

Remote Physiologic Monitoring (RPM)

Remote physiologic or patient monitoring (RPM) allows clinicians and health care teams the ability to monitor weight, blood pressure, blood glucose, pulse, temperature, oximetry, respiratory flow rates and more in a variety of settings, including patients' homes. Based on the transmitted data, treatment plans are developed to help patients and care givers optimally manage health issues, keeping patients out of hospitals and emergency departments. Remote monitoring is especially important during a public health emergency (PHE) to reduce risk of infection transmission while keeping patients and staff safe, especially after a recent hospital discharge.

While the Centers for Medicare and Medicaid Services (CMS) has reimbursed for RPM since 2019, to date they have not created RPM-related educational materials as they have for other Medicare services. Using proposed and final rules published in the Federal Register by CMS, Comagine Health has compiled relevant regulatory details for health care organizations to implement RPM, which enhances service delivery options and improves outcomes, enhances the patient experience, and reduces health care costs.

There are at least three versions of RPM to keep distinct.

1. RPM as defined by Medicare, includes five billing codes (see [Table 1](#) below) and have several conditions and requirements. These RPM services require that “the medical device should digitally (that is, automatically) upload patient physiologic data (that is, data are not patient self-recorded and/or self-reported)”¹, which is not the case for 2 and 3 below.
2. Medicare reimburses for other RPM services (e.g., self-measured blood pressure monitoring and continuous glucose monitoring (CGM), and [ambulatory blood pressure monitoring](#)) that don't technically fall under their RPM definition from 1 above.
3. Remote patient monitoring that may or may not be “physiologic” can be a great adjunct for chronic disease and other self-management and may include regular check-ins, reminders, diet logs and so much more. With the explosion of patient health apps, the possibilities continue to expand.

¹ Calendar Year 2021 Physician Fee Schedule Final Rule (CY 2021 PFS FR) p. 84543

Summary of Key Details and Requirements for the Five RPM Codes Listed in Table 1 Below

- Beneficiaries' consent (verbal or written) to receive RPM and notification of any applicable cost sharing must be documented in the patient's medical record.
- Because CMS has designated RPM as care management services, CPT codes 99457 and 99458 can be furnished by clinical staff under the general supervision of the physician or nonphysician practitioner.
- CMS clarifies that "the medical device should digitally (that is, automatically) upload patient physiologic data (that is, *data are not patient self-recorded and/or self-reported*)"².
- Practitioners may provide RPM services for patients with acute and/or chronic conditions. This had been a provision during the PHE, and CMS has made this permanent³.
- Nurses, working with clinicians, can check in with the patient and then using patient data, determine whether home treatment is safe.
- RPM and Chronic Care Management codes, including Principal Care Management (new in 2020) can be billed concurrently by the same practitioner for the same beneficiary provided that the time is not counted twice.
- Federally Qualified Health Centers (FQHCs) and Rural Health Clinics (RHCs) cannot bill for RPM for Medicare beneficiaries. According to CMS "Services such as RPM are not separately billable because they are already included in the RHC AIR or FQHC PPS payment."⁴ CMS did not change this in the CY 2021 PFS Final Rule.

During the PHE, RPM may be:

- Furnished to new patients, as well.
- Initiated for patients for whom a face-to-face visit has not occurred.
- Delivered without the requirement of cost-sharing by the patient.
- Reported for shorter periods of time than 16 days - if the other code requirements are met.

² Calendar Year 2021 Physician Fee Schedule Final Rule (CY 2021 PFS FR) p. 84543

³ CY 2021 PFS FR p. 84546

⁴ CY 2021 PFS FR p. 62698; AIR – all-inclusive rate; PPS – prospective payment system

Figure 1. Overview and progression of services and codes through the end of an RPM episode of care



Table 1. Service Descriptions, Codes and Prices for General Remote Physiologic Monitoring (RPM)

Service Description	Code – Price
Remote monitoring of physiologic parameter(s) (e.g., weight, blood pressure, pulse oximetry, respiratory flow rate), initial; set-up and patient education on use of equipment (clinical staff time)	99453 - \$19
Remote monitoring of physiologic parameter(s) (e.g., weight, blood pressure, pulse oximetry, respiratory flow rate), initial; device(s) supply with daily recording(s) or programmed alert(s) transmission, each 30 days (may include the medical device or devices supplied to the patient and the programming of the medical device for repeated monitoring ⁵)	99454 - \$63
<p>CPT 99453 and 99454 (considered care management codes)</p> <ul style="list-style-type: none"> • Include clinical staff time, supplies and equipment (including the medical device(s)) • Consent may be obtained at the time the services for these two codes are furnished⁶ • Auxiliary personnel (which includes other individuals who are not clinical staff but are employees or leased or contracted employees) may furnish services for 99453 and 99454 under the general supervision of the billing physician or practitioner⁴ • Monitoring must occur over at least 16 days of a 30-day period to bill these codes and cannot be billed by more than one practitioner per beneficiary even when multiple devices are provided to the patient • Not to be reported for a patient more than once during a 30-day period, even when multiple medical devices are provided to a patient • Can be billed only once per episode of care, where an episode of care is defined as “beginning when the remote physiologic monitoring service is initiated and ends with attainment of targeted treatment goals²” 	
Collection and interpretation of physiologic data (e.g., ECG, blood pressure, glucose monitoring) digitally stored and/or transmitted by the patient and/or caregiver to the physician or other qualified healthcare professional, qualified by education, training, licensure/regulation (when applicable) requiring a minimum of 30 minutes of time, each 30 days	99091 - \$57
<p>CPT 99091</p> <ul style="list-style-type: none"> • After the 30-day data collection period for CPT codes 99453 and 99454, the physiologic data that are collected and transmitted are analyzed and interpreted by the physician or practitioner as described by CPT code 99091 • Includes a total time of 40 minutes of physician or nonphysician practitioner work broken down as follows: 5 minutes of preservice work (e.g., chart review); 30 minutes of intra-service work (e.g., data analysis and interpretation, report based upon the physiologic data, as well as a possible phone call to the patient); and 5 minutes of post-service work (that is, chart documentation). • Can be billed once per patient during the same service period as Chronic Care Management CPT codes (99487, 99489, and 99490), Transitional Care Management CPT codes (99495 and 99496), and behavioral health integration (BHI) CPT codes (99492, 99493, 99494, and 99484). 	
BASE CODE: Remote physiologic monitoring treatment management services, clinical staff/physician/other qualified health care professional time in a calendar month requiring interactive communication with the patient/caregiver during the month; initial 20 minutes	99457 - \$51

⁵ CY 2021 PFS FR p. 84543

⁶ CY 2021 PFS FR p. 84536

Service Description	Code – Price
ADD-ON CODE: Remote physiologic monitoring treatment management services, clinical staff/physician/other qualified health care professional time in a calendar month requiring interactive communication with the patient/caregiver during the month; additional 20 minutes	99458 - \$41
CPT 99457 and 99458 – 20 minutes of interactive communication <ul style="list-style-type: none"> • Can be furnished by clinical staff under the general supervision of the physician or nonphysician practitioner⁷. • Interactive communication must total at least 20 minutes of interactive time with the patient over the course of a calendar month for CPT code 99457 to be reported. CMS clarifies that the work associated includes non-face-to-face care management services during the month.⁸ • Time spent in direct, real-time interactive communication with the patient. • CMS defines interactive communication as “real-time interaction, between a patient and the physician, nonphysician practitioner, or clinical staff who provide the services” and “involves, at a minimum, a real-time synchronous, two-way audio interaction that is capable of being enhanced with video or other kinds of data transmission.” 	
The national payment amount for the non-facility price from the Physician Fee Schedule Search as of Jun 22, 2021 is rounded to the nearest dollar. Do not rely on the pricing information in this table; have your biller/coder double-check.	

Table 2. Service Descriptions, Codes and Prices for Self-Measured Blood Pressure Monitoring and Continuous Glucose Monitoring (CGM) Note that the codes and services listed in Table 2 are not technically remote physiologic monitoring, but they do offer the opportunity to support patients with monitoring and self-management support.

Service Description	Code – Price
Self-measured blood pressure using a device validated for clinical accuracy; patient education/training and device calibration	99473 - \$12
Separate self-measurements of two blood pressure readings one minute apart, twice daily over a 30-day period (minimum of 12 readings), collection of data reported by the patient and/or caregiver to the physician or other qualified health care professional (QHCP), with report of average systolic and diastolic pressures and subsequent communication of a treatment plan to the patient	99474 - \$15
Ambulatory CGM of interstitial tissue fluid via a subcutaneous sensor for a minimum of 72 hours; patient-provided equipment, sensor placement, hook-up, calibration of monitor, patient training, removal of sensor, and printout of recording (check additional reporting requirements in an official CPT codebook).	95249 - \$59
Ambulatory CGM of interstitial tissue fluid via a subcutaneous sensor for a minimum of 72 hours; physician or other qualified health care professional (office) provided equipment, sensor placement, hook-up, calibration of monitor, patient training, removal of sensor, and printout of recording	95250 - \$157
Ambulatory CGM of interstitial tissue fluid via a subcutaneous sensor for a minimum of 72 hours; interpretation and report.	95251 - \$36
Note that for CGM there are Category III CPT codes 0446T, 0447T and 0448T that describe services related to the insertion and removal of an implantable interstitial glucose sensor system. ⁹ These may sunset in Jan 2022.	
The national payment amount for the non-facility price from the Physician Fee Schedule Search as of Jun 22, 2021 is rounded to the nearest dollar. Do not rely on the pricing information in this table; have your biller/coder double-check.	

⁷ CY 2021 PFS FR p. 84544

⁸ CY 2021 PFS FR; Correction. P. 5021. Published Jan 21, 2021. <https://www.govinfo.gov/content/pkg/FR-2021-01-19/pdf/2021-00805.pdf>

⁹ CMS Manual System – Transmittal 4468. Centers for Medicare & Medicaid Services. Nov 27, 2019.

<https://www.cms.gov/files/document/r4468cp#:~:text=Category%20III%20CPT%20codes%200446T,contractor%20priced%20in%20CY%202020.>

Medical Devices per the FDA

Since the initiation of RPM codes for reimbursement, there has been some debate over which kinds of medical devices can be used to collect the patient's physiologic data. CMS reiterates that devices used to capture a patient's physiologic data must meet the FDA definition of being a medical device as described as described in [section 201\(h\) of the Federal, Food, Drug and Cosmetic Act \(FFDCA\)](#) but do not need to be an FDA-approved or cleared device¹⁰. Additionally, CMS clarifies that the medical device does not need to be prescribed by a physician, although this could be possible depending upon the medical device.

CMS also notes that the medical device or devices must be "reasonable and necessary for the diagnosis or treatment of the patient's illness or injury or to improve the functioning of a malformed body member" and that "the device must be used to collect and transmit reliable and valid physiologic data that allow understanding of a patient's health status to develop and manage a plan of treatment."

References

- Calendar Year 2018 Physician Fee Schedule Final Rule
<https://www.govinfo.gov/content/pkg/FR-2017-11-15/pdf/2017-23953.pdf>
- Calendar Year 2019 Physician Fee Schedule Final Rule
<https://www.govinfo.gov/content/pkg/FR-2018-11-23/pdf/2018-24170.pdf>
- Calendar Year 2020 Physician Fee Schedule Final Rule
<https://www.govinfo.gov/content/pkg/FR-2019-11-15/pdf/2019-24086.pdf>
- CMS Interim Final Rule, April 6, 2020
<https://www.cms.gov/files/document/covid-final-ifc.pdf>
- Calendar Year 2021 Physician Fee Schedule Proposed Rule
<https://www.govinfo.gov/content/pkg/FR-2020-08-17/pdf/2020-17127.pdf>
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<https://www.govinfo.gov/content/pkg/FR-2020-12-28/pdf/2020-26815.pdf>
- COVID-19 FAQs on Medicare Fee-for-Service Billing
<https://www.cms.gov/files/document/03092020-covid-19-faqs-508.pdf>
- Physicians and Other Clinicians: CMS Flexibilities to Fight COVID-19
<https://www.cms.gov/files/document/covid-19-physicians-and-practitioners.pdf>

¹⁰ CY 2021 PFS FR p. 84543