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DATA SNAPSHOT

August 2025 | OEI-02-23-00261

Billing for Remote Patient Monitoring in Medicare

HIGHLIGHTS



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Billing for Remote Patient Monitoring in Medicare

Why OIG Did This Review

- Remote patient monitoring is a technology-based health care service designed to allow for better management of health conditions, especially chronic conditions.¹
- Remote patient monitoring allows a patient to collect their own health data (e.g., their blood pressure or weight) using a connected medical device that automatically transmits these data to their provider.² The provider then uses these data to treat or manage the patient's condition.
- OIG previously found that the use of these services in Medicare has the potential to greatly expand in the future and that additional oversight of remote patient monitoring is needed.³

Key Takeaways

- The use of remote patient monitoring continued to grow in 2024, with Medicare payments exceeding \$500 million.
- Monitoring billing can help safeguard the Medicare program and prevent fraud, waste, and abuse.
- We developed several measures to monitor billing for remote patient monitoring, including:
 - billing for a high proportion of enrollees who have no prior history with the medical practice;
 and
 - billing for multiple monitoring devices a month for an enrollee.
- These measures can identify medical practices with billing for remote patient monitoring that warrant further scrutiny.

Nearly 1 million Medicare enrollees received remote patient monitoring in 2024.



Source: OIG analysis of Medicare claims and Medicare Advantage encounter data, 2025.

 Analyzing billing can help CMS, Medicare Advantage Organizations, and other entities ensure that enrollees receive the benefit of remote patient monitoring while, at the same time, minimizing program integrity risks.

Remote patient monitoring in Medicare

- Medical practices can bill for remote patient monitoring for the collection of physiologic data using a wide range of medical devices, for chronic and acute conditions.
- To bill for these services, medical practices use a general set of procedure codes. These codes represent three different components of the monitoring enrollees receive (i.e., education and setup; device supply; and treatment management).

An example of remote patient monitoring in Medicare



A Medicare enrollee has high blood pressure (hypertension).



The enrollee's provider determines that remote patient monitoring is **medically necessary** to treat his hypertension and the enrollee **consents** to receiving it.



The provider **supplies a connected blood pressure cuff** to the enrollee.



The provider **educates** the enrollee on **how to use and set up** the connected blood pressure cuff.



The enrollee regularly uses the connected blood pressure cuff to collect blood pressure readings, and the device automatically transmits the enrollee's data to the provider.



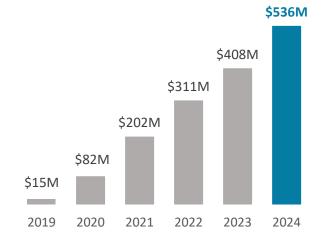
The provider then **reviews the data**, **makes decisions about** the enrollee's **treatment**, and **communicates with the enrollee**. For example, the provider may decide that the enrollee's blood pressure medication needs to be adjusted and call him to discuss this change.

How much is Medicare paying for remote patient monitoring?

Payments for remote patient monitoring were \$536 million in 2024. This includes Original Medicare (also known as Medicare fee-for-service) and Medicare Advantage.⁴ It represents a 31-percent increase from 2023 and continues an upward trend that occurred in every year since Medicare began widely covering the services in 2019.

The number of Medicare enrollees who received remote patient monitoring also grew. In 2024, nearly 1 million enrollees received remote patient monitoring, a 27-percent increase from 2023.

Medicare payments for remote patient monitoring increased 31 percent from 2023 to 2024.



Source: OIG analysis of Medicare claims and Medicare Advantage encounter data, 2025.

How many new enrollees do medical practices bill for?

About 4,600 medical practices routinely billed for remote patient monitoring in 2024.⁵ Typically, these medical practices each billed remote patient monitoring for about 70 enrollees during the year and added about 5 new enrollees each month.⁶

However, some medical practices experienced significant growth. For example, 32 medical practices had a large increase in the number of new enrollees for whom they billed remote patient monitoring.⁷ In a single month, they each had an increase of at least 150 percent—representing at least 100 new enrollees. One medical practice billed remote patient monitoring for nearly 3,400 new enrollees in a single month.

While significant increases in billing may represent legitimate growth in a practice's uptake of remote patient monitoring, these types of spikes in billing have been a marker of fraud in other Medicare services. As such, they signal a need for further scrutiny.

Some medical practices experienced large, sudden increases in billing for remote patient monitoring.



Do medical practices have a prior relationship with their patients?

CMS requires that medical practices have a prior relationship with an enrollee to bill for remote patient monitoring. This means that before billing for monitoring, one of the practice's providers has an inperson or telehealth visit with the enrollee. During this visit, the provider can collect information about the enrollee's medical status and determine whether remote patient monitoring could benefit the enrollee.

Most medical practices had prior relationships with nearly all of their patients. However, 45 medical practices—including practices that bill Original Medicare and Medicare Advantage Organizations—did not have a prior medical relationship with more than 80 percent of the patients for whom they billed remote patient monitoring in 2024. In one example, a medical practice lacked a prior relationship with more than 30,000 enrollees. Further review of these medical practices is warranted.

Before billing for remote patient monitoring, the medical practice must establish a relationship with the enrollee by having:

- an in-person service; or
- a telehealth service.⁹

Are medical practices billing for treatment management?

Treatment management is an essential component of remote patient monitoring. ¹⁰ Treatment management is when a provider spends at least 20 minutes in a month using the enrollee's data to make decisions about their treatment and talks to the enrollee about their care. ¹¹ For most medical practices, it is rare for an enrollee to not receive treatment management. Notably, for the majority of practices, fewer than 1 percent of enrollees never received it.

Yet, for 52 medical practices, more than 75 percent of their enrollees never had treatment management billed to Medicare during the year.

All enrollees may not need treatment management or may not need the full 20 minutes of treatment management that is required to bill each month. However, a medical practice that has a high percentage of enrollees who never received treatment management in any month warrants further scrutiny to ensure that remote patient monitoring is being effectively used to treat the enrollee's condition.

Treatment management is when a provider uses the enrollee's data to make decisions and talks to the enrollee about their care.



Do medical practices bill for the same enrollees?

Medical practices rarely billed for remote patient monitoring for the same enrollee as other practices (i.e., to share enrollees).

The vast majority—nearly 90 percent—of medical practices never billed for the same enrollees as two or more other practices.

Yet, 34 practices frequently billed for the same enrollees as two or more other practices. These practices billed this way for more than 25 percent of their enrollees.

When practices frequently bill for the same enrollees, it raises concern that they may be billing for monitoring that is not necessary or not provided; such billing warrants further scrutiny.

When practices bill for the same enrollees as two or more other practices, it raises concern that they are billing for services that are unnecessary.



Do medical practices bill for multiple devices per enrollee?

Medicare generally allows practices to bill for only one remote patient monitoring device per month per enrollee. 12

Most medical practices never billed for more than one device per month per enrollee.

Yet, about 20 practices frequently billed Medicare for 2 or more devices per month per enrollee. Each of these practices billed for multiple devices for enrollees more than 100 times in a year. One medical practice billed this way about 1,700 times during the year.

Frequently billing for multiple devices per enrollee may indicate that practices are double billing for the same device, or billing for devices that are not provided or not medically necessary. As such, these patterns signal a need for further scrutiny.

Medicare generally does not allow billing for more than one remote patient monitoring device per month per enrollee.



Device 1:Blood
pressure
cuff

Device 2: Connected weight scale

Conclusion

The use of remote patient monitoring has continued to grow in Medicare. In 2024, payments—including both Original Medicare and Medicare Advantage—for remote patient monitoring exceeded \$500 million. These data provide further support for the findings and recommendations in our first report which found that the use of these services in Medicare has the potential to greatly expand and that additional oversight is needed.¹³

To that end, we reiterate the importance of CMS implementing the recommendations we made in our previous report about remote patient monitoring to strengthen its oversight of these services. Using measures—such as the ones in this report—to monitor billing for remote patient monitoring can help safeguard program integrity and prevent fraud, waste, and abuse.

Further, this approach can help CMS, Medicare Advantage Organizations, and other entities ensure that enrollees receive the benefit of remote patient monitoring while, at the same time, minimizing program integrity risks.

OIG previously recommended that CMS:

 implement additional safeguards to ensure that remote patient monitoring is used and billed appropriately in Medicare.

For information about other recommendations related to remote patient monitoring, see *Additional Oversight of Remote Patient Monitoring in Medicare Is Needed*, OEI-02-23-00260.

Methodology

We based this analysis on Medicare fee-for-service (i.e., Original Medicare) claims from the National Claims History File and Medicare Advantage encounters from the Part C Encounter data. We identified claims and encounters for remote patient monitoring with dates of service from January 1, 2024, through December 31, 2024. We included claims and encounters billed with one or more remote patient monitoring procedure codes (i.e., Current Procedural Terminology (CPT®) codes: 99091, 99453, 99454, 99457, and 99458). These services are also referred to as "remote physiologic monitoring." We also used data from CMS's Provider Enrollment, Chain, and Ownership System.

Identifying Medical Practices That Billed for Remote Patient Monitoring

In total, we identified 10,388 medical practices that billed for at least one remote patient monitoring service in 2024. These practices billed either Medicare fee-for-service, Medicare Advantage plans, or both. They are also known as the "billing provider." We determined the amount Medicare and Medicare Advantage plans paid for remote patient monitoring in 2024 and the number of enrollees who received these services.

We then identified medical practices that routinely billed for remote patient monitoring. We defined "routinely" as billing for 10 or more enrollees and more than 100 remote patient monitoring services during 2024. In total, 4,639 medical practices routinely billed for remote patient monitoring.¹⁴

Analyzing Medical Practices' Billing Patterns

To analyze medical practices' billing patterns for remote patient monitoring, we developed five measures. We developed these measures based on input from OIG investigators and others; a review of Medicare billing guidelines; and analyses of Medicare data. We focused this analysis on the 4,639 medical practices that routinely billed for remote patient monitoring.

For each practice, we calculated the following measures.

- New enrollees: For each medical practice, we determined the number of new enrollees for whom the practice billed remote patient monitoring in each month. Next, for each practice, we compared the number of new enrollees receiving monitoring in a given month to the previous month's number of new enrollees to identify providers with sudden increases in new enrollees.¹⁵
- **Prior relationships:** For each medical practice, we determined the percentage of enrollees with whom it did not have a prior relationship before billing remote patient monitoring. To do this, we identified the enrollees for whom each practice billed remote patient monitoring in 2024. Next, for each of these enrollees, we identified the date of the first remote patient monitoring service in 2024 and looked back to January 1, 2021, to determine whether the enrollee had a prior in-person or telehealth visit with that same practice. ¹⁶ If the enrollee had a prior visit with the practice, we considered the practice to have had a prior relationship with the enrollee. ¹⁷
- **Treatment management:** For each medical practice, we determined the percentage of its enrollees for whom it billed remote patient monitoring who never received treatment management from any medical practice during the year.

- Billing for remote patient monitoring for the same enrollees as other medical practices: For each medical practice, we determined the percentage of its enrollees who received remote patient monitoring from two or more other medical practices during the year.
- Billing for multiple devices per enrollee: For each medical practice, we determined the number of times that the practice billed for multiple devices for an enrollee in the same month.

For each measure, we reviewed the distribution of the medical practices and identified medical practices that billed well outside of the normal range. 18

Limitations

This analysis is based on Medicare claims and encounter data in CMS's Integrated Data Repository as of June 5, 2025. Medicare claims or encounters submitted or adjusted after this timeframe are not included in this analysis. We did not conduct a medical record review. Additionally, the measures that we analyzed do not confirm that a particular medical practice is engaging in fraudulent or abusive practices or does not meet Medicare billing requirements for remote patient monitoring. Any determination of fraud or an overpayment requires additional investigation.

Standards

We conducted this study in accordance with the *Quality Standards for Inspection and Evaluation* issued by the Council of the Inspectors General on Integrity and Efficiency.

- ¹ For example, remote patient monitoring can be used to treat patients with hypertension to help better manage their condition and reduce hospitalizations. See Mitchell Tang, Carter H. Nakamoto, Ariel D. Stern, et al., "Effects of Remote Patient Monitoring Use on Care Outcomes Among Medicare Patients with Hypertension: An Observational Study," *Annals of Internal Medicine*, Vol. 172, No. 11, 2023, pp. 1465-1475.
- ² This review covers remote patient monitoring of physiologic data. It does not cover monitoring of non-physiologic data (i.e., remote therapeutic monitoring). Medicare covers these services differently. Examples of nonphysiologic data include information about medication adherence and cognitive behavioral therapy.
- ³ OIG, Additional Oversight of Remote Patient Monitoring in Medicare Is Needed, OEI-02-23-00260, September 19, 2024.
- ⁴ For Original Medicare, these amounts include Medicare payments, enrollee copays, and deductible amounts for these services. For Medicare Advantage, these amounts include the amounts Medicare Advantage plans reported paying for these services, which may not include enrollee cost-sharing. In addition, due to incomplete Medicare Advantage encounter data, payment information may be missing in some instances.
- ⁵ Throughout this report, we use the term "medical practices" to refer to health care entities that billed for remote patient monitoring; these entities are also known as billing providers. Each of these medical practices billed for at least 10 enrollees and 100 remote patient monitoring services during the year. In total, we based our analyses on 4,639 practices.
- ⁶ These data represent the medians.
- ⁷ To ensure that we compared similar medical practices, we excluded very large practices from the analysis.
- ⁸ See 85 Fed. Reg. 84472, 84543 (Dec. 28, 2020). Original Medicare requires medical practices to have an established relationship with the enrollee before billing for remote patient monitoring. This requirement was briefly waived during the COVID-19 Public Health Emergency and reinstated in May 2023. While Medicare Advantage plans may have different requirements, it raises concern when practices frequently bill for remote patient monitoring without a prior relationship.
- ⁹ CMS also considered a medical practice to have a prior relationship with the enrollee if the enrollee received remote patient monitoring from the practice during the COVID-19 Public Health Emergency. For more information, see 88 Fed. Reg. 78818 (Nov. 16, 2023).
- ¹⁰ According to CMS, treatment management ensures that practices review the health data and use them to manage the patient's conditions. For more information, see CMS, *Remote Patient Monitoring*, May 2025. Accessed at https://www.cms.gov/medicare/coverage/telehealth/remote-patient-monitoring on June 25, 2025.
- ¹¹ See 85 Fed. Reg. 84472, 84543 (Dec. 28, 2020).
- ¹² See 86 Fed. Reg. 5020, 5021 (Jan. 19, 2021). Original Medicare allows practices to bill for just one device per month per enrollee. While Medicare Advantage plans may have different requirements, it raises concern when practices frequently bill Medicare for two or more devices per month per enrollee.
- ¹³ OIG, *Additional Oversight of Remote Patient Monitoring in Medicare Is Needed*, OEI-02-23-00260, September 19, 2024.

- ¹⁴ To ensure that we compared similar medical practices, we excluded very large practices (i.e., those that billed for more than 1.5 million evaluation and management services in the year) from the analysis.
- ¹⁵ When determining the number of practices with large increases in the number of new enrollees in a month, we limited our analysis to practices that had at least 40 enrollees in the prior month.
- ¹⁶ In conducting this analysis, we looked at whether the enrollee had a prior visit billed either to Original Medicare or to a Medicare Advantage Organization.
- ¹⁷ Consistent with CMS policy, we also considered a medical practice to have a prior relationship with the enrollee if the enrollee received remote patient monitoring from the practice during the COVID-19 Public Health Emergency.
- ¹⁸To identify medical practices that billed outside of the normal range, we selected thresholds that were higher than the Tukey threshold and the 95th percentile. The Tukey method identifies outliers that are above the 75th percentile plus three times the interquartile range.

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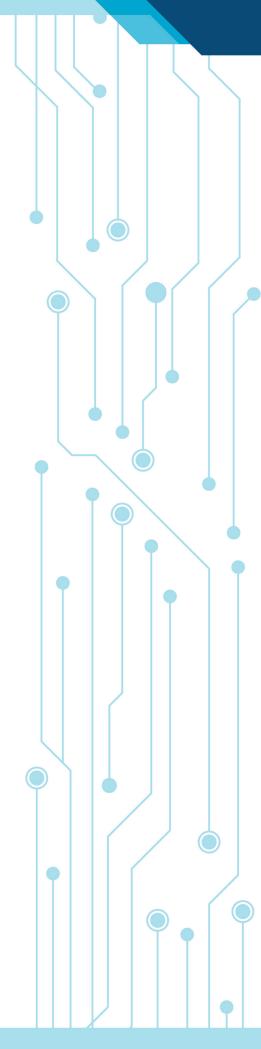
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U.S. Department of Health and Human Services Office of Inspector General **Public Affairs** 330 Independence Ave., SW Washington, DC 20201

Email: Public.Affairs@oig.hhs.gov