



A PROVIDER'S GUIDE TO **REMOTE PATIENT MONITORING**

TriageLogic Mission

**To nurture and empower human strength and the human spirit -
One patient, one nurse, one call at a time.**

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A Provider's Guide to Remote Patient Monitoring

Introduction

Remote patient monitoring (RPM) is at the forefront of healthcare, offering providers the ability to monitor chronically ill patients safely, closely, and economically. It is also one of the fastest growing technologies in the medical field. RPM provides essential data that can help providers keep track of patient vitals outside of traditional office visits. This translates to lower patient morbidity and mortality, as well as decreased overall healthcare expenditure. In fact, for practitioners, RPM reimbursements cover the expenses of an RPM program and provide additional income for the practice—a win for all.

This guide provides an overview of RPM: how it can improve care for patients and create an income source for doctors as well as tips to decrease physicians' work burden. It also ends with tips to help organizations implement a successful RPM program.

Summary of Key Points:

- Ninety percent of the United States' \$4.1 trillion healthcare expense is for people with chronic and mental health issues. RPM is especially effective for patients with chronic conditions.
- Remote patient monitoring devices allow doctors to regularly monitor patient vitals for signs of change.
- RPM may help providers adapt to the increased demands on the healthcare system caused by an aging population.
- RPM increases safety and convenience for patients. It may also help improve health equity.

- Improved monitoring capabilities give doctors the power to provide quality care outside clinical settings.
- Call centers, triage nurses, and nonclinical staff can help reduce the workload on doctors when implementing an RPM system.
- Reimbursements for RPM implementation are available, and we foresee insurance companies increasing their willingness to reimburse doctors.

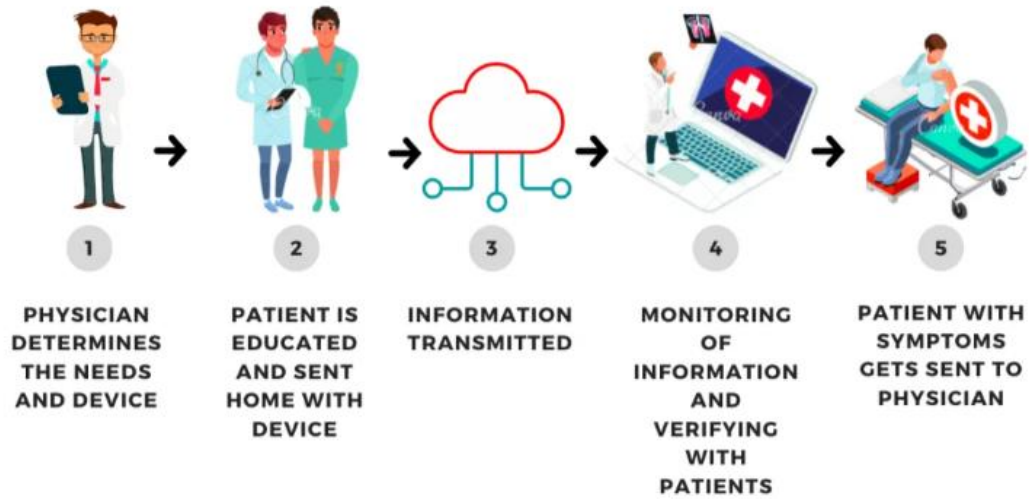
What Is RPM?

Remote patient monitoring (RPM) is part of a new era of remote medical services and technology. Most remote patient care takes place over the phone or a two-way video. However, RPM goes one step further by helping doctors regularly collect and evaluate patient data using electronic medical devices.

With an RPM system, devices are given to patients to measure their vitals and transmit that information directly to a provider's online portal for evaluation. Those vitals typically include blood pressure, heart rate, blood glucose levels, oxygen saturation, and temperature. Some RPM devices can also measure weight, patient activity, and sleep. Newer models continue to expand on these services and become more comprehensive, including devices that can monitor patients with heart failure. In any case, all of these devices have the same goal: to improve doctors' abilities to regularly monitor their patients for signs of change and intervene preemptively.

Many monitoring devices can capture data that is not observed by the patient, such as oxygen saturation. As a result, a provider can intervene *before* a patient presents a concerning symptom. This increased monitoring capacity cuts down on both morbidity and mortality while saving on the associated costs of Emergency Room (ER) visits. Indeed, as the [Center for Technology and Aging](#) asserts, the healthcare industry "could reduce its costs by nearly \$200 billion during the next 25 years if remote monitoring tools were used routinely in cases of congestive heart failure, The RPM process is explained further in the accompanying figure.

Five Steps in Remote Patient Monitoring



Why Is RPM Important?

According to the CDC, [six in ten Americans](#) have a chronic condition such as heart disease, lung disease, or diabetes and four in ten Americans have two or more chronic conditions. These patients account for approximately seventy percent of the \$4.1 trillion spent on health care annually and are responsible for eighty percent of all hospital admissions. “Among Medicare fee-for-service beneficiaries,” notes MGMA, “people with multiple chronic conditions account for [93% of total Medicare spending](#).” It costs 3.5 times more to treat chronically ill patients than those without these conditions. Chronic conditions are also among the leading causes of death in Americans. Furthermore, a study published in 2016 by Drs. Usha Sambamoorthi, Xi Tan, and Arijita Deb for the [National Institutes of Health](#) states, “The presence of MCC [multiple chronic conditions] has profound healthcare utilization and cost implications for public and private insurance payers, individuals, and families.”

As chronic health conditions continue to rise, solutions are needed to treat patients effectively and economically. RPM is one of them. These conditions require detailed, comprehensive care that can be challenging for many providers. RPM allows nurses and doctors to access and react to real-time changes detected by patients’ monitoring device, making it possible for them to issue health orders that curb unnecessary emergency department visits.

RPM has also helped meet additional demands in healthcare during the COVID-19 pandemic. Over the past two years, COVID-19 has overwhelmed hospital systems across the US. Many hit full capacity and needed to send patients elsewhere for treatment. The implementation of RPM has since allowed for more home-based care, freeing up available hospital rooms to treat those patients exhibiting concerning or life-threatening symptoms. It has also allowed patients who may be immunocompromised to distance or isolate themselves to avoid infections.

How Does RPM Help Patients?

RPM, while useful for patients overall, is especially effective for patients who are managing chronic conditions as it **increases both safety and convenience** for them. Rather than put the onus on them to maintain detailed notes and self-assessments, RPM replaces this notetaking with accurate, consistent information. It allows providers to measure and record key vitals daily, and contacts patient for further investigation if any vitals appear abnormal or concerning.

Second, RPM **empowers** patients to take care of their health. The act of wearing a device encourages them to comply with their medications and healthier habits. They experience improved health outcomes because their monitored vitals establish trends that can be used for early intervention by medical professionals. Patients are to follow the trends and see the impact of their medication and healthy habits on their vitals.

Finally, RPM can contribute to **improved health equity**. According to research, such as [Dr. Jayathilaka's et al. 1](#) work in the National Library of Medicine, individuals with lower income and education are often associated with higher rates of chronic disease. This means that many people suffering from acute or chronic symptoms may not have the ability to be physically present for medical appointments. [Healthcare IT Today](#) highlights how this is often due to limited transportation, extended travel distance, and lower income. RPM devices mean that fewer in-person appointments are necessary to review patient vitals and intervene when necessary, which gives patients the means to receive quality medical care and close the health equity gap.

How Does RPM Help Providers?

1. Improved Patient Education and Care

RPM allows doctors more access to their patients and gives them opportunities to educate patients on their behavior and treatment plans. Providers can review patient data activity and use nurses for check-ins to encourage patients to comply with their care instructions. It also gives doctors the power to provide quality care outside of a clinical setting while improving health outcomes. This includes responding to changing vitals for high-risk patients.

For these reasons, it isn't surprising that digital health tools like RPM have become more commonplace. A [2018 survey](#) revealed that sixty-five percent of physicians believe that “technology that captures consumer-generated data will reduce the burden on doctors and nurses specifically.” Still, one concern some doctors may have with implementing RPM is the possibility of an increased workload. This is understandable, as many in the healthcare field already experience overwhelming schedules, and burnout rates remain high.

RPM addresses this concern in two ways. First, most monitoring devices are programmed to automatically inform providers when they detect anomalies or potential patient problems. Second, doctors can use an outsourced nurse service like TriageLogic to monitor device data on their behalf. Nurses check the data regularly and contact patients to get if any of the vitals appear abnormal. Nurses then send patients for further evaluation by their doctors if protocols suggest that patients need physician intervention. This leads to improved patient care and decreased physician workload. Nurses can also be available around the clock (24/7) to answer any inbound calls from patients. The role of triage nurses and call centers is discussed in further detail below.

2. Cost-Savings & Opportunity for Additional Income

In addition to improved education and care, remote patient monitoring lowers provider costs. In 2017, The Centers for Medicare and Medicaid Services (CMS) published a [two-year study on its Chronic Care Management program](#), outlining how RPM saved Medicare millions of dollars, decreased hospital readmissions, and increased patient education about their chronic ailments.

In recent years, the pandemic has prompted CMS to quickly expand its support for remote care projects like RPM. Current Procedural Terminology (CPT) codes are now available to help doctors' offices make RPM programs profitable by providing reimbursements for time spent and equipment used. On average, these reimbursements have been \$120 per patient per month. Consider that if 50 patients are enrolled in an RPM program, a doctor's office can generate **\$72,000 a year in revenue**.

Health insurance companies have also shown an interest in RPM as they follow CMS' lead when evaluating results. In 2018, CMS [proposed several amendments](#) designed to increase remote patient monitoring programs by improving reimbursements. Some of these amendments included reimbursements for RPM setup and patient education, both of which were significant incentives to providers considering the implementation of this new technology. There have also been revisions about who is allowed to monitor these devices. Allowances have been made for registered nurses (RNs) to do the bulk of the monitoring, freeing up physicians and nurse practitioners (NPs).

The Role of Triage Nurses and Call Centers in RPM

While RPM allows doctors to monitor patients regularly, these devices send various alerts, not all of which must be reviewed by physicians. For example, patients may have difficulty putting their devices on correctly, resulting in faulty readings. That is where clinical and nonclinical call centers come in, as they can help monitor this high volume of information and verify it with patients first to confirm any abnormal results that require them to be seen by their physicians.

First, nonclinical call centers can help alleviate the work by addressing concerns about devices while keeping an eye on their data. They can verify if abnormal results are legitimate, call patients back about potential malfunctions with their devices, educate them on how to use those devices properly, and refer alerts to doctors based on the guidelines those doctors have provided.

Clinical telehealth nurses can also help patients and reduce the workload for doctors' offices and hospitals. They can use general, symptom-based protocols such as Schmitt-Thompson to verify patient safety from an overall perspective. Once this has been established, nurses then use disease- and device-specific protocols to determine which patients require physician attention. Nurse telehealth software customized with RPM protocols will allow nurses to ask the right questions and determine dispositions for patients, including when doctor visits are needed. Telehealth nurses also document all calls before attaching or embedding that information within providers' existing EMRs, thus decreasing liability for providers. Finally, some [nurse telehealth centers](#), such as TriageLogic, are available around the clock to help patients with inbound calls if symptoms or issues arise.

Challenges to Implementing RPM and Outsourcing Solutions

According to [Spyglass Consulting Group](#), at least eighty-eight percent of healthcare organizations want to invest in some form of RPM technology to provide greater value-based care. With that, eighty-nine percent of practices surveyed in the report state that they are actively drafting strategies for patients to take more direct roles in managing their chronic health. RPM is one prong to these strategies that by offering a continuous link between patients and doctors.

Yet, for all of these benefits — and despite 2020’s big healthcare push for all-things-remote — many providers are still far from implementing full-fledged RPM programs. The reason, says [HealthIntelligence](#), is that they simply don’t have enough trained nurses to manage them. According to a survey of 110 cardiology providers, less than half of them are using RPM, and are “only using RPM platforms for 20 percent or less of their patients.” The survey further stated that “almost 94 percent [of health systems] are using RPM to track rhythm management, but a third is collecting that data from less than 60 percent of their patients. Also, less than 68 percent are monitoring for heart failure, and less than 15 percent are tracking hypertension.”

While it’s up to physicians to prescribe the appropriate RPM devices for their patients and educate them on their use, it’s often nursing staff who must handle the analysis of that recorded data. In cases where providers don’t have the resources to hire and train these team members internally, they can outsource this analysis to a nonclinical call center or triage nurses (as discussed previously). This is often less expensive than internal hiring and saves valuable physician time. However, with that said, this only solves one potential issue, when, in reality, there can be many. Below is a list of common challenges and solutions related to starting an RPM program:

Challenge #1: Evaluating an RPM Vendor

RPM’s success has prompted new players to enter the remote care market. Some of them may have already approached your practice. Despite their enthusiasm, many have limited experience regarding critical areas that make such a partnership successful: the level of technology involved, the available customer service, and the security of patient data, among others. This makes evaluating them more difficult and time-consuming, which delays implementation and could make the service less of a priority to your leadership.

The Solution: Narrow your search by evaluating vendors who have been around for [at least five years](#) and have a proven track record you can review.

Challenge #2: Choosing Which Patients Are Admitted to Your Program

While you may already know about the benefits of a remote patient monitoring program, one of the surprising challenges with RPM is identifying which types of patients to include. You must consider factors such as the cost of RPM, likely reimbursement, and any education requirements.

The Solution: Partner with a healthcare agency that has the medical expertise to advise you on qualifications for enrollment. Companies such as [TriageLogic](#) can evaluate your patient data and help identify eligible candidates. Ideally, selections will provide maximum benefit to both patients and the financial well-being of the practice.

Challenge #3: Leasing Equipment vs. Covering the Startup Costs

It may be tempting to lease RPM equipment on a per member per month (PMPM) basis, based only on what you *currently* need. But projected over the long term, this strategy could cost you more than purchasing the devices upfront.

The Solution: Although it may seem like more money initially, we recommend paying the startup costs and getting devices in advance (keeping in mind how many patients you're likely to enroll, as mentioned above). Companies such as TriageLogic also work directly with device vendors who will send [the devices directly to patients](#) and educate them about usage. In some cases, providers can pay for this equipment over time as they generate revenue from it. This helps alleviate some of the expenses associated with the initial setup.

Challenge #4: Managing and Following Up on Patient Data From RPM Devices

Of all of the challenges with RPM, this one is [by far the most prevalent](#). The purpose of remote patient monitoring is to record patient vitals, which means that each month your team will receive a substantial amount of data that will need to be monitored and reviewed. This requires oversight from your registered

nurses (or higher) to identify abnormal health readings and reach out to patients when appropriate — an arrangement for which most practices aren't prepared.

The Solution: Partner with a healthcare vendor that has a [team of registered nurses](#) with the bandwidth and resources to review this data on your behalf and contact patients when needed. This turnkey care requires minimal effort, improves patient health outcomes, and generates profit for your practice. Best of all, an outsourced vendor such as TriageLogic can also ensure that nurses are available around the clock (24/7) to answer any patient questions that come up, even when your offices are closed. This service is effective because nurses have access to triage software that guides them through these protocols, questions, and dispositions to ensure the appropriate level of patient care — all while integrating that call data with providers' specific EMRs.

A nonclinical call center that works with the nursing group can also help with the solution, as noted above. Working with an organization that manages nonclinical and clinical staff for your practice can significantly decrease the workload on your staff.

Challenge #5: Billing Confusion Over Codes and Payments

Even after you've implemented RPM, your team may not know how to bill correctly for this service. That's a big deal, especially considering that CMS will reimburse you up to [\\$120 per patient a month](#).

The Solution: Make sure the healthcare vendor you partner with provides reporting that will make billing easy and seamless.

Conclusion

The shift from volume-based care to value-based is impacting hospitals, doctors' offices, and home health agencies. According to [Fierce Healthcare](#), the Centers for Medicare & Medicaid Services (CMS) created a payment model that "incentivizes quality of care improvements without denying or limiting coverage or provision of Medicare benefits for all Medicare consumers and includes updates to payment rates and policies." One of the best ways agencies can improve their standing is to implement and expand their use of remote patient monitoring (RPM) devices. Here are some of the main benefits.

- 1. They provide advanced warning for potential health complications:* Remote patient monitoring involves treating patients with at least one chronic health condition. RPM devices measure and record the daily vitals of these patients and submit them for review. When abnormal readings are detected within those vitals, patients can be alerted to seek preventative care, thus preventing potential health complications.
- 2. They reduce the number of health visits:* With RPM devices in use, agency staff will already have the updated vitals they need for review, thus reserving their visits for times when in-person examinations and consultation are necessary.
- 3. They prevent trips to the ER:* The sooner health complications are identified, the easier it is for patients to schedule time with their primary care physicians instead of being forced to go on after-hours trip to the Emergency Room. That reduces healthcare costs for everyone, but especially for patients and agencies.
- 4. They represent an important source of revenue for practitioners:* The Centers for Medicare & Medicaid Services have recognized the benefits of RPM and created new codes that reimburse providers who offer this service. Some of these new codes allow clinical staff, such as nurses, to provide monitoring and care, freeing up time for physicians. These codes help pay for the expenses associated with RPM, but also leave room for additional revenue per patient for physicians.

Remote patient monitoring continues to offer promising technology to transform care, reduce costs, and save time for providers. In an era where many patients suffer from chronic health issues and hospitals struggle with space for patients, remote patient monitoring is more vital than ever. Contact us at info@triagelogic.com if you have any questions or need help implementing a successful RPM program.

About TriageLogic

TriageLogic is a URAC-accredited, SOC2 Type II, physician-led provider of high-quality software and services for telehealth and remote patient monitoring. It is a unique blend of innovative communication solutions and medical expertise to improve patient outcomes and decrease healthcare expenses.

The TriageLogic group serves over 10,000 physicians and covers over 25 million lives nationwide. With over 14 years of experience and six customizable products, TriageLogic continues to partner with private practices, hospitals, and corporations throughout the U.S. Visit www.triagelogic.com for more information.