

OPTIMIZING HYPERTENSION MANAGEMENT REMOTE PHYSIOLOGICAL MONITORING PEOPLE & PROCESSES



March 21, 2023 | presented by Christian Milaster

WEBINAR SERIES

Optimizing Hypertension Management
With Virtual Care

Thu,
Feb 23

Interactive Patient Care
for Optimizing Hypertension Management

Thu,
Mar 2

Remote Physiological Monitoring:
People & Processes

Tue,
Mar 21

Remote Physiological Monitoring:
Technology & Vendors

Mon,
Apr 3

Implementing
Virtual Care Services

Tue,
Apr 18



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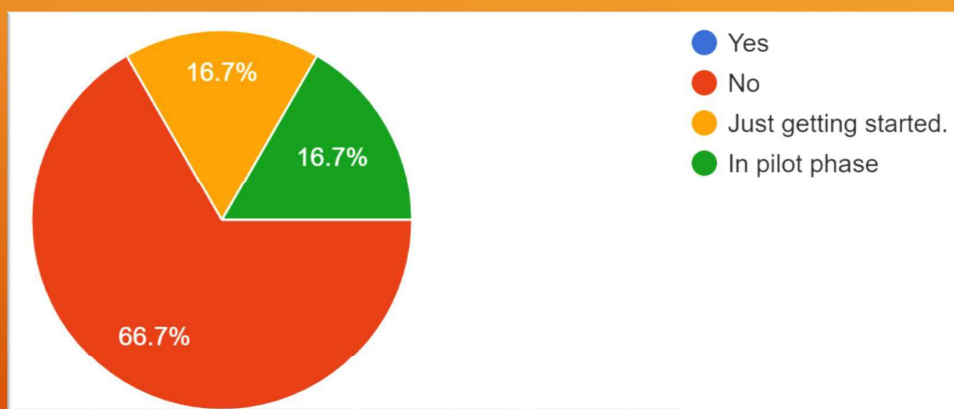


ABOUT YOU!



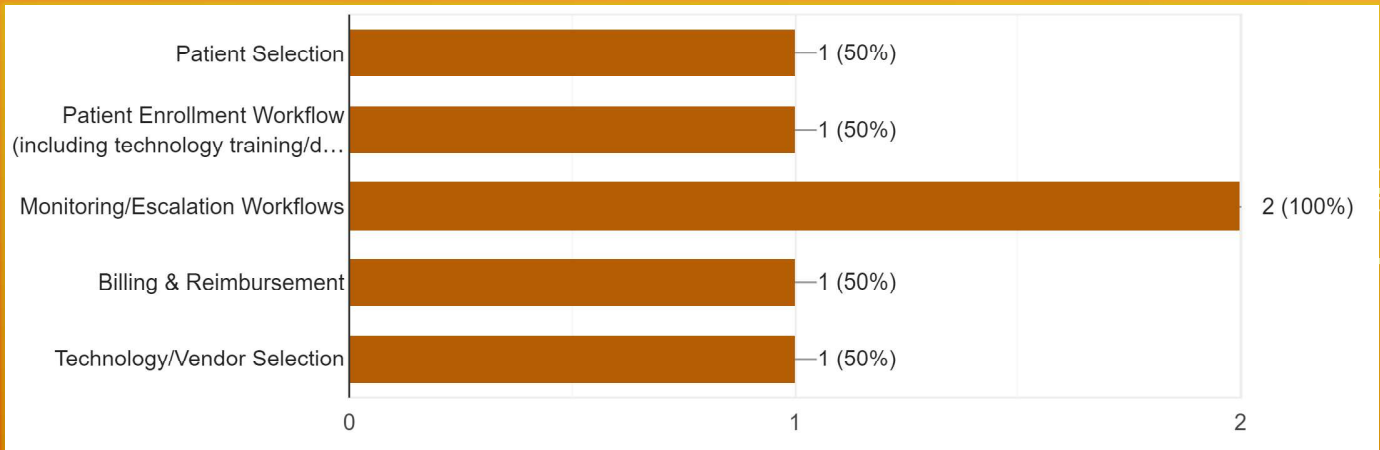
SURVEY QUESTIONS

Does your organization have a Remote Physiological Monitoring (RPM) program?



SURVEY QUESTIONS

What are key challenges regarding your RPM program implementation?



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WHAT ARE YOU MOST INTERESTED IN LEARNING?








- ▶ How to begin implementing a virtual care program with HTN
- ▶ What does it take to implement a HTN Mgmt. Program with RPM?
 - ▶ Are there external services that we could utilize if we do not have the internal capacity to manage such a program?
- ▶ Learning new strategies to expand RPM modalities
- ▶ How to achieve compliance with BP measurements
- ▶ How often is dashboard checked?
- ▶ What resources can you use to monitor vital signs remotely?
 - ▶ 1) How is the equipment supplied?
 - ▶ 2) How are technical problems dealt with?
 - ▶ 3) How does the information get inputted into ECW?
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 - ▶ 5) How to get RPM equipment to my patients
 - ▶ 6) How to incorporate RPM into patients' care



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AGENDA

-  RPM Definitions & Overview
-  RPM Applications
-  RPM Benefits
-  RPM Workflows
-  RPM Reimbursement
-  Launching RPM
-  Q&A & Wrap Up



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ABOUT CHRISTIAN

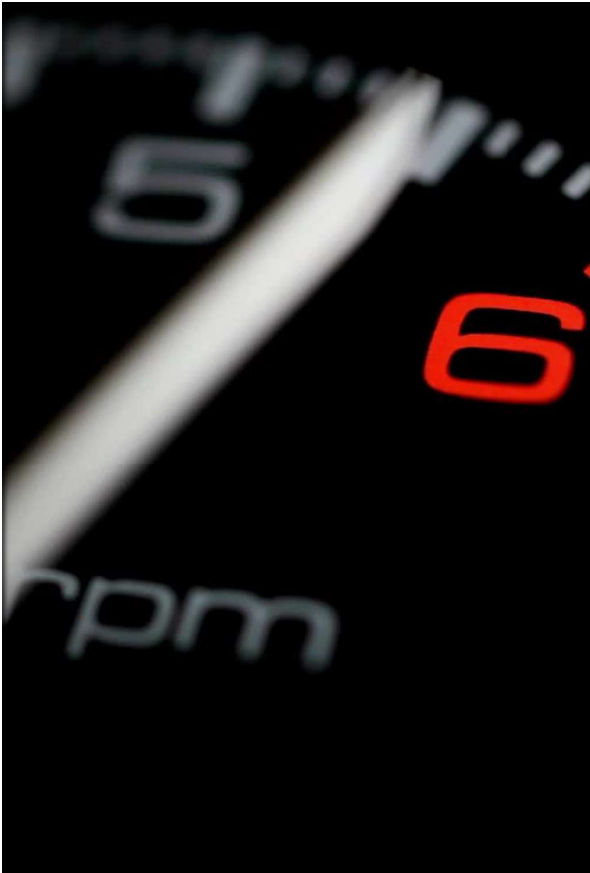


30+ years



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RPM OVERVIEW

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RPM

A digital health dashboard with several glowing blue and yellow gauges. A large red prohibition sign is overlaid on the top-left gauge. The gauges include a speedometer (0-200 km/h), a tachometer (0-5), a fuel gauge (E-F), a temperature gauge (C-H), and a pressure gauge (C-H).

Health Dashboard

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RPM DEFINITION

~~Revolutions per minute~~

Remote Patient Monitoring
Remote Physiological Monitoring

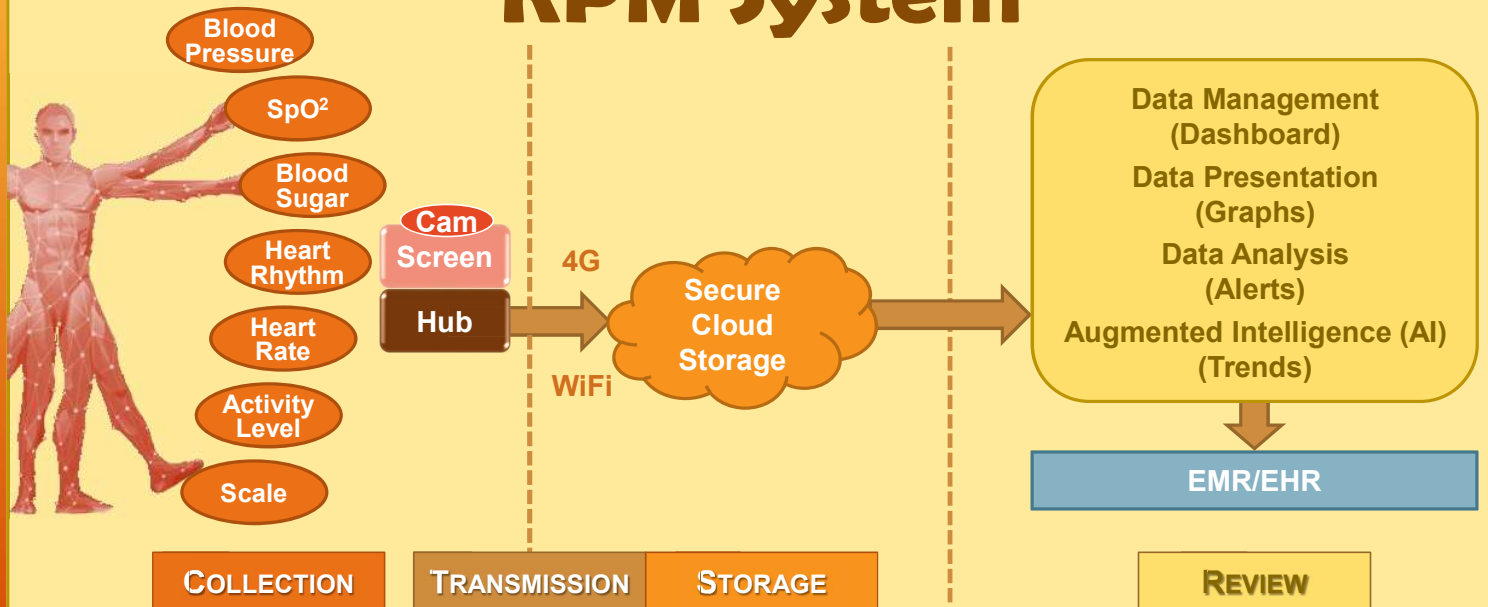
The continuous or periodic collection, transmission and review of physiological data to inform care decisions.



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RPM System

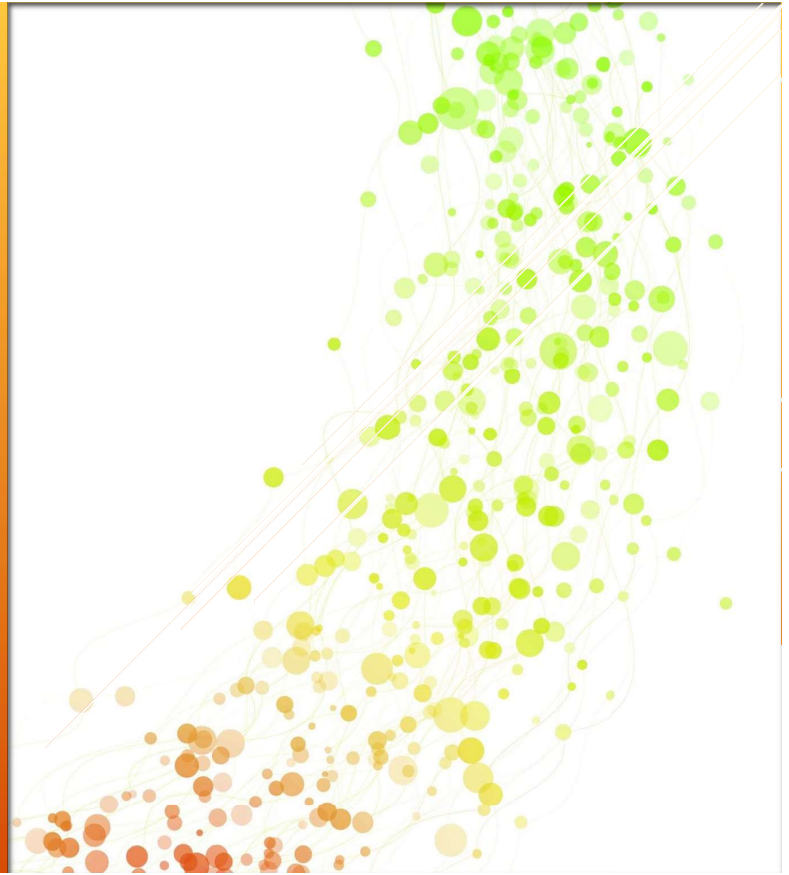


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RPM APPLICATIONS

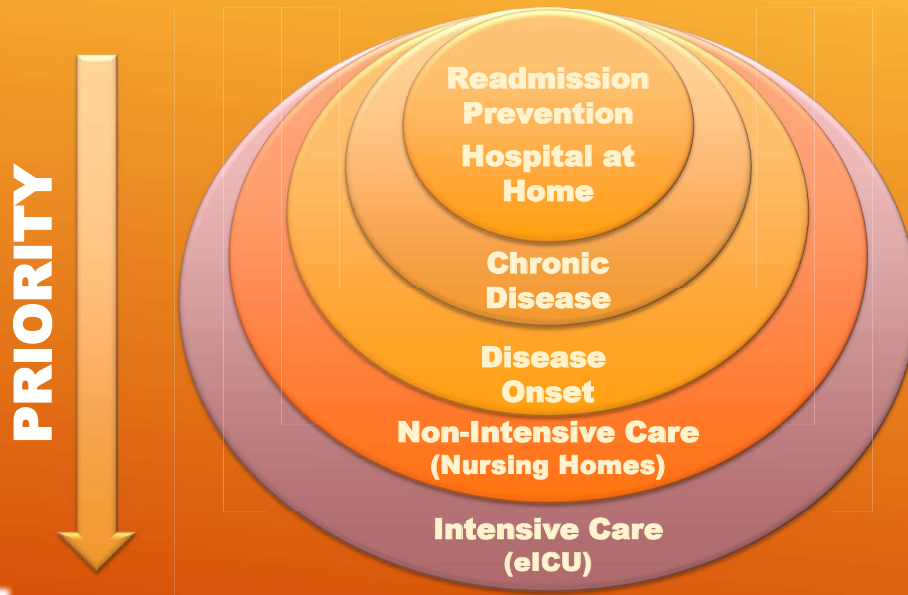
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RPM USE CASES

- ▶ **RPM in a Clinical Setting**
 - ▶ Intensive Care (eICU)
 - ▶ Non-intensive Care (e.g., SNF)
- ▶ **RPM in a Home or Home-like Setting**
 - ▶ “Hospital at Home” models (early discharge)
 - ▶ Short-term readmission prevention
 - ▶ Long-term chronic disease management
 - ▶ Long-term disease onset monitoring (at risk pop.)

PRIORITIZATION OF RPM USE CASES



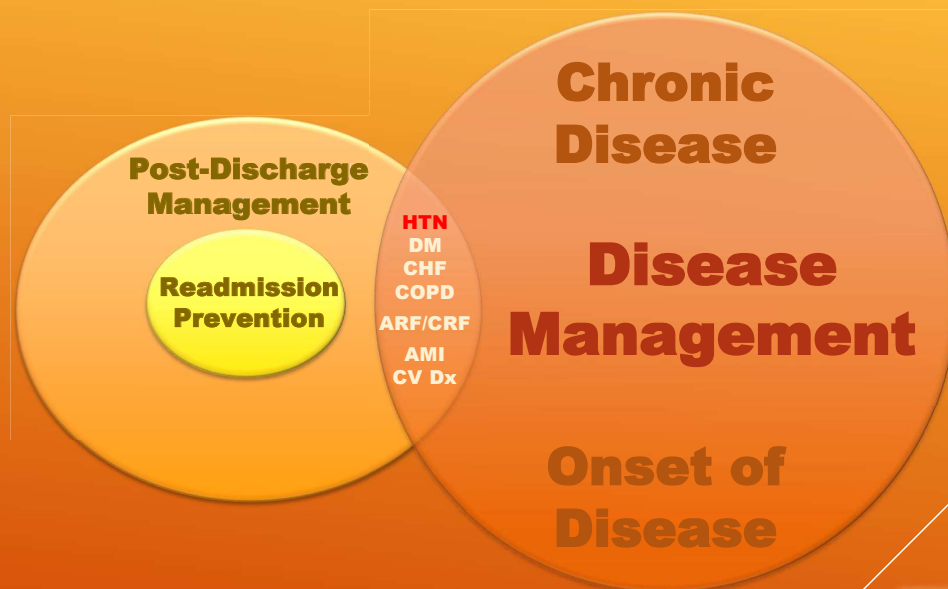
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CLINICAL USE CASES



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RPM BENEFITS

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RPM: CLINICAL BENEFITS

Clinical Care Quality

- ▶ Daily Insights allowing adjustment of the Care Plan
- ▶ With video capabilities, opportunities for interactive visits
- ▶ Better “exam” capabilities – not “flying in the dark”
- ▶ Establishing a Baseline to detect onset of disease

Patient Engagement

- ▶ “Seeing your body” increases patients’ engagement
- ▶ Opportunities for Just-in-Time Education of patients



RPM: RETURN ON INVESTMENT

- ▶ **Reduced Health Care Costs**
 - ▶ Reduced readmissions (e.g., -53%, -60%, -67%, -71%, -75%, -82%)
 - ▶ Reduced skilled nursing visits (e.g., -40%)
 - ▶ Reduced emergency room visits
 - ▶ Savings for payer (e.g., \$1.9M)
- ▶ **More Engaged Patients**
 - ▶ Increased care engagement by 24 minutes/day
 - ▶ Early identification and treatment of disease exacerbation
- ▶ **Overall ROI**
 - ▶ e.g., \$14.50 for every \$1 invested (1,350% ROI)
(\$350k invested = \$5M return)



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RPM WORKFLOW

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RPM Workflow Roadmap

(1) Identification

Qualify suitable patients. Assess clinical, psycho-social, technical factors.

(2) Enrollment

Create Order. Obtain consent. Initial training?

(3) Equipment Setup

Setup and verify equipment at patient's home.

(4) Monitoring

Continual monitoring. Resolution of issues. Escalation when warranted

(5) Recovery

De-Enrollment. Equipment Recovery.

(6) Refurbishing

Cleaning and Calibration.

(7) Post-Monitoring

Patient follow-up and/or tracking.



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QUESTIONS FOR YOU...

**Respond
in the Poll**

Question 1: Who has responsibility for training patients on the use of remote monitoring equipment?

- n/a, community health worker, paramedics, nurse, other staff, etc.

Question 2: Do you have a documented process for reviewing RPM data daily & identifying exceptions that require intervention?

- e.g., n/a, yes, no, kind of (needs improvement)

Question 3: Who reviews the RPM data?

- designated monitoring nurse; each patients' physician's nurse



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SAMPLE DOCUMENTS/PROTOCOLS



Patient Competency Validation Form

RPM Authorization Agreements

RPM Device Maintenance Policy

Alert Parameters

CHF Weight Gain Protocol



Stp	Type		Name	Creator	Owner	Link	Status	Vivify?
(0) General								
	Policy	P-1	RPM Policy		Lynne		1-identified	
	Policy	P-2	RPM Equipment Management Policy					
	Policy	P-3	RPM Equipment Handling Policy	Bonnie			1-identified	x
(1) Identification								
	Workflow	W-1.1	Patient Identification Clinical Workflow	Bonnie	Donna P?			
	Workflow	W-1.2	Off-floor referral process	Christian				
	Workflow	W-1.3	EHR Referral					
	Form	1-F1.1	Inclusion/Exclusion Criteria Checklist	Bonnie				
	Form	1-F1.2	Referral form					
	Policy							
(2) Enrollment								
	Workflow	2-W1	Patient Enrollment		Do			
	Form	1-F1.1	Inclusion/Exclusion Criteria Checklist					
	Form	2-F2	Authorization Agreement					
(3) Equipment Setup								
	Workflow	3-W1	Equipment Deployment Preparation	Bonnie/Christian	St			
	Workflow	3-W2	Equipment Setup & Configuration	Christian	St			
	Workflow	3-W3	Patient Education	Bonnie	St			
	Form	3-F1	Patient Competency Validation	Bonnie	St			
	Form	3-F2	Installation & Retrieval Form	Bonnie	St			
	Form	3-F3	RPM Patient Instructions		St			
(4) Monitoring								
	Workflow	4-W1	Patient Monitoring	Bonnie	Ellen			x
		4-W1.1	Alert Parameter Modification	Bonnie	Ellen			x

- 2-F1 Authorization Agreement.docx
- 2-W1 Enrollment, and Installation workflow ex.docx
- 3-F1 RPM Patient Instructions.docx
- 3-F2 Patient Competency Validation Form.docx
- 3-F3 Device Installation Checklist Form.docx
- 4-F1 Alert Parameters.docx
- 4-P1.1 High Heart Rate.docx
- 4-P1.2 Low Heart Rate.docx
- 4-P2.1 High Blood Pressure.docx
- 4-P2.2 Low Blood Pressure.docx
- 4-P3 Low SpO2.docx
- 4-P4 HF Weight Gain.docx
- 4-P5.1 High Blood Sugar.docx
- 4-P5.2 Low Blood Sugar.docx
- 5P Remote Monitoring Devices Maintenance Policy....
- 5-W1 Deinstallation and Discharge Workflow.docx



[1] IDENTIFICATION



- ▶ **Inclusion/Exclusion Criteria**
 - ▶ Clinical, Physical, Cognitive, Environmental
- ▶ **Workflow for HTN RPM:**
 - ▶ Pre-Identification – HTN Dx, other factors?
 - ▶ Joint Decision – PCP, Pop Health/Care Coord.?
 - ▶ Referral to HTN RPM Service



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INCLUSION/EXCLUSION CRITERIA



Clinical

Diagnoses – HTN Score
Risk Score



Home Assessment

Environmental — e.g., tidiness
Technical — outlets, phone,



INCLUSION/EXCLUSION CRITERIA

1

Physical Dexterity

- Ability collect the data

Cognitive

- Ability to follow instructions

Environmental/technical

- Living at home
- Working phone
- 4G coverage / Home WiFi



[2] ENROLLMENT [3] EQUIPMENT SETUP

2

3

Sample Workflow Steps:

- ▶ Establish patient in RPM monitoring system
- ▶ Prepare patient forms & documents
 - ▶ authorization agreement, consent form
 - ▶ patient competency assessment ("teach back")
- ▶ Set up & test RPM kit at patient's home
 - ▶ Checklist: contact info, record serial numbers, etc.



SETUP VARIATIONS

3

- ▶ **Set up in Clinic**
 - ▶ **Demonstration & Teach back in Clinic**
 - ▶ **Remote Test Transmission**
- ▶ **Set up at Home**
 - ▶ **Community Health Worker, Community Paramedics, Home Health, Case Manager?**
 - ▶ **Test Transmission**



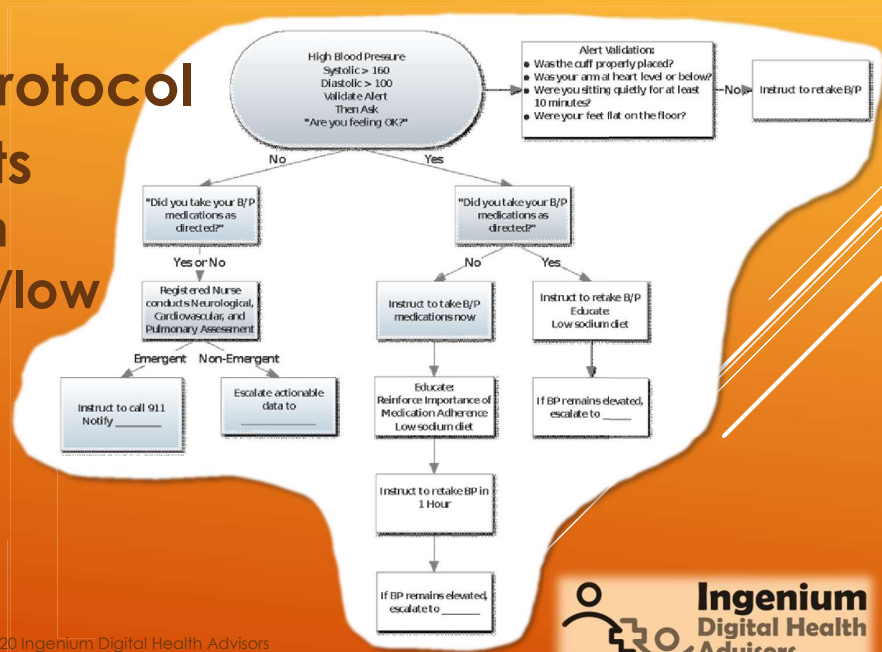
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[4] MONITORING

4

- ▶ **Daily Monitoring Protocol**
- ▶ **Workflows for Alerts**
 - ▶ **No data collection**
 - ▶ **Vital Sign too high/low**
 - ▶ **Alert Validation**
 - ▶ **Medication Protocol**
 - ▶ **Escalation Protocol**



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[5] RECOVERY [6] REFURBISHING



- ▶ **Recovery**
 - ▶ De-Enrollment
 - ▶ Equipment Recovery
- ▶ **Refurbishing**
 - ▶ Cleaning
 - ▶ Calibration



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[7] POST-MONITORING



- ▶ **Periodic Patient Follow-Up**
- ▶ **Post monitoring Tracking**



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RPM MONITORING STAFF OPTIONS

	Clinical Activities	Logistics
Option A	Health Center Nurse (HC RN)	
Option B	HC RN	Outsourced
Option C	Outsourced	
Option D	HC RN w/ outsourced backup	



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RPM REIMBURSEMENT

Chronic Care Management (CCM)
and
Remote Patient Monitoring (RPM)

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RPM & CCM REIMBURSEMENT

FQHCs that have opted out of APGs are unable to bill for RPM services.

NYS Medicaid – Yes (RPM; CCM?)

Medicare – Yes (RPM, CCM)

Private Payer – Depends



MEDICARE REIMBURSEMENT

For Chronic Care Management and Remote Physiological Monitoring
(January 2019)



Remote Patient Monitoring in Maryland (Jan 2019)



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MEDICARE **CCM** REIMBURSEMENT

- ▶ Covered by Medicare since 2015
- ▶ As of 2017, four codes for basic, complex and initial assessment/care planning
- ▶ Can supplement RPM billing



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MEDICARE CCM CODES

- **CPT 99490**
 - Basic CCM (20+ min/month)
- **CPT 99487**
 - Complex CCM (60+ min/month)
- **CPT 99489**
 - Complex CCM add-on (+30 min/month)
- **HCPCS G0506**
 - Add-on code for comprehensive assessment and care planning at the CCM-initiating visit



RPM Reimbursement in Maryland (Jan 2019)



MEDICARE CCM CODES: 99490

CPT 99490

- ▶ at least 20 minutes non face-to-face clinical staff time [per month]
- ▶ directed by a physician or other qualified health professionals
- ▶ coordinate care for beneficiaries who have two or more chronic conditions expected to last more than 12 months



RPM Reimbursement in Maryland (Jan 2019)



MEDICARE **RPM** REIMBURSEMENT: OVERVIEW

- Started in 2018 with CPT Code 99490 (RPM 'collection and interpretation')
- Expanded in 2019 with 3 codes for setup, devices, and treatment management



RPM Reimbursement (Jan 2019)



RPM CPT CODE 99091 (2018)

**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 health care
professional, qualified by education, training,
licensure/regulation (when applicable)**

requiring a minimum of 30 minutes of time.



RPM Reimbursement (Jan 2019)



CMS RPM CODES 2019 – OVERVIEW

CPT Code 99453	CPT Code 99454	CPT Code 99457
RPM Setup	RPM Devices	RPM Treatment
Remote monitoring of physiologic parameters (e.g., weight, blood pressure, pulse oximetry, respiratory flow rate), initial setup;	Remote monitoring of physiologic parameters (e.g., weight, blood pressure, pulse oximetry, respiratory flow rate), every 30 days recurring;	Remote physiologic monitoring treatment management services. every 30 days recurring;
Set-up and patient education on use of equipment. (one time fee)	Devices supply with daily recordings or programmed alerts transmission, each 30 days. (with 16 days of data!)	20 minutes or more of clinical staff/physician/other qualified healthcare professional time in a calendar month requiring interactive communication with the patient/caregiver during the month.



RPM Reimbursement in Maryland (Jan 2019)



99457 RPM TREATMENT MGMT. SERVICES

- ▶ **Requires 20 minutes per month**
(CPT 99091 required 30 minutes per 30-day period)
- ▶ **Can be provided by the physician, qualified healthcare professional, or clinical staff, including RNs and MAs**
(CPT 99901 did not include clinical staff)
- ▶ **99457 describes professional time and therefore “cannot be furnished by auxiliary personnel incident to a practitioner’s professional services.”**



RPM Reimbursement in Maryland (Jan 2019)



RESOURCES



2021 Medicare Remote Patient Monitoring FAQs: CMS Issues Final Rule



<https://www.foley.com/en/insights/publications/2020/12/2021-remote-patient-monitoring-cms-final-rule>



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NEW YORK MEDICAID RPM

Remote patient monitoring services are billed using CPT code "99091" and should not be billed more than once per member per month. Billing should occur on the last day of each month in which RPM is used. A fee of \$48.00 per month will be paid for RPM for a minimum of 30 minutes per month spent collecting and interpreting a member's RPM data.

FQHCs that have opted out of APGs are unable to bill for RPM services.



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HCPCS CODE G0511 FOR FQHC CCM

HCPCS Code for Federally Qualified Health Center (FQHC) or Rural Health Clinic (RHC) only;

- ▶ general care management, 20 minutes or more of clinical staff time
- ▶ for chronic care management services or behavioral health integration services
- ▶ directed by an RHC or FQHC practitioner (physician, NP, PA, or CNM)
- ▶ per calendar month
- ▶ 2023 rates: \$77.94

<https://www.aapc.com/codes/hcpcs-codes/G0511>



LAUNCHING REMOTE PHYSIOLOGICAL MONITORING

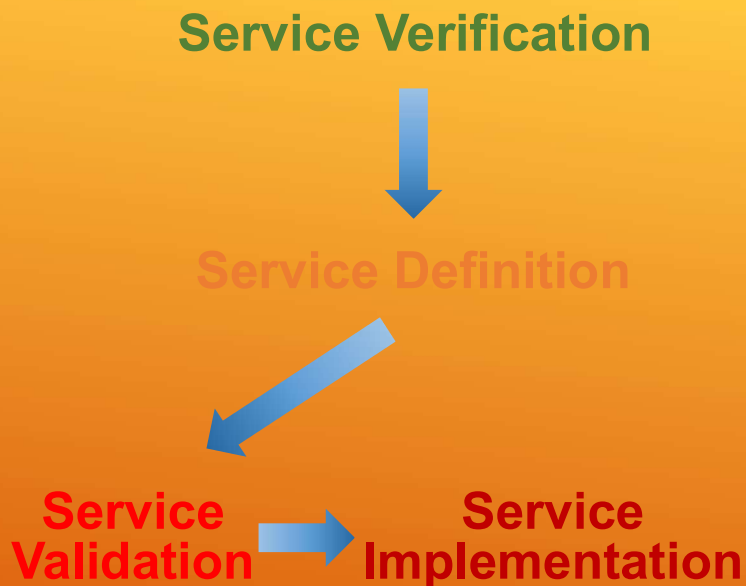
RPM SYSTEM OPTIONS



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Ingenium Telehealth Service Launch Process



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Ingenium Telehealth Service Launch Process

Service Verification

Strategic
Case

Business
Case

Clinical
Case

Service Definition

Workflow

Technology

Operatio-
nalization

Service Validation

Proof-of-
Concept

Service Implementation

Organizational
Change
Methods

Deploy-
ment



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RPM LAUNCH PROCESS

Project Management & Facilitation

RPM Strategy & Objectives

RPM Business & Clinical Case

RPM Process/Workflow Design

RPM Performance Dashboard

Patient Selection Criteria & Process

Vendor/Technology Selection

Vendor-Optimized RPM Workflow

RPM Service Proof-of-Concept

RPM Service Deployment

Strategic
Case

Business
Case

Clinical
Case

Workflow

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Operatio-
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Proof-of-
Concept

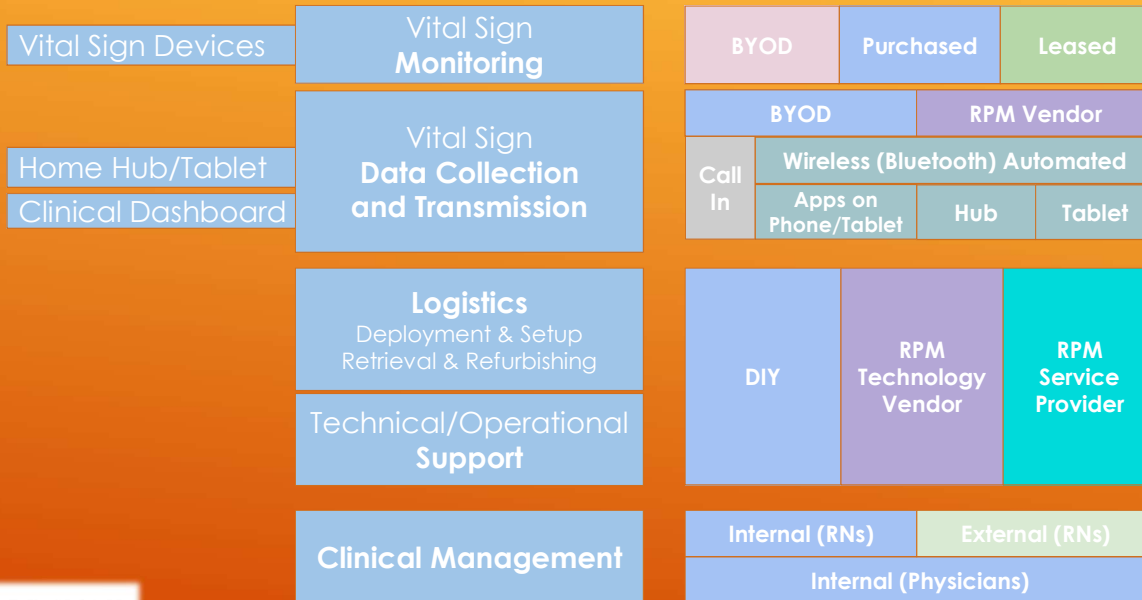
Deploy-
ment



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RPM SYSTEM OPTIONS



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After the Q&A

Your Interest
Key Takeaways
Action Items
Webinars Outlook

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-  RPM Definitions & Overview
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-  RPM Reimbursement
-  Launching RPM
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PLEASE COMPLETE THE SURVEY!

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WHAT ARE YOU MOST INTERESTED IN LEARNING?

- ▶ How to begin implementing a virtual care program with HTN
- ▶ What does it take to implement a HTN Mgmt. Program with RPM?
 - ▶ Are there external services that we could utilize if we do not have the internal capacity to manage such a program?
- ▶ Learning new strategies to expand RPM modalities
- ▶ How to achieve compliance with BP measurements
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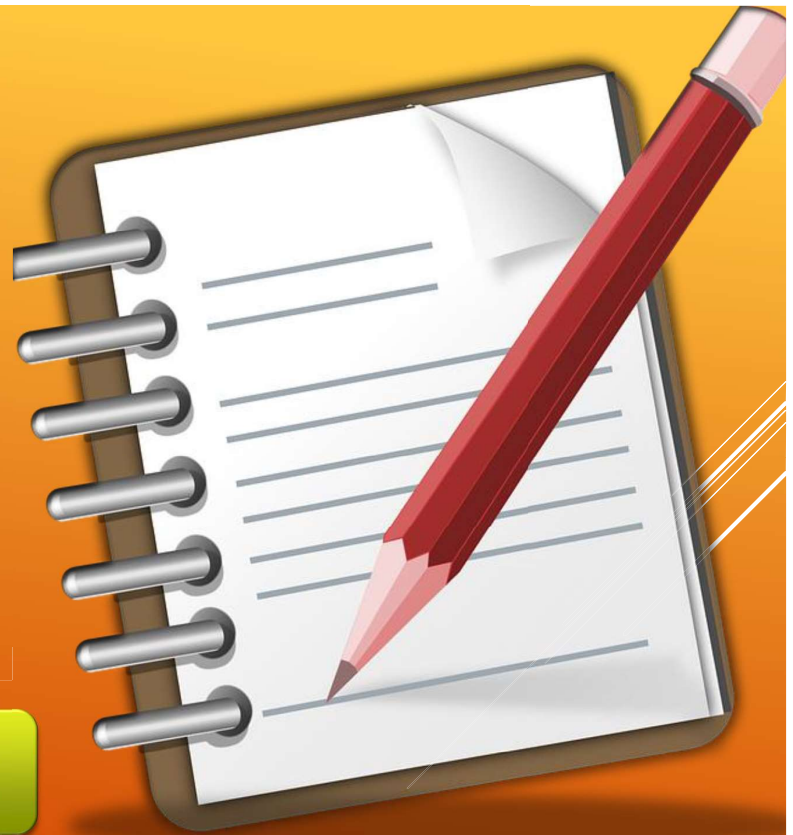


KEY TAKEAWAYS

Put your Major Insights,
Learnings into the Chat.



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4 KEY TAKEAWAYS

- ▶ Good RPM requires a series of well-defined workflows
- ▶ Patient Activation is Key for RPM success and for success in managing the patient's HTN
- ▶ RPM can be more than just HTN management
- ▶ ?



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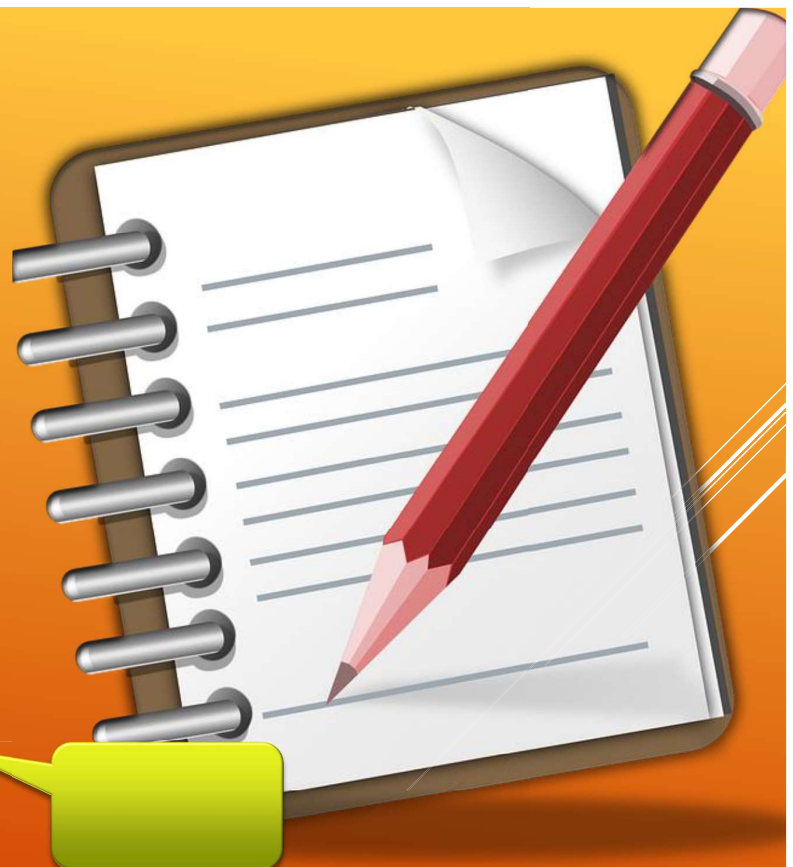


ACTION ITEMS

Jot down 1-3 Action Items you will take on now!

Share in the Chat, if you'd like.

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SAMPLE ACTION ITEMS

E.g.,

- ▶ Map out your desired patient RPM enrollment workflow.
- ▶ Identify designated monitoring resource.
- ▶ Review RPM dashboard with PCPs



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OPTIMIZING HYPERTENSION MANAGEMENT WITH VIRTUAL CARE



See you on Monday, April 3 @ 1 PM!