



## WHAT IS TELEHEALTH AND REMOTE PATIENT MONITORING (RPM)?

The understanding of what telehealth is and what it does for patients has risen significantly, especially during the pandemic. According to Telehealth.HHS.gov<sup>1</sup>, telehealth is defined as video visits, phone calls, online communication, and storing patient data. Telehealth can be:

- **Asynchronous communication** between providers, patients, and caregivers that is stored for future reference or response, such as lab results delivered via email; or
- **Synchronous, real-time interaction** between patient and provider for patient health communication. This might include audio or video calls between the patient and the healthcare provider.

RPM can be asynchronous or synchronous. RPM uses in-home devices such as blood pressure monitors, pulse oximeters, glucometers, spirometers, scales, and thermometers to collect, transmit and store patient data measurements. RPM tracks patient data in real time and over time to help care teams track issues that need to be taken care of immediately, such as a high fever, while providing a longer-term view of a patient's health that shows trending data, such as a rising blood pressure or decreasing blood oxygen levels.

In general, telehealth tends to be less expensive than an in-person office visit. Costs vary between telehealth services and depend on what type of insurance patients have. A 2017 study from Health Affairs found that the average price for a virtual telehealth visit costs about \$79, while an office visit's average cost is \$146<sup>2</sup>.

## RPM AND THE BENEFITS FOR VALUE-BASED CARE ORGANIZATIONS

Remote Patient Monitoring (RPM) and telehealth have been transforming the way hospitals, health systems and providers deliver healthcare. The onset of COVID-19 dramatically accelerated this usage of these solutions over the past few years as seniors wish to remain at home and not be unnecessarily exposed to the virus. During the past two years, the use of RPM has been expanded to enable programs like hospital at home, post-operative care, and chronic care management.

This white paper will discuss how RPM is helping change the way healthcare is delivered and the benefits it brings to value-based care organizations like accountable care organizations (ACOs), hospitals and health systems.

## WHY IS RPM IMPORTANT IN VALUE-BASED CARE ORGANIZATIONS?

RPM offers the real-time recording and transmission of vital signs that can play a crucial role in moving patients from episodic care to proactive preventive care. It utilizes two-way communication to provide information to care providers between office visits and with their patients at the right time with the correct information. RPM augments patient care with real-time data, making it an effective next step to efficient chronic care management. Having direct access to patient data allows for quick intervention and decreases ER visits and hospital stays. It optimizes workflows, efficiently manages patients, and provides cost savings to value-based care organizations.

RPM helps drive shared savings while improving quality scores and centers around the value-based care Quadruple Aim.

The benefits of RPM to value-based care organizations are four-fold:



- 1) RPM improves population health.** Adopting RPM best practices through an integrated remote care platform improves patient health and reduces the risk of exacerbations and/or readmissions.

RPM improves patient outcomes, standard of care compliance, insight to practice's population health and quality of life, while reducing complications, mortality rate, hospital admissions and ER visits.

- 2) RPM enhances patient experience.** The ubiquitous nature of RPM solutions allows patient monitoring and treatment to be performed

wherever the patient is, at convenient schedules. They no longer need to wait for an appointment with their physician or healthcare provider for vital signs to be taken or to speak with a care team member about concerns. Care team members are available at the touch of a button and familiar with the patients' cases. In addition, through RPM, patients receive automated reminders for vital signs and medications. RPM also allows care teams to contact the patient directly with solutions if abnormalities are detected.

- 3) RPM Reduces the total cost of care.** The average cost of a three-day hospital stay is around \$30,000<sup>3</sup> RPM allows for more patient interaction with fewer staffing resources while improving the patient's scheduled and targeted care. This optimized approach lowers costs and delivers better continual care. In addition, patient costs can be proactively managed and forecasted. Clinical call centers can intercept and manage non-emergent, high-use patients.
- 4) RPM improves care team and provider satisfaction.** Remote patient monitoring on a quality connected care platform provides timely and relevant data to care providers when they want/need it the most, reducing alert fatigue and burnout. Providers see fewer practice interruptions and an improved ability to view patient's vital signs. If an external clinical call center is used, additional clinical support can be provided.

RPM also allows providers to earn additional revenue through four primary Medicare RPM CPT codes - 99453, 99454, 99457, and 99458. Specifics on these reimbursement codes may be located on [Telehealth.hhs.gov](https://www.hhs.gov/telehealth)<sup>4</sup>.

## WHAT TYPES OF PATIENTS BENEFIT FROM RPM?

Doctors can use RPM to track vital signs in all types of patients, but those with high-acuity conditions are ideal for RPM.

### In adults 65+,

- 80% have 1 chronic condition<sup>5</sup>
- 77% have 2 chronic conditions<sup>5</sup>
- 36% have 3 or more chronic conditions<sup>6</sup>

There are several chronic conditions that benefit the most from RPM solutions, including:

- CHF – Congestive Heart Failure. RPM solutions can measure a patient's blood pressure for consistency and weight for onset of fluid i.e., a 3 lb. weight gain overnight.
- Diabetes – RPM solutions can measure glucose levels and report for intervention as needed
- COPD – Chronic Obstructive Pulmonary Disease – RPM provides consistent measurement through a spirometer and pulse oximeter
- Kidney Disease – RPM offers consistent weight measurements for onset of fluid and high blood pressure
- HTN – Hypertension – RPM provides consistent blood pressure measurements
- COVID-19 – RPM solutions can measure temperature, pulse oximeter for oxygen levels, and possibly spirometer for lung capacity

According to the American Medical Association<sup>7</sup>, RPM is particularly helpful in managing chronic conditions because it provides visibility into patients'

lives outside of their scheduled appointments. This has historically been a barrier to timely and effective diagnosis and management. With data collected over time, care team members can manage and treat chronic conditions in a way that is timely, meaningful, and realistic to the patient's lifestyle.

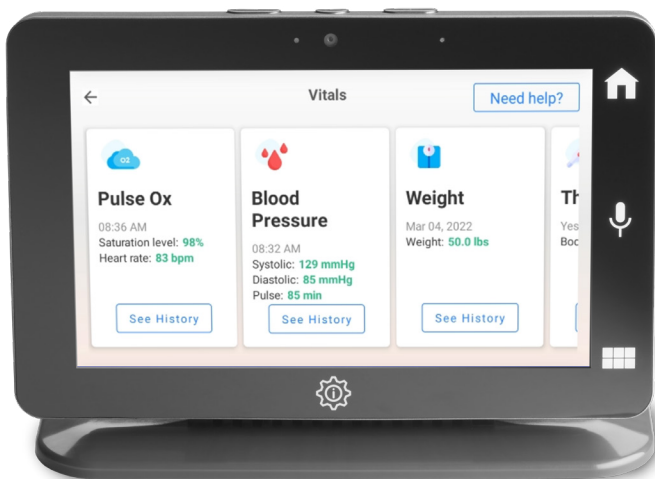
Benefits of RPM for patients:

- Increases access to care that results in better outcomes
- Keeps patients in their homes and out of the emergency room or doctor's office.
- Strengthens physician-patient relationships by providing continuity of care
- Boosts patient engagement
- Improves medication management and adherence
- Gives peace of mind and daily assurance
- Allows the ability to age in place
- Better health for individuals

**"One of our patients who has had multiple hospitalizations related to CHF started the process of doing daily weights and blood pressure monitoring. Since we started it, he has not gone back to the hospital once."**

**— Dr. Paul Kim, MD, Internal Medicine, Bedford, Texas**

Although RPM solutions have been around for many years, the addition of two-way video to RPM solutions is changing the game for both senior patients and their healthcare providers. In addition to being able to see the patient's vital statistics, providers can now see the patient themselves and determine if any issues are immediately present. The patient can also see the healthcare provider via the touch of a button and are connected to a healthcare provider that is familiar with their condition, adding a level of trust to the care patients receive. Video can be used over a smartphone, tablets or, ideally, a stand-alone cellular product like Anelto's RemoteCareLive!



## TYPES OF RPM: WI-FI VS. CELLULAR

Reliable connectivity is required to transmit data between the patient and the physician's office or hospital. A high-bandwidth connection is not needed for most applications of RPM—it just needs to consistently work to connect RPM devices to the network of the physician or healthcare facility. The goal: Keeping patients healthy and allowing them to take a greater role in their healthcare.

RPM solutions usually connect to the internet via Wi-Fi or cellular. Wi-Fi is the de facto home connectivity option for many people. It is relatively inexpensive, upload and download speeds have been consistently upgraded by service providers, and, in general, it works when needed. But Wi-Fi faces some challenges for home healthcare:

- **Lack of ubiquity:** According to Pew Research Group, as of 2019, only 59 percent of people over 65 have access to broadband connectivity at home<sup>8</sup>. That makes it challenging to utilize Wi-Fi in RPM solutions, which require a continuously reliable 24x7 data connection.
- **Limited ease of use:** Wi-Fi can provide security, but that protection comes at a cost: the use of complex, multi-variable passwords, and other configuration steps, which some seniors may struggle with.
- **Lack of 24/7 reliability:** Patients may not know how to connect to Wi-Fi through their phone or tablet and may need to reconnect multiple times to establish a connection. If Wi-Fi has a weak signal, loses power, or goes offline for another reason, it impacts the ability to deliver consistent patient results back to healthcare professionals—and vice versa.



That has caused many providers to look at cellular-based RPM solutions as a better connectivity solution. Cellular is a more reliable option for home care providers and the patients they serve. Some of the benefits of using cellular connectivity include:



- **Ubiquity:** People understand how cellular works. For patients aged 65 and older, 92 percent own a cellphone and of those, 61 percent own a smartphone, according to Pew Research Group<sup>9</sup>.
- **Simplicity of set-up:** For many RPM devices, complicated configuration is not required. While some solutions providers retrofit tablets, a purpose-built RPM solution that works right out of the box provides a better experience for seniors. There is no complicated use of passwords as found with Wi-Fi. Some RPM solutions also come preconnected to vital sign devices and have large buttons to connect patients easily to their care providers.
- **Consistent real-time data sets:** Gathering data sets developed in real time and over time allows healthcare providers to see trends and take preventative action. Cellular is a stronger fit for this type of application.

## IMPLEMENTATION

The implementation of RPM doesn't need to be confusing or difficult. The AMA has developed a Telehealth Implementation Playbook Series<sup>10</sup> to help providers and organizations get started. It even includes a Remote Patient Monitoring Implementation Playbook Overview<sup>11</sup>. The AMA recommends a six-step process for RPM implementation:

- **Identifying a need:** To find success, value-based care organizations must prioritize resources by centering their initiative around a true organizational need. Identifying a need can also help bring purpose and context to the project, crystalize buy-in from key stakeholders and incite long-term stability for the project.
- **Forming a team.** Having the right people involved upfront helps value-based care

organizations anticipate barriers from all angles, facilitate buy-in from all key stakeholders, and minimize workflow disruption during the implementation process.

- **Defining what success looks like early in the process.** This will help the team set specific short- and long-term goals with measurable metrics. Goals can also help you identify vendors who can best help you be successful.
- **Evaluating the vendor.** Look for a long-term partner and not just someone to execute a transaction. The right partner will be equally motivated as you to achieve a successful outcome.
- **Making the case to your leadership team.** Communicating your vision creates the opportunity to gain valuable input to improve your program, secure funding and help champion the success of your RPM program throughout the organization as you scale.
- **Contracting with the right partner.** A strong contract underpins a successful long-term relationship by providing aligned expectations, written, agreed-upon terms to hold each party accountable, and legal protection for you and your vendor.



## BENEFITS OF RPM FOR VALUE-BASED CARE ORGANIZATIONS

Value-based care organizations can find tremendous success by implementing RPM solutions. RPM helps:

- Shift patient care to preventive and preemptive care instead of episodic
- Flag potential patient deterioration, and provides the means to intervene quickly to prevent exacerbations
- Decrease cost of care
- Reduce ER frequent flyer visits
- Decrease hospital admissions
- Optimize workflow capacities through care team protocols
- Provide better health for patient populations

## RPM CASE STUDY

Charleston Area Medical Center (CAMC) enrolled 18 high-risk patients who lived in rural areas that were going to the hospital frequently for COPD or CHF. It was expected that only 20% of selected patients would participate. Surprisingly, 75% of the patients participated.

Based on a scale of 1 to 5, CAMC participants rated the Anelto RPM overall experience highly at 4.75. When asked to rate the likelihood of using the service again if offered, the participants rated as 4.125. The ease-of-use rating by the participants was 4.88.

The average study participant said they did not have trouble taking their vital signs each day because of Anelto's easy-to-use solution. They also said that the service helped them become more aware of their health. One participant stated it "makes you keep a close eye on your health and allows you to see your vitals." Perhaps most notably, the service helped patients stay out of the ER and hospital. In fact, patients estimated that the monitoring service helped them avoid at least 10 trips to the emergency room. One patient stated that "without this equipment, I would have gone to the emergency room at least 3-4 times in the past five weeks."



## WHY ANELTO

Anelto RPM solutions can be used right out of the box, avoiding complicated set up and Wi-Fi configuration. Anelto handles configuration, kitting, shipment, and warranty of all equipment. Anelto also remotely manages the RemoteCare Consoles and provides important information needed to manage patient's experience either directly to providers or through a clinical call center partner.

Anelto's complete RPM ConnectedCare Platform is a clinical tool suite provider teams may use to manage patients efficiently and effectively. From this platform, Anelto can produce reports and data to help manage patients and billing.

Anelto's RemoteCareLive! platform:

- Proprietary stand-alone device, not a tablet - provides enhanced audio and video capabilities specifically for seniors
- Easy to use by seniors -easy-to-follow instructions, and purpose-built solutions
- Cellular-based reliability - no complicated Wi-Fi set-up is needed
- Always on - two-day back-up battery if unplugged
- Privacy is paramount -device doesn't listen unless asked to and only connects to HIPPA certified server
- Provides conversational AI using both audio and on-screen communications
- Pairs vital sign devices prior to shipping, allowing patients to use the solution right out of the box

For more information on how Anelto's RPM solution can help value-based care organizations and their patients thrive, visit [www.anelto.com/remote-patient-monitoring](http://www.anelto.com/remote-patient-monitoring)

## SOURCES

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