

REMOTE PHYSIOLOGIC MONITORING (RPM) TOOLKIT

*Guidance for Implementation of Reimbursable Services
Across Care Settings*



Prepared by the Practice Advancement and Innovation Committee,
December 2025

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Introduction

The purpose of this Remote Physiologic Monitoring (RPM) Toolkit is to empower pharmacists with the knowledge, resources, and practical strategies needed to integrate RPM into their workflow and clinical practice. As healthcare continues to evolve toward more proactive, technology-enabled care models, pharmacists are uniquely positioned to enhance patient outcomes through real-time monitoring and intervention. This toolkit aims to support pharmacists in navigating regulatory, operational, and clinical considerations, while fostering confidence in leveraging RPM to deliver high-quality, patient-centered care.

RPM overview

Remote patient monitoring encompasses Remote Therapeutic Monitoring (RTM) and Remote Physiologic Monitoring (RPM). RTM involves the collection of patient non-physiologic, self-reported data on medication adherence and therapeutic response. It is currently available for respiratory, musculoskeletal and cognitive behavioral therapy conditions billable only by Qualified Healthcare Professionals including Physical Therapists, Occupational Therapists, and Speech-Language Pathologists for services they provide themselves. This Ohio Pharmacists Association resource specifically addresses RPM, which is the use of physiologic data transmitted digitally and automatically from a medical device to the healthcare team for use in clinical decision making for acute and chronic conditions. RPM expands access to care by permitting the management to occur outside of traditional office settings with potential to address common barriers for patients like geographic isolation, transportation, mobility issues, and getting time off work or school for office visits. The model also allows continuous access to patient data, permitting early intervention when needed to prevent acute worsening of managed conditions and reduce hospital/ED utilization.

The Centers for Medicare and Medicaid Services (CMS) has adopted a set of Current Procedural Terminology (CPT) codes specific to billing of RPM services, including codes associated with time spent by the care team in management of the associated condition using the transmitted data. Reporting of these codes by a Qualified Healthcare Professional can support reimbursement for time spent by the pharmacist in care of the patient, but there are several requirements for proper use of these codes, which are detailed in Table 1 and which may have implications on the design of RPM services.

The Medicare Physician Fee Schedule (MPFS) assigns payment to the use of RPM CPT codes in either a non-facility setting or facility settings including hospital outpatient departments (HOD) and the reimbursement scheme and amount differ based on setting. Regardless of setting, the reimbursement rates for RPM codes are intended to support the service, rather than to drive revenue, so consideration of the impact of the pharmacist-provided service on clinical metrics and payer contracts is often an important factor in selection of the target disease state(s) and population(s). Additionally, individual commercial insurance plans and Medicaid Managed Care Organizations determine whether and to what extent they will cover RPM services and may apply additional restrictions.

CMS has provided additional clarification on the use of these billing codes since adopting them in 2019. Table 2 summarizes application of some of this information.

TABLE 1: RPM CPT CODE DETAILS AS OUTLINED IN MEDICARE PHYSICIAN FEE SCHEDULE (MPFS)

CPT Code	Description from MPFS	Additional Notes and References	CY2025 payment rate*	wRVUs
99453	<i>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</i>	<ul style="list-style-type: none"> Initial set-up and patient training on use of equipment Billed once per episode of care after cumulative monitoring of at least 2 days in a 30-day period^A Practice expense-only code valued to reflect clinical staff time that includes instructing a patient and/or caregiver about using one or more medical devices^B 	MPFS non-facility: \$18.04 MPFS facility: \$0 (OPPS)	-
99445	<i>Remote monitoring of physiologic parameter(s) (e.g., weight, blood pressure, pulse oximetry, respiratory flow rate), initial; device(s) SUPPLY with daily recordings or programmed alert(s) TRANSMISSION, 2-15 days in a 30-day period</i>	<ul style="list-style-type: none"> Practice expense-only; valued to include the clinic-owned medical device(s) supplied to the patient and programming of the medical device for repeated monitoring (so should not be reported if device is patient-owned) Data cannot be self-recorded and/or self-reported^D 99445 and 99454 are not additive. Only one should be selected per 30 days based on the appropriate number of days transmitted.^C Valued the same as 99454 because the device is supplied for 30 days regardless of days of data transmission^C 	N/A; anticipated to match 99454	-
99454	<i>Remote monitoring of physiologic parameters(s) (e.g., weight, blood pressure, pulse oximetry, respiratory flow rate), initial; device(s) SUPPLY with daily recording(s) or programmed alert(s) TRANSMISSION, 16-30 days in a 30-day period</i>	<ul style="list-style-type: none"> Practice expense-only; valued to include the clinic-owned medical device(s) supplied to the patient and programming of the medical device for repeated monitoring (so should not be reported if device is patient-owned)^B Data cannot be self-recorded and/or self-reported^D 99445 and 99454 are not additive. Only one should be selected per 30 days based on the appropriate number of days transmitted.^C 	MPFS non-facility: \$39.23 MPFS facility: \$0 (OPPS)	-

TABLE 1: RPM CPT CODE DETAILS AS OUTLINED IN MEDICARE PHYSICIAN FEE SCHEDULE (MPFS)

CPT Code	Description from MPFS	Additional Notes and References	CY2025 payment rate*	wRVUs
99091	<i>Collection and interpretation of physiologic data (eg, ECG, blood pressure, glucose monitoring) 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 (when applicable) requiring a minimum of 30 minutes of time, each 30 days</i>	<ul style="list-style-type: none"> • Cannot be reported if the services are provided on the same day the patient presents for an evaluation and management (E/M) service by the same provider • Only includes time spent by physician or other qualified health care professional 	MPFS non-facility: \$50.59 MPFS facility: \$50.59	1.10
99470	<i>Remote physiologic monitoring treatment management services, clinical staff/physician/other qualified health care professional time in a calendar month requiring 1 real-time interactive communication with the patient/caregiver during the month; FIRST 10 MINUTES</i>	<ul style="list-style-type: none"> • Billed once every 30 days for the first 10 minutes of clinical interpretation and treatment management • 99470 and 99457 are not additive. Only one should be selected per 30 days based on the time spent that calendar month.^C • Face-to-face or virtual patient interaction • The days of data requirement does not apply to these codes as they are considered treatment management codes^E 	N/A; anticipated to be 50% of 99457	0.31
99457	<i>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</i>	<ul style="list-style-type: none"> • Billed once every 30 days for the first 20 minutes of clinical interpretation and treatment management • 99470 and 99457 are not additive. Only one should be selected per 30 days based on the time spent that calendar month.^C • Face-to-face or virtual patient interaction • The days of data requirement does not apply to these codes as they are considered treatment management codes^E 	MPFS non-facility: \$45.53 MPFS facility: \$28.14	0.61

TABLE 1: RPM CPT CODE DETAILS AS OUTLINED IN MEDICARE PHYSICIAN FEE SCHEDULE (MPFS)

CPT Code	Description from MPFS	Additional Notes and References	CY2025 payment rate*	wRVUs
99458	<i>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; EACH ADDITIONAL 20 MINUTES</i>	<ul style="list-style-type: none"> Billed once every 30 days for each additional 20-minute interval spent with clinical interpretation and treatment management Can only be billed after 99457, not 99470 because it is for instances where more than 20 minutes of treatment management is needed after 99457.^C Face-to-face or virtual patient interaction The days of data requirement does not apply to these codes as they are considered treatment management codes^E 	MPFS non-facility: \$36.98 MPFS facility: \$28.14	0.61
References <ul style="list-style-type: none"> A. American Medical Association. CPT® 2026 Professional Edition. AMA Press; 2026. B. MPFS CY 2019 Final Rule C. MPFS CY 2026 Final Rule D. MPFS CY 2021 Final Rule E. MPFS CY 2024 Final Rule 				

*Calendar Year 2025 payment rate specific to 15202 Ohio MAC

TABLE 2: RPM BILLING FREQUENTLY ASKED QUESTIONS

Question	Answer
When should consent be obtained?	<ul style="list-style-type: none"> • <i>“We... allow consent to be obtained at the time that RPM services are furnished”^A</i>
Can 99453 be completed virtually?	<ul style="list-style-type: none"> • <i>“Commenters inquired as to whether CPT code 99453 can be furnished via telecommunication technology... Response: We plan to issue guidance to help inform practitioners and stakeholders on these issues.”^B</i>
How many times can 99453 be billed?	<ul style="list-style-type: none"> • Even when multiple devices are provided to a patient, the services associated with all the devices can be billed only once per patient per 30-day period • CPT code 99453 can be billed only once per episode of care where an episode of care is defined as <i>“beginning when the remote physiologic monitoring service is initiated and ends with attainment of targeted treatment goals”^A</i>
What team members can be involved in billable RPM services?	<ul style="list-style-type: none"> • <i>“Because the CPT code descriptors do not specify that clinical staff must perform RPM services, we also allow auxiliary personnel (which includes other individuals who are not clinical staff but are employees or leased or contracted employees) to furnish services described by CPT codes 99453 and 99454 under the general supervision of the billing physician or practitioner.”^A</i>
What must be included in the service covered by the time-based codes?	<ul style="list-style-type: none"> • <i>“‘Interactive communication’ 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”^A</i>
Who can report the RPM CPT codes?	<ul style="list-style-type: none"> • <i>“can be ordered and billed only by physicians or non-physician practitioners who are eligible to bill Medicare for E/M services”^A</i> • <i>“Only one practitioner can bill CPT codes 99453 and 99454 during a 30-day period”^C</i>
What type of supervision is required for these services?	<ul style="list-style-type: none"> • <i>“Because care management services include establishing, implementing, revising, or monitoring treatment plans, as well as providing support services, and because RPM services include establishing, implementing, revising, and monitoring a specific treatment plan for a patient related to one or more chronic conditions that are monitored remotely, we believed that CPT codes 99457 and 99458 should be included as designated care management services. Designated care management services can be furnished under general supervision.”^D</i>

TABLE 2: RPM BILLING FREQUENTLY ASKED QUESTIONS

Question	Answer
Are RPM services telehealth services?	<ul style="list-style-type: none"> • Telehealth services are those with one or more elements that would ordinarily involve direct, face-to-face interaction such that use of interactive telecommunications systems is a substitute for an in-person visit. RPM CPT codes describe services that are inherently non face-to-face, so are not considered telehealth services.^B • <i>“We would like to clarify that these services, which are inherently non-face-to-face, do not meet the definitions of section 1834(m) of the [Social Security] Act, fall outside the scope of the definition of Medicare telehealth service, and do not meet step 2 of our review process.”^E</i>
How does this billing apply to FQHCs?	<ul style="list-style-type: none"> • In the CY 2018 MPFS, HCPCS code G0511 was established for FQHCs to report when at least 20 minutes of qualified care management services are furnished in a calendar month.^G • In the CY 2024 MPFS, the RPM suite of services was added to the general care management code, G0511, as the requirements are similar to the non-face-to-face requirements for the general care management services furnished in FQHCs^C • Later, CMS required FQHCs to bill the individual care management codes that make up G0511 instead, including RPM codes^F
<p>References</p> <ul style="list-style-type: none"> A. MPFS CY 2021 Final Rule B. MPFS CY 2019 Final Rule C. MPFS CY 2024 Final Rule D. MPFS CY 2020 Final Rule E. MPFS CY 2026 Final Rule F. MPFS CY 2025 Final Rule G. MPFS CY 2018 Final Rule 	

Implementing RPM – The Who

When establishing RPM within an organization, it is important to first identify the need, ensuring that the efforts to establish the program align with the organization's priorities. This can be difficult in a large organization. While there are many different opportunities for RPM, beginning with implementation of one RPM service may lend itself more successful to ensure sustainability. Once the initial service is established, then the program can be expanded to other RPM services and/or other locations.

To ensure program success, key stakeholders need to be included as part of the implementation team. Team composition for a large-scale RPM implementation project can be categorized into clinical and operational stakeholders. Many of these team members are brought into the work after the initial business request (or case for change) has been submitted by a clinical lead and approved by the business/technology expansion committee. The following list describes roles that are often included, though may not be essential, in an institution's RPM implementation project.

Clinical Stakeholders

- Executive Leadership: Director of Pharmacy, VP of Ambulatory Care, VP of Enterprise Clinical Services, etc.
 - Ensure alignment with institution's over-arching vision, mission, and budget parameters.
 - Serve as Executive Sponsor for the formal project – provide final sign-off on the project charter and intended scope from the clinical leadership perspective.
- Pharmacy Lead
 - Write up and submit formal business request – pharmacist may be responsible (in whole or with physician) for this initial step, as many institutions value pharmacists as integral to innovative health monitoring programs.
 - Work closely with physician champion to establish qualifying criteria for patient enrollment, standard patient care process, and technical workflow.
 - Attend all project meetings and work groups to serve as liaison between clinical stakeholders and operational stakeholders.
 - Pharmacist is ideal patient-facing, “front-line” team member for this role.
- Physician/Advanced Practice Provider (APP) Champion
 - Represent physician/APP team's preferences regarding both patient-centered and practical aspects of workflow, including documentation and billing.
 - Physician/APPs serve as “billing provider” when utilizing formal RPM billing.
- Provide, along with pharmacist, insight on scalability to other practice sites with differing staff make-up and patient populations.

Operational Stakeholders

- Project Manager
 - Host focus groups with clinicians to solidify scope of project and outline of goals based upon initial business request and IT department capacity.
 - Review and obtain approval from Executive Sponsor.
 - Hold consistent (often weekly - biweekly) “discovery calls” to allow a forum for essential information flow between operational and clinical stakeholders.
 - Set timelines, track progress and communicate consistently to entire team regarding successes, barriers, and recommended shifts in project focus.
- IT Lead
 - Confirm proper data transmission between health devices, patient applications, and medical chart (i.e., flow of data via Bluetooth technology).
 - Will often work with a team of informaticists or technicians.
 - Review clinician workflow requests and identify solutions or propose adaptations.
- Billing/Coding Supervisor
 - Review scope of project and relevant codes with charges provided by project manager.
 - Grant approval for integration of new codes with charges into institution’s catalog.
- EMR Education Manager
 - Ensure workflow is sensible and efficient within the electronic medical record (EMR).
 - Compile tip sheets and other relevant educational material regarding RPM workflow for clinicians and clinic staff.
- Legal Counsel
 - Assess and provide feedback on processes of billing and patient consent, enforcing compliance standards and minimizing any institutional liability.
- Marketing Representative
 - Review and certify any patient-facing educational materials or promotional messaging.
- Infection Prevention Staff
 - Advise on best practices for sanitizing and repurposing returned health devices.
 - Relevant if providing devices via a loan program, in which the patient returns the device upon achievement of health goals per provider discretion.

While the clinical stakeholders, project manager, IT lead, and informaticists will be involved throughout the entirety of the formal RPM implementation project, many of the other operational stakeholders are looped in as needed throughout various phases of development. It is typically the role of the project manager to identify and solicit guidance from appropriate contributors, with input from clinicians and leadership. Once a project manager is assigned to an RPM implementation project, the timeline to completion could

be anywhere from 6 months to 18 months, depending on the necessary technology testing, EMR workflow build, and general communication and responsiveness from multiple stakeholders. These timelines can also be impacted by external influences such as policy changes related to RPM.

Upon completion of the development phase of the RPM project, a pilot should be launched – typically with the involved physician champion, pharmacist lead and a small number of patients. During this pilot, the project manager, IT lead, and other project support staff are available for troubleshooting issues and modifying existing workflow, as needed. Once the initial pilot is running satisfactorily, with the majority of “kinks” smoothed out, attention can be turned to expanding involvement and training to other clinical staff.

On-boarding efforts of new staff should first focus on attending physicians or qualified healthcare professionals (those who will be billing provider for the RPM service) and other clinical pharmacists who will help manage the remote monitoring program. Some health systems utilize medical residents, in concert with pharmacists, to monitor patients’ transmitted health data, communicate with patients, and perform clinical management. While pharmacists can be involved from start to finish in the RPM process – setting up the health device, educating the patient, monitoring data, making therapeutic adjustments under a Collaborative Practice Agreement (CPA), and documenting requirements for billing for physician sign-off – it could be beneficial to train other staff for the RPM initiation step. This allows the pharmacist more time for patient care and clinical work.

Ideal staff members to assist with RPM initiation might include pharmacy technicians or medical assistants, who could walk patients through device set-up and technology syncing, and registered nurses, who could provide device and disease state education. It is essential that the trainer be knowledgeable to provide appropriate education to patients to gain clinically meaningful results. An alternative solution for the initiation step would be utilization of an external RPM vendor that provides medical equipment and education to the patient, allowing clinician review and oversight without pulling office/pharmacy staff from other job responsibilities.

Implementing RPM – The What

Devices

Must meet the FDA definition of medical device per Section 201(h)(1) of the Food, Drug, and Cosmetic Act¹: *An instrument, apparatus, implement, machine, contrivance, implant, in vitro reagent, or other similar or related article, including a component part, or accessory which is:*

- (A) recognized in the official National Formulary, or the United States Pharmacopoeia, or any supplement to them,*
- (B) intended for use in the diagnosis of disease or other conditions, or in the cure, mitigation, treatment, or prevention of disease, in man or other animals, or*
- (C) intended to affect the structure or any function of the body of man or other animals, and which does not achieve its primary intended purposes through chemical action within or on the body of man or other animals and which is not dependent upon being metabolized for the achievement of its primary intended purposes. The term "device" does not include software functions excluded pursuant to section 520(o).*

Data must digitally and automatically transmit

- Bluetooth enabled devices can be paired to a smartphone or in-home wifi “hub”
- Cellular enabled devices, though often more costly, connect directly to cell towers for data transmission, removing access to a smartphone or wifi as a requirement for engaging in this care model

Data may transmit:

- To an external platform supported by the device manufacturer or an RPM vendor requiring manual retrieval
- Through unidirectional EHR integration where data transmits to the EHR for viewing, but other actions related to device and data management may require accessing the external manufacturer or vendor platform
- Through bidirectional EHR integration, the EHR is equipped with device and data management tools, eliminating the need to access a separate platform

Devices engaged in RPM include but are not limited to:

- Blood pressure cuff
- Pulse oximeter
- Glucometer/glucose monitor
- Weight scale
- Thermometer
- Otoscope
- Spirometer
- ECG

Disease states

RPM can be used to manage acute or chronic conditions including but not limited to:

- Diabetes
- Hypertension
- Heart disease/Heart Failure
- COPD/Asthma
- Weight management
- Cellulitis
- UTI
- COVID-19
- Pneumonia

Consent process

Verbal or written consent must be documented before or at the point of engagement in an RPM service. While CMS does not dictate the specific components of RPM consent beyond billing and the treatment plan, the following may be considered for inclusion in consultation with organization legal and compliance representatives:

- An explanation that only one provider can bill for the service in a 30-day period, so that the patient is an informed participant in preventing duplicative billing
- What data will be transmitted and how that data will be used to inform the care plan
- The expectation for frequency of monitoring to encourage engagement
- When to seek urgent medical evaluation based on readings taken on RPM device
- That the RPM enrollment can be terminated and how to do so
- How data transmitted “after hours” will be managed, if not offering 24/7 monitoring

Data and billing management

- Continuous data allows for proactive care but can be a challenge for integration into standard workflows. Options exist within some EHR platforms to set alert parameters so that the care team is notified of alert values in real time, but not of every value taken, and can review aggregate data as needed. Organizations without these capabilities can partner with one of the increasing numbers of RPM vendors on the market for management of data and additional tools including RPM service documentation and billing management. Klas Research is one resource for evaluation and comparison of software and service companies in the RPM space.²
- Please refer to the Additional Resources section at the end of this toolkit for more information.

Implementing RPM – The When

TABLE 3: TIMELINE OF STRATEGIES FOR IMPLEMENTATION³

Implementation Process	Strategies and associated characteristics	Example duration
Planning	<u>Gather information</u> <ul style="list-style-type: none"> • Learn about RPM: reference primary resources on RPM billing considerations and best practices for implementation • Complete a Strengths, Weaknesses, Opportunities, Threats (SWOT) analysis • Talk with others who have implemented RPM services • Talk with potential stakeholders about qualities of a desirable service 	3 months
	<u>Select strategy</u> <ul style="list-style-type: none"> • Develop business plan or project proposal that outlines steps for implementation and measures of success • Identify the disease state(s) to be targeted with the RPM intervention • Identify RPM-compatible devices to be used • Complete usability testing - test the education and use of the device with an individual who can represent a real patient • Design a pilot as proof of concept and a plan for gradually rolling out to additional patients/care teams • Establish a consent process • Establish enrollment and un-enrollment processes 	3 months
	<u>Establish leadership, buy in, and relationships</u> <ul style="list-style-type: none"> • Form implementation team to include physician/APP champion(s), key clinical staff, administrative personnel, stakeholders, and specialists from information technology, legal/compliance, and billing • Highlight the need that is being met by the service with potential partners and consider engaging champions of the service to market to others • Designate project leaders to be responsible for management of the service • Establish contracts with partners such as provider practices or RPM vendors • Identify a pilot care team • Consider direct-to-patient marketing of the service 	6 months

Implementation Process	Strategies and associated characteristics	Example duration
Financing	<u>Facilitate financial support</u> <ul style="list-style-type: none"> • Secure funding for the new service • Establish billing/reimbursement structure • If using RPM billing codes, develop a process to tabulate days of readings transmitted and time spent and work with IT support to automate this process if possible • Identify and highlight cost-savings benefits for patients and stakeholders 	6 months
Educating	<u>Develop education</u> <ul style="list-style-type: none"> • Develop workflows and a training guide for care team • Develop patient education materials • Acquire any device troubleshooting guidance or resources that may be needed to support device use <u>Deliver education</u> <ul style="list-style-type: none"> • Host education on the workflows in meetings with each care team role (i.e. explain the actions required for the service by the provider at a clinic provider meeting) • Develop a dynamic plan for ongoing training with a variety of delivery methods to meet the needs of different learning styles • Establish access by the care team to project leaders for ongoing consultation 	3-6 months
Restructuring	<u>Modify the service</u> <ul style="list-style-type: none"> • Revise roles/assignments of staff to meet needs of expansion (i.e. evaluate whether administrative tasks involved could be completed by nonclinical staff) • Include new clinical teams in expansion of the service • Consider offering deployment of RPM devices from additional sites if applicable to increase access • Evaluate the chosen device and consider a change if this would facilitate expansion (i.e. a switch from Bluetooth transmission to cellular transmission) • Evaluate the chosen data access strategy and consider a change if this would improve efficiency (i.e. eliminate the need to access an external platform if data can integrate into EHR instead) • Evaluate the chosen record system and consider a change if different method would facilitate data collection for evaluation of the program 	6-12 months

Implementation Process	Strategies and associated characteristics	Example duration
Managing quality	<u>Evaluation and Intervention</u> <ul style="list-style-type: none"> • Solicit feedback from providers, pharmacists, and patients and ensure a process for using the feedback to inform the service • Spot check encounters to identify opportunities for re-education of staff and providers • Collect and summarize performance data and share with clinicians to inform behavior (i.e. share a report of referrals by provider to encourage increased referring) • Conduct Plan-Do-Study-Act (PDSA) cycles to refine the RPM service • Consider options for provider prompts (i.e. to promote referrals or ensure required actions to complete an RPM encounter are taken, consider a small checklist on the workstation or an EHR-based Best Practice Alert) • Evaluate strategies to promote patient adherence to regular use of RPM device to ensure sufficient data for clinical decision making and that billing requirements are met • Conduct meetings of clinical team to share opportunities and best practices across different sites 	Ongoing

Implementing RPM – The Where

RPM represents a versatile care model for pharmacists working in a variety of practice settings and can be utilized either to support a new service or to enhance an existing service. The following summaries of setting-specific considerations were prepared following one-on-one interviews and small group discussions among OPA Practice Advancement and Innovation Committee members and other Ohio pharmacists.

Non-FQHC Outpatient Ambulatory Care Practices

Practice site specific considerations:

- Pharmacists embedded within an outpatient ambulatory medical clinic have a model that aligns particularly well with the traditional RPM billing structure, as these practices are typically equipped for medical billing and may have established referral and communication processes to support collaborative service models with physicians or qualified healthcare professionals.
- While reporting of CPT codes is common practice in these environments, RPM billing has complexities that require workflow modifications, such as cumulative tracking of time spent in care management and days of data transmission. Further, storage of RPM devices can put strain on clinic space and management of technical aspects of the program, such as device troubleshooting, can detract from time spent in care management.
- Another advantage of this practice setting with respect to RPM implementation is that ambulatory care practices are typically a multidisciplinary environment which can allow for offloading of administrative and technical support tasks to other team members, where appropriate. When the practice is part of a network of clinics implementing the service, opportunities to centralize resources can further promote scaling of the service.

Example program:

- The Ohio State University Wexner Medical Center Primary Care Clinics⁴
Columbus, Ohio

Contact:

- Jen Sabatino, PharmD, BCACP
Clinical Pharmacist - Ambulatory Care
OSU General Internal Medicine Clinics & OSU Physicians Virtual Care Center
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Federally-Qualified Health Centers (FQHCs)

Practice site specific considerations⁵⁻⁸:

- Payment and reimbursement policies, particularly Medicaid parity for RPM services, are critical for sustainability, as FQHCs often face workforce shortages and financial constraints that can limit program expansion. FQHCs can experience inadequate reimbursement for RPM services, which undermines the financial sustainability of these programs and exacerbates workforce recruitment and retention challenges.
- Equity considerations are paramount, as FQHCs serve populations with high rates of socioeconomic disadvantage, limited English proficiency, and variable digital access. Addressing these disparities requires investment in patient training, provision of devices, and reliable broadband access. FQHCs have reported mixed results in overcoming these barriers, highlighting the need for long-term policy support and infrastructure investment to ensure that RPM can be scaled and sustained in safety-net settings.
- Patient engagement and sustained use of RPM can be hindered by low health and digital literacy, lack of awareness of RPM benefits, and inconsistent access to reliable internet or devices, particularly among patients living in areas affected significantly by social determinants of health. At the same time, this population has the potential to benefit most from a more accessible care model that overcomes common barriers to in-office management. Pharmacists can partner with care teams in FQHCs to provide education and resources to promote productive engagement in RPM services that facilitate efficient chronic disease management for this vulnerable population.

Example program:

- Neighborhood Family Practice Community Health Centers
Cleveland, Ohio

Contact:

- Katie Posendek, PharmD, BCACP, 340B ACE
Director of Pharmacy
Neighborhood Family Practice
KPosendek@nfpmcenter.org

Community Pharmacies

Practice site specific considerations:

- Being typically separated from the eligible billing provider both physically and with respect to EHR access adds several administrative challenges and logistical barriers to implementation for community pharmacists within traditional RPM billing structure. In order for time spent by the pharmacist to “count” toward RPM care management codes, a business agreement with the eligible billing provider is required. Further, putting a consult agreement for management of drug therapy in place significantly maximizes the impact community pharmacists can make in RPM practice models.
- While identifying and gaining access to the provider or practice may prove challenging, RPM as a service model sells itself well as it improves clinical outcomes and increases the value of care provided, revenue, and wRVUs for the practice without increasing patient visit burden or staffing demand. Once that relationship and agreement are identified and established, the pharmacist must implement a process for documenting RPM activities and time spent in a format that can be shared with the billing provider for monthly submission of charges. Partnership with an RPM vendor and/or utilization of RPM software can facilitate these aspects of the service. Keeping referrals to the service top-of-mind for partnering providers can be more challenging without the face time often needed with the practice in order to build relationships, so identifying a target population or disease state that ties to a value-based metric or other priority for the practice can promote engagement.
- Alternatively, some community pharmacies in Ohio have developed RPM services outside of the traditional billing model, in example through partnership directly with the payer. This model often retains all of the logistical elements of a traditional RPM service but eliminates the need for a physician or qualified healthcare professional to submit charges, as reimbursement to the pharmacy occurs not through payment of CPT code-based billing, but through contracts with per-member-per-month or value-based terms.

Example program:

- Shrivens Pharmacy
Multiple locations, Southeast Ohio

Contact:

- Andrea Kowalski, PharmD
Director of Clinical Services
Shrivens Pharmacy
Andrea.Kowalski@shrivenspharmacy.com

Hospital Outpatient Department (HOD)

Practice site specific considerations:

- Pharmacist contracting practices in hospital-based clinics can interfere with provider reporting of care management billing codes based on pharmacist time, as the pharmacists may not be credentialed within the same department as the physician or qualified healthcare professional. Facility billing and pharmacist contracting practices can impact reimbursement and the model under which pharmacy services are financially supported.
- When traditional RPM billing is not supported, HOD pharmacists may propose RPM care models for services that align with cost-avoidance and quality improvement priorities for the organization. Many health systems participate in risk-based or value-based payment contracts. As such, a health system may support, for example, a pharmacist-led heart failure service aimed at reducing readmissions and ED utilization by utilizing clinic-provided weight scales that transmit to the EHR, allowing for earlier detection of clinical deterioration.

Example program:

- Multiple, in various stages of implementation

Contact:

- Please reach out to info@ohiopharmacist.org and OPA can put you in touch with a representative with experience in HOD implementation.

Implementing RPM – The Why

Evidence suggests that RPM can improve clinical outcomes for a variety of chronic conditions, including hypertension, heart failure, and diabetes. For example, a 2025 study of 5057 patients engaged in hypertension management by a pharmacist utilizing RPM demonstrated higher rates of BP control across racial subgroups when compared to usual care.⁹ Hassan et al. reported that 90% of participants in a remote hypertension management program maintained their target systolic blood pressure 42 months after enrollment, demonstrating long-term benefits of RPM for hypertension management.¹⁰ Similarly, systematic reviews demonstrate that telemonitoring and telehealth reduce heart failure rehospitalization and mortality.¹¹ For diabetes, Aggarwal et al. found that continuous glucose monitoring (CGM) improved HbA1c levels, reduced hospitalizations, and reduced instances of diabetic ketoacidosis.¹² These findings highlight the wide-ranging benefits of RPM in chronic disease management.

In addition to improving clinical outcomes, RPM has demonstrated the ability to lower healthcare costs. Tan et al. conducted a systematic review that found RPM interventions demonstrated a downward trend in the risks of hospital admission/readmission, length of stay, number of outpatient visits and non-hospitalization costs.¹³ Similarly, Lynch et al. found that telehealth can lead to cost savings through in-home monitoring for heart failure patients.¹⁴ In their study, nurse and pharmacist interventions utilizing home monitoring prevented 26 emergency room visits over five months.

Pharmacists are well-positioned to support RPM services due to their accessibility and expertise in management of chronic disease. Pharmacists have demonstrated the ability to provide effective clinical interventions in patients with chronic conditions such as hypertension, diabetes, and heart failure when utilizing RPM.¹⁴⁻¹⁶ Notably, in a meta-analysis of randomized controlled trials of interventions targeting barriers to hypertension control, Mills et al. found that pharmacist led-interventions resulted in the greatest blood pressure reductions, making them significantly more effective than multiple health care professionals, nurses, and physicians at delivering interventions.¹⁷

Pharmacists can leverage the RPM model of care to provide accessible, efficient, and effective chronic disease state management and lower healthcare costs.

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Additional Resources:

- [American Medical Association - Remote Patient Monitoring Playbook](#)
- [Bipartisan Policy Center - The Future of Remote Patient Monitoring](#)
- [National Association of Community Health Centers - Self-measured Blood Pressure Monitoring \(SMBP\) Implementation Toolkit](#)
- [National Association of Community Health Centers - Reimbursement Tips: Remote Physiologic Monitoring \(RPM\) & Remote Therapeutic Monitoring \(RTM\)](#)
- [US Department of Health and Human Services - Billing for remote patient monitoring](#)
- [Independent Pharmacy Cooperative - Digital Health for Independent Pharmacies](#)

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