Remote Patient Monitoring (RPM) TOOLKIT

Pre-Implementation Phase

STEP 01: Create Executive Team To Complete the Pre-Implementation Phase

Include Executives from Nursing, Physician Staff, Finance Department, IT and the Quality Department.

This Executive Team will:

- Clearly define the roles of the Executive Team.
- Clearly define timing of internal meetings, internal data reports and documentation.
- Adjust the project schedule and deliverables to account for equipment vendor upgrades and EMR updates.
- Complete Steps two through six.
- Execute Memorandums of Understanding
- Contractual Documents should be in place to address equipment vendor upgrades, EMR upgrades, and any supporting activities to ensure fulfillment of requirements.
**STEP TWO:**
Determine Organizational Readiness

- Review internal strategic business plan and determine how the RPM solution can support the organizations goals.
- Identify other initiatives that may impede RPM implementation.
- Determine RPM champion(s).
- Obtain buy-in from key stakeholders including Medical and Nursing staff, Finance Department staff and the Quality Team.

**STEP THREE:**
Determine Organizational Needs

It is critical to determine how RPM can assist the organization in accomplishing clinical goals, admissions/readmission goals, and billing and coding goals.

*Examples of Organizational needs may include:*
- Decreasing < 30-day In-patient hospital readmissions
- Decreasing hospital In-patient admissions
- Decreasing ER usage
- Decreasing number of in-home skilled nursing visits
- Increasing quality scores
- Increasing patient engagement
- Increasing patient satisfaction
- Enhancing clinical outcome indicators
- Increasing Medicare reimbursement.

Define measurable objective goals based on the needs.

*Examples include:*
- Decreasing < 30-day IP readmissions by a certain percent (i.e. 20%-30%)
- Decreasing ER usage by a certain percent (i.e. 20%)
- Decreasing in-home visits by a certain number (i.e. 3-5)
- Lowering Hgb A1C levels by a certain percentage.
- Maintaining blood pressure levels.

**STEP FOUR:**
Define Return on Investment Methodology and Sustainability Plan

Sustainability is the most critical long-term program goal to be met.

**Determine financial goals.**

**Determine data indicators to monitor and analyze including but not limited to:**
- # < 30-day IP hospital readmissions
- # Total In-patient hospital admissions
- # ER visits
- # Hospital bed days
- Costs and reimbursement for above data sets
- Clinical indicators (BP, HR, Glucose, O2 level)
- Patient Satisfaction (develop data collection tool)
- Provider and Staff Satisfaction (develop data collection tools)

**Determine timeline for pulling and analyzing data.**

*Examples include:*
- 30 days prior to RPM implementation
- 1st 30 days on RPM
- 30 days after completing the RPM program.

Analyze financial outcomes every 6 months.

Review evaluation plan and clinical workflows and adjust as needed on an annual basis.
**STEP FIVE: Identify, Vet and Select RPM Device Vendors**

Things to consider in selecting a vendor include but are not limited to:

- Patient population
- Ease of use
- Transmission options to overcome geographic and demographic barriers (i.e. POTS, cellular providers, connectivity, and Wi-Fi and the patient has means to communicate via phone).
- Reporting capabilities
- EHR Integration
- Clinical and technical components for implementation
- Cost

**STEP SIX: Define RPM Conceptual Model**

Each organization needs to evaluate internal resources and associated costs for managing devices and providing RPM services.

Device management includes:

- Receive devices
- Inventory, tag and store devices
- Pull devices for installation
- Device installation
- Device de-installation
- Clean and refurbish devices after de-installation
- Utilize device vendors inventory management tools.

Keep devices in a central location.

**How device management will be provided?**

This can be an internal non-clinical person, or these responsibilities can be outsourced to the device vendor. Best practice for RPM installation, education and patient competency validation is in-home installation. If the organization has the human and material resources to provide this service, it is best for the patient.

**Remote Patient Monitoring Clinical RPM services includes:**

- Alert validation- can be provided by non-clinical staff.
- Data monitoring-can be provided by an LPN or RN (RN is best practice).
- Conduct nursing assessment, provide patient education, and escalate validated actionable data to the patient’s primary care provider- Must be provided by a RN.
- Tier 1 device troubleshooting- can be provided by non-clinical staff but is usually provided by the nurse monitoring the patient.
- Non-adherence calls- can be provided by non-clinical staff.

**How will the RPM services be provided?**

These services can be provided by internal clinical and non-clinical staff or outsourced to an RPM Clinical Service Provider.

Many organizations use a hybrid mix of conceptual models based on current available human and material resources.

**Examples of RPM Conceptual Models:**

- Insource device management and RPM clinical monitoring.
- Outsource device management and RPM clinical monitoring.
- Insourse device management and outsource RPM clinical monitoring
- Outsource device management and insource RPM clinical monitoring

---
PROGRAM PLANNING

It is essential to incorporate RPM clinical workflows into existing clinical workflows.

Develop Referral, Enrollment and Installation Workflows
Key components to consider include:
- Determine who will identify and refer patients to the program.
- Determine how referrals will be handled (i.e. electronically, via phone or fax).
- Determine who will educate the patient on the program and obtain verbal consent.
- Determine the timeframe for installing devices.

Develop Alert Escalation Workflow- RN Guide to Monitoring RPM Alerts
The purpose of RPM is to monitor for trends in a patient’s health to help the provider determine the most appropriate plan of care and to also help the patient learn self-management skills. It's important to look at multiple readings over multiple days to analyze trends.

Patients are monitored by a RN during normal business hours. All alerts received during the business day shall be reviewed by a RN within 4 hours of the alert. An RPM RN will review each alert and check on the patient if readings or trends are concerning, conduct a proper nursing assessment, provide education and alert providers of changes in a patient’s condition.

When reviewing the alert and discussing/triaging with the patient, keep in mind factors that could influence the accuracy of a home blood pressure reading i.e. proper blood pressure taking technique, stress, exercise or smoking prior to reading, and when the patient last took medication. Create a balance between the frequency of nurse calls to the patient and focus on trended data over time.

Documentation
Document the review of the alert and any intervention/education provided. If nursing judgment dictates that patient does not need to be called, document that the alert was reviewed, rationale for no action as compared to the patient’s plan of care.

Develop De-Installation Workflow
Determine the length of monitoring based on stability of readings, patient compliance, and availability of resources.

Specific length of monitoring guidelines or specific discharge criteria can be set by medical directors and followed by RPM RNs in case of limited resources.

Determine discharge criteria. Criteria can include the following:
- Patient meets goals, reading are stable and the patient is compliant.
- Patient is non-adherent.
- Patient requests to stop the program.

Determine discharge process and de-installation and refurbishment of RPM devices.

EHR Integration
- Partnering early with EHR vendor is critical – especially if moving toward an interface build.
- Prepare to spend a lot of time, planning and re-planning when interfacing RPM vendor software with the EHR.
- Identify Key Stakeholders to participate in the EHR network to keep costs down.

Staffing
Typical staffing ratios is one RN for every 85-100 patents.

Determine the skillsets needed and training aligned for each clinical role including:
- Good understanding of RN care coordination and triage.
- Ability to work within multiple care teams.
- Flexibility in managing and supporting different care teams
- Aren’t afraid to ask hard questions
- Work in collaborative ways to obtain success.
Patient volume is critical to determine resources needed to support the program. A limited RN workforce can challenge an organization's ability to hire and maintain the program without RN's being assigned in a partial FTE capacity or outsourcing RPM clinical monitoring services.

Management continuity is essential to support resource allocations including personnel, equipment, and decision-making to ensure the program has enough support and oversight.

Training
Power point training session with Providers, staff, and key stakeholders to explain the program and clinical workflows. Follow up with a reference guide.

Train the direct RPM team on:
- Device Hardware
- Portal Software
- Skillsets needed to work with patients through RPM and phone call outreach.

Communication
Internal Communication
- Develop clearly defined internal and external communication plans.
- Clearly communicate the goals of the program to all internal and external stakeholders.
- Participate in weekly calls, initially, for all partners to start up quickly and address challenges quickly and decisively.
- After the initial few months of the program, calls can occur every other week and continue for the duration of the RPM Program.
- Stay actively engaged with the organizations Executive Team to ensure success.

External Communication
- Engage a payer or other organization early in the program if you desire to expand RPM.
- Identify partners with similarities to make collaboration successful, for example the same EHR, similar workflows.

Provider Communication:
- Providers need to clearly understand the Inclusion Criteria for the program and how to make a referral.
- Determine the frequency that providers will receive patient data reports.
- Determine how much trending data the providers prefer.
- Determine where providers want the results/reports.
- An interface between the RPM device vendor and EHR helps with communication between the RPM program and the providers.
- RN will make recommendations for the patient to continue monitoring, to be graduated from the program or other recommendations.

Patient Communication
- Frequent virtual outreach with the patients is critical for them to continually learn about their disease management/decision-making.
- RN will meet with RPM patients in their home to enroll the patient, install devices and assure devices are working properly.
- Identify barriers to a patient taking readings or to the successful transmission of RPM readings.
- Review patient medications
- The RN enrollment visit may also be conducted at a clinic office visit if the patient is not agreeable to a home visit, if RPM staffing time is limited, or if concerns over staff safety during a home visit.

Enrolling a patient into RPM requires assessment and education within the RN Scope of Practice to make sure a patient takes accurate readings and that patient understands the readings and monitoring parameters.

The RN scope is necessary to address:
- Proper technique for taking a home blood pressure or blood sugar reading.
- Assessment of education needs for patient and health literacy level/stage of change.
- Review of patient medications and problem list.
- Assessment and triage of patient symptoms or concerns reported during the enrollment visit.
- Triage abnormal readings taken while demonstrating use of equipment.

- Instructions for patients if feeling symptomatic or concerned about a reading during the monitoring period.
- Goal setting and care coordination within the RN scope.
- Ensuring necessary follow up with PCP.

**Installation Checklist**
A RN Checklist will guide nurses in setting up patients on RPM. The checklist is as follows:

<table>
<thead>
<tr>
<th>Task Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Explain RPM and the purpose of the program.</td>
</tr>
<tr>
<td>Review patient medications, diagnoses and purpose for monitoring/monitoring instructions from PCP.</td>
</tr>
<tr>
<td>Explain hours of monitoring and what to do when experiencing symptoms or concerned about a reading.</td>
</tr>
<tr>
<td>Emphasize the on-call provider number for symptoms after hours.</td>
</tr>
<tr>
<td>Be clear that patient is responsible for following up if concerned or symptomatic, as RPM is not a 24-hour triage service.</td>
</tr>
<tr>
<td>Determine availability for regularly standard phone calls</td>
</tr>
<tr>
<td>Make sure the patient has correct devices.</td>
</tr>
<tr>
<td>Cross check the serial numbers on the Inventory Form with the serial number on the back of the blood pressure monitor, scale, enabler or SpO2 monitor.</td>
</tr>
<tr>
<td>Demonstrate how to use device(s), utilizing teach back method. Discuss tips for taking a good home reading.</td>
</tr>
<tr>
<td>Assess if there are any barriers to patient being able to use the equipment or taking own bio-metric readings</td>
</tr>
<tr>
<td>Assess need for education and provide initial education on diagnosis and management.</td>
</tr>
<tr>
<td>Patient’s plan of care for RPM-instructions for taking reading.</td>
</tr>
<tr>
<td>Have patient sign program consent and equipment inventory form.</td>
</tr>
</tbody>
</table>
OUTCOMES

Measures for success of an RPM program include:
- Provider satisfaction
- Patient satisfaction
- Population health clinical outcomes
- Individual clinical outcomes
- Meeting the program budget

Patient Outcomes

Objective patient data such as changes in Blood Pressure, Pulse, Weight, Oxygen Saturation Level, and Glucose Readings are important data to collect and analyze.

Subjective patient stories:
- Positive patient stories/results and the number of incredible outcomes.
- Patient results and interactions with the redeveloping workflows is ongoing and fluid

Medicare Reimbursement for RPM

On January 1, 2019 CMS released 3 new CPT Codes for RPM

CPT Code 99453
Remote monitoring of physiologic parameter(s) initial set-up
- Weight
- Blood Pressure
- Heart Rate
- Pulse Oximetry
- Respiratory Flow Rate
- Blood Glucose

Device set up and patient education on the use of equipment
Average national rate: $21

CPT Code 99454
Remote monitoring of physiologic parameter(s)- device supply

Minimum of 16 parameters transmitted each 30 days
Average national rate: $69 PPPM

CPT Code 99457
Chronic Care Remote Physiologic Monitoring Services

Chronic Care RPM services involve:
- Collection, analysis, and interpretation of digitally collected physiologic data.
- Development of a treatment plan.
- Managing of a patient under the treatment plan.

Billable after 20 minutes or more of clinical staff/physician/other qualified professional time with a patient in a calendar month requiring interactive communication with the patient/caregiver during the month.
Average national rate: $54 PPPM

In September 2018, the CPT Editorial Panel revised the CPT code structure for CPT code 99457 effective beginning in CY 2020. The new code structure retains CPT code 99457 as a base code that describes the first 20 minutes of the treatment management services and uses a new add-on code to describe subsequent 20-minute intervals of the service.

On July 29, 2019, the Center for Medicare and Medicaid Services (“CMS”) released its proposed rule for the 2020 Medicare Physician Fee Schedule (the “2020 MPFS”).
MAJOR TAKEAWAYS

New Reimbursement Opportunities for additional time spent on RPM.

The new code descriptors for CY 2020 are:

**CPT code 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; initial 20 minutes)

**AND**

**CPT code 994X0** (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).

The additional time allowed by this code should prove particularly beneficial for patients requiring significant monitoring and interaction during a month.

**Facilitates the development of fully outsourced business models for Remote Patient Monitoring ("RPM") services**

**General Supervision for “incident to” billing of Remote Patient Monitoring**

In response to stakeholder feedback on CPT Code 99457 established by the final 2019 MPFS, CMS proposes changing the supervision requirement for “incident to” billing of clinical staff time spent on RPM services from direct supervision — whereby clinical staff must be physically located in the same place as the billing practice — to general supervision, allowing clinical staff to monitor patient data and interact with patients remotely, while escalating problems on an as-needed basis to the billing physician or QHCP.

RPM services providers and healthcare professionals share the belief that RPM services can be conducted efficiently and effectively through general supervision of outsourced clinical staff located remotely, as demonstrated by the Chronic Care Management services outsourced business model.

**Remote Patient Monitoring and Chronic Conditions**

In proposing the change from direct to general supervision for RPM, CMS effectively designates RPM as a “care management service,” stating: “because RPM services (that is, CPT codes 99457 and 994X0) 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 believe that CPT codes 99457 and 994X0 should be included as designated care management services."

It is worth noting that the implied requirement that one or more chronic conditions be present for RPM services to be reimbursed is contrary to CMS' prior position on this issue.

Further, the code descriptors for CPT Codes 99453, 99454, and 99457 do not include any reference to chronic conditions, whereby code descriptors for Chronic Care Management services specifically require two or more chronic conditions for reimbursement.