



November 2021

# MEDICARE

## Information on the Transition to Alternative Payment Models by Providers in Rural, Health Professional Shortage, or Underserved Areas



A Century of Non-Partisan Fact-Based Work

## Why GAO Did This Study

In 2017, in response to the Medicare Access and CHIP Reauthorization Act of 2015, CMS implemented the Quality Payment Program—a payment incentive program intended to reward high-quality, efficient care. Advanced APMs, which offer a 5 percent incentive payment for Medicare providers seeing a certain percentage of their Medicare beneficiaries through the Advanced APM, are one part of this program.

The Medicare Access and CHIP Reauthorization Act of 2015 included a provision for GAO to examine transitions to APMs for providers in rural areas, shortage areas, or medically underserved areas. This report describes (1) participation in Advanced APMs by providers in rural or shortage areas; (2) challenges providers in rural, shortage, or underserved areas face in transitioning to APMs, including Advanced APMs; and (3) actions CMS has taken to help these providers transition to APMs.

GAO analyzed CMS data on participation in Advanced APMs for 2017 through 2019—the most recent years available at the time of GAO’s analysis. GAO also interviewed officials from CMS and 18 stakeholder organizations that represent providers of various specialties that participate in APMs or that have conducted research and are knowledgeable of issues related to APMs.

The Department of Health and Human Services provided technical comments on a draft of this report, which GAO incorporated as appropriate.

View [GAO-22-104618](#). For more information, contact Michelle B. Rosenberg at (202) 512-7114 or [rosenbergm@gao.gov](mailto:rosenbergm@gao.gov).

## MEDICARE

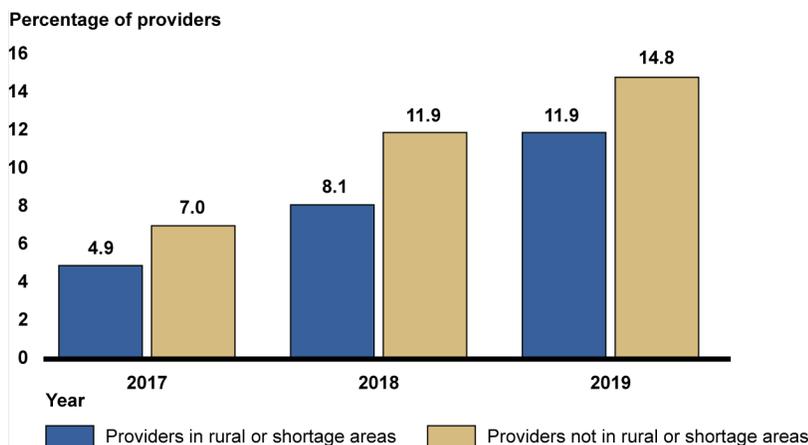
### Information on the Transition to Alternative Payment Models by Providers in Rural, Health Professional Shortage, or Underserved Areas

## What GAO Found

In recent years, the Centers for Medicare & Medicaid Services (CMS) has developed and implemented new Medicare payment models, including alternative payment models (APM), in an effort to shift from paying providers based on the volume of care provided to the quality of care provided (value-based payments). One type of APM, Advanced APMs, are designed to encourage providers to share in both the financial rewards and risk of caring for Medicare beneficiaries. Providers must meet certain requirements to take part in an Advanced APM, such as using certified electronic health record technology.

GAO’s analysis of CMS data found that a smaller percentage of providers eligible to participate in Advanced APMs (eligible providers) in rural or health professional shortage areas (shortage areas) participated in them each year from 2017 through 2019 compared to providers not located in these areas.

**Percentage of Medicare Providers in Rural or Shortage Areas and Providers Not Located in These Areas Who Participated in Advanced APMs, 2017 – 2019**



Source: GAO analysis of Centers for Medicare & Medicaid Services (CMS) data. | GAO-22-104618

Providers in rural, shortage, or medically underserved areas face financial, technology, and other challenges in transitioning to APMs, including Advanced APMs, according to CMS officials and stakeholders GAO interviewed. These include

- a lack of capital to finance the upfront costs of transitioning to an APM, including purchasing electronic health record technology; and
- challenges acquiring or conducting data analysis necessary for participation.

CMS has implemented models with certain features that may help providers in rural, shortage, or underserved areas transition to APMs, including Advanced APMs. This includes models that offer upfront funding to help with costs associated with participating in the APM, such as hiring additional staff; and technical assistance, such as education about APMs, to support providers.

---

# Contents

---

---

Letter		1
	Background	5
	Providers in Rural or Shortage Areas Participated in Advanced APMs at Lower Rates than Providers Not Located in These Areas	10
	Providers in Rural, Shortage, or Underserved Areas Face Financial and Technology Challenges, Among Others, in Transitioning to APMs, Including Advanced APMs	15
	CMS Has Implemented Models with Features, Such as Upfront Funding, and Taken Other Actions to Help Providers in Rural, Shortage, or Underserved Areas Transition to APMs	22
	Agency Comments	27
Appendix I	Data on Medicare Providers Who Participated in Alternative Payment Models (APM), 2017 – 2019	29
Appendix II	GAO Contact and Staff Acknowledgments	35
Tables		
	Table 1: Number of Medicare Providers Eligible to Participate in Advanced Alternative Payment Models (APM) by Location and Year, 2017 through 2019	10
	Table 2: Examples of Challenges Faced by Providers in Rural, Shortage, or Underserved Areas in Transitioning to Alternative Payment Models (APM), Including Advanced APMs	16
	Table 3: Number and Percentage of Medicare Providers Who Participated in Alternative Payment Models (APM), by Location, 2017 – 2019	29
	Table 4: Number and Percentage of Medicare Providers Who Participated in Advanced Alternative Payment Models (APM) by Location and Practice Size, 2017 – 2019	30
	Table 5: Number and Percentage of Medicare Providers Participating in Advanced Alternative Payment Models (APM) by Location, 2017 – 2019	30
	Table 6: Number and Percentage of Medicare Providers Participating in Advanced Alternative Payment Models (APM) by Practice Size and Location, 2017 – 2019	31

---

---

Table 7: Percentage of Medicare Providers Participating in Advanced Alternative Payment Models (APM) by Location and Provider Type, 2017 – 2019	32
Table 8: Percentage of Physicians Participating in Advanced Alternative Payment Models (APM) by Location and Physician Specialty, 2017 – 2019	33

---

Figures

Figure 1: Percentage of Medicare Providers in Rural or Shortage Areas and Providers Not Located in These Areas Who Participated in Advanced Alternative Payment Models (APM), 2017 – 2019	11
Figure 2: Advanced Alternative Payment Model (APM) Participation by Location and Qualifying APM Participant (QP) Status, Performance Years 2017 – 2019	13

---

---

## Abbreviations

ACO	accountable care organization
APM	alternative payment model
CMS	Centers for Medicare & Medicaid Services
EHR	electronic health record
MIPS	Merit-based Incentive Payment System
QP	qualifying alternative payment model participant
QPP	Quality Payment Program

This is a work of the U.S. government and is not subject to copyright protection in the United States. The published product may be reproduced and distributed in its entirety without further permission from GAO. However, because this work may contain copyrighted images or other material, permission from the copyright holder may be necessary if you wish to reproduce this material separately.



November 17, 2021

Congressional Committees

Traditionally, Medicare has paid for physician services on a fee-for-service basis.<sup>1</sup> We have reported that a fee-for service payment system—in which each distinct service is generally paid for separately—largely rewards physicians for the volume and complexity of health care services they provide to beneficiaries, rather than the quality of care they provide.<sup>2</sup>

Since 2007, the Centers for Medicare & Medicaid Services (CMS) has launched value-based payment incentive programs intended to reward physicians with additional payments for reporting quality measures and providing high-quality, efficient care to Medicare beneficiaries. CMS's Center for Medicare and Medicaid Innovation, established in 2010, tests new health care delivery and payment approaches, known as models, including alternative payment models (APM). These payment approaches are intended to encourage health care providers to provide high-quality care to Medicare beneficiaries. One way Medicare providers may participate in APMs is through an accountable care organization (ACO)—a group of doctors, hospitals, and other health care providers, who come together voluntarily in an effort to give coordinated, high-quality care to the patients they serve.

In 2017, CMS further expanded its efforts for value-based payment when it created the Quality Payment Program (QPP) in response to the Medicare Access and CHIP Reauthorization Act of 2015.<sup>3</sup> QPP is a payment incentive program that ties payments to the quality and efficiency of care. Under QPP, certain Medicare providers, including most physicians, must participate in either (1) a type of APM called an

---

<sup>1</sup>Medicare is the federally financed health insurance program for persons aged 65 and over, certain individuals with disabilities, and individuals with end-stage renal disease that is administered by the Centers for Medicare & Medicaid Services (CMS). One part of Medicare, Medicare Part B, is optional insurance that helps pay for services from physicians and other health care providers, outpatient care, home health care, durable medical equipment, and some preventive services.

<sup>2</sup>See GAO, *Medicare: Small and Rural Practices' Experiences in Previous Programs and Expected Performance in the Merit-based Incentive Payment System*, [GAO-18-428](#) (Washington, D.C.: May 31, 2018).

<sup>3</sup>See Pub. L. No. 114-10, 129 Stat. 87.

---

Advanced APM, which has requirements that encourage providers to share in the financial rewards and risk (i.e., negative payment adjustments) of caring for Medicare beneficiaries, or (2) the Merit-based Incentive Payment System (MIPS), through which providers can earn performance-based payment adjustments for services rendered to Medicare beneficiaries.<sup>4</sup>

CMS and stakeholders have raised questions about small and rural practices' readiness and ability to participate in QPP. In particular, as we previously reported, CMS and stakeholders have noted that small and rural physician practices may be less equipped to manage any administrative, technological, or financial challenges associated with participation in QPP, including participating in APMs.<sup>5</sup> For example, we found that small and rural providers may lack financial resources needed to make initial investments to participate, such as costs associated with making electronic health record (EHR) systems interoperable between providers, which is a key aspect of many value-based payment models.<sup>6</sup> These small and rural providers, along with providers in areas with physician shortages or that are medically underserved, could face similar or other challenges in participating in Advanced APMs under QPP.

The Medicare Access and CHIP Reauthorization Act of 2015 included a provision for us to examine certain health care providers' transition to APMs, including Advanced APMs.<sup>7</sup> These providers include those in rural

---

<sup>4</sup>See 42 U.S.C. § 1395w-4(q)(1)(C).

<sup>5</sup>See GAO, *Medicare Value-Based Payment Models: Participation Challenges and Available Assistance for Small and Rural Practices*, [GAO-17-55](#) (Washington, D.C.: Dec. 9, 2016).

<sup>6</sup>In order to efficiently capture and share patient data, health care providers need an EHR that stores data in a structured format. Structured data allows health care providers to easily retrieve and transfer patient information and use the EHR in ways that can aid patient care. CMS and the Office of the National Coordinator for Health Information Technology have established standards and other criteria for structured data for EHR interoperability.

<sup>7</sup>Pub L. No. 114-10, § 101(c)(2)(D), 129 Stat. 87, 114.

---

areas, health professional shortage areas (shortage areas), or medically underserved areas (underserved areas).<sup>8</sup> This report describes

1. participation in Advanced APMs by providers located in rural or shortage areas;
2. challenges that health care providers in rural, shortage, or underserved areas face in transitioning to APMs, including Advanced APMs; and
3. actions CMS has taken to help health care providers in rural, shortage, or underserved areas transition to APMs, including Advanced APMs.

To describe participation in Advanced APMs by providers located in rural or shortage areas, we analyzed CMS data for 2017 through 2019—the most recent years available at the time of our analyses—on Medicare providers who were eligible to participate in Advanced APMs (whom we refer to as eligible providers). We compared participation in Advanced APMs for providers in rural or shortage areas to providers not located in these areas.<sup>9</sup> In addition, we assessed Advanced APM participation by provider type, such as physician, nurse practitioner, and physician assistant; by physician specialty, such as family practice, internal medicine, and orthopedic surgery; and by practice size. To determine the reliability of the CMS data we used, we discussed the data with CMS officials and conducted data reliability checks. We determined the data used in this report were sufficiently reliable for the purposes of our reporting objective.

---

<sup>8</sup>Health professional shortage areas are geographic areas, population groups, or health care facilities that have been designated by the Health Resources and Services Administration as having a shortage of primary, dental, or mental health care providers. Medically underserved areas are geographic areas designated by the Health Resources and Services Administration as having a lack of access to primary care services.

<sup>9</sup>For these analyses, we included providers eligible to participate in Advanced APMs for whom CMS had information on whether they were located in a rural or shortage area based on the place of service in their Medicare Part B claims. CMS uses census data when making rural area determinations and designations from the Health Resources and Services Administration to identify shortage areas. We excluded providers for whom CMS did not provide information on their location; according to CMS, information on location was not available for these providers because they did not have Medicare Part B claims in the year. We did not include data on participation in Advanced APMs by providers in medically underserved areas because CMS does not have data on whether providers are located in such areas.

---

To describe challenges that health care providers in rural, shortage, or underserved areas face in transitioning to APMs, including Advanced APMs, we interviewed CMS officials and obtained written responses from officials at the Health Resources and Services Administration.<sup>10</sup> In addition, we interviewed officials from 18 organizations selected to represent: 1) federal advisory committees, 2) national health associations and research organizations, 3) state or regional medical organizations, 4) specialty medical associations, and 5) consultant organizations. These stakeholder organizations represent providers of various specialties who participate in APMs or have conducted research and are knowledgeable of issues related to APMs, including Advanced APMs. In some of our interviews with stakeholders, the organizations included some of their health care provider members. We obtained their perspectives on challenges providers in rural, shortage, or underserved areas, and small practices (15 or fewer providers) in these areas, report facing in transitioning to APMs, including Advanced APMs. We also reviewed information and studies obtained from these organizations related to the challenges they identified. When characterizing the challenges identified by stakeholders, we use the term “most” when the challenge was identified by more than half of the stakeholder organizations and “some” when it was mentioned by fewer than half of them. The perspectives of these stakeholders are not generalizable.

We also conducted a review of peer-reviewed articles and other studies published from January 1, 2015, through April 30, 2021. We identified these studies through a search of bibliographic databases, including ProQuest and Scopus, using terms such as “alternative payment model” and “rural,” “shortage,” and “underserved,” and “quality payment program.” Of the 284 study citations we identified, we reviewed 158 full studies. Of those, we identified and examined two relevant studies related

---

<sup>10</sup>We contacted the Health Resources and Services Administration to identify any research the agency may have conducted or was aware of related to challenges faced by providers in rural, shortage or underserved areas because the agency is responsible for designating shortage and underserved areas.

---

to challenges faced by providers in rural, shortage, or underserved areas in transitioning to APMs.<sup>11</sup>

To describe actions CMS has taken to help health care providers in rural, shortage, or underserved areas transition to APMs, we reviewed CMS documents, including those describing models the agency identified as helping these providers transition to APMs. We also interviewed CMS officials and obtained perspectives from officials at the 18 stakeholder organizations we interviewed. We also identified and examined two relevant studies from our literature review on actions CMS has taken to help providers transition to APMs.<sup>12</sup> Finally, for all three objectives, we reviewed relevant laws and regulations.

We conducted this performance audit from November 2020 to November 2021 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

---

## Background

---

### APMs

An APM is a payment approach that gives added incentive payments to providers to provide high-quality and cost-efficient care.<sup>13</sup> APMs are

---

<sup>11</sup>The two studies we identified were: RAND Corporation, *Perspectives of Physicians in Small Rural Practices on the Medicare Quality Payment Program* (Santa Monica, California: 2019); and Bipartisan Policy Center, *Confronting Rural America's Health Care Crisis* (Washington, D.C.: 2020). We also examined these studies for methodological sufficiency.

<sup>12</sup>The two studies we identified were: M. J. Trombley, B. Fout, S. Brodsky, J. M. McWilliams, J. Nyweide, and B. Morefield, "Early Effects of an Accountable Care Organization Model for Underserved Areas," *New England Journal of Medicine*, vol. 381, no. 6 (Aug. 8, 2019): 543-51; and Bipartisan Policy Center, *Confronting Rural America's Health Care Crisis*. We also examined these studies for methodological sufficiency.

<sup>13</sup>See 42 C.F.R. § 414.1305 (2020) (definition of APM).

---

generally overseen by CMS's Center for Medicare and Medicaid Innovation.<sup>14</sup>

Providers can participate in one or more APM, and APMs can have multiple participation options (or tracks). For example, an APM may offer different tracks that allow participants to assume various levels of risk. Some tracks may include one-sided risk where the participating providers may share in the savings that are generated from lowering health care costs but assume no financial risk. Other tracks may have two-sided risk models where participants can share in savings and may receive added incentive payments, but also take on increasing levels of financial risk.<sup>15</sup> For example, in certain APMs, if providers do not meet certain benchmarks, such as quality benchmarks that could include having a certain percentage of beneficiaries receive preventive care (e.g., colorectal cancer screenings), CMS withholds or reduces payment, or providers owe payments to CMS.

APMs can apply to a specific clinical condition, a care episode, or a population. For example, an APM could be focused on beneficiaries who are undergoing cancer treatment, or beneficiaries who had hip and knee replacements. APMs may also focus on a specific provider type, such as primary care providers, and may also be limited to certain geographic locations, such as a certain state.

---

## Quality Payment Program

CMS implemented QPP on January 1, 2017, to continue to shift providers to payment incentive programs intended to reward high-quality, efficient care (i.e., value-based care).<sup>16</sup> By law, certain Medicare providers, including most physicians, are required to participate in one of two QPP

---

<sup>14</sup>CMS's Center for Medicare and Medicaid Innovation supports the development and testing of innovative health care payment and service delivery models.

<sup>15</sup>Participants in these tracks must meet certain spending and quality thresholds to receive a share in any savings. For example, if an ACO meets quality metrics and lowers spending below a certain level then it gets a share of any savings, but if spending exceeds that limit then it must repay Medicare the difference.

<sup>16</sup>The Medicare Access and CHIP Reauthorization Act of 2015 repealed the sustainable growth rate formula for determining Medicare payments for certain health care providers' services. Pub. L. No. 114-10, § 101, 129 Stat. 87, 89. The sustainable growth rate was a system used to update Medicare physician fees and to moderate the growth in spending for physician services under Medicare Part B (e.g., outpatient and home health care). For more information, see GAO, *Medicare Physician Payments: Concerns about Spending Target System Prompt Interest in Considering Reforms*, [GAO-05-85](#) (Washington, D.C.: Oct. 8, 2004).

---

tracks; however, there are exceptions, such as an exclusion for providers that serve a low volume of Medicare beneficiaries.<sup>17</sup> The two QPP tracks are:

**MIPS track.** Under MIPS, Medicare providers' performance is generally measured in four categories: quality, cost, improvement activities, and promoting interoperability.<sup>18</sup> Depending on their performance, providers participating in MIPS may be subject to a positive, neutral (i.e., no change), or negative payment adjustment.<sup>19</sup>

**Advanced APM track.** Advanced APMs are designed to encourage providers to share in the financial rewards and risk of caring for Medicare beneficiaries. Advanced APMs must meet statutory and regulatory criteria pertaining to:<sup>20</sup>

1. Participants' exposure to financial risk or participation in a Medical Home Model expanded under CMS's Innovation Center authority;<sup>21</sup>
2. Participants' use of certified EHR technology; and
3. The provision of payment for services based on quality measures that are comparable to those used in the MIPS quality performance category.

---

<sup>17</sup>See 42 U.S.C. § 1395w-4(q)(1)(C).

<sup>18</sup>The promoting interoperability performance category promotes patient engagement and electronic exchange of information using certified EHR technology.

<sup>19</sup>In MIPS, the provider's final score for a performance year is used to determine the payment adjustment that is applied to the provider's Medicare Part B payments made 2 years later (i.e., the payment year). If a provider's final score falls below the performance threshold set by CMS for that year, the provider receives a negative adjustment, resulting in a lower payment to the provider than they would have received without the adjustment. If the final score exceeds the performance threshold, the provider receives a payment increase. For more information related to MIPS, see GAO, *Medicare: Provider Performance and Experiences under the Merit-based Incentive Payment System*, [GAO-22-104667](#) (Washington, D.C.: Oct. 1, 2021).

<sup>20</sup>See 42 U.S.C. § 1395l(z)(3)(D) (defining eligible alternative payment entity) and 42 C.F.R. § 414.1415 (2020) (Advanced APM criteria).

<sup>21</sup>A Medical Home Model is an approach to providing comprehensive primary care that facilitates partnerships between patients, clinicians, medical staff, and families. It is a medical practice organized to produce higher quality care and improved cost efficiency.

---

Like other APMs, Advanced APMs can apply to a specific clinical condition, episode of care, or population. Models based on episodes of care can also involve different payment methodologies. For example, one Advanced APM (the Bundled Payments for Care Improvement Advanced APM) combines the payments for physician, hospital, and other health care provider services into a single bundled payment amount that is calculated based on the expected costs of all items and services furnished to a beneficiary during an episode of care. Another Advanced APM (the Next Generation ACO Model) bases payment on the total cost of care a beneficiary receives across all health care settings and services provided. According to CMS, the number of Advanced APMs increased from six in 2017, when QPP was implemented, to nine in 2019.

Providers who participate in an Advanced APM and achieve certain thresholds receive an incentive payment in the amount of 5 percent of their estimated aggregate Medicare Part B payments for the year.<sup>22</sup> (See text box for details on the incentive payment 3-year cycle.) Specifically, to qualify, providers must meet either a payment amount threshold or a patient count threshold specific to each year.<sup>23</sup> Providers who meet one of these thresholds are called qualifying APM participants (QP). Participating providers who do not meet the thresholds for QP status, but meet a lower threshold, are considered partial QPs. Partial QPs are not eligible for the incentive payment.<sup>24</sup> For provider performance in 2019, the thresholds to achieve QP status and partial QP status were as follows:

- **QP.** To become a QP and earn the 5 percent incentive payment in 2021, Advanced APM participants must have received at least 50 percent of their Medicare Part B payments or seen at least 35 percent

---

<sup>22</sup>See 42 C.F.R. § 414.1450 (2020) (APM incentive payment). For purposes of this report, we refer to a Medicare provider who participates in an Advanced APM as a participant or participating provider.

<sup>23</sup>Individual providers, groups, or combinations may come together to form an APM entity, which participates in an APM under an agreement with CMS. For example, an APM entity could be an ACO.

<sup>24</sup>Providers who participate in the Advanced APM track in QPP but do not achieve QP status or partial QP status are subject to MIPS-track reporting requirements and payment adjustments.

---

of their Medicare beneficiaries through an Advanced APM entity in 2019.<sup>25</sup>

- **Partial QP.** To become a partial QP, Advanced APM participants must have received at least 40 percent of their Medicare Part B payments or seen at least 25 percent of their Medicare beneficiaries through an Advanced APM entity in 2019.<sup>26</sup> These partial QPs are not eligible to receive the 5 percent incentive payment in 2021; however, they can choose whether to report to MIPS in order to receive a MIPS-track payment adjustment in 2021.

**How the 5 percent Incentive Payment Works for Qualifying Alternative Payment Model Participants (QP)**

The 5 percent incentive payment operates on a 3-year cycle that includes a performance year, a base year, and a payment year. Eligible providers participating in Advanced alternative payment models, known as Advanced APMs, receive QP status if a specified percentage of their Medicare Part B payments are received or Medicare patients are seen through an Advanced APM entity—an entity that has signed an agreement with the Centers for Medicare & Medicaid Services (CMS) or which is directly governed by a law or regulation—during the performance year. Once CMS determines a provider has achieved QP status, CMS then calculates the 5 percent incentive payment based on the amount of covered Medicare Part B claims paid in the following year (the base year). The incentive payments are then paid in the year after the base year (payment year). However, if providers do not have any paid Medicare Part B covered professional services during the applicable base year, their incentive payment is calculated as zero, and therefore they will not receive an incentive payment, according to CMS. The 5 percent incentive payment only applies through payment year 2024.

Source: GAO. | GAO-22-104618

CMS data show that most eligible providers—that is, providers who were eligible to participate in Advanced APMs—were not located in rural areas or shortage areas in 2017, 2018, and 2019 (see table 1).

---

<sup>25</sup>The thresholds to become a QP have increased over time. When QPP started in 2017, Advanced APM participants were required to receive at least 25 percent of Medicare Part B payments or see at least 20 percent of Medicare beneficiaries through an Advanced APM entity to become a QP and receive an incentive payment in 2019. These thresholds have increased to 50 percent and 35 percent, respectively, to qualify to receive an incentive payment in 2021.

<sup>26</sup>The thresholds to become a partial QP have increased over time. When QPP started in 2017, Advanced APM participants were required to receive at least 20 percent of Medicare Part B payments or see at least 10 percent of Medicare beneficiaries through an Advanced APM entity to become a partial QP in 2019.

**Table 1: Number of Medicare Providers Eligible to Participate in Advanced Alternative Payment Models (APM) by Location and Year, 2017 through 2019**

Location	2017	2018	2019
Located in rural area or shortage area <sup>a</sup>	509,618	433,041	442,927
Not located in rural area or shortage area	1,280,376	1,137,443	1,173,792

Source: Centers for Medicare & Medicaid Services (CMS). | GAO-22-104618

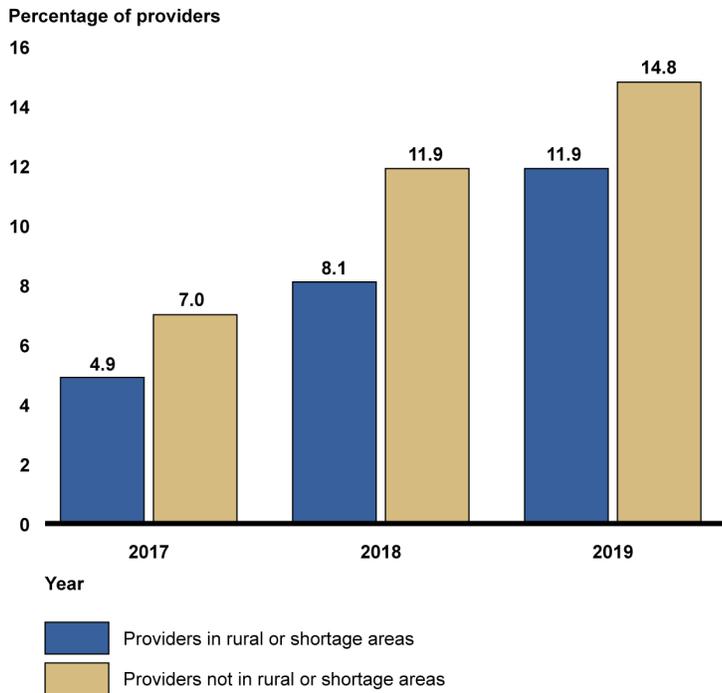
Note: Advanced APMs are payment approaches designed to encourage providers to share in the financial rewards and risk of caring for Medicare beneficiaries. Some providers that CMS determined to be eligible to participate in Advanced APMs did not have Medicare Part B claims in a particular year and therefore location information for these providers were not available, according to CMS. Therefore, these eligible providers are not included in our analysis.

<sup>a</sup>Eligible providers could be located in a rural area, located in a health professional shortage area (shortage area), or both. CMS does not collect data on whether providers are located in medically underserved areas.

**Providers in Rural or Shortage Areas Participated in Advanced APMs at Lower Rates than Providers Not Located in These Areas**

The proportion of eligible providers in rural or shortage areas who participated in Advanced APMs each year from 2017 through 2019 was lower than the proportion of eligible providers not located in these areas, according to CMS data. For example, 52,592 of the 442,927 providers in rural or shortage areas—about 12 percent—participated in an Advanced APM in 2019. In comparison, 174,140 of the 1,173,792 providers—about 15 percent—not located in these areas participated in an Advanced APM in 2019. (See fig. 1.)

**Figure 1: Percentage of Medicare Providers in Rural or Shortage Areas and Providers Not Located in These Areas Who Participated in Advanced Alternative Payment Models (APM), 2017 – 2019**



Source: GAO analysis of Centers for Medicare & Medicaid Services (CMS) data. | GAO-22-104618

Notes: Advanced APMs are payment approaches designed to encourage providers to share in the financial rewards and risk of caring for Medicare beneficiaries. For this analysis, we included providers eligible to participate in Advanced APMs for whom CMS had information on whether they were located in a rural or shortage area based on the place of service in their Medicare Part B claims. We excluded providers for whom CMS did not provide information on their location because, according to CMS, the provider did not have Medicare Part B claims in the year.

However, participation in Advanced APMs among providers in rural or shortage areas increased at a faster rate than those not in those areas. The number of providers in rural or shortage areas who participated in Advanced APMs went from 25,160 in 2017 to 52,592 in 2019, a 109 percent increase. By comparison, the number of participating providers who were not in rural or shortage areas increased from 90,056 providers in 2017 to 174,140 in 2019, a 93 percent increase.<sup>27</sup>

<sup>27</sup>See app. I for additional data on providers who participated in APMs, including Advanced APMs.

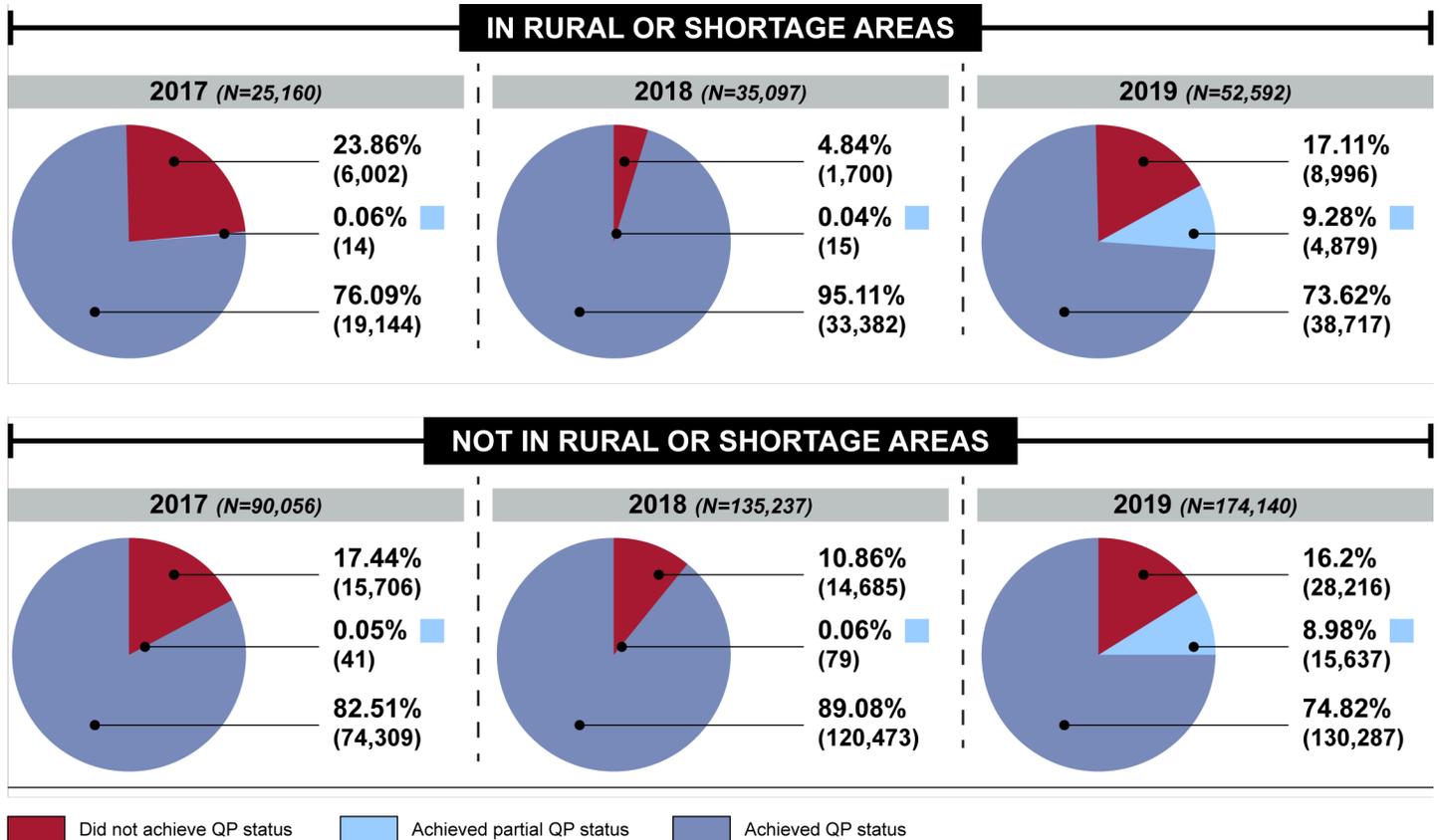
---

Most providers who participated in an Advanced APM, regardless of whether or not they were in a rural or shortage area, achieved QP status based on their performance in each of the 3 years reviewed, making them eligible to earn the 5 percent incentive payment (see fig. 2). However, not all of the providers who achieved QP status received the incentive payment.<sup>28</sup> Of the providers in rural or shortage areas who achieved QP status in 2017, about 88 percent received the 5 percent incentive payment, and this percentage increased to about 92 percent of the providers who achieved QP status in 2018. These percentages were similar for providers not located in rural or shortage areas.

---

<sup>28</sup>According to CMS, when a provider who has achieved QP status does not have any paid Medicare Part B covered professional services in the base year following the performance year, their incentive payment is calculated as zero and therefore they will not receive an incentive payment in the payment year (the year following the base year). Data on providers who achieved QP status based on performance in 2019 who received the 5 percent incentive payment were not available as of August 2021, according to CMS.

**Figure 2: Advanced Alternative Payment Model (APM) Participation by Location and Qualifying APM Participant (QP) Status, Performance Years 2017 – 2019**



Source: GAO analysis of Centers for Medicare & Medicaid Services (CMS) data. | GAO-22-104618

Notes: Advanced APMs are payment approaches designed to encourage providers to share in the financial rewards and risk of caring for Medicare beneficiaries. For this analysis, we included providers eligible to participate in Advanced APMs for whom CMS had information on whether they were located in a rural or shortage area based on the place of service in their Medicare Part B claims. We excluded providers for whom CMS did not provide information on their location because, according to CMS, the provider did not have Medicare Part B claims in the year.

Providers participating in Advanced APMs achieve QP status or partial QP status if a specified percentage of their Medicare Part B payments are received or Medicare patients are seen through an Advanced APM entity—an entity that has signed an agreement with CMS or which is directly governed by a law or regulation—during the performance year. The thresholds to achieve QP or partial QP status (i.e., the percentages of Medicare Part B payments received or Medicare patients seen) increased in 2019, which likely explains some of the differences in the percentage of Advanced APM participants achieving QP and partial QP status compared to the prior years. Advanced APM participants who achieved QP status are eligible for the 5 percent incentive payment. CMS calculates the 5 percent incentive payment based on the amount of covered Medicare Part B claims paid for services in the following year (the base year). The incentive payments are then paid in the year after the base year (payment year).

---

In terms of provider type, from 2017 through 2019, about two-thirds of the providers in rural or shortage areas who participated in Advanced APMs were physicians, and over 70 percent of participating providers not located in these areas were physicians.<sup>29</sup> The next most common types of providers participating in Advanced APMs regardless of location were nurse practitioners and physician assistants.

In terms of physician specialty, from 2017 through 2019, of the physicians in rural or shortage areas who participated in Advanced APMs, there was a higher percentage in family practice and internal medicine than in other physician specialties, such as cardiology or orthopedic surgery. For example, in 2019, about 21 percent of participating physicians in rural or shortage areas were family practice physicians, and about 17 percent were internal medicine physicians. Of the physicians not located in rural or shortage areas who participated in Advanced APMs, there was also a higher a higher percentage in family practice and internal medicine than in other physician specialties. However, more of these physicians were in internal medicine (about 19 percent) compared to family practice (about 14 percent).

Nearly all providers who participated in Advanced APMs participated in a single Advanced APM during the years covered by our analysis. Specifically, about 99 percent of the providers who participated in Advanced APMs participated in just one Advanced APM in 2017 and 2018; this percentage was the same for providers in rural or shortage areas and those not in those areas. However, in 2019, CMS data show that providers who participated in more than one Advanced APM were more often not located in rural or shortage areas. Specifically, in 2019, 6 percent of providers in rural or shortage areas who participated in any Advanced APMs participated in two or more Advanced APMs, compared to 11 percent of those not in rural or shortage areas.<sup>30</sup>

---

<sup>29</sup>Physicians include Doctors of Medicine, Optometry, Osteopathy, Dental Medicine/Dental Surgery, and Podiatric Medicine. See app. I for additional information on provider types for Medicare providers participating in Advanced APMs.

<sup>30</sup>The maximum number of Advanced APMs that providers in rural or shortage areas participated in from 2017 to 2019 was four, and the maximum number for providers not located in these areas was six.

---

---

## Providers in Rural, Shortage, or Underserved Areas Face Financial and Technology Challenges, Among Others, in Transitioning to APMs, Including Advanced APMs

Medicare providers in rural, shortage, or underserved areas, including small practices in these areas, face a number of challenges in transitioning to APMs, including Advanced APMs, according to the 18 stakeholder organizations and CMS officials we interviewed, as well as the two studies we identified from our literature review.<sup>31</sup> These challenges can be grouped into four areas: 1) financial resources and risk management; 2) data and health information technology; 3) staff resources and capabilities; and 4) design and availability of models (see table 2).<sup>32</sup>

---

<sup>31</sup>Some of the challenges reported by stakeholders and CMS or noted in the literature are unique to providers in rural, shortage, or underserved areas, while others may be more pronounced in these areas but experienced by providers broadly.

<sup>32</sup>We previously reported similar challenges in our 2016 report on CMS value-based payment models. See [GAO-17-55](#).

**Table 2: Examples of Challenges Faced by Providers in Rural, Shortage, or Underserved Areas in Transitioning to Alternative Payment Models (APM), Including Advanced APMs**

Category of challenge	Challenge to participating in APMs
<b>Financial resources and risk management</b>	Providers lack the capital to finance upfront costs of transitioning to APMs
	Providers are averse to financial risk or lack reserves to cover potential losses
	Providers treat too few Medicare patients to justify investments in APM participation, and lower patient volumes result in less predictable spending patterns, heightening financial risk
	Providers are less able to control cost of care because they often must refer patients elsewhere for tertiary care
<b>Data and health information technology</b>	Providers are unable to conduct data analytics or financial modeling needed to provide value-based care
	Complexity and cost of electronic health records (EHRs), or lack of high-speed internet, hinder EHR adoption
<b>Staff resources and capabilities</b>	Practices lack the staff members capable of managing the transition to or participation in APMs
	Providers lack awareness about APMs
<b>Design and availability of models</b>	Providers have limited APM options due to models' geographic or participant restrictions, a lack of nearby accountable care organizations, or a lack of models appropriate for providers in rural, shortage, or underserved areas
	Providers struggle to adapt to changing model rules and regulations

Source: GAO analysis of Centers for Medicare & Medicaid Services and stakeholder interviews, and literature. | GAO-22-104618

Notes: APMs are intended to encourage health care providers to provide high-quality care to Medicare beneficiaries. Advanced APMs are payment approaches designed to encourage providers to share in the financial rewards and risk of caring for Medicare beneficiaries. Stakeholders interviewed were from 18 organizations selected to represent: 1) federal advisory committees, 2) national health associations and research organizations, 3) state or regional medical organizations, 4) specialty medical associations, and 5) consultant organizations. These stakeholder organizations represent providers of various specialties who participate in APMs or have conducted research and are knowledgeable of issues related to APMs, including Advanced APMs. Some of the challenges identified are unique to providers in rural, shortage, or underserved areas, while others may be more pronounced in these areas but experienced by providers broadly.

**Financial resources and risk management.** Officials from CMS, 15 of the stakeholder organizations we interviewed, and the two studies from our literature review identified financial resources and risk management challenges for providers in rural, shortage, or underserved areas, including small practices in these areas, to transition to APMs. These challenges apply to participation in APMs generally, but challenges related to the downside risk (i.e., the risk that if providers do not meet financial and quality benchmarks, CMS will withhold or reduce payment, or providers will owe payments to CMS), are specific to Advanced

---

APMs.<sup>33</sup> The challenges related to financial resources and risk management include:

- **Lack of capital.** Providers in rural, shortage, or underserved areas may be unable to finance the upfront costs of transitioning from a fee-for-service payment system to APMs, according to most stakeholders, CMS officials, and one of the studies. These upfront costs associated with APM participation may include hiring additional staff, developing new care management strategies, and performing analysis to estimate the provider's likely performance in an APM before joining one, according to some stakeholders.<sup>34</sup> According to the study, high overhead and a low volume of billable services result in tight financial margins and insufficient funding to meet operating costs for many rural practices.<sup>35</sup>
- **Aversion to financial risk.** Providers in rural, shortage, or underserved areas may be averse to taking on financial risk or lack reserves to cover potential losses, according to most of the stakeholders, CMS officials, and one of the studies. If providers do not meet certain benchmarks in an Advanced APM, CMS withholds or reduces payment, or providers owe payments to CMS.<sup>36</sup> As such, providers with fewer financial reserves may have a limited ability to participate in APMs that include such downside risks. One stakeholder said that small practices are less able than large hospitals to absorb a potential reduction in revenue.
- **Smaller patient populations.** Providers in rural, shortage, or underserved areas may have few Medicare patients. Therefore, it is difficult for these providers to justify the investment required for APM participation because Medicare patients may only account for a small

---

<sup>33</sup>Advanced APM entities must meet or exceed one or more specified performance standards, which may include expected expenditures, or face financial penalties. See 42 C.F.R. § 414.1415(c) (2020).

<sup>34</sup>Examples of care management strategies required of participants in one Advanced APM include ensuring patients have 24/7 access to care team practitioners with real-time EHR access; and ensuring all patients receive timely contact from the participating practice after emergency department visits and hospitalizations; among others.

<sup>35</sup>Bipartisan Policy Center, *Confronting Rural America's Health Care Crisis*, 41.

<sup>36</sup>For example, the Comprehensive Primary Care Plus Advanced APM provides a prospective performance-based incentive payment at the beginning of each program year. After each program year ends, CMS retrospectively reconciles the amount of the incentive payment that a practice earned based on how well the practice performed on certain measures, such as clinical quality measures. Practices will either keep their entire payment, repay a portion, or repay all of it.

---

proportion of their patient caseload, according to some stakeholders. Additionally, providers who have lower patient volumes could face less predictable spending and utilization patterns and heightened financial risk in an APM, according to some of the stakeholders and CMS officials. As a result, it is hard for these providers to predict if they will achieve APM benchmarks in a given year, according to one stakeholder. Specifically, a small number of patients who require costlier care can adversely affect the providers' ability to meet the financial benchmarks on which APMs measure them (i.e., their expected expenditures), according to another stakeholder.

- **Referrals limit control over cost of care.** Providers in rural, shortage, or underserved areas can face difficulty controlling the cost of care, which can affect their ability to meet an APM's financial benchmarks, because they often must refer patients elsewhere for tertiary care, according to some of the stakeholders and CMS officials.<sup>37</sup> APMs are intended to create continuity and accountability for patients' care over care episodes and time, according to CMS officials. Providers in rural, shortage, or underserved areas may not be part of a health system that includes specialists and sometimes must refer patients to another practice to receive specialized care, which can result in costs beyond their control, according to some stakeholders. It is easier for providers in large, urban health systems to control costs because they can offer more comprehensive treatment in one location, some stakeholders said. Additionally, ACOs may exclude rural providers from joining if their costs are too high, one stakeholder told us.

**Data and health information technology.** CMS officials, 15 stakeholder organizations we interviewed, and the two studies identified from our literature review cited the following data and health information technology challenges for providers in rural, shortage, or underserved areas, including small practices in these areas, in transitioning to APMs.

- **Data analytics and financial modeling.** Providers in rural, shortage or underserved areas may be unable to conduct needed financial modeling or data analytics, most stakeholders said. They explained that financial modeling or data analysis would be necessary, for example, to assess performance in an APM. A provider and a practice administrator who participated in stakeholder interviews said they

---

<sup>37</sup>Tertiary care includes specialized diagnostic and treatment procedures that are not necessarily available at all medical facilities that provide acute inpatient care.

---

would not have been able to analyze Medicare data without contracting with outside firms, which can be cost prohibitive for small practices, according to another provider. Providers in rural, shortage, or underserved areas may also lack the capability or time to conduct the financial modeling that would allow them to predict how they may perform in an APM before committing to joining one, according to some stakeholders.

- **Electronic health records.** Providers use EHRs to efficiently capture and share patient data in a structured format, which allows them to easily retrieve and transfer patient information to aid care. However, the complexity and cost of EHRs, or lack of high-speed internet to access them, may hinder EHR adoption among providers in rural, shortage, and underserved areas, according to half of the stakeholders, CMS officials, and the two studies we identified. Advanced APMs must require that at least 75 percent of eligible clinicians in an Advanced APM entity—that is, an entity that participates in an APM or other payer arrangement through a direct agreement with CMS or another payer or through federal or state law or regulation—use certified EHR technology.<sup>38</sup> As such, providers who do not obtain and utilize certified EHR technology may be unable to participate in Advanced APMs. One representative from a stakeholder organization we interviewed said that EHR vendors charge practices the same price regardless of their size. This provider also said that EHR vendors charge practices every time they interface their system with another practice’s EHR, and these charges can range in the thousands of dollars. In addition, one of the studies found that some providers in small, rural practices reported that EHRs cost more time, as documentation takes time away from patient care, and expense, such as high purchase, startup, and maintenance costs, than they appear to save.<sup>39</sup> Beyond cost, providers in rural, shortage, or underserved areas may not understand how to use EHRs to their full capacity or may not know how to select the optimal software for their practice, some stakeholders said.

**Staff resources and capabilities.** Officials from CMS, 14 stakeholder organizations we interviewed, and one of the studies identified from our literature review cited the following challenges related to staff resources

---

<sup>38</sup>Prior to 2019, 50 percent of eligible clinicians in an Advanced APM entity were required to use certified EHR technology. 42 C.F.R. § 414.1415(a) (2020).

<sup>39</sup>RAND Corporation, *Perspectives of Physicians in Small Rural Practices*, 13.

---

and capabilities for providers in rural, shortage, or underserved areas, including small practices in these areas, in transitioning to APMs.

- **Staff resources, time, and capabilities.** Practices in rural, shortage or underserved areas may lack the staff members capable of managing the transition to, or participation in, APMs, according to most of the stakeholders, CMS officials, and the study. Some stakeholders noted that existing staff in small practices in rural, shortage, or underserved areas may already be overburdened with office administration duties, from handling payroll to managing the front desk, to cleaning. As such, the stakeholders explained that to participate in an APM, practices may have to hire additional staff for tasks, such as managing care coordination and processing data. Small, rural providers feel that larger practices and health systems have more supporting infrastructure to handle participation in an Advanced APM, according to the study from our literature review.<sup>40</sup>
- **Education and awareness.** Providers in rural, shortage or underserved areas may lack education and awareness about APMs, according to some stakeholders and the study. These providers may not have an understanding of the structure of individual APMs, are too busy treating patients or handling administrative issues to learn about them, or may not see APMs as relevant to them, some stakeholders said.

**Design and availability of models.** Eleven stakeholder organizations we interviewed and the two studies identified from our literature review noted that the following aspects related to the design and availability of models could lead to challenges for providers in rural, shortage, or underserved areas, including small practices in these areas, in transitioning to APMs.

- **Availability of APMs or ACOs.** Providers in rural, shortage, or underserved areas may have limited options of APMs or ACOs in which to participate due to their geographic or participant limitations, model design, or because there is no APM or ACO in the area for them to join, according to most stakeholders and both of the studies from our literature review. Some providers participate in APMs through an ACO, however some stakeholders and one study said ACOs are not available everywhere or can be too far from providers' patient populations.<sup>41</sup> For example, for ACOs to participate in the

---

<sup>40</sup>RAND Corporation, *Perspectives of Physicians in Small Rural Practices*, 12.

<sup>41</sup>RAND Corporation, *Perspectives of Physicians in Small Rural Practices*, 14.

---

Medicare Shared Savings Program APM, ACOs must have a minimum of 5,000 Medicare fee-for-service beneficiaries assigned to the ACO, which one stakeholder said is a threshold that is more challenging for providers in rural communities to meet.<sup>42</sup>

Additionally, some stakeholders we interviewed and one of the studies said there are not enough APMs designed specifically for providers in rural, shortage, or underserved areas.<sup>43</sup> One stakeholder said it is important for CMS to offer models with grants or forgivable loans in order to entice rural providers to participate, such as the now-ended ACO Investment Model, which provided funding to encourage new ACOs to form in rural and underserved areas. Providers in rural, shortage, or underserved areas could potentially use such funds to offset the financial challenges discussed earlier in this section of the report.

- **Adapting to changing model requirements.** Providers in rural, shortage, or underserved areas may struggle to adapt to changing model rules and requirements, according to some stakeholders and one of the studies. It is difficult for these providers to find the time to learn about new requirements and to perform additional financial calculations when an APM's targets change, some stakeholders said. The lack of staff resources discussed earlier in this report may contribute to providers' struggle to adapt to changing rules. One stakeholder said there is a mismatch between the long-term nature of health care investment and the short-term lifespan of some APMs.

---

<sup>42</sup>The Medicare Shared Savings Program is a voluntary program that encourages groups of doctors, hospitals, and other health care providers to form ACOs.

<sup>43</sup>Bipartisan Policy Center, *Confronting Rural America's Health Care Crisis*, 43.

---

## CMS Has Implemented Models with Features, Such as Upfront Funding, and Taken Other Actions to Help Providers in Rural, Shortage, or Underserved Areas Transition to APMs

CMS has implemented a number of models with features such as upfront funding for providers, technical assistance, and other elements, which may help providers in rural, shortage, or underserved areas, and small practices in these areas, transition to APMs, including Advanced APMs. CMS has also offered programs and initiatives to help providers broadly, and specifically those in rural, shortage, and underserved areas, transition to APMs. We learned of these efforts through interviews with CMS officials and stakeholder organizations, as well as the two studies identified from our literature review.

**Funding.** CMS has provided, or plans to provide, upfront funding to participants in some of its APMs, which can help with costs associated with transitioning to and participating in an APM. CMS has provided upfront funding in APMs in various ways.<sup>44</sup>

- **Predictable, upfront payments through global budgets.** Global budgets provide a fixed amount to participating providers, set in advance, to cover all inpatient and hospital-based outpatient items and services. For example, global budgets are a feature of the Pennsylvania Rural Health Model.<sup>45</sup> The predictable, upfront funding offered by this APM helps participating hospitals focus on transitioning its providers to value-based care rather than volume of services, according to a stakeholder. In addition, CMS intends to make up to \$25 million available over 6 years (2019-2024) to Pennsylvania to help participating rural hospitals calculate and administer their budgets, among other efforts.
- **Upfront funding to help transition to value-based care and form rural ACOs.** According to CMS documents, CMS will provide upfront funding for up to 20 rural-focused ACOs to join the Medicare Shared Savings Program and help participants engage in value-based payment efforts through the Community Health Access and Rural

---

<sup>44</sup>CMS sometimes describes the funding it provides as part of the technical assistance it offers for certain APMs. We chose to highlight funding as a key APM feature separate from other aspects of technical assistance CMS offers in these APMs.

<sup>45</sup>Among other things, the Pennsylvania Rural Health Model seeks to test whether care delivery transformation in conjunction with hospital global budgets increase rural Pennsylvanians' access to high-quality care and improve their health, while also reducing the growth of hospital expenditures across payers, including Medicare. Rural Pennsylvania hospitals began participating in this APM on January 1, 2019, and it has an anticipated end date of December 31, 2024. Although this model is not an Advanced APM (i.e., no financial risk for participants), the Pennsylvania Rural Health Model helps rural providers transition to value-based care, according to a stakeholder.

---

Transformation Model's ACO Transformation Track.<sup>46</sup> According to CMS, this upfront money will encourage participants to accept two-sided risk and will vary based on how much risk the ACO accepts in the Medicare Shared Savings Program.<sup>47</sup>

The ACO Investment Model, which concluded in 2018, offered upfront funding to encourage ACOs to form in rural and underserved areas and to encourage existing ACOs to transition to APMs with greater financial risk. CMS funded upfront and ongoing monthly payments to smaller groups of providers who lacked access to capital under the ACO Investment Model and has based parts of the Community Health Access and Rural Transformation Model on it.<sup>48</sup> One of the studies identified in our literature review found that in 2016, more than 75 percent of attributed beneficiaries in the ACO Investment Model lived in rural areas, whereas 24.1 percent of beneficiaries attributed to Medicare Shared Savings Program ACOs of similar size lived in rural areas.<sup>49</sup>

**Technical assistance.** CMS provided, or plans to provide, technical assistance, which includes support such as education, to providers who participate in some of its APMs. The following forms of technical assistance, among others, are included in CMS APMs.

- **Assistance with data analysis.** Under the Pennsylvania Rural Health Model, the state provides technical assistance with data analysis for rural hospitals to redesign care delivery so their providers can better meet the health needs of their local communities. An official

---

<sup>46</sup>Through this APM, CMS aims to provide a way for rural communities to transform their health care delivery systems by leveraging innovative financial arrangements.

<sup>47</sup>CMS will seek repayment of these funds from ACOs participating in the Community Health Access and Rural Transformation Model by reducing the amount of any shared savings payments that are owed to the ACO upon annual reconciliation in the Medicare Shared Savings Program.

<sup>48</sup>The ACO Investment Model was designed for organizations participating as ACOs in the Medicare Shared Savings Program. CMS recouped these prepayments from shared savings earned by the participating ACOs—that is, the ACOs did not receive shared savings bonuses until their cumulative shared savings exceeded the prepayment amount from CMS. Participants first joined this APM in 2015. By 2016, there were 45 participating ACOs. The APM's last performance year ran through 2018.

<sup>49</sup>Trombley et al., "Early Effects of an Accountable Care Organization Model for Underserved Areas," p. 546.

---

from one stakeholder organization stated that small hospitals do not typically have the financial resources or technical skills to process data, and without the technical assistance provided through this APM, participants said they would not be able to participate in this model.

- **Assistance with transformation plans.** According to CMS, CMS plans to offer technical assistance through the Community Health and Rural Transformation Model's Community Transformation Track for up to 15 lead organizations, which could be a state Office of Rural Health, local health department, or other organization.<sup>50</sup> The lead organizations will develop and implement transformation plans, which outline the community's strategy for health care delivery redesign, and will focus on chronic conditions or health disparities present in the community. In addition, transformation plans will include strategies to expand the use of telehealth and other technology to support care delivery improvement.

**Additional features of APMs.** CMS has implemented APMs with other features that may help providers transition to value-based care, for example, by helping to address challenges with staff resources. These features include the following:

- **All-payer ACOs.** One issue identified by stakeholders that may prevent providers from transitioning to APMs is that Medicare patients may account for a small portion of the total patients they treat, and providers therefore feel it is not worth investing in APM participation. To address this challenge, one model, the Vermont All-Payer ACO Model, includes the state's most significant payers (i.e., Medicare, Medicaid, and commercial payers) under the same payment structure. One stakeholder said the all-payer aspect of this APM has the potential to increase APM participation by providing consistent incentives across all payers.
- **Care transformation organizations to alleviate staffing challenges.** Care transformation organizations, which are included in the Maryland Total Cost of Care Model, are intended to enable provider practices to participate in APMs by addressing the difficulties they may have hiring staff to perform care management services,

---

<sup>50</sup>A lead organization is a single entity that represents a rural community, comprised of either (a) a single county or census tract or (b) a set of contiguous or non-contiguous counties or census tracts.

---

according to CMS officials.<sup>51</sup> Providers in rural, shortage, or underserved areas may struggle to hire additional staff to oversee APM participation, such as nurses to act as care managers and analysts to collect and process performance data, according to some stakeholders. Care Transformation Organizations can leverage economies of scale and deploy resources that would be difficult or uneconomical for small- and medium-sized practices that may lack the economic resources for a full interdisciplinary care management team, according to CMS.

- **Resources to assist with care coordination.** The Vermont All-Payer ACO Model assists providers with care coordination and supports their collaboration with community-based providers.<sup>52</sup> Officials from one stakeholder group told us this APM's statewide scope enables the participating ACO to link providers in rural areas with tertiary and specialized providers, provides tools and human resources so providers can handle care coordination locally, and incentivizes collaboration between rural providers and the state's better-resourced medical center. This stakeholder compared the ACO to a utility, in that it is a centralized source for care coordination resources, such as data analysis, which alleviates the need for all providers to invest in data analytic capabilities. One challenge to participating in APMs noted by stakeholders is that providers in rural, shortage, and underserved areas have less control over total cost of care when they refer patients elsewhere for tertiary care.
- **APMs with non-EHR tracks.** Some Advanced APMs have non-advanced tracks for providers who lack certified EHR technology, such as the Radiation Oncology Model. These non-EHR tracks were developed as a means of enabling smaller and rural practices to participate in the APM without necessitating the capital investment in certified EHR technology, according to CMS. Providers participating in the non-EHR tracks are not eligible for the QP incentive payment.

**Other CMS programs and initiatives.** CMS has conducted or plans to conduct other programs and initiatives to help providers in rural, shortage, or underserved areas transition to APMs, according to CMS officials.

---

<sup>51</sup>The Maryland Total Cost of Care Model is an Advanced APM. This APM's first performance year began January 1, 2019, and is anticipated to end on December 31, 2026.

<sup>52</sup>The Vermont All-Payer ACO Model is an active Advanced APM. It began in 2018 and is scheduled to conclude in 2022.

- 
- **Small, Underserved, and Rural Support Program.** CMS contracted with 11 organizations to help small practices and providers in rural, shortage, and underserved areas participate in QPP. Since 2017, the Small, Underserved, and Rural Support Program contractors have directed providers to resources they may need and educated providers interested in participating in an APM on how to make that transition, according to CMS officials.<sup>53</sup>
  - **Health Care Payment Learning and Action Network.** Established by CMS in 2015, this 7,000-member network is a public-private partnership designed to increase awareness about APMs among providers, payers, patients, and other stakeholders. The initiative offers annual public meetings, work groups, and white papers that share APM best practices, with a goal of aligning public- and private-sector stakeholders in shifting away from the fee-for-service, volume-based payment system to one that pays for high-quality care and improved health. Focus areas include data analytics, reducing ineffective care, and facilitating market shifts to value. Assistance is intended for all providers, not only those in rural, shortage, and underserved areas.
  - **Pathways to Success.** CMS issued Pathways to Success in a final rule in 2018 that established policies in the Medicare Shared Savings Program to support ACOs with independent practices, small rural hospitals, or both, and encourage their participation in APMs and Advanced APMs.<sup>54</sup> Following the issuance of that rule, CMS established a track in the Medicare Shared Savings Program APM that allows these ACOs to participate for a longer period under one-sided risk (i.e., potential for higher payments) before moving to two-sided risk (i.e., risk of lower payments).
  - **MIPS Value Pathways.** This framework, which CMS plans to implement in 2023, is intended to help providers, including those in rural and underserved areas, transition to APMs, among other things. According to CMS, once it begins, MIPS Value Pathways will reduce barriers to APM participation by including measures that are part of APMs and assisting health care providers, including those with patients in rural and underserved areas, assess their ability to take on

---

<sup>53</sup>CMS launched this program in 2017 as a 5-year program to provide free, customized technical assistance regarding MIPS to small practices with 15 or fewer providers. Priority is given to those small practices in rural, shortage, and underserved areas. According to CMS, the program focuses on MIPS reporting, such as help submitting data.

<sup>54</sup>83 Fed. Reg. 67,816 (Dec. 31, 2018).

---

financial risk and manage that risk, as would be required in Advanced APMs.<sup>55</sup>

- **Transforming Clinical Practices Initiative.** This initiative, which ended in 2019, included technical assistance to prepare for and support certain providers, such as those in shortage areas and within small practices, participate in APMs, according to CMS. CMS launched this initiative in 2015, which supported 71,409 health care providers in shortage areas and small practices over a 4-year period through a nationwide, collaborative, and peer-based learning network, according to CMS. The initiative helped providers prepare for APM participation by developing resources and tools to help participants, for example, lower total cost of care and implement data-driven quality improvement practices.

---

## Agency Comments

We provided a draft of this report to the Department of Health and Human Services for review and comment. The department provided technical comments, which we incorporated as appropriate.

---

We are sending copies of this report to the Secretary of Health and Human Services, appropriate congressional committees, and other interested parties. In addition, the report will be available at no charge on the GAO Web site at <http://www.gao.gov>.

If you or your staff have any questions about this report, please contact me at (202) 512-7114 or [rosenbergm@gao.gov](mailto:rosenbergm@gao.gov). Contact points for our Offices of Congressional Relations and Public Affairs are on the last page of this report. GAO staff who made major contributions to this report are listed in appendix II.



Michelle B. Rosenberg  
Director, Health Care

---

<sup>55</sup>85 Fed. Reg. 84,472 (Dec. 28, 2020).

---

---

*List of Committees*

The Honorable Ron Wyden  
Chairman

The Honorable Mike Crapo  
Ranking Member  
Committee on Finance  
United States Senate

The Honorable Patty Murray  
Chair

The Honorable Richard Burr  
Ranking Member  
Committee on Health, Education, Labor, and Pensions  
United States Senate

The Honorable Frank Pallone, Jr.  
Chairman

The Honorable Cathy McMorris Rodgers  
Republican Leader  
Committee on Energy and Commerce  
House of Representatives

The Honorable Richard E. Neal  
Chairman

The Honorable Kevin Brady  
Republican Leader  
Committee on Ways and Means  
House of Representatives

# Appendix I: Data on Medicare Providers Who Participated in Alternative Payment Models (APM), 2017 – 2019

This appendix presents 2017 through 2019 data—the most recent years of available data at the time of our analysis—on Medicare providers who participated in APMs, including Advanced APMs.<sup>1</sup> The tables include information on providers for whom data from the Centers for Medicare & Medicaid Services (CMS) indicated were located in rural areas, health professional shortage areas (shortage areas), or both; as well as providers not located in these areas.<sup>2</sup>

Table 3 presents data on APM and Advanced APM participation for providers located in rural or shortage areas, and not located in these areas.

**Table 3: Number and Percentage of Medicare Providers Who Participated in Alternative Payment Models (APM), by Location, 2017 – 2019**

Type of APM	Providers located in rural or shortage areas			Providers not located in rural or shortage areas		
	2017 (n=509,618)	2018 (n=433,041)	2019 (n=442,927)	2017 (n=1,280,376)	2018 (n=1,137,443)	2019 (n=1,173,792)
Participating in any APM	25.3% (129,153)	30.2% (130,641)	32.0% (141,595)	27.4% (351,126)	32.3% (367,594)	33.4% (391,748)
Participating in an Advanced APM <sup>a</sup>	4.9% (25,160)	8.1% (35,097)	11.9% (52,592)	7.0% (90,056)	11.9% (135,237)	14.8% (174,140)

Source: GAO analysis of Centers for Medicare & Medicaid Services (CMS) data. | GAO-22-104618

Note: For this analysis, we included providers eligible to participate in Advanced APMs for whom CMS had information on whether they were located in a rural or shortage area based on the place of service in their Medicare Part B claims. We excluded providers for whom CMS did not provide information on their location because, according to CMS, the provider did not have Medicare Part B claims in the year. We calculated percentages based on the number of providers eligible to participate in an Advanced APM.

<sup>a</sup>Advanced APMs are payment approaches designed to encourage providers to share in the financial rewards and risk of caring for Medicare beneficiaries. Advanced APMs are a subset of APMs; therefore, these data are not mutually exclusive.

<sup>1</sup>APMs are payment approaches that give added incentive payments to providers to provide high-quality and cost-efficient care. See 42 C.F.R. § 414.1305 (2020) (definition of APM). An Advanced APM is an APM that CMS determines meets the criteria set forth in regulation pertaining to use of certified electronic health record technology, quality measures, and financial risk. See 42 C.F.R. § 414.1415 (2020) (Advanced APM criteria).

<sup>2</sup>CMS data identified providers as being located in rural areas, shortage areas, or both. CMS uses census data when making rural area determinations and designations from the Health Resources and Services Administration to identify shortage areas. Health professional shortage areas are geographic areas, population groups, or health care facilities that have been designated as having a shortage of primary, dental, or mental health care providers.

**Appendix I: Data on Medicare Providers Who Participated in Alternative Payment Models (APM), 2017 – 2019**

Table 4 presents data on the extent to which providers located in rural or shortage areas, and not located in these areas, participated in Advanced APMs by practice size.

**Table 4: Number and Percentage of Medicare Providers Who Participated in Advanced Alternative Payment Models (APM) by Location and Practice Size, 2017 – 2019**

Practice size	Providers located in rural or shortage areas			Providers not located in rural or shortage areas		
	2017 (n=509,618)	2018 (n=433,041)	2019 (n=442,927)	2017 (n=1,280,376)	2018 (n=1,137,443)	2019 (n=1,173,792)
Small practice (15 or fewer providers)	0.6% (3,154)	1.1% (4,585)	1.5% (6,569)	0.9% (11,906)	1.6% (17,719)	1.6% (18,993)
Not a small practice (16 or more providers)	4.3% (22,006)	7.0% (30,512)	10.4% (46,023)	6.1% (78,150)	10.3% (117,518)	13.2% (155,147)
Total participating providers	4.9% (25,160)	8.1% (35,097)	11.9% (52,592)	7.0% (90,056)	11.9% (135,237)	14.8% (174,140)

Source: GAO analysis of Centers for Medicare & Medicaid Services (CMS) data. | GAO-22-104618

Notes: Advanced APMs are payment approaches designed to encourage providers to share in the financial rewards and risk of caring for Medicare beneficiaries. For this analysis, we included providers eligible to participate in Advanced APMs for whom CMS had information on whether they were located in a rural or shortage area based on the place of service in their Medicare Part B claims. We excluded providers for whom CMS did not provide information on their location because, according to CMS, the provider did not have Medicare Part B claims in the year. We calculated percentages based on the number of providers eligible to participate in an Advanced APM.

Table 5 presents data on the number and percentage of providers participating in Advanced APMs by location.

**Table 5: Number and Percentage of Medicare Providers Participating in Advanced Alternative Payment Models (APM) by Location, 2017 – 2019**

Location	2017 (n=115,216)		2018 (n=170,334)		2019 (n=226,732)	
	number	percent	number	percent	number	percent
<b>Rural area</b>						
Located in a rural area	11,212	9.73	16,453	9.66	20,797	9.17
Not located in a rural area	104,004	90.27	153,881	90.34	205,935	90.83
<b>Shortage area</b>						
Located in a shortage area	21,172	18.38	30,276	17.77	46,709	20.60
Not located in a shortage area	94,044	81.62	140,058	82.23	180,023	79.40
<b>Rural or shortage area</b>						
Located in a rural or shortage area <sup>a</sup>	25,160	21.84	35,097	20.60	52,592	23.20

**Appendix I: Data on Medicare Providers Who Participated in Alternative Payment Models (APM), 2017 – 2019**

Location	2017 (n=115,216)		2018 (n=170,334)		2019 (n=226,732)	
	number	percent	number	percent	number	percent
Not located in a rural or shortage area	90,056	78.16	135,237	79.40	174,140	76.80

Source: GAO analysis of Centers for Medicare & Medicaid Services (CMS) data. | GAO-22-104618

Notes: Advanced APMs are payment approaches designed to encourage providers to share in the financial rewards and risk of caring for Medicare beneficiaries. For this analysis, we included providers eligible to participate in Advanced APMs for whom CMS had information on whether they were located in a rural or shortage area based on the place of service in their Medicare Part B claims. We excluded providers for whom CMS did not provide information on their location because, according to CMS, the provider did not have Medicare Part B claims in the year. We calculated percentages based on the number of providers who participated in at least one Advanced APM.

<sup>a</sup>Providers could be located in a rural area, located in a health professional shortage area (shortage area), or both.

Table 6 presents data on the number and percentage of providers participating in Advanced APMs by practice size and location.

**Table 6: Number and Percentage of Medicare Providers Participating in Advanced Alternative Payment Models (APM) by Practice Size and Location, 2017 – 2019**

Practice size and location	2017 (n=115,216)		2018 (n=170,334)		2019 (n=226,732)	
	number	percent	number	percent	number	percent
<b>Practice size</b>						
Small practice (15 or fewer providers)	15,060	13.07	22,304	13.09	25,562	11.27
Not a small practice (16 or more providers)	100,156	86.93	148,030	86.91	201,170	88.73
<b>Small practice and location</b>						
Small practice located in a rural or shortage area <sup>a,b</sup>	3,154	2.74	4,585	2.69	6,569	2.90
Small practice not located in a rural or shortage area <sup>b</sup>	11,906	10.33	17,719	10.40	18,993	8.38
<b>Not a small practice and location</b>						
Not a small practice located in a rural or shortage area <sup>a,c</sup>	22,006	19.10	30,512	17.91	46,023	20.30
Not a small practice and not located in a rural or shortage area <sup>c</sup>	78,150	67.83	117,518	68.99	155,147	68.43

Source: GAO analysis of Centers for Medicare & Medicaid Services (CMS) data. | GAO-22-104618

Notes: Advanced APMs are payment approaches designed to encourage providers to share in the financial rewards and risk of caring for Medicare beneficiaries. For this analysis, we included providers eligible to participate in Advanced APMs for whom CMS had information on whether they were located in a rural or shortage area based on the place of service in their Medicare Part B claims. We excluded providers for whom CMS did not provide information on their location because, according to CMS, the providers did not have Medicare Part B claims in the year. We calculated percentages based on the number of providers who participated in at least one Advanced APM.

<sup>a</sup>Providers could be located in a rural area, located in a health professional shortage area (shortage area), or both.

**Appendix I: Data on Medicare Providers Who Participated in Alternative Payment Models (APM), 2017 – 2019**

<sup>b</sup>This category is a subset of all small practices.

<sup>c</sup>This category is a subset of all practices that are not small practices.

Table 7 presents data on the percentage of providers participating in Advanced APMs by location and provider type.

**Table 7: Percentage of Medicare Providers Participating in Advanced Alternative Payment Models (APM) by Location and Provider Type, 2017 – 2019**

Provider type	2017 (n=115,216)		2018 (n=170,334)		2019 (n=226,732)	
	In rural/shortage area (25,160)	Not in rural/shortage area (90,056)	In rural/shortage area (35,097)	Not in rural/shortage area (135,237)	In rural/shortage area (52,592)	Not in rural/shortage area (174,140)
Physician <sup>a</sup>	69.12%	76.02%	68.97%	73.20%	69.16%	71.02%
Nurse practitioner	14.79%	10.72%	14.24%	12.19%	14.32%	13.08%
Physician assistant	9.25%	7.42%	9.83%	7.94%	8.99%	8.67%
Certified Registered Nurse Anesthetist	2.69%	1.55%	3.57%	2.21%	3.31%	2.32%
Physical Therapist	0.64%	0.80%	0.76%	0.95%	1.60%	1.52%
Clinical Social Worker	1.45%	0.89%	0.65%	0.84%	0.60%	0.87%
Clinical Psychologist	0.41%	0.83%	0.48%	0.88%	0.42%	0.81%
Certified Nurse-Midwife	0.51%	0.42%	0.45%	0.40%	0.37%	0.38%
Qualified Audiologist	0.25%	0.35%	0.31%	0.38%	0.32%	0.39%
Registered Dietician/Nutrition Professional	0.27%	0.28%	0.29%	0.32%	0.23%	0.28%
Clinical Nurse Specialist	0.18%	0.22%	0.21%	0.23%	0.20%	0.18%
Occupational Therapist	0.10%	0.13%	0.11%	0.16%	0.26%	0.26%
Doctor of Chiropractic	0.11%	0.12%	0.05%	0.09%	0.06%	0.06%
Qualified Speech-Language Pathologist	0.07%	0.05%	0.02%	0.05%	0.06%	0.05%
Anesthesiologist Assistant	0.0%	0.13%	0.01%	0.12%	0.03%	0.06%
Missing	0.15%	0.07%	0.04%	0.03%	0.07%	0.04%

Source: GAO analysis of Centers for Medicare & Medicaid Services (CMS) data. | GAO-22-104618

Notes: Advanced APMs are payment approaches designed to encourage providers to share in the financial rewards and risk of caring for Medicare beneficiaries. For this analysis, we included providers eligible to participate in Advanced APMs for whom CMS had information on whether they were located in a rural or shortage area based on the place of service in their Medicare Part B claims. We excluded providers for whom CMS did not provide information on their location because, according to CMS, the providers did not have Medicare Part B claims in the year. We calculated percentages based on the number of providers who participated in at least one Advanced APM.

<sup>a</sup>Physicians include Doctors of Medicine, Optometry, Osteopathy, Dental Medicine/Dental Surgery, and Podiatric Medicine.

**Appendix I: Data on Medicare Providers Who Participated in Alternative Payment Models (APM), 2017 – 2019**

Table 8 presents data on the percentage of physicians participating in Advanced APMs by location and physician specialty.

**Table 8: Percentage of Physicians Participating in Advanced Alternative Payment Models (APM) by Location and Physician Specialty, 2017 – 2019**

Physician specialty <sup>a</sup>	Year					
	2017 (n=85,850)		2018 (n=123,201)		2019 (n=160,043)	
	In rural/shortage area (17,391)	Not in rural/shortage area (68,459)	In rural/shortage area (24,206)	Not in rural/shortage area (98,995)	In rural/shortage area (36,370)	Not in rural/shortage area (123,673)
Family Practice	23.57%	14.60%	23.11%	13.43%	21.03%	13.68%
Internal Medicine	16.93%	20.71%	13.66%	17.56%	16.55%	19.02%
Emergency Medicine	5.97%	4.71%	6.50%	5.20%	6.04%	4.79%
Diagnostic Radiology	4.62%	4.19%	6.25%	4.65%	5.80%	4.09%
Orthopedic Surgery	3.20%	3.40%	3.66%	3.45%	5.35%	5.32%
Hospitalist	0.22%	0.22%	2.32%	1.65%	4.29%	2.83%
Cardiology	4.16%	3.92%	4.07%	3.74%	3.46%	3.68%
Obstetrics/Gynecology	4.04%	4.31%	3.69%	4.28%	3.40%	4.17%
General Surgery	3.66%	2.84%	3.53%	2.97%	3.11%	2.89%
Nephrology	3.12%	2.25%	2.78%	2.16%	2.40%	1.80%
Anesthesiology	2.89%	3.19%	2.30%	3.73%	2.28%	3.26%
Gastroenterology	1.66%	2.37%	2.23%	2.52%	1.88%	2.15%
Neurology	2.05%	2.70%	2.18%	2.69%	1.86%	2.44%
Pulmonary disease	1.48%	1.78%	1.54%	2.02%	1.51%	1.89%
Psychiatry	1.22%	2.66%	1.61%	2.56%	1.37%	2.45%
Urology	1.63%	1.29%	1.51%	1.31%	1.28%	1.25%
Ophthalmology	1.36%	2.38%	1.42%	2.40%	1.22%	1.97%
Podiatry	1.11%	1.23%	1.23%	1.20%	1.22%	1.06%
Hematology/Oncology	1.61%	1.55%	1.38%	1.57%	1.11%	1.34%
Dermatology	1.00%	1.41%	0.83%	1.48%	1.03%	1.33%
All other physician specialties	14.48%	18.23%	14.16%	19.29%	13.77%	18.54%
Unknown	0.05%	0.09%	0.07%	0.11%	0.04%	0.05%

Source: GAO analysis of Centers for Medicare & Medicaid Services (CMS) data. | GAO-22-104618

Notes: This analysis is limited to physician provider types, which include Doctors of Medicine, Optometry, Osteopathy, Dental Medicine/Dental Surgery, and Podiatric Medicine.

Advanced APMs are payment approaches designed to encourage providers to share in the financial rewards and risk of caring for Medicare beneficiaries. For this analysis, we included physicians eligible to participate in Advanced APMs for whom CMS had information on whether they were located in a rural or shortage area based on the place of service in their Medicare Part B claims. We

---

**Appendix I: Data on Medicare Providers Who  
Participated in Alternative Payment Models  
(APM), 2017 – 2019**

---

excluded physicians for whom CMS did not provide information on their location because, according to CMS, the physician did not have Medicare Part B claims in the year. We calculated percentages based on the number of physicians who participated in at least one Advanced APM.

<sup>a</sup>This table lists the physician specialties that accounted for at least 1 percent of the physicians in rural or shortage areas participating in Advanced APMs in 2019. The remaining physician specialties are included in the all other physician specialties category.

---

# Appendix II: GAO Contact and Staff Acknowledgments

---

## GAO Contact

Michelle B. Rosenberg (202) 512-7114 or [rosenbergm@gao.gov](mailto:rosenbergm@gao.gov)

---

## Staff Acknowledgments

In addition to the contact above, Kim Yamane (Assistant Director), Lisa A. Lusk (Analyst-in-Charge), Eli Dile, Christina Murphy, Dan Ries, and Jenny Rudisill made key contributions to this report. Also contributing to this report were Sam Amrhein, Jieun Chang, Joycelyn Cudjoe, and Vikki Porter.

---

---

## GAO's Mission

The Government Accountability Office, the audit, evaluation, and investigative arm of Congress, exists to support Congress in meeting its constitutional responsibilities and to help improve the performance and accountability of the federal government for the American people. GAO examines the use of public funds; evaluates federal programs and policies; and provides analyses, recommendations, and other assistance to help Congress make informed oversight, policy, and funding decisions. GAO's commitment to good government is reflected in its core values of accountability, integrity, and reliability.

---

## Obtaining Copies of GAO Reports and Testimony

The fastest and easiest way to obtain copies of GAO documents at no cost is through our website. Each weekday afternoon, GAO posts on its [website](#) newly released reports, testimony, and correspondence. You can also [subscribe](#) to GAO's email updates to receive notification of newly posted products.

---

## Order by Phone

The price of each GAO publication reflects GAO's actual cost of production and distribution and depends on the number of pages in the publication and whether the publication is printed in color or black and white. Pricing and ordering information is posted on GAO's website, <https://www.gao.gov/ordering.htm>.

Place orders by calling (202) 512-6000, toll free (866) 801-7077, or TDD (202) 512-2537.

Orders may be paid for using American Express, Discover Card, MasterCard, Visa, check, or money order. Call for additional information.

---

## Connect with GAO

Connect with GAO on [Facebook](#), [Flickr](#), [Twitter](#), and [YouTube](#).  
Subscribe to our [RSS Feeds](#) or [Email Updates](#). Listen to our [Podcasts](#).  
Visit GAO on the web at <https://www.gao.gov>.

---

## To Report Fraud, Waste, and Abuse in Federal Programs

Contact FraudNet:

Website: <https://www.gao.gov/about/what-gao-does/fraudnet>

Automated answering system: (800) 424-5454 or (202) 512-7700

---

## Congressional Relations

A. Nicole Clowers, Managing Director, [ClowersA@gao.gov](mailto:ClowersA@gao.gov), (202) 512-4400, U.S. Government Accountability Office, 441 G Street NW, Room 7125, Washington, DC 20548

---

## Public Affairs

Chuck Young, Managing Director, [youngc1@gao.gov](mailto:youngc1@gao.gov), (202) 512-4800  
U.S. Government Accountability Office, 441 G Street NW, Room 7149  
Washington, DC 20548

---

## Strategic Planning and External Liaison

Stephen J. Sanford, Managing Director, [spel@gao.gov](mailto:spel@gao.gov), (202) 512-4707  
U.S. Government Accountability Office, 441 G Street NW, Room 7814,  
Washington, DC 20548

