Remote Patient Monitoring Workbook

Executive Summary

Medical practices have the opportunity to develop a new care channel that increases quality of care, complements value-based initiatives, increases touch patients with patients, improves care plan compliance and generates recurring revenue from non-face-to-face visits. By implementing Remote Patient Monitoring for at-risk patients who have hypertension, diabetes, COPD, CHF, obesity, renal disease, or any other medical condition warranting physiological monitoring, practices could earn up to $1,200 per year per enrolled patient.

Background

In 2018 CMS published a set of new codes for reimbursement of Remote Physiological Monitoring, also known as Remote Patient Monitoring or “RPM,” as a new form of non-face-to-face care not subject to the existing reimbursement limitations of telemedicine.

The key elements of any RPM program are the following:

- The provider identifies a patient for whom he/she believes that daily at-home monitoring of at least one physiological parameter, such as blood sugar, blood pressure, or weight, would likely improve health outcomes (improve quality of life, reduce hospitalizations);
- The provider discusses with the patient his/her desire to monitor the patient, obtains consent, documents medical necessity, and identifies the physiological thresholds at which alerts shall be generated;
- The provider arranges for the patient to receive a monitoring device and initiates daily recordings, which are sent electronically to the provider’s monitoring team;
- The monitoring team reviews daily recordings, responds to alerts, discusses issues with the patient, suggest changes to the care plan, and recommends follow-up visits. These increased and continuous touch points are expected to increase the patient’s engagement in their health and reduce complications.

Beginning Jan 1, 2020, these codes are now applicable to work done by auxiliary personnel (clinical staff) incident to general supervision\(^1\) and can be outsourced to contracted vendors\(^2\). It


\(^2\) “The physician or other qualified healthcare professional supervising the auxiliary personnel need not be the same individual treating the patient more broadly. However, only the supervising physician or other qualified healthcare professional may bill Medicare for "incident to" services.” [https://www.foley.com/en/insights/publications/2019/11/cms-finalizes-new-rpm-code-general-supervision](https://www.foley.com/en/insights/publications/2019/11/cms-finalizes-new-rpm-code-general-supervision)
is anticipated that cost-sharing for RPM codes could be eliminated by 2021 as part of a new fraud-and-abuse proposal being considered by CMS\(^3\).

**Codes ($ Maximum / $ APP rate / $ Minimum if copay not paid)**

99453 RPM Setup ($19 / $16 / $13)
This code can be applied one time per patient per episode of care to reflect the work involved in onboarding a patient onto the clinician’s RPM program.

99454 RPM Device ($64 / $54 / $43)
This code offers reimbursement for supplying the patient with an FDA-approved medical device and for the alert transmission service for a 30-day period. 99454 can be billed every 30 days.

99457 RPM First 20 min ($51 / $44 / $35)
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.
The kinds of activities that qualify for 99457 include reviewing data, reviewing the EHR record, comparing data to target parameters, discussing results and changes with the patient, changing the care plan based on data, responding to patient questions regarding the data, and more.

99458 RPM Additional 20 min
Same criteria as 99457 but additional 20 min. Not to exceed two times per month.

---

RPM Coding Notes

- **Can** be billed in the same months as CCM, TCM, and BPI
- Billing provider must have at least one face-to-face visit with the patient in the preceding 12 months
- Billing provider must be a QHCP (MD, DO, NP, PA)
- Time accrued on a day spent performing an E/M visit is recorded cannot be counted towards 99457/8.
- Report codes only once per 30 days regardless of the number of parameters measured
- Don’t bill if or with
  - A more specific code applies
  - 99091 (legacy remote monitoring code)
- Don’t count time related to another reported service
- The initial set-up code (99453) can be billed after 16 days of monitoring. The transmission code (99454) should be billed at the end of each 30-day monitoring period or after monitoring has ended (if less than 30 days). 99457/8 are billed on a calendar month basis.
- Document the following in the medical chart:
  - Medical condition to be monitored, its severity and history
  - Medical necessity and rationale for monitoring
  - Goals of RPM for this patient

---

4 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.


6 https://www.getqardio.com/qardiomd-blog/remote-monitoring-codes/
### Remote Patient Monitoring Cheat Sheet

<table>
<thead>
<tr>
<th>Code</th>
<th>Notes</th>
<th>Revenue (MD/DO)</th>
<th>Support services (cost)</th>
<th>Net</th>
</tr>
</thead>
<tbody>
<tr>
<td>99453</td>
<td><strong>RPM set up</strong>&lt;br&gt;• Remote monitoring of physiologic parameter(s) (eg, weight, blood pressure, pulse oximetry, respiratory flow rate), initial set-up and patient education on use of equipment.&lt;br&gt;• Must be FDA approved device</td>
<td>$19 (once/pt)</td>
<td>$15 (once/pt)</td>
<td>$4</td>
</tr>
<tr>
<td>99454</td>
<td><strong>Device</strong>&lt;br&gt;• Device(s) supply with daily recording(s) or programmed alert(s) transmission, each 30 days. This code offers reimbursement for providing the patient with a device for a 30-day period. 99454 can be billed every 30 days.</td>
<td>$64/mo</td>
<td>$25/mo</td>
<td>$39/mo</td>
</tr>
<tr>
<td>99457</td>
<td><strong>RPM first 20 min</strong>&lt;br&gt;• 20 min of physician, QHP or clinical staff time, incident to general supervision&lt;br&gt;• Do not count time on the same day as E/M visit&lt;br&gt;• Qualifying activities including reviewing data, educating pt, responding to pt’s questions, validating/controlling data, modifying care plan, d/w care manager</td>
<td>$51/mo</td>
<td>$20/mo</td>
<td>$31/mo</td>
</tr>
<tr>
<td>99458</td>
<td><strong>Additional 20 min</strong>&lt;br&gt;• 20 additional minutes of time&lt;br&gt;• Max twice per month</td>
<td>$51/mo</td>
<td>$20/mo</td>
<td>$31/mo</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td>$166/mo</td>
<td>$65/mo</td>
<td>$101/mo</td>
</tr>
</tbody>
</table>

**Net: $101/mo per patient**<br>10 pts = $1,010 /mo | 100 pts = $10,100 /mo | 500 pts = $50,500 /mo

### Key Issues
- Device mgmt (selection, purchasing, storing, shipping, maint.)
- Patient engagement (candidate selection, software/hardware onboarding, compliance and longevity w/ program)
- Workflow integration (EMR integration, documentation of med necessity, minimal disruption to current practice)
- Billing/coding (integration into current RCM process)
- Compliance (audit trail of time & activities)

### References
- Foley & Lardner LLP
- Powers Law
- mHealth

### Contact: Alex Mohseni, MD FACEP | amohseni@accuhealth.tech | 301.706.4461

Prepared by Alex Mohseni, MD | amohseni@accuhealth.tech | 301.706.4461 | Please consult your healthcare attorney 4
Vendor Assessment

Many vendors offer a varying range of products and services to support RPM initiatives. In evaluating a vendor, here are key elements to explore:

1. Device management
   a. Types of devices offered
   b. FDA approved
   c. Physiological parameters measured
   d. Ease of use
   e. Connectivity medium (WiFi, Bluetooth, cellular, other)
   f. Shipping and tracking
   g. Returns and cleaning
   h. Who buys the device
   i. Minimum purchase orders

2. Patient engagement
   a. Onboarding onto the service
   b. Verification and documentation of consent
   c. Reminders to measure
   d. Engagement recovery
   e. Games and prizes
   f. Churn rate (% of patients lost each month)

3. Clinical support
   a. Is there a clinical monitoring service
   b. How are alerts responded to
   c. How are alerts filtered
   d. How are escalations communicated
e. How is communication with patient performed, timed, and documented

f. Average alerts per patient per week

g. Typical engagement minutes per patient per month

4. Workflow integration
   a. How orders/referrals for RPM services are generated
   b. Integration into EMR (ordering, receiving data)

5. Billing/coding
   a. Is work timed automatically or manually
   b. Types of reports generated
   c. Ability to export data in format ingestible by practice
   d. Ability to bill on behalf of provider

6. Compliance
   a. Audit trail of work done
   b. Recordings of communications
   c. HITRUST, SOC2, HIPAA
   d. Audit of RPM services by health care law firm

There are vendors who offer full-service RPM programs such that the only key remaining responsibilities for providers are to identify the patients for whom monitoring would be beneficial, communicate which parameter to monitor, provide medical decision making, respond to escalated alerts, and bill.

| Identify Patient → RPM vendor manages program → Provider manages MDM and escalated alerts |
Suggested Workflow

1. Provider identifies a patient who could be a good candidate for RPM
   a. Inclusion criteria
      i. Medicare (Original or Medicare Advantage) patient;
      ii. Has at least one physiological parameter that is poorly controlled or is otherwise high-risk, with the recommendation being to limit initial focus to blood pressure and blood sugar until workflows are optimized.
      iii. Patient expresses a desire to improve his/her medical condition;
      iv. Patient would be able to use a device to measure his/her own physiological parameter, or has somebody at home do it for them;
   b. Exclusion criteria
      i. Patient is already receiving RPM through another provider
2. Provider (or support staff) communicates to patient their desire to implement the RPM program, expected value of program, potential patient responsibility (copay = 20%, so ~$20-40/month) if they do not have supplemental insurance/Medigap;
3. Provider (or support staff) obtains verbal consent and documents consent in the chart;
4. Provider documents medical necessity (what is being measured, why, goals, [see above])
5. Provider orders RPM services for the patient, either via integration in EMR (placing an order, just like placing any other order), or using online interface of RPM vendor, or fax (depends on which vendor chosen)
6. RPM vendor receives order and calls the patient to verify understanding of program and desire to participate. RPM vendor documents conversation.
7. RPM vendor sends appropriate device to patient by mail
8. RPM vendor sets the threshold physiological parameters for the patient on the platform based on the practice’s settings (these can also be patient-specific).
9. RPM vendor calls the patient after the device is delivered and onboards the patient over the phone. RPM vendor performs the first measurement with the patient on the phone to verify understanding and ability.
10. RPM vendor initiates patient onto reminder service
11. Patient performs daily measurement
12. RPM vendor’s clinical team reviews each incoming result on a daily basis.
13. RPM vendor’s clinical team calls patients when results are concerning and/or above thresholds. Some conversations uncover concerning issues, resulting in an escalation, which is sent to the practice’s designee of choice.

---

7 “What is the state of private payer coverage and reimbursement for RPM services? In states with telehealth coverage and/or reimbursement parity that include RPM in the definition of telehealth, coverage and payment may be required, depending on how the state law is written. One example is Virginia, which just passed a law requiring commercial payers to cover RPM.”

Prepared by Alex Mohseni, MD | amohseni@accuhealth.tech | 301.706.4461 | Please consult your healthcare attorney
14. Practice designee receives the escalation notice, pulls up patient chart in the EMR and performs and documents their response:
   a. Call the patient directly
   b. Ignore
   c. Arrange for follow up appointment
   d. Refer to specialist
   e. Ask RPM vendor to do something (e.g., “call patient and have them see us tomorrow”)

15. Billing data exported monthly and sent to practice
## Financials

<table>
<thead>
<tr>
<th>Code</th>
<th>Summary</th>
<th>Reimbursement (Medicare Allowable)</th>
<th>Vendor Fee</th>
<th>Net to Practice</th>
</tr>
</thead>
<tbody>
<tr>
<td>99453</td>
<td>RPM set up</td>
<td>$19 one time</td>
<td>$15 one time</td>
<td>$4 one time</td>
</tr>
<tr>
<td>99454</td>
<td>Device/Data</td>
<td>$64 /mo</td>
<td>$25 /mo</td>
<td>$39 /mo</td>
</tr>
<tr>
<td>99457</td>
<td>RPM first 20 min</td>
<td>$51 /mo</td>
<td>$20 /mo</td>
<td>$31 /mo</td>
</tr>
<tr>
<td>99458</td>
<td>RPM add’l 20 min&lt;sup&gt;8&lt;/sup&gt;</td>
<td>$51 /mo</td>
<td>$20 /mo</td>
<td>$31 /mo</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td>$101 /mo</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Number of Enrolled Patients</th>
<th>Net Income / month (After vendor fees)</th>
<th>Net Income / year (After vendor fees)</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>$1,010</td>
<td>$12,120</td>
</tr>
<tr>
<td>100</td>
<td>$10,100</td>
<td>$121,200</td>
</tr>
<tr>
<td>1,000</td>
<td>$101,000</td>
<td>$1,212,000</td>
</tr>
<tr>
<td>10,000</td>
<td>$1,010,000</td>
<td>$12,120,000</td>
</tr>
</tbody>
</table>

<sup>8</sup> This table assumes 99458 being billed only once per patient per month, but this code can be billed up to twice per month, when medically necessary. Interviews with RPM vendors reveal that many patients qualify for 99458 being billed at least once per month.
Further Reading

Remote Patient Monitoring: Reimbursement, RPM Success Stories, and Adoption
NOTE: this article was published before the “incident to” rule for RPM was updated from direct supervision to general supervision effective Jan 1, 2020.

Medicare Remote Patient Monitoring: CMS Finalizes New Code and General Supervision

2019 Medicare Physician Fee Schedule and Quality Payment Program CMS Proposed Rule CPT Codes 99453, 99454, and 99457 – Everything You Need to Know

Medicare Remote Patient Monitoring Reimbursement FAQs: Everything You Need to Know About Chronic Care Remote Physiologic Monitoring Codes


For further information, please contact

Alex Mohseni, MD FACEP
amohseni@accuhealth.tech
301-706-4461 (mobile)
https://www.linkedin.com/in/alex-mohseni-2142b87/