



**REMOTE
MONITORING
SERVICES
IMPLEMENTATION GUIDE**

Overview

This implementation guide provides information and guidance to sleep medicine physicians and sleep centers on remote physiological monitoring (RPM) and remote therapeutic monitoring (RTM) services. The following content areas are included:

- Introduction and background of remote services
- Remote services general requirements
- Digitally stored data services/RPM codes and descriptors
- RPM treatment management services codes and descriptors
- RPM and RTM background, applications, and reporting requirements
- RPM and RTM medical devices
- Ordering and rendering of RPM and RTM services
- Interactive communication requirements
- Recommendations for implementation in sleep medicine

Introduction and Background

Remote monitoring services allow health care providers to collect and analyze patients' health care data and use that data to monitor and manage their patients' acute and chronic conditions outside of a traditional clinical setting. The use of remote monitoring services has grown as new technologies are profoundly changing the way patients interact with health care providers. A rise in virtual care services, the establishment of new procedure/billing codes, and coverage/payment determinations from public and private payers are also contributing to the growth of remote monitoring services.

General Requirements for Remote Services

Furnishing remote monitoring services

To report remote monitoring services, the service must be ordered, furnished, and billed by a physician or other qualified health care professional (QHP), qualified by

education, training, licensure/regulation. The phrase "physician or other qualified health care professional" is defined by CPT as, "an individual who is qualified by education, training, licensure/regulation (when applicable) and facility privileging (when applicable) who performs a professional service within his/her scope of practice and independently reports that professional service." Examples include clinical social workers, clinical nurse specialists, nurse practitioners, physician assistants, etc. Accordingly, when referring to a specific CPT procedure/service code for Medicare coverage determinations, a physician or other QHP is an individual whose scope of practice and Medicare benefit category includes the service and who is authorized to independently bill Medicare for the service. Clinical staff are "persons who work under the supervision of a physician or other qualified health care professional, and who are allowed by law, regulation, and facility policy to perform or assist in the performance of a specified professional service but do not individually report that professional service." Examples of clinical staff include medical assistants, licensed practical nurses, etc. In the 2021 Medicare Physician Fee Schedule Final Rule, the Centers for Medicare and Medicaid Services (CMS) finalized that auxiliary personnel may provide services described by CPT codes 99453 and 99454 incident to the billing practitioner's services and under their supervision. Auxiliary personnel may include contracted employees.

Coding guidelines

Remote CPT coding guidelines may differ from private and public payer payment eligibility and coverage policy guidelines. The AASM recommends that providers contact payers to verify requirements as they vary by payer.

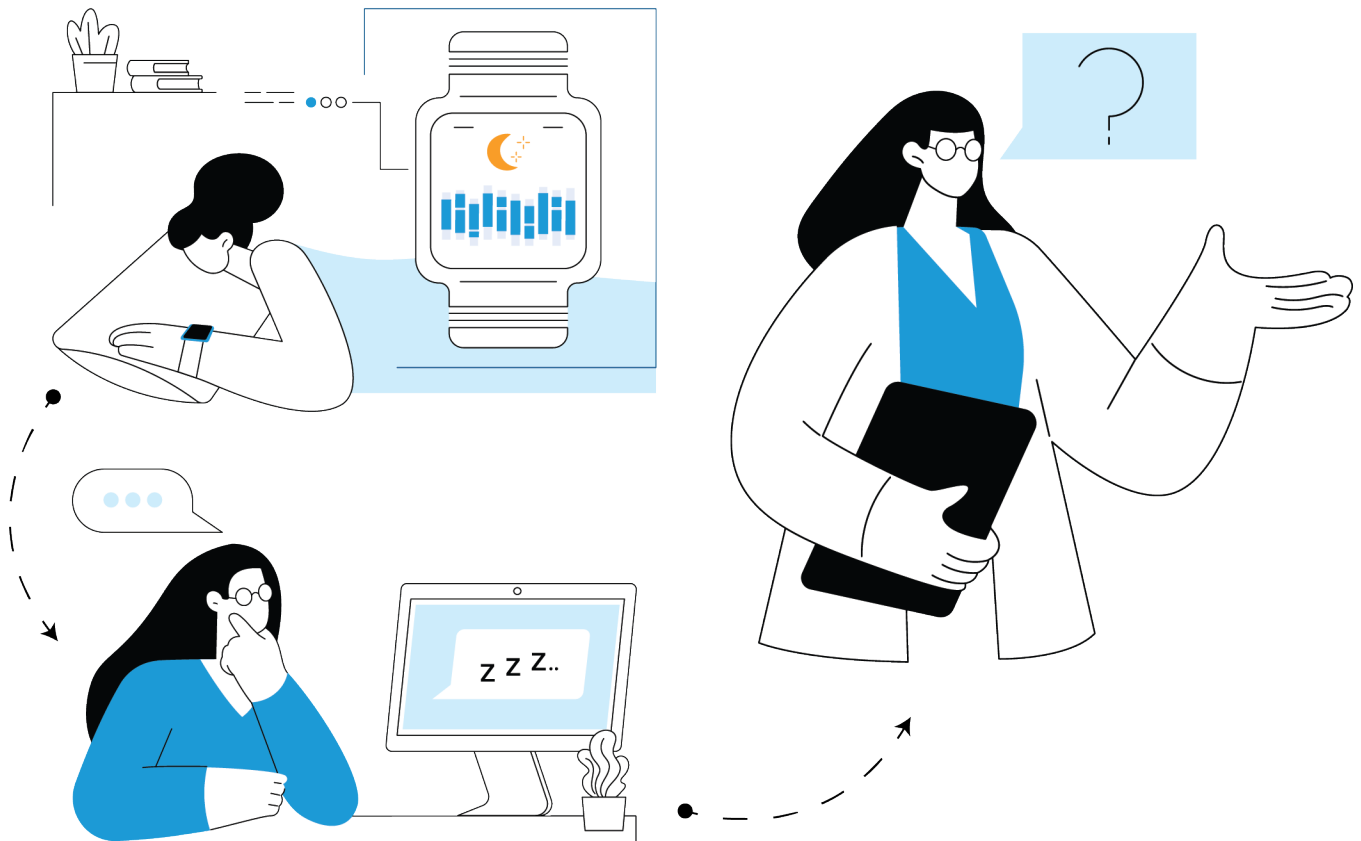
Patient consent

Patient consent requirements vary by state. In addition, in the 2021 Medicare Physician Fee Schedule Final Rule, CMS finalized that patient consent be obtained at the time that RPM services are furnished but is unclear about consent requirements for RTM services. As state requirements for patient consent vary, the AASM recommends that patient consent is always obtained and documented in the patient's medical record prior to providing remote monitoring services.

Remote monitoring process

Physiological or therapeutic data from a medical device (defined by the FDA) is stored and transmitted to a sleep medicine practice. The data is received by a non-physician provider who takes down the observations compiled from the data, and then records the observations that are being

transmitted. The recorded observations are then sent to the sleep physician or QHP who determines the diagnosis of the sleep disorder, treatment plan or therapy response.



Remote Physiological Monitoring (RPM)

Listed under Evaluation and Management (E/M) services in the CPT manual, digitally stored data services/remote physiologic monitoring (RPM) and RPM treatment management services involves *the collection and analysis of patient physiologic data that is used to develop and manage a treatment plan related to a chronic and/or acute health illness or condition. Since the end of the COVID-19 public health emergency, remote physiologic monitoring services should only be furnished to established patients.*

Digitally Stored Data Services/RPM

Codes	Long Descriptor
99091	Collection and interpretation of physiologic data digitally stored and/or transmitted by the patient and/or caregiver to the physician or other qualified health care professional, qualified by education, training, licensure/regulation requiring a minimum of 30 minutes of time, each 30 days.
99453	Remote monitoring of physiologic parameter(s) (e.g., weight, blood pressure, pulse oximetry, respiratory flow rate), initial; setup and patient education on use of equipment (PE only).
99454	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 (PE only).
99473	Self-measured blood pressure using a device validated for clinical accuracy; patient education/training and device calibration. (Do not report 99473 more than once per device).
99474	Separate self-measurements of two 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, with report of average systolic and diastolic pressures and subsequent communication of a treatment plan to the patient. (Do not report 99474 more than once per calendar month).

RPM Treatment Management Services

Medical devices

Codes	Long Descriptor
99457	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; first 20 minutes. (Report 99457 once each 30 days, regardless of the number of parameters monitored).
99458	Each additional 20 minutes. (List separately in addition to code for primary procedure. Do not report 99458 for services of less than an additional increment of 20 minutes).

Medical Devices

The CPT manual simply states that RPM devices must meet the FDA's definition of a medical device as described in section 201(h) of the Federal, Food, Drug and Cosmetic Act (FFDCA).

CMS offers more specific guidance regarding medical devices, in the digitally stored data services/remote physiologic monitoring/treatment management services (RPM) guidance document, as follows:

- There is no requirement that a medical device be prescribed by a physician, although, under certain circumstances, a prescribed device may be appropriate, depending upon the medical device.
- Medical devices should automatically upload patient physiologic data. This is data that is not self-recorded or reported by the patient.
- Medical devices that automatically collect and transmit a patient's physiologic data must be reasonable and medically necessary for the diagnosis or treatment of the patient's illness or injury or to improve the functioning of an abnormal body part.
- Medical devices must collect and transmit reliable and reasonable physiologic data that allows for insight of patient's health status for the purpose of developing a treatment and management plan.

Data Collection and Analysis

Codes 99453 and 99454

The two practice expense (PE) only RPM codes include:

- Code 99453 is used for clinical staff time spent instructing/educating a patient and/or caregiver about using one or more medical devices.
- Code 99454 is used for the medical device or devices supplied to the patient and the programming of the medical device for repeated monitoring.

When billing codes 99453 and 99454, monitoring must occur over at least 16 days of a 30-day period. These two codes cannot be reported more than once during a 30-day period per patient.

- When multiple medical devices are provided to a patient, the services associated with all the medical devices can only be billed once per patient per 30-day period and only when at least 16 days of data have been collected.
- CPT code 99453 can only be billed only once per episode of care. An episode of care is defined as “beginning when the remote physiologic monitoring service is initiated and ends with attainment of targeted treatment goals.”

Code 99091

After the completion of the 30-day data collection period for CPT codes 99453 (initial; setup and patient education on use of equipment) and 99454 (initial supply of device), the physiologic data that is collected and transmitted is analyzed and interpreted by the physician or practitioner under CPT code 99091. The typical process that code 99091 covers is as follows: physiological data is collected from the patient; the data is digitally stored and/or transmitted by the patient and/or caregiver to the physician or other QHP; the observations are recorded, and the physiological data is charted and interpreted; and the physician decides on a treatment plan based on patient’s acute or chronic condition.

Payment for this code, finalized in calendar year 2018 by CMS, describes professional work only. PAP efficacy and compliance—including the download, analysis, and interpretation of CPAP compliance data—can be billed

under RPM codes 99091 and 99457. See the AASM Coding FAQs on this topic at <https://aasm.org/coding-faq-downloading-and-interpreting-pap-data>.

Code 99091 should be reported no more than once in a 30-day period. Once 30 days has passed, the service may be reported again within the subsequent 30 contiguous days or later. The service can be reported once a total of 30 minutes of work reviewing data, writing reports, and/or modifying a patient care plan within the 30 contiguous days. The provider must document the time spent assessing, reviewing, and interpreting the data; and the time spent communicating with the patient and/or caregiver. Code 99091 cannot be reported in conjunction with codes 99457 or 99458.

Codes 99473 and 99474

As of January 1, 2020, physicians can submit claims for self-measured blood pressure (SMBP) services using CPT codes 99473 and 99474. SMBP refers to blood pressure (BP) measurements obtained outside of a physician’s office, typically, in the home. Patients bring in their BP devices from home and the staff calibrates the device for accuracy. SMBP services can enhance the quality and accessibility of care for people with high blood pressure. SMBP can be useful to make a diagnosis of hypertension, and it allows patients to actively participate in their BP management as well as increasing adherence to anti-hypertensive drugs. These codes address both initial and ongoing SMBP clinical services.

Code 99473

- CPT code 99473 can be used when a patient receives education and training (facilitated by clinical staff) on the setup and use of a SMBP measurement device validated for clinical accuracy, including device calibration.
- Code 99473 can only be reported once per device. It would most commonly be used prior to initiating SMBP in patients suspected of having hypertension or for those patients with an existing diagnosis of hypertension who have a new BP measurement device or are receiving training for the first time.

CPT code 99473 can be submitted once per device. Code 99473 should not be reported if performed as part of an E/M service. Modifier 25—indicating a significant, separately identifiable, and reportable E/M service—should be attached to the code.

Code 99474

- CPT code 99474 can be used for SMBP data collection and interpretation when patients use a BP measurement device validated for clinical accuracy to measure their BP twice daily (two measurements, one minute apart in the morning and evening), with a minimum of 12 readings required each billing period.
- SMBP measurements must be communicated back to the physician’s office and can be manually recorded (e.g., phone, fax, or in-person) or electronically captured and transmitted (e.g., secure email, patient portal, or directly from device).
- The physician or other QHP must establish or change the treatment plan based on the documented average of these readings. The treatment plan must be documented in the medical record and communicated back to the patient, either directly or through clinical staff.

CPT code 99474 can be submitted once per calendar month; it cannot be used in the same calendar month as codes for ambulatory blood pressure monitoring (93784, 93786, 93788, 93790), remote physiologic monitoring (99453-8, 99091) or chronic care management 99487, 99489-91). Code 99474 should not be reported if performed as part of an E/M service. Modifier 25—indicating a significant, separately identifiable, and reportable E/M service—should be attached to the code.

Code 99457

After analyzing and interpreting remotely collected physiologic data from the patient and a treatment plan is developed, the treatment plan is managed until the targeted objectives are accomplished, indicating the end of the episode of care. CPT code 99457 and its add-on service code, 99458, describe the management services provided via remote monitoring. Codes 99457 and 99458, which are considered care management services, can be furnished by clinical staff under the general supervision of the physician

or non-physician practitioner (NPP). It is important to note that RPM services are not diagnostic tests and cannot be furnished and billed by an independent diagnostic testing facility even if ordered by a physician or QHP.

The services described by CPT codes 99457 and 99458, which are services that are usually delivered remotely, use communications technologies that require interactive communication. Interactive communication, for purposes of CPT codes 99457 and 99458, is a real-time synchronous, two-way audio interaction between a patient or caregiver and the physician, NPP, or clinical staff member, providing the services. This communication is also capable of being enhanced with video or other kinds of data transmission. As per the code descriptor for 99457, the interactive communication must total at least 20 minutes of interactive time with the patient over the course of a calendar month for the code to be reported. Each additional 20 minutes of interactive communication between the patient and the physician/NPP/clinical staff is reported using CPT code 99458. For purposes of measuring time, the CPT manual states that unless exceptions exist, (e.g., code-range specific or parenthetical instructions, or code descriptors to the contrary) time is the “face-to-face” time with the patient or patient’s caregiver/medical decision-maker. CPT code 99457 can be reported once each 30 days, regardless of the number of parameters monitored and requires 20 minutes of physician time per month. Code 99457 should not be reported for services of less than 20 minutes or in conjunction with code 99091. Code 99458 is the add-on code for 99457. Use this code for each additional 20 minutes. It is listed separately in addition to code for the primary service/procedure, 99457. Report 99458 in conjunction with 99457. Do not report 99458 for services of less than an additional increment of 20 minutes.

Remote Therapeutic Monitoring (RTM)

Remote physiological therapeutic monitoring (RTM) services represent the review and monitoring of data related to signs, symptoms, and functions of a therapeutic response. Data collected from RTM may represent objective device-generated integrated data or subjective inputs reported by a patient. Data is reflective of therapeutic responses that provide a functionally integrative depiction of a patient’s health status. The six RTM codes include:

Remote Therapeutic Monitoring Services

Codes	Long Descriptor
98975	Remote therapeutic monitoring (e.g., therapy adherence, therapy response); initial setup and patient education on use of equipment.
98976*	Device(s) supply with scheduled (e.g., daily) recording(s) and/or programmed alert(s) transmission to monitor respiratory system, each 30 days.
98977*	Device(s) supply with scheduled (e.g., daily) recording(s) and/or programmed alert(s) transmission to monitor musculoskeletal system, each 30 days.
98978*	Device(s) supply with scheduled (e.g., daily) recording(s) and/or programmed alert(s) transmission to monitor cognitive behavioral therapy, each 30 days.
98980*	Remote therapeutic monitoring treatment management services, physician or other qualified health care professional time in a calendar month requiring at least one interactive communication with the patient or caregiver during the calendar month; first 20 minutes.
98981*	Each additional 20 minutes. (List separately in addition to code for primary procedure).

*These codes depend on collection of no fewer than 16 days of data in a 30-day period.

Medical devices

To report 98975, 98976, 98977, 98980, and 98981, the device used must be a medical device as defined by the FDA. That is, a device meeting the FDA's definition of a medical device as described in section 201(h) of the Federal Food, Drug and Cosmetic Act (FFDCA). Since RTM devices are still emerging and evolving, CMS continues to seek input from stakeholders regarding RTM devices that are used to deliver services instead of establishing a new RTM device code. More information is needed about types of data collected using RTM devices, costs associated with RTM devices that are available to collect RTM data, and potential number of beneficiaries for whom an RTM device might be used by the health condition type. Though specific to RTM, these questions can give medical device manufacturers and suppliers insight into how CMS is thinking about these codes in the future.

Codes 98975-98977

Codes 98975, 98976, 98977 are used to report remote therapeutic monitoring services during a 30-day period.

Code 98975 may be used to report the setup and patient education on the use of any device(s) used for therapeutic data collection. Codes 98976, 98977 may be used to report supply of the device for scheduled (e.g., daily) recording(s) and/or programmed alert(s) transmissions. Codes 98975, 98976, 98977 are not reported if monitoring is less than 16 days. Do not report 98975, 98976, 98977 with other physiologic monitoring services (e.g., 95250 for continuous glucose monitoring requiring a minimum of 72 hours of monitoring or 99453, 99454 for remote monitoring of physiologic parameter(s)). Code 98975 is reported for each episode of care. For reporting remote therapeutic monitoring parameters, an episode of care is defined as beginning when the remote therapeutic monitoring service is initiated and ends with attainment of targeted treatment goals.

Codes 98980 and 98981

Do not report 98980, 98981 for time that can be reported using codes for more specific monitoring services. Codes 98980, 98981 may be reported during the same service period as chronic care management services, transitional care management services principal care management services, and behavioral health integration services. That said, time spent performing these services should remain separate and no time should be counted toward the required time for both services in a single month. For the first completed 20 minutes of physician or other QHP time in a calendar month, report 98980, and report 98981 for each additional completed 20 minutes. Do not report 98980 and 98981 for services of less than 20 minutes. Report 98980 once regardless of the number of therapeutic monitoring modalities performed in a given calendar month. Do not count any time on a day when the physician or other QHP reports an E/M service or time related to other reported services (e.g., psychotherapy services, respiratory monitoring services, health behavior assessment and intervention services or therapeutic interventions that focus on cognitive function services). Codes 98980, 98981 require at least one interactive communication with the patient or caregiver. Interactive communication is defined at minimum as a real-time synchronous, two-way audio interaction between a patient or caregiver and the physician or QHP. The interactive communication contributes to the total time, but it does not need to represent the entire cumulative reported time of the treatment management service.

Sleep Medicine Recommendations

Because of continuing technological advances in health care delivery, expansion of telemedicine services during the public health emergency, and expanded reimbursement opportunities, the AASM recommends the implementation of remote physiologic monitoring and remote therapeutic monitoring codes (as appropriate) to improve access to care, decrease labor costs, improve sleep patient device use, and optimize physician-patient satisfaction for sleep medicine practices. Key takeaways, include:

- Sleep physicians and centers often assess PAP efficacy and compliance through remote physiologic monitoring in PAP devices. 99091 or 99457 are two physiologic monitoring codes that may capture the work that sleep physicians provide in reviewing this data and assisting a patient in management in between their visits.
- Providers should report 98978 for monitoring cognitive behavioral therapy, with appropriate documentation.
- Patient consent should always be obtained and documented in the patient's medical record before providing RPM and RTM services to sleep medicine patients.
- Sleep providers should document the time spent assessing, reviewing and/or interpreting the data in the medical record.
- Sleep providers should document time spent communicating with the patient (and family caregiver, if applicable), along with the details of the conversation, in the medical record.
- Sleep practices should understand and assess liability and risk before implementing and providing RPM and RTM services (e.g., medical liability, licensing, consent requirements, HIPAA compliance).
- Sleep practices should make use of digital tools to allow providers to provide ongoing guidance and assessments for patients outside of the in-office visit, including the collection and use of patient-generated health data (PGHD).

- Make use of platforms and devices that work as part of an active feedback loop, providing data in real time (or near-real time) to the sleep care team as well as offering patients automatic and ongoing one-way guidance.
- Balance the costs of remote monitoring platforms with the potential benefits of remote monitoring services for sleep patients.
- Identify which patients are using remote monitoring services and which, if any, sleep disorder patient groups are facing access issues.
- Evaluate the use of remote monitoring services for monitoring symptoms of respiratory sleep disorders.

To access national payments for remote physiologic and therapeutic monitoring services, visit <https://aasm.org/wp-content/uploads/2023/01/telemedicine-payment-RVU-comparison-2022-2023-revised.pdf>.

References

Guidance from CMS Released 2020 -2024 regarding Digitally Stored Data Services/Remote Monitoring Services. Published in the Federal Register.
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