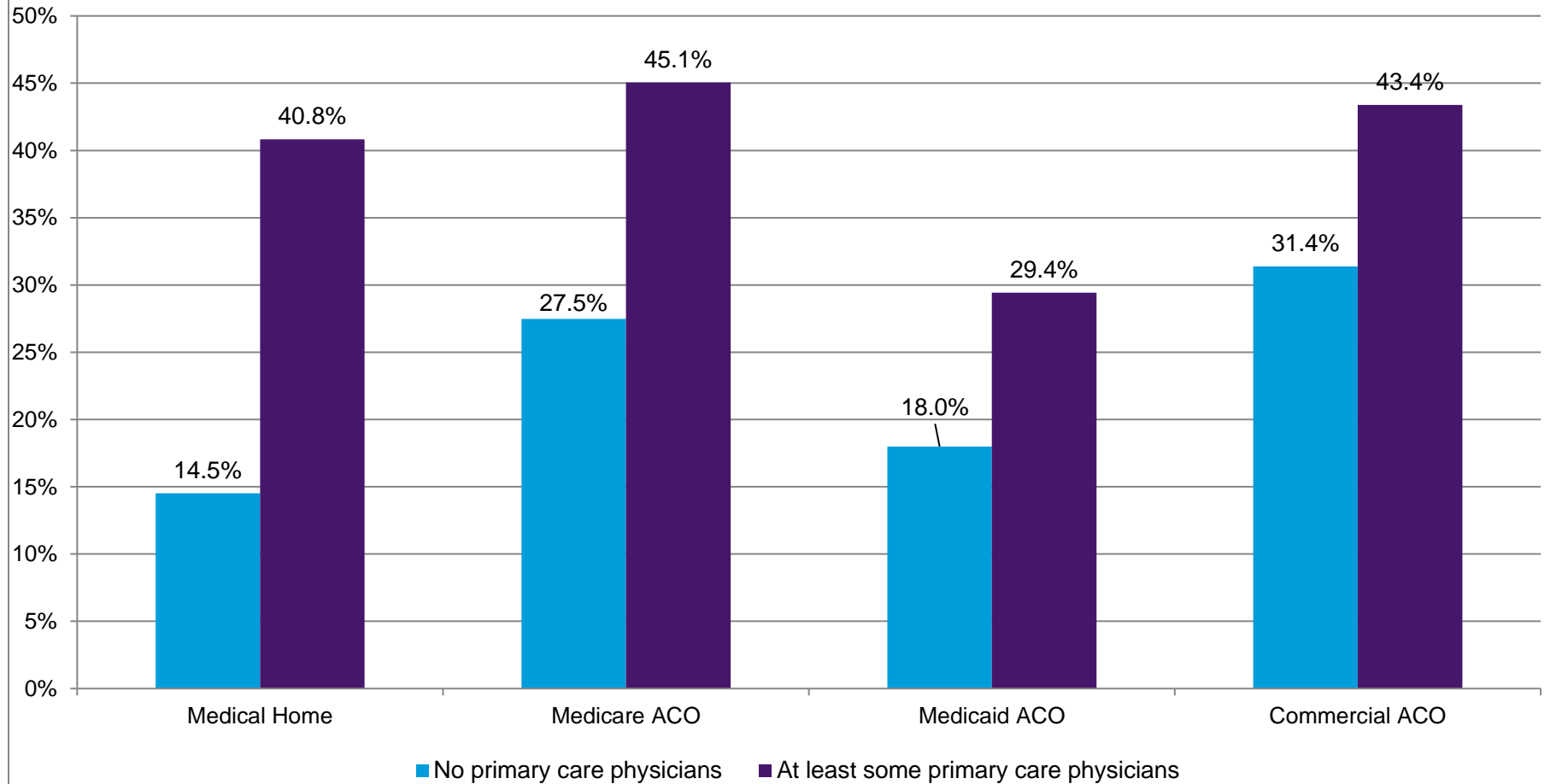
**Figure 2. Percentage of physicians in medical homes and ACOs by practice type (2018)**



Source: Author's analysis of AMA 2018 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.

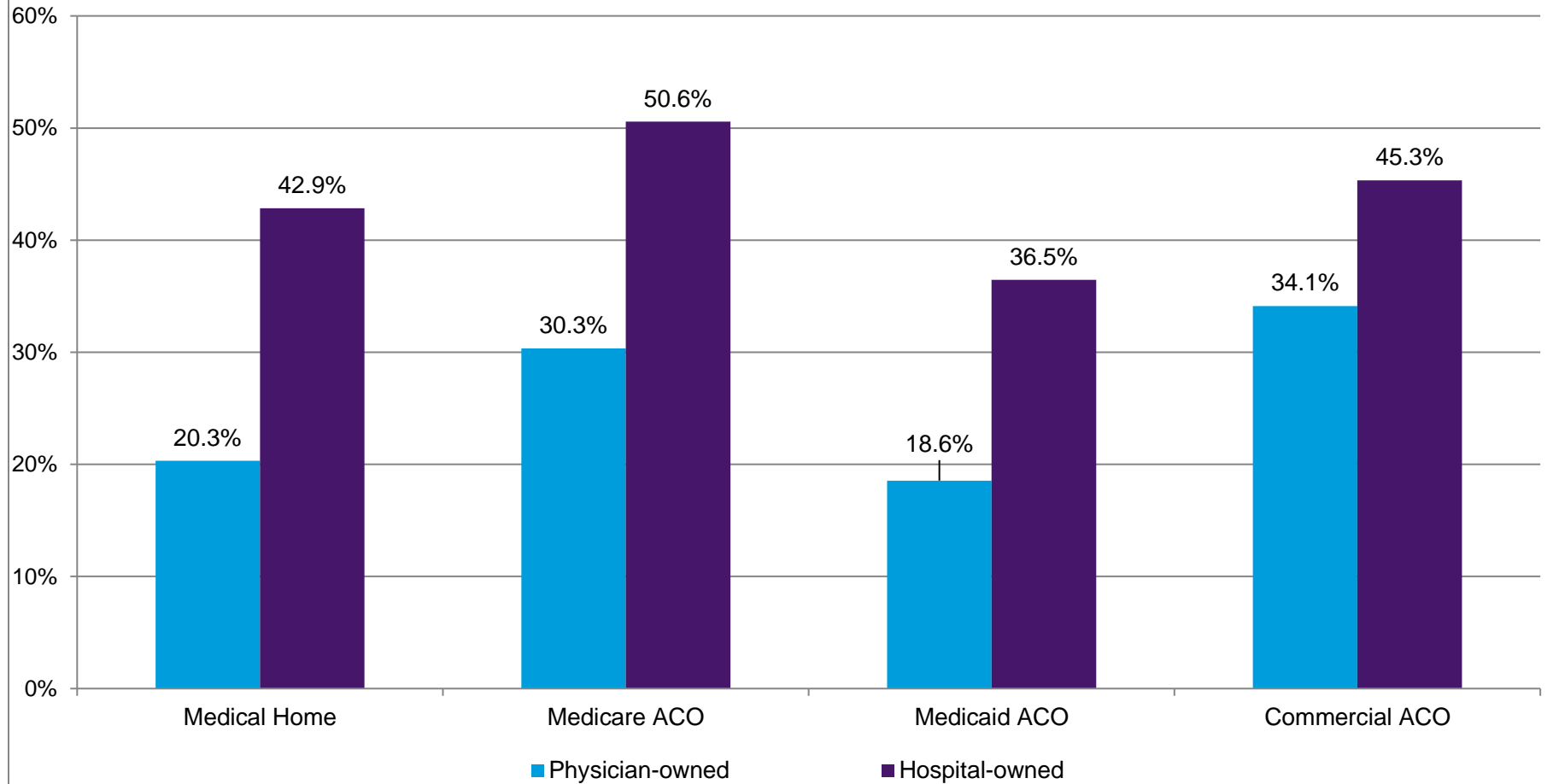
**Figure 3. Percentage of physicians in medical homes and ACOs by practice specialty mix (2018)**



Source: Author's analysis of AMA 2018 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.

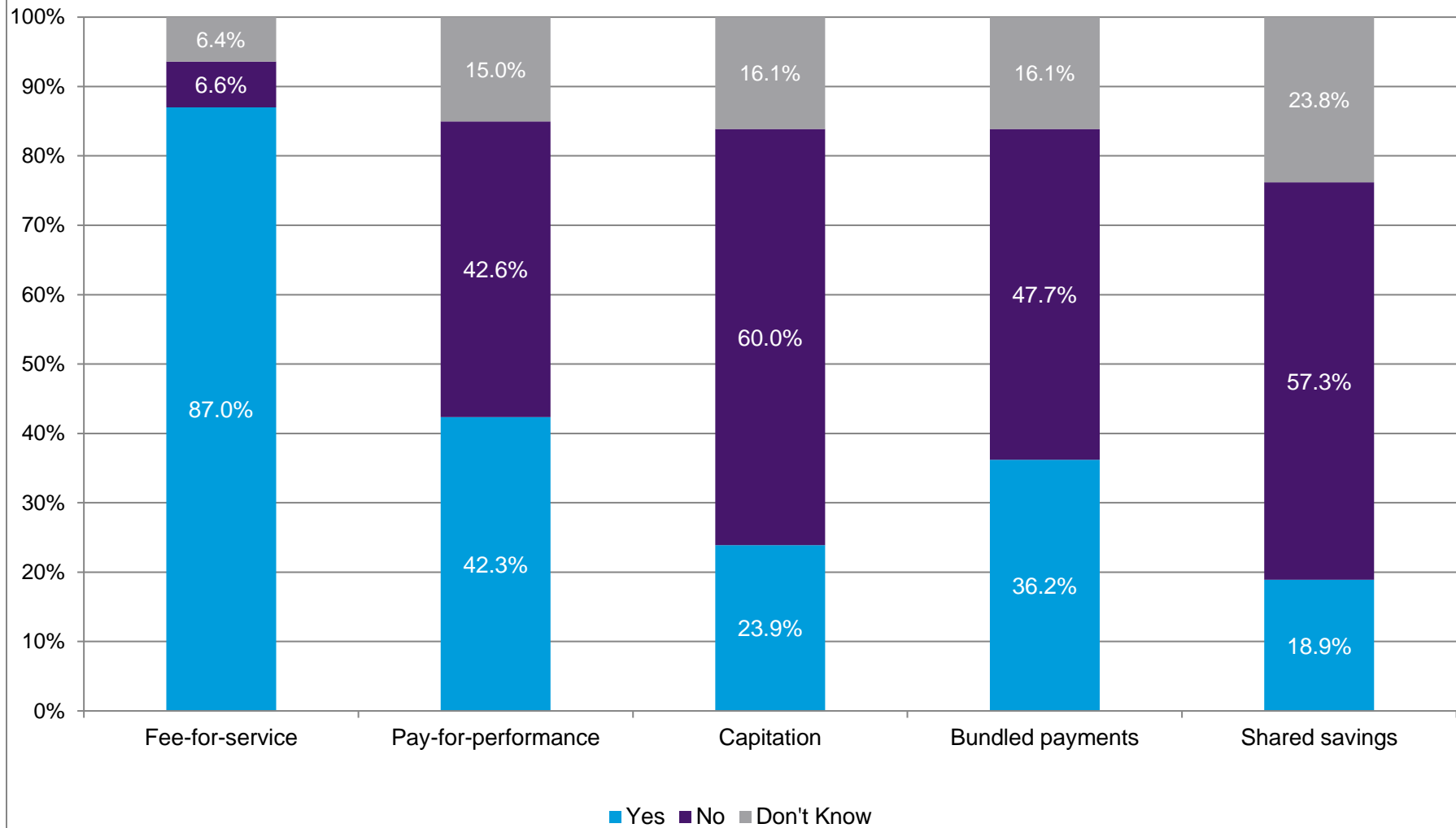
**Figure 4. Percentage of physicians in medical homes and ACOs by practice ownership (2018)**



Source: Author's analysis of AMA 2018 Physician Practice Benchmark Survey.

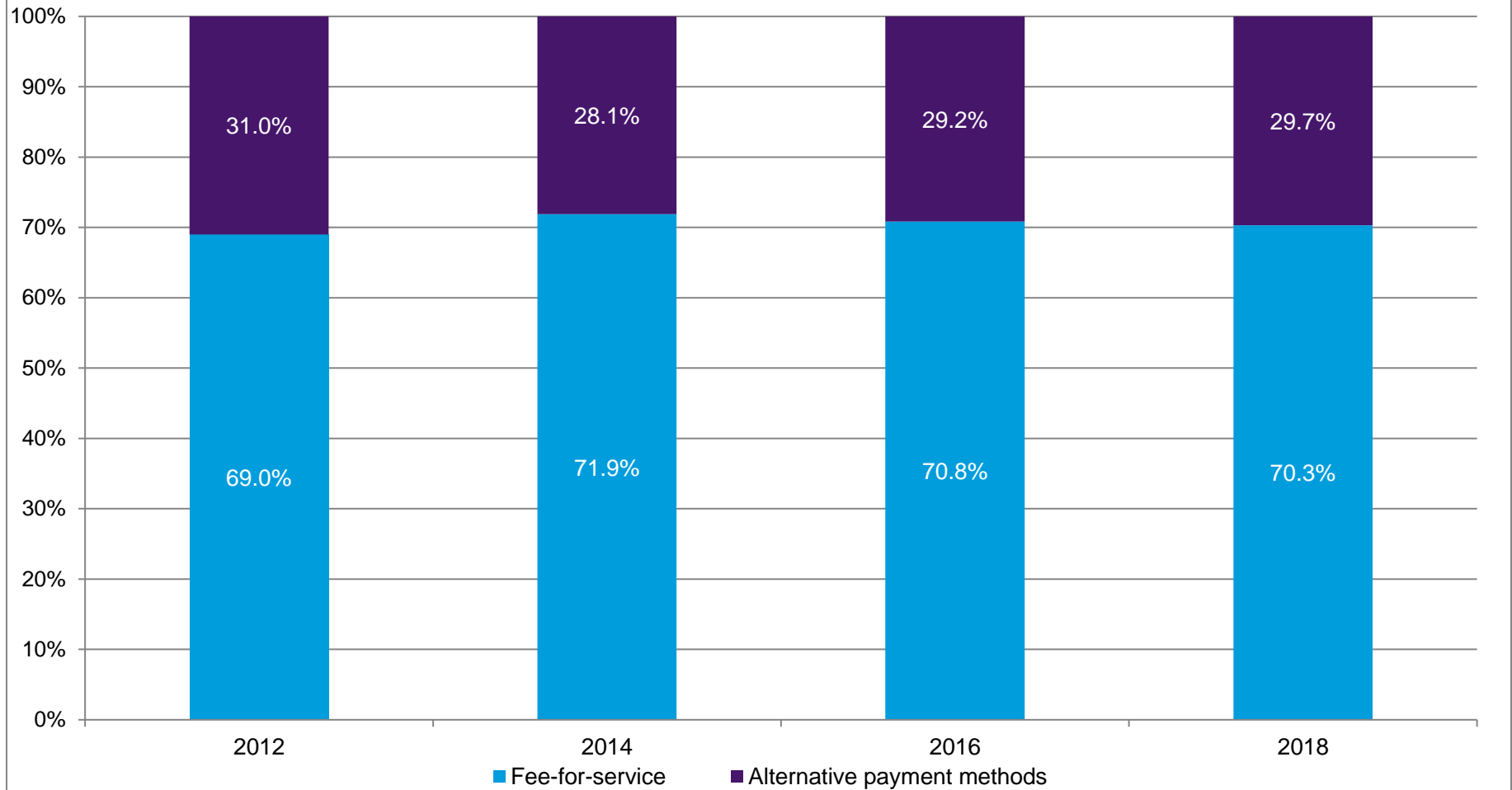
Note: Responses to whether part of a medical home or ACO (yes, no, don't know) are significantly different across practice type ( $p < 0.01$ ) using chi-squared test. See Appendix Table 1 for t-tests.

**Figure 5. Payment methods reported by physicians (2018)**



Source: Author's analysis of AMA 2018 Physician Practice Benchmark Survey.

**Figure 6. Fee-for-service and alternative payment method revenue shares reported by physicians**

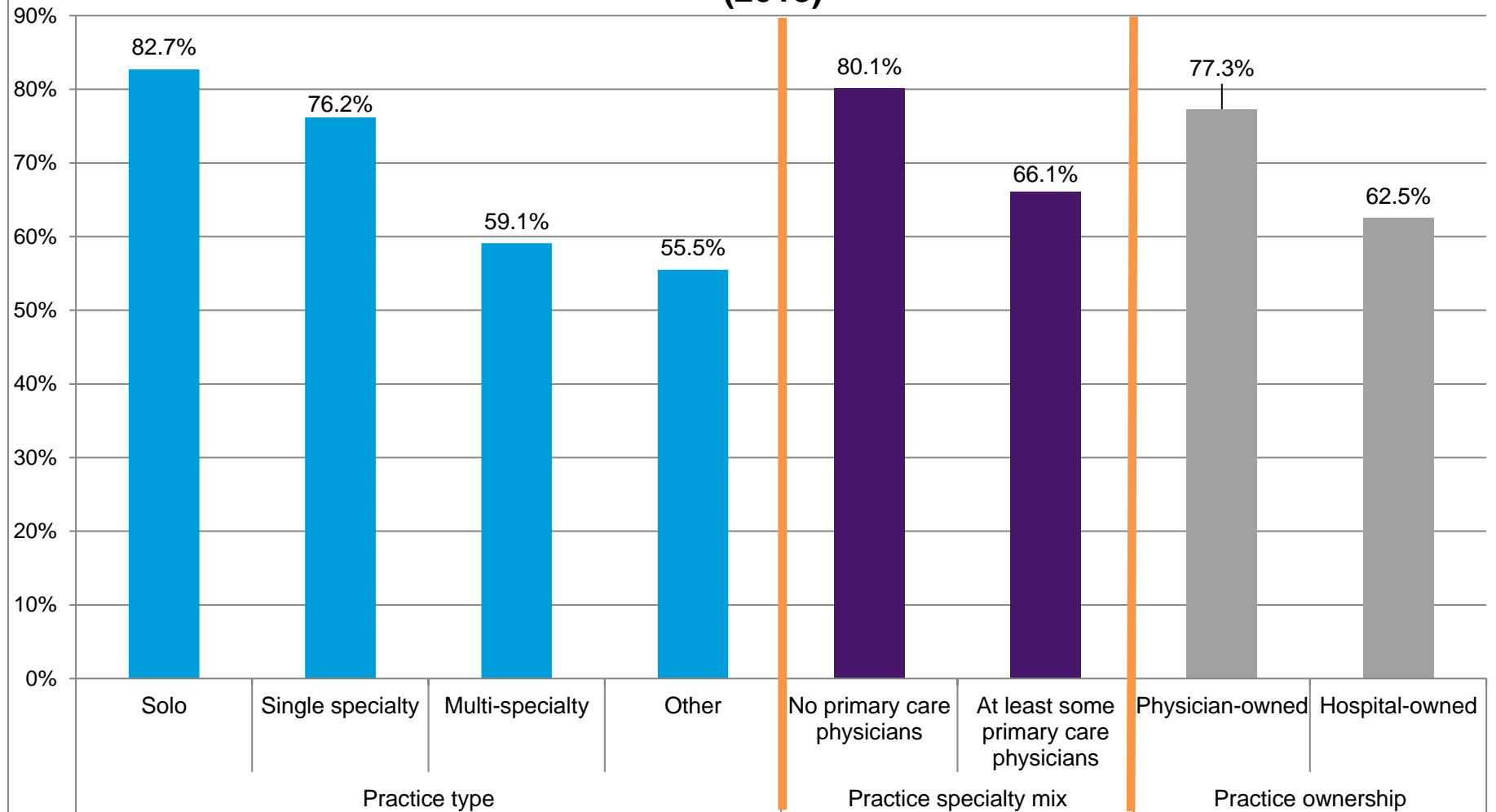


Source: Author's analysis of AMA 2012, 2014, 2016, and 2018 Physician Practice Benchmark Survey.

Note: See Appendix Table 2 for t-tests.



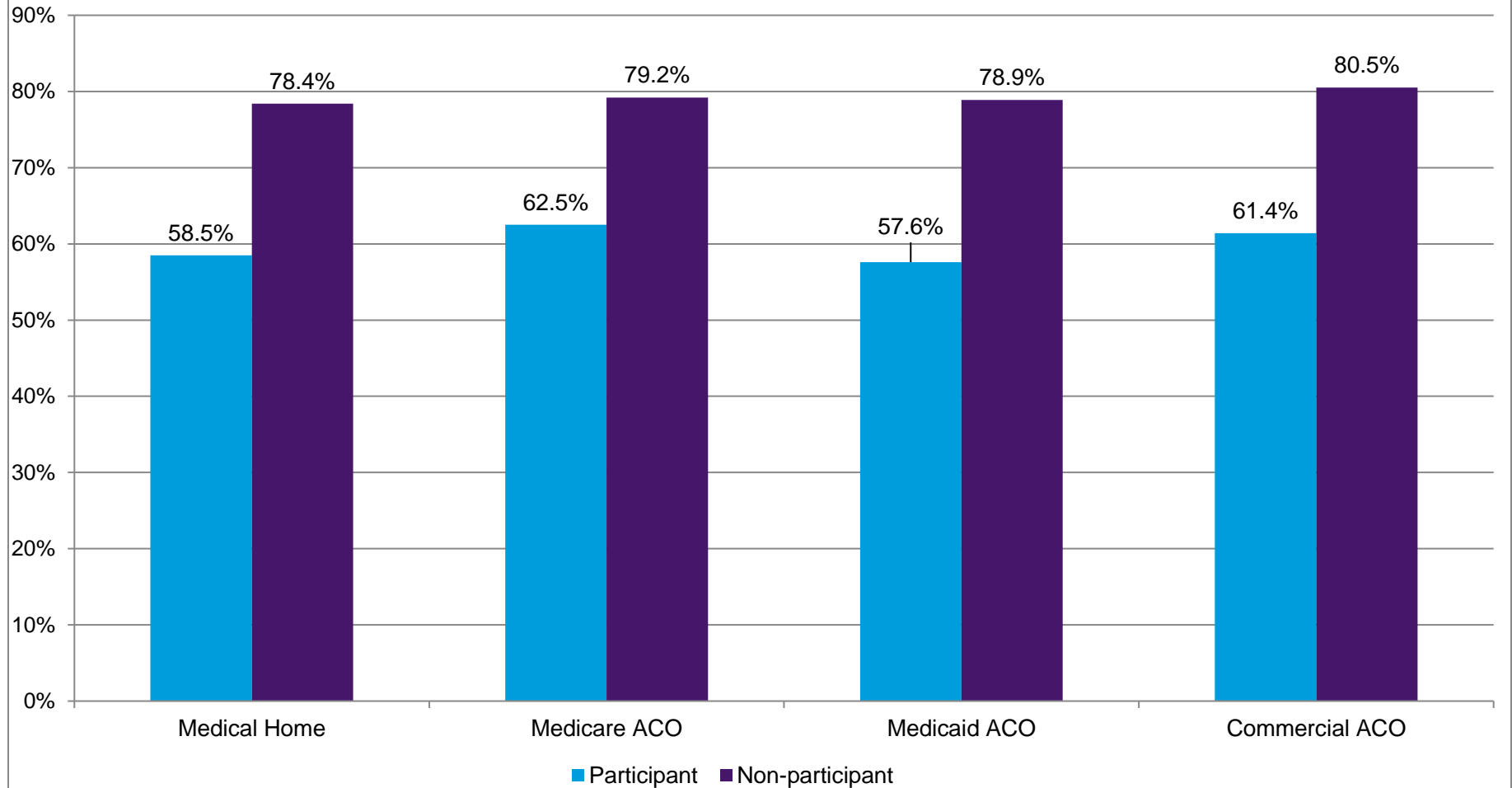
**Figure 7. Fee-for-service revenue shares by practice characteristics (2018)**



Source: Author's analysis of AMA 2018 Physician Practice Benchmark Survey.

Note: Specialties within the practice and practice ownership only include the responses of physicians in solo, single specialty, and multi-specialty practices. Differences in mean revenue share from FFS by each practice characteristic are statistically significant ( $p < 0.01$ ).

**Figure 8. Fee-for-service revenue share by medical home and ACO participation (2018)**



Source: Author's analysis of AMA 2018 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 ( $p < 0.01$ ).

**Appendix Table 1. Medical home and ACO participation by practice characteristics and year**

		Medical Home			Medicare ACO			Medicaid ACO			Commercial ACO		
		Yes	No	Don't Know	Yes	No	Don't Know	Yes	No	Don't Know	Yes	No	Don't Know
Year	2014	23.7 <sup>a</sup>	52.2 <sup>a</sup>	24.1	28.6 <sup>a</sup>	46.5 <sup>a</sup>	24.9 <sup>a</sup>						
	2016	25.7 <sup>a</sup>	49.4 <sup>a</sup>	24.9 <sup>a</sup>	31.8 <sup>a</sup>	43.7 <sup>a</sup>	24.5 <sup>a</sup>	20.9 <sup>a</sup>	47.2 <sup>a</sup>	31.9 <sup>a</sup>	31.7 <sup>a</sup>	37.6 <sup>a</sup>	30.7 <sup>a</sup>
	2018	31.9	45.2	23.0	38.2	40.1	21.7	26.3	44.0	29.7	39.0	32.7	28.4
Practice type (2018)	Solo	11.1 <sup>a</sup>	74.3 <sup>a</sup>	14.6 <sup>a</sup>	22.6 <sup>a</sup>	68.7 <sup>a</sup>	8.7 <sup>a</sup>	14.6 <sup>a</sup>	71.5 <sup>a</sup>	13.9 <sup>a</sup>	27.2 <sup>a</sup>	57.1 <sup>a</sup>	15.7 <sup>a</sup>
	Single specialty	24.6	53.3	22.1	33.3	47.1	19.6	21.2	51.3	27.6	34.7	37.2	28.1
	Multi-specialty	46.0 <sup>a</sup>	28.6 <sup>a</sup>	25.4 <sup>b</sup>	51.6 <sup>a</sup>	24.9 <sup>a</sup>	23.5 <sup>b</sup>	34.9 <sup>a</sup>	33.2 <sup>a</sup>	31.9 <sup>b</sup>	49.5 <sup>a</sup>	23.3 <sup>a</sup>	27.3
	Other	47.0 <sup>a</sup>	24.1 <sup>a</sup>	28.9 <sup>a</sup>	44.4 <sup>a</sup>	20.1 <sup>a</sup>	35.5 <sup>a</sup>	36.8 <sup>a</sup>	17.9 <sup>a</sup>	45.3 <sup>a</sup>	44.2 <sup>a</sup>	14.0 <sup>a</sup>	41.8 <sup>a</sup>
Practice specialty mix (2018)	No primary care physicians	14.5 <sup>a</sup>	61.3 <sup>a</sup>	24.2 <sup>a</sup>	27.5 <sup>a</sup>	52.0 <sup>a</sup>	20.5 <sup>b</sup>	18.0 <sup>a</sup>	53.7 <sup>a</sup>	28.3	31.4 <sup>a</sup>	41.9 <sup>a</sup>	26.8
	At least some primary care physicians	40.8	39.5	19.7	45.1	37.6	17.4	29.4	45.7	24.9	43.4	32.0	24.6
Practice ownership (2018)	Hospital-owned	42.9 <sup>a</sup>	29.9 <sup>a</sup>	27.3 <sup>a</sup>	50.6 <sup>a</sup>	23.8 <sup>a</sup>	25.7 <sup>a</sup>	36.5 <sup>a</sup>	27.4 <sup>a</sup>	36.1 <sup>a</sup>	45.3 <sup>a</sup>	20.0 <sup>a</sup>	34.6 <sup>a</sup>
	Physician-owned	20.3	60.0	19.7	30.3	54.6	15.1	18.6	60.4	21.0	34.1	44.4	21.5

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

Notes: 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 2018 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  $p < 0.05$ .

**Appendix Table 2. Share of revenue from fee-for-service by practice characteristics and year**

		Average fee-for-service share
Year	2012	69.0 <sup>a</sup>
	2014	71.9
	2016	70.8
	2018	70.3
Practice type (2018)	Solo	82.7 <sup>a</sup>
	Single specialty	76.2
	Multi-specialty	59.1 <sup>a</sup>
	Other	55.5 <sup>a</sup>
Practice specialty mix (2018)	No primary care physicians	80.1 <sup>a</sup>
	At least some primary care physicians	66.1
Practice ownership (2018)	Hospital-owned	62.5 <sup>a</sup>
	Physician-owned	77.3
Medical Home (2018)	Participant	58.5 <sup>a</sup>
	Non-participant	78.4
Medicare ACO (2018)	Participant	62.5 <sup>a</sup>
	Non-participant	79.2
Medicaid ACO (2018)	Participant	57.6 <sup>a</sup>
	Non-participant	78.9
Commercial ACO (2018)	Participant	61.4 <sup>a</sup>
	Non-participant	80.5

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

Notes: T-tests are run for average share of revenue from fee-for-service. The table reports pairwise comparisons between 2018 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), participating in the care delivery model (i.e., medical home, ACO) and not participating in the care delivery model. a indicates  $p < 0.01$ , b indicates  $p < 0.05$ .