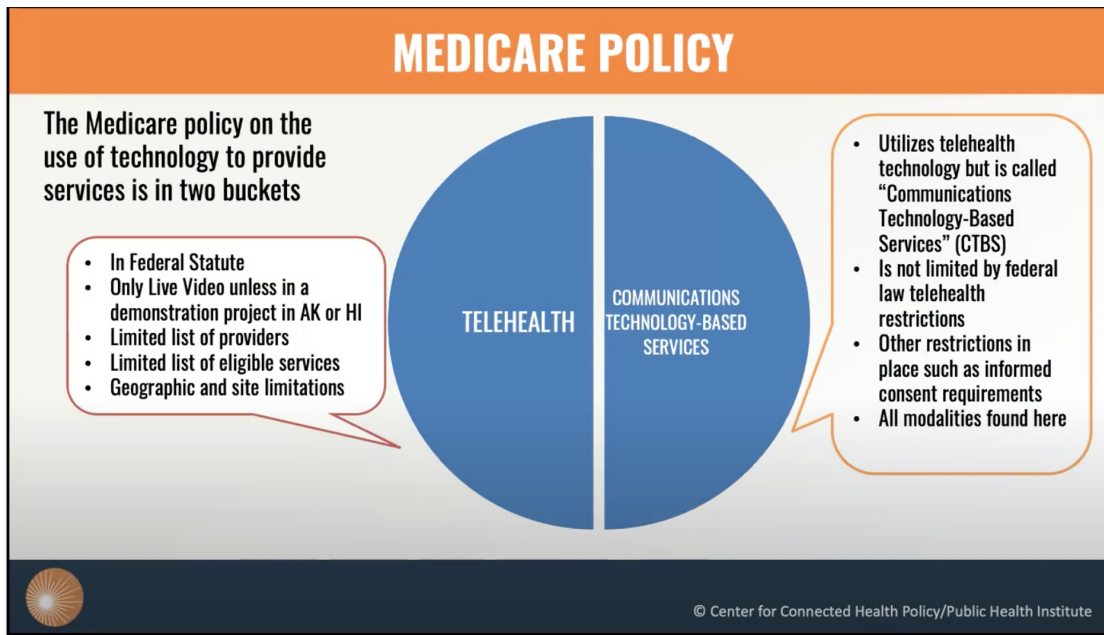


# REMOTE PATIENT MONITORING

## REMOTE PATIENT MONITORING: INCLUDES

1. REMOTE PHYSIOLOGIC MONITORING (RPM)
2. REMOTE THERAPEUTIC MONITORING (RTM) new in 2022

RPM/RTM are NOT TELEHEALTH SERVICES per MEDICARE. CMS considers RPM and RTM as Communication Technology Based Services. RPM and RTM use digital technology to provide services and can be integrated into practice program using telehealth. Therefore, subject to different restrictions than Medicare Telehealth Services.



## Guides for Development of RPM Programs:

- Download the *Telehealth Resource Center Remote Patient Monitoring Toolkit*: <https://telehealthresourcecenter.org/resources/remote-patient-monitoring-toolkit/>
- Download the *AMA Digital Health Implementation Playbook*: <https://www.ama-assn.org/practice-management/digital/remote-patient-monitoring-implementation-playbook-overview>
- Download Integrating Patient-Generated Health Data to Electronic Health Records in Ambulatory Settings. <https://digital.ahrq.gov/sites/default/files/docs/citation/pghd-practical-guide.pdf>
- Security: Download the NIST Securing Remote Patient Monitoring: <https://nvlpubs.nist.gov/nistpubs/SpecialPublications/NIST.SP.1800-30.pdf>

There are many steps involved in developing (RPM) and/or (RTM) programs and many of these steps are similar to setting up a telehealth program. Here are some special areas requiring attention in RPM.

**NOTE: The "lift" required to start an RPM program is significant. DO YOUR RESEARCH BEFORE DIVING IN!!**

- **Patient engagement:** RPM programs require patient engagement and training which is **more intensive** than a telehealth program
- **Device Management:** If you plan to distribute your own devices, your team must have a plan for device inventory, distribution, tracking, cleaning, calibration, and maintenance
- **Secure Data Transfer:** Security is a significant concern. An extensive plan is necessary to move secure, encrypted data directly from device in patient's home or elsewhere, to patient's phone or

computer app, then to third party vendor, with final upload to your patient portal and then proceed with decryption in your EHR. (Electronic transfer is a requirement for billing Medicare for RPM services)

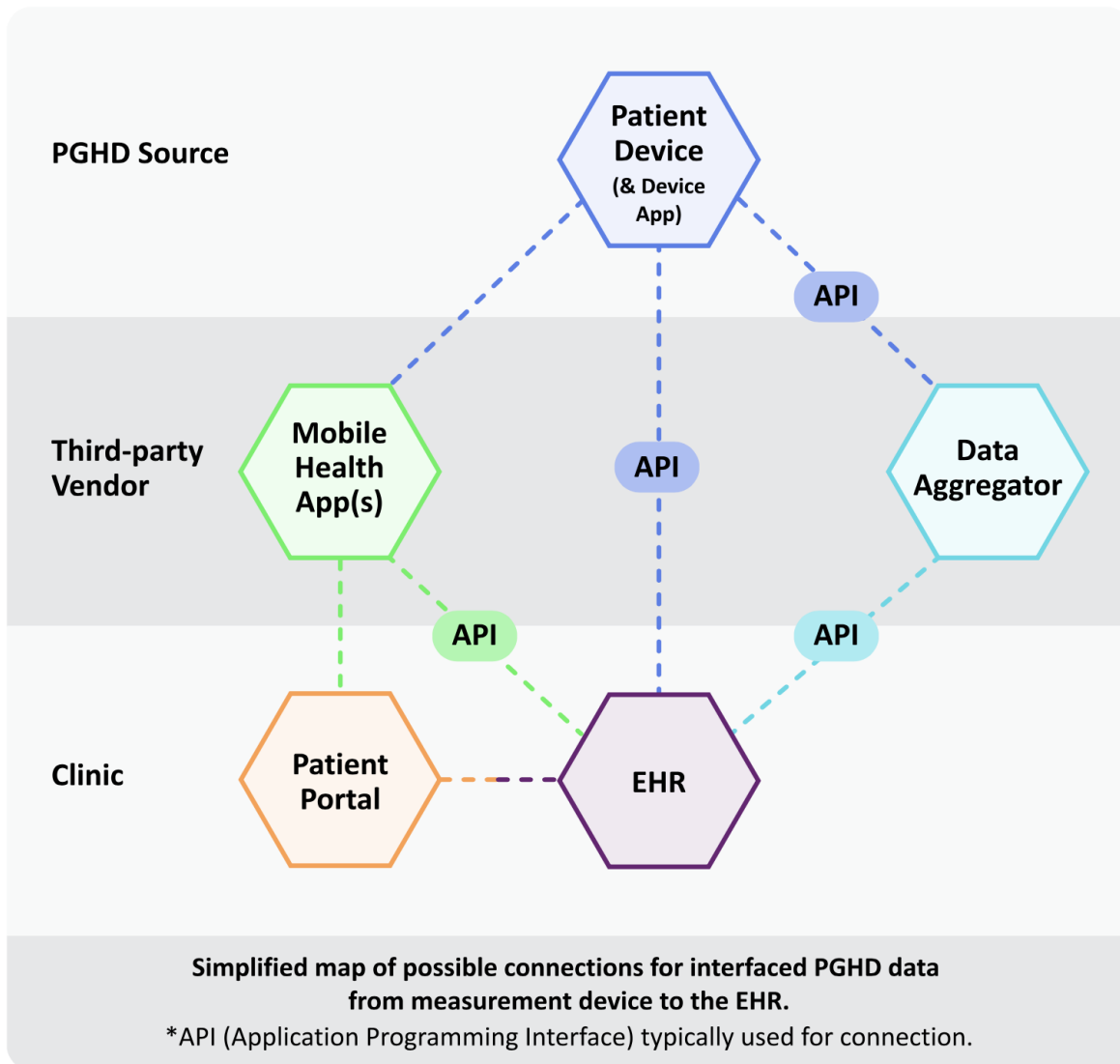
- **Data Management:** How will your team manage incoming data without overwhelming staff and providers? How will you communicate the results of the data to your patients? What parameters will you use to “flag” data of concern?
- **Medical Decision-Making based on Data:** When and how will clinical staff communicate critical or concerning data to provider? How will you protect your providers from overwhelming amount of data? How will provider communicate changes in medical care based on this data?
- **Coding and Billing:** RPM CPT education of billing and coding staff is necessary. RPM CPT must be added to the chargemaster and the EHR. Required RPM documentation must be developed for the EHR. NOTE: **FQHC and RHCs cannot bill RPM/RTM codes.** Cost for these services are applied to overall cost.

## **HOW DOES RPM ACTUALLY WORK? WHAT IS THE WORKFLOW?**

From AHRQ **Integrating Patient-Generated Health Data Into Electronic Health Records in the Ambulatory Setting.**

<https://digital.ahrq.gov/health-it-tools-and-resources/patient-generated-health-data-i-patient-reported-outcomes/practical-guide>

**Figure 1. Simplified Connection Network Between a Device and the EHR**



There are many routes for the electronic data to reach your EHR. Remote Patient Monitoring Programs are not an easy “lift” for practices currently. Just 8% of US Physicians were utilizing RPM in their practices at the end of 2021 according to the AMA 2021 Physician Telehealth Survey. This is down from 12% the year before. Most cited technological issues as the barrier. Devices must be “FDA recognized medical devices” See weblink: <https://www.fda.gov/medical-devices>

**Significant resources are needed** to buy devices, inventory them, maintain them and then distribute them to patients let alone educate them on use and service them. Many physicians decide to engage a 3<sup>rd</sup> party vendor to take on this part of the program. If this is what you decide to do, contact your EHR vendor first and find out what RPM vendor solutions they interface with as having that electronic data arrive seamlessly to your EHR is paramount. The RPM vendor will often receive the order for RPM device directly from the EHR, supply the device to patient and provide education, upload the data, aggregate it and present it to the EHR in a readable fashion via API. **If the patient has their own device**, they may choose to upload their data via API to AppleHealthKit or CommonHealth APP (MOBILE HEALTH APPS ON DIAGRAM ABOVE) to your EHR Patient Portal if your EHR allows those APIs as accepted data. HIPAA would not apply until the data reaches your EHR. Second, the patients must **CONSENT and agree to COPAYS and DEDUCTIBLES** before you can proceed. AND you must **keep them ENGAGED**. This means the product must allow immediate and understandable feedback from the device. The patients want to know if they are doing “OK” or are they doing

“WORSE” or are they “IMPROVING”. Otherwise, you run the risk of patients putting the device aside and there will be less than 16 days (2 days for Covid Dx monitoring during PHE) of data for the practice to assess and nothing to bill for.

**Provider time is necessary**, and they are stakeholders in these projects. Algorithms on how to handle alerts are necessary, with nursing staff handling low level alerts, nurse practitioners and physician assistants handling next level and physicians if the severe alerts occur. There must be a plan for what to do when alerts occur on weekends and nights. Providers must develop a treatment plan based on the data received and must communicate that to the patient through their staff for at least 20min of SYNCHRONOUS staff time per month. A well-planned project, with a pilot to start, will be successful but this is not a whimsical endeavor.

### COMPARISON OF RPM TO RTM: HOW DO THEY DIFFER?

<b>Medicare Remote Patient Monitoring</b>		
	<b>Remote Physiologic Monitoring</b>	<b>Remote Therapeutic Monitoring</b>
Example	CGM uploads to smartphone which uploads directly to EHR.  BP cuff uploads reading directly to APP which adds data to a Dashboard in EHR	MDI directly uploads usage count to smartphone which uploads to EHR or patient portal. Patient manually completes PHQ9 on APP which uploads results directly to EHR or patient portal
Category	E and M: Now under Care Management Services allowing for “Incent-To” rule and general supervision	Listed under General Medical Services. Requires that the licensed person perform the work or be present when it is done. If assistant is used, reimbursement is reduced by 15%. Use Modifier CQ for PTA and CO for OTA.
Eligible providers	Physicians, APRN, PA-C	Physicians, APRN, PA-C, PT, OT, ST, clinical social workers
Data	Physiologic data	Non-physiologic data to indicate therapy/meds adherence or response
Data requirement	At least 16 days. Waiver in PHE: any data	Limited to respiratory or MSK data for now. 16day minimum waived during PHE
Upload of data	Electronic data direct to EHR. Removes anything manual by patient	Electronic data direct to EHR. Sometimes include manual entry of data to APP on patient side.
Communication with patient re results	Required	Required
Device	Must be “Medically recognized by the FDA”. Patient can supply own device if meets qualifications	Medical Device as “defined under the Federal Food, Drug and Cosmetics Act” (can’t be some wellness device).
Software as a Medical Device (SaMD)	Allowed in certain circumstances: i.e., Apple watch for EKG monitoring	SaMD can be used and patient can manually record data in software then upload
Consent	Required	Required
Copay and Deductible/Cost sharing	Applied but can be waived during PHE	Applied but can be waived during PHE
WV MEDICAID	NO	NO
FQHC/RHC	Can’t bill for this. Must include expensed in AIR rate or use RPM to enhance CCM and TCM coding	? unlikely
Can bill CCM/TCM separately	Yes	Yes

**DETAILS: REMOTE PHYSIOLOGIC MONITORING:** Still under E and M services but now **Care Management Services (allow incident-to rule) with general supervision** as of 2022. THIS IS NOT TELEHEALTH. No modifier is required. POS is where the service was provided.

DEFINITION: Remote physiologic monitoring (RPM) uses digital technologies to collect medical and other forms of health data from individuals in one location and **electronically transmit that information securely to health care providers**. Data needs to reach the EHR electronically, not manually. Consent required. Must be a “medical device” per Section 201(h) of the FDA and data must be electronically (automatically) collected and transmitted rather than self-reported. Device supplied to the patient as part of RPM services. These are meant to provide data from patients without work on the patient’s part. Example: CGM via smartphone upload direct to EHR.

## REMOTE PHYSIOLOGIC MONITORING CODING AND BILLING MEDICARE

**(Classified at E and M codes)** \* Estimated Expected payment may not be accurate

**NOTICE: FQHC/RHCs cannot bill for these services. They must include expenses in AIR rate or use RPM to enhance CCM and TCM coding.**

Reference: [AMA website](#), [CMS website](#)

RPM CODE	WHO PERFORMS?	WHAT IS DONE?	WHAT DOES IT PAY? (AVG NAT)*	WRVUs
99453	Non-clinical staff Clinical staff Or Health Care Provider	Enrollment of patient with consent, initial set up of device, training on use of medical device recognized by the FDA (does not need to be “FDA Approved” and ordered by qualified health care professional.	Practice expense code: Bill once when initiating RPM service.  Expected 2022 Payment: \$19.04	0.00
99454	Non-clinical staff Clinical staff Or Health Care Provider	Provision of device used for monitoring. Device must be uploaded electronically remotely to clinician (does not say direct to EHR). <b>Device cannot be “lease to own” or owned by patient.</b>	Billed once every 30 days but requires at least 16 days or days of uploads of recording(s) from device.  Expected 2022 payment: \$55.72	0.00
99457	Health care provider and Incident to Clinical staff Health care provider	At least 20min per month of time spent on remote monitoring of patient’s physiologic data as part of care plan. <b>Requires some form of communication of interpretation of monitoring with patient or caregiver via <u>phone with or without video</u> which can be by clinical staff. (During PHE, it may be better to just bill E and M telehealth visit to discuss these results)</b> RPM codes can be billed separately and in addition to CCM billing. In documentation: Need documentation of time spent by team members and what they monitored. Need treatment plan from provider: Give summary of monitoring, dx, ST and LT goals. Provider should be doing the decision-making based on data upload but much of the other work can be delegated to the clinical staff.	Once per calendar month no matter how many parameters are monitored.  Standard Rates:2022 \$50.18 non facility \$32.84 facility  CAN REPORT WITH CCM AND TCM	0.61
99458	Incident to Clinical Staff Health care provider	Each additional 20min per month of time spent on remote monitoring of patient’s physiologic data as part of care plan.	Once each calendar month.  Standard reimbursement: \$40.84 non facility	0.61

			\$32.84 facility	
<b>99091 (Allows for patient to upload to their computer or smartphone then transmit results)</b>	Patient or caregiver stores and transmits to physician or qualified healthcare provider and does not need to come from an FDA defined device. Example: Home glucose monitoring device used multiple times and uploaded to patient computer then summarized in a secure email or text message and transmitted to provider for download and view.	<b>Need consent from patient</b> and ABN. Initial provider service has to be in physician office. Collection and interpretation of data 30min each 30 days. (EKG, BP, BS). <b>Provider does not need to communicate with patient after interpretation of data but at least one communication with patient to provide medical management and monitoring recommendation takes place.</b>  Note: In reality, with the amount of time spent, it would be better have office visit or telehealth to discuss to bill these services as a 99213.	\$56.41 (non-facility and facility) Expected payment 2022  CANNOT REPORT WITH 99457 or 99458  CAN report with TCM and CCM	1.10 WRVU

- Special Notes: You may elect to have the patient use their own device if recognized as an FDA medical device (digital watch, continuous blood glucose monitor, pedometer, weigh scale, EKG device) capable of Bluetooth connection with their phone/tablet/PC app. If the patient consents, this app (Application Programming Interface, API) may accept the data in a secure and encrypted form and pass it through to your EHR via the patient portal where it will be decrypted. From here, your staff may view and select the data important to add to the patient's record where it will be passed to providers who need to see and manage. **By using this method, the "Device Purchase and Management" step can be avoided thus simplifying program greatly however reimbursement also decreases.** CPT RPM codes 99457, 99458 and 99091 are available for billing in this case while 99453 and 99454 would not.

**REMOTE THERAPEUTIC MONITORING:** Listed under General Medical Services Not E and M codes. NOT TELEHEALTH. From CMS Website, AMA website.

**DEFINITION:** Designed for management of patients using medical devices that **collect non-physiological data** which indicates therapy/medication adherence or response. For example, the number of times an MDI inhaler is used to treat asthma per week. Even pain level scores could technically be recorded and monitored with RTM. However, at this time CMS has limited the conditions to respiratory and MSK and did not include an "agnostic condition" code to allow practices to supply patients with device and education to record non-physiologic data for other conditions. CMS expects these codes as primarily being billed by psychiatrists, nurse practitioners, physical therapist and other eligible practitioners who cannot currently bill for RPM as RPM is and E and M code. Codes could be available to physicians and eligible providers: PT, OT, ST, PA, APRN, clinical social workers. **Unlike RPM, RTM codes for device supply, education and monitoring are not time dependent.** RTM requires the use of a medical device as defined under the federal Food, Drug, and Cosmetics Act (i.e., not merely a wellness device). CPT codes 98975, 98976, and 98977 require the RTM device to monitor at least 16 days of data per each 30-day period, in total (waived during PHE). RTM data can be self-reported by the patient, as well as digitally uploaded via the device. While RTM codes still require the device used to meet the FDA's definition of a medical device, **self-reported RTM data via a smartphone app or online platform classified as Software as a Medical Device (SaMD) may also qualify for reimbursement, according to CMS.**

**REMOTE THERAPEUTIC MONITORING CODING AND BILLING** (classified as general medical codes not E and M codes) Go Live is Jan 1, 2022. Copays and deductibles apply (but can be waived during PHE for Medicare and other commercial insurers)

RPM CODE	WHO PERFORMS?	WHAT IS DONE?	WHAT DOES IT PAY? (AVG NAT)	WRVUs
98975	Ordered by a provider, Carried out by Physicians and	PROVISION OF DEVICE: Remote therapeutic monitoring (e.g. respiratory system status, musculoskeletal system status,	Expense only code. BILL ONCE PER TREATMENT EPISODE (onset of	NONE

	eligible health care provider. Can use clinical staff with <b>direct supervision</b> , not incident to.	therapy adherence, therapy response); initial set-up and patient education on use of equipment	RTM to when patient meets goals) Expected 2022 payment: \$19.38	
98976	Ordered by a Provider. Carried out by Physicians and eligible health care provider. Can use clinical staff with <b>direct supervision</b> , not incident to.	<b>Limited to respiratory conditions only.</b> Remote therapeutic monitoring (e.g. respiratory system status, musculoskeletal system status, therapy adherence, therapy response); <b>device(s) supply with scheduled (e.g. daily) recording(s) and/or programmed alert(s) transmission to monitor respiratory system, each 30 days, (must monitor for at least 16 days)</b>	Expense only code Expected 2022 payment: \$55.72	NONE
98977	Ordered by a provider. Carried out by Physicians and eligible health care provider. Can use clinical staff with <b>direct supervision</b> , not incident to.	<b>Limited to MSK conditions only.</b> Remote therapeutic monitoring (e.g. respiratory system status, musculoskeletal system status, therapy adherence, therapy response); <b>device(s) supply with scheduled (e.g. daily) recording(s) and/or programmed alert(s) transmission to monitor musculoskeletal system, each 30 days (must monitor for at least 16 days)</b>	Expense only code Expected 2022 payment: \$55.72	NONE
989X6	Coming in FUTURE	<b>Cognitive Behavioral Therapy Monitoring (future service suggested) RTM device supply to monitor cognitive behavioral therapy.</b>		
98980	Physicians and eligible health care provider. Can use clinical staff with <b>direct supervision</b> , not incident to.	Remote therapeutic monitoring treatment, physician/other qualified health care professional time in a calendar month requiring at least one interactive communication with the patient/caregiver during the calendar month; <b>first 20 minutes</b>	Professional fees Bill once per month Expected 2022 Payment: \$50.18	NONE
98981	Physicians and eligible health care provider. Can use clinical staff with <b>direct supervision</b> , not incident to.	Remote therapeutic monitoring treatment, physician/other qualified health care professional time in a calendar month requiring at least one interactive communication with the patient/caregiver during the calendar month; <b>each additional 20 minutes</b>	Professional Fees Bill once per month Expected 2022 Payment: \$40.84	NONE

**EXAMPLE OF  
REMOTE PATIENT MONITORING VERBAL CONSENT**

**Date:** \_\_\_\_\_ **Patient Name:** \_\_\_\_\_  
**DOB:** \_\_\_\_\_

Patient has requested and verbally consented to participation in remote patient monitoring via patient portal. Data uploaded to the portal is encrypted and secure and is not shared with any other entity. Medical issues

discovered by engaging in remote patient monitoring may require an in-person visit, a telehealth visit or communication electronically or by phone. Note that copays and deductibles may apply depending on patient plan. Patient has the option to revoke consent at any time.