Trailblazing Remote Patient Monitoring

Evan Harmon, MHI, RHIA

April 11, 2024

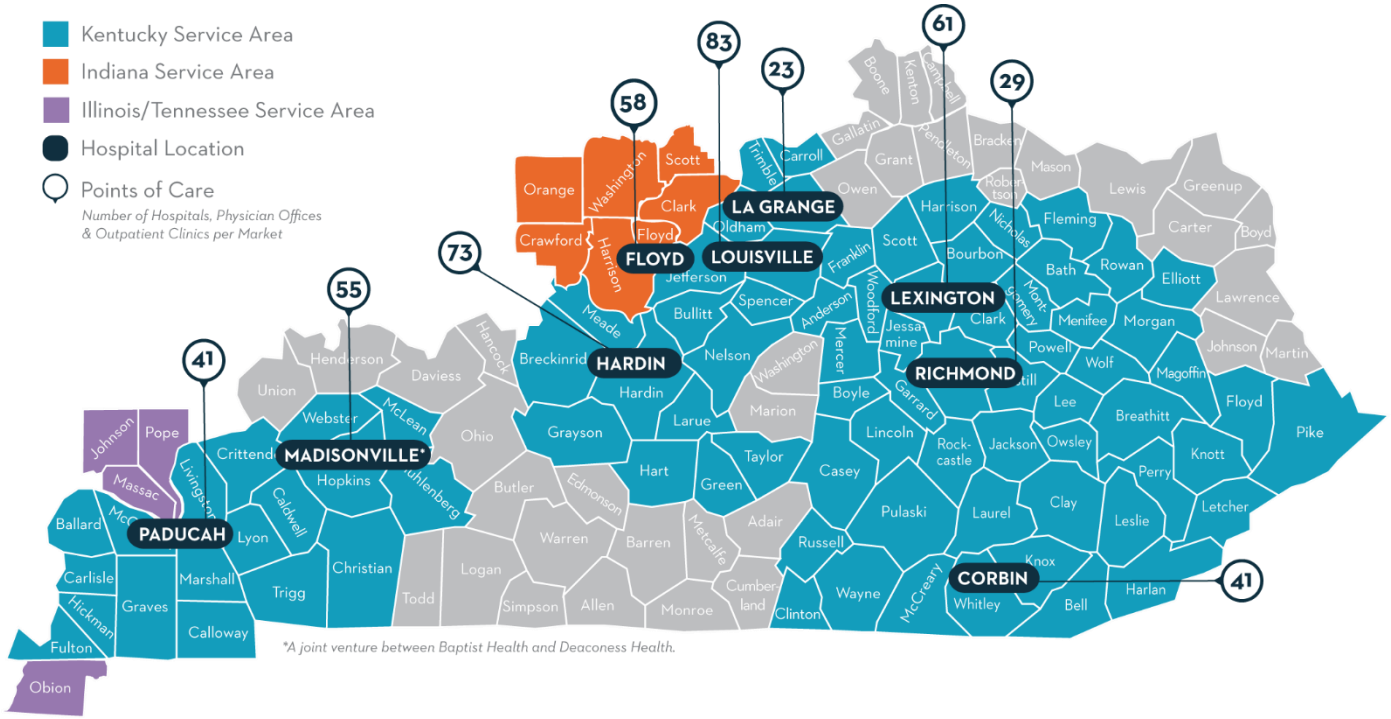
Intro to Speaker | Evan Harmon

- Remote Patient Monitoring System Leader, Baptist Health (KY & IN) – representing Baptist *today*.
- New career journey starting next week as RPM Director at Resolve Pain Solutions.
- RPM Expert and Innovator
- HIM and IT Trailblazer
- Servant Leader
- Community Volunteer and Mentor

Baptist Health - Overview

Patient Care	
Licensed beds	2,740
Inpatients	103,865
Outpatients	2.15 million
Emergency visits	372,070
Open heart surgeries	1,425
Deliveries/Births	12,459
Oncology visits	28,886
Employed providers	1,651
Urgent Care visits	161,403
Virtual Care visits	145,563
Home Care visits	109,629

Economic Impact: System	
Total revenue	$3.9 billion
Local purchases	$748.8 million
State and local taxes	$49.2 million
Economic Impact: Employees	
Local purchases	$749 million
State and local taxes	$385.1 million



Agenda

- RPM / RTM - Defined
- Provider Story
- Baptist Health – RPM Programs
  - Continuous Monitoring
  - Intermittent Monitoring
- RPM Billing
- Final thoughts – Evan's Insights
- Patient Story / Reflection

Remote Patient Monitoring

Remote Physiologic Monitoring

- RPM involves the collection and analysis of patient physiologic data that are used to develop and manage a treatment plan related to a chronic and/or acute health illness or condition.[1]
- RPM can consist of devices that complete continuous (24/7 monitoring) **OR** devices transmit data on-demand (weighted scale, BP cuff, pulse oximetry).

Remote Therapeutic Monitoring

- RTM is non-physiologic, patient reported data including but not limited to musculoskeletal system status, respiratory system status, therapeutic/medication adherence and response, measurement of pain levels, and general patient assessment.
- RTM data capture is completed via application or web-based tools.

Provider Story

Baptist's Journey with RPM

- Signed Contract with Current Health Vendor in 2019.
- Rollout of devices increased during pandemic; Homecare as the primary referred location to administer.
- HF Pilot work began in late 2020.
- RPM Manager hired/began work in July 2021.
  - Surveillance begin
- System strategy defined and approved in late August 2021.
- Building/Refining foundations in 2022.
- EXPANSION and GROWTH was the theme for 2023.
- Optimization and trying new scenarios is the direction for 2024.

Current Health – Domain Areas/Locations

Homecare

All Markets
- Louisville
- Floyd
- Lexington
- Paducah

Specialty Clinics

Heart Failure Clinics
- Louisville HF Clinic
- Corbin HF Clinic
- Richmond HF Clinic
- Paducah HF Clinic
- Hardin HF Clinic

Future COPD Clinic
- Corbin COPD Clinic
- Richmond COPD Clinic

Early Supported Discharge (ESD)

Future Vision for Program
- Focus on LOS reduction post-hospitalization
- Observation opportunity for admission avoidance
- Low acuity dx focus
- Interest at Hardin and Corbin

RPM Expansion Efforts

HF Clinic Expansion | Current Health

- BH RIC (03/23)
- BH PAD (07/23)
- BH HAR (09/23)

COPD Clinic Use Case | Current Health

- Go-live April 2024 at BH COR and BH RIC

Hypertension Management | MyChart Care Companion

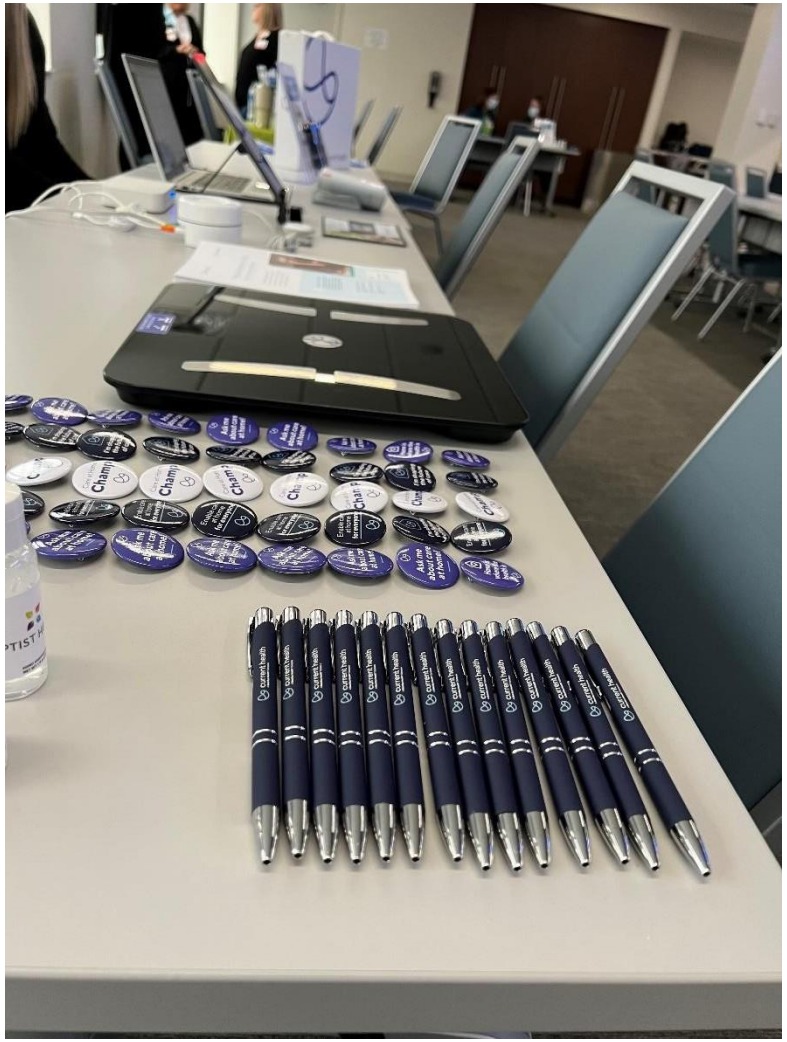
- Live in West Market (07/23)
- Lexington Cardiology (12/23)
- Lexington / Richmond Market (02/24)

RPM Billing Integration

- Projected go-live April 2024

Early Supported Discharge (ESD)

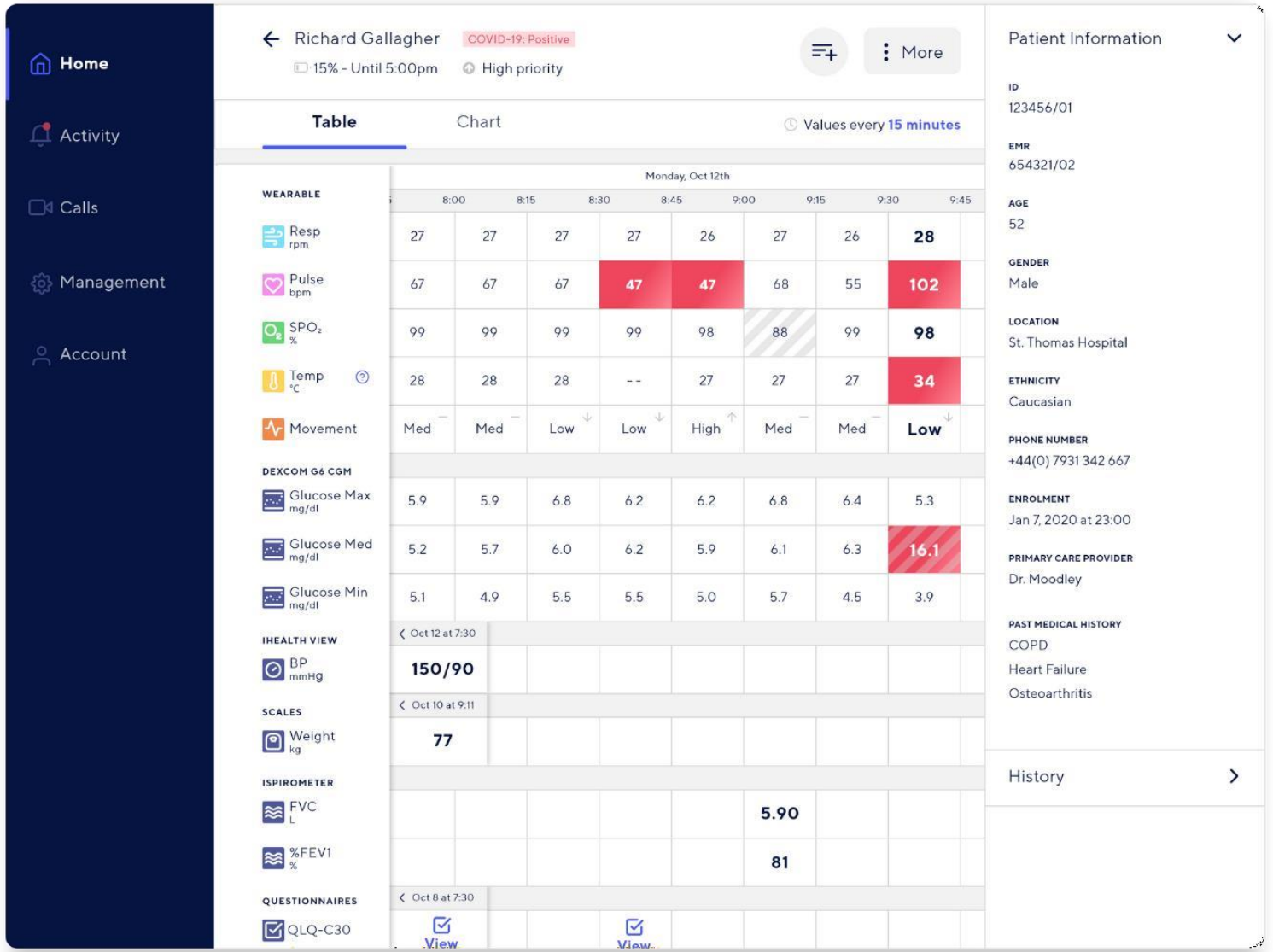
- BH HAR
- In Discovery



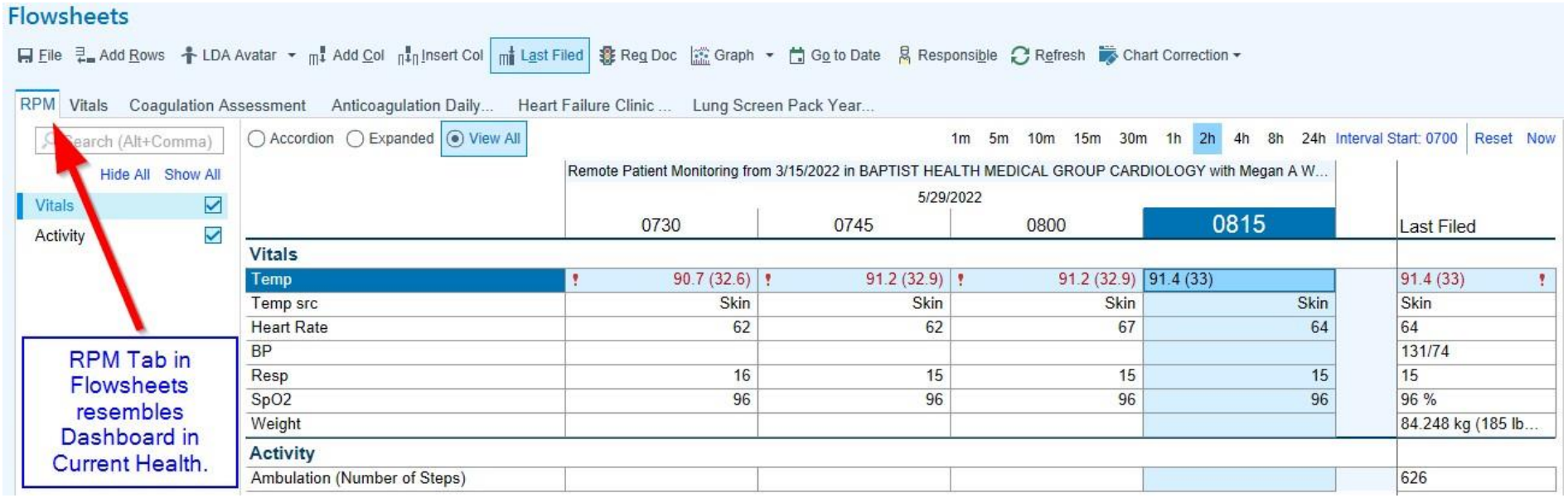
What comes in an RPM Kit?

- Home Hub (Wi-Fi connection or Cell Tower connection)
- Tablet
- Wearable
- Charging Dock
- Spirometer
- Scale
- BP Cuff
- Axillary Temperature Patch

RPM Device Dashboard



Vitals from CH to Flowsheets



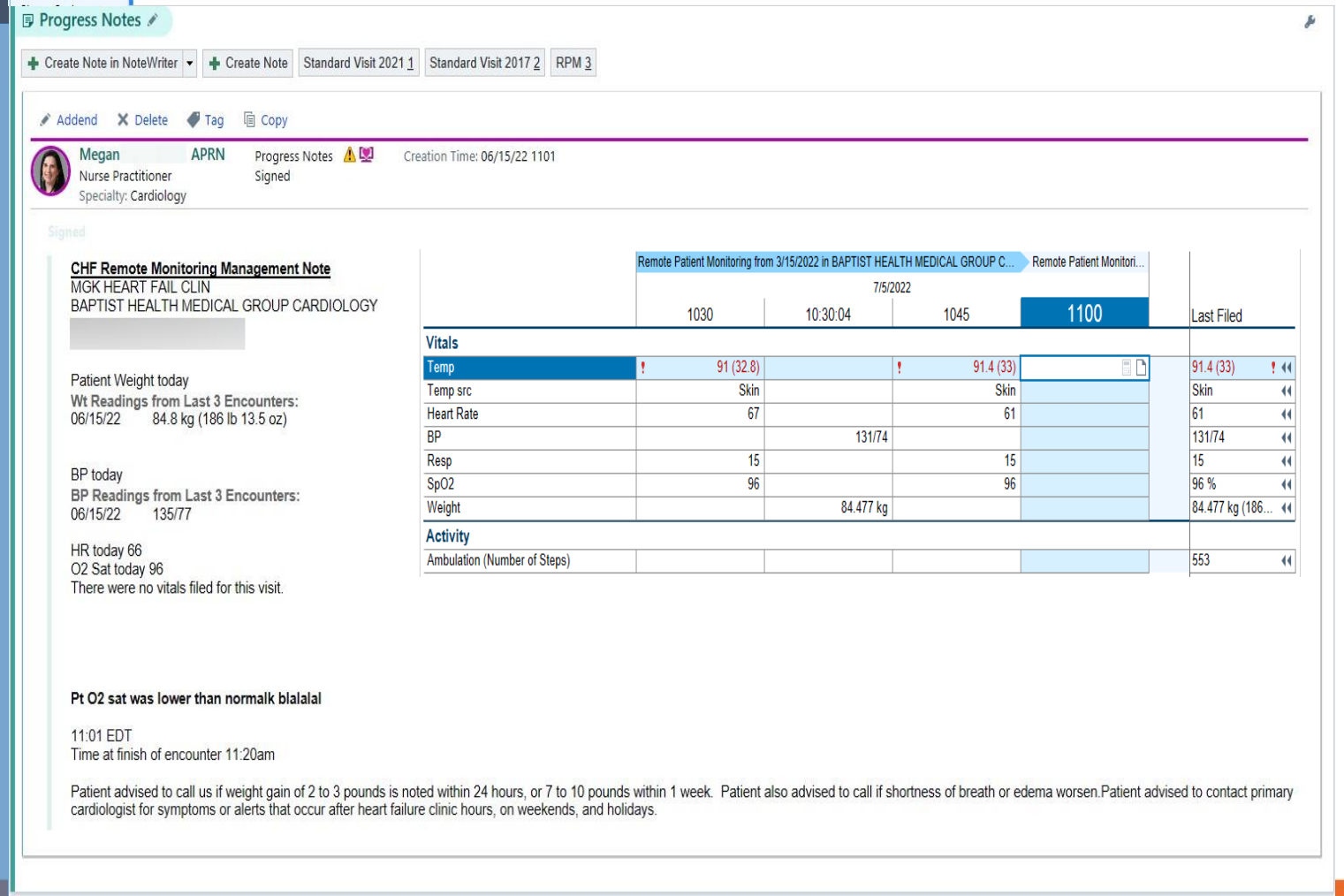
*Fun fact: Patients transmit up to 480 vital sign values per day.

Calculation:

- Potential Data Capture Opportunities: 4 times an hour (every 15 mins.)* 24 hours a day = 96 data capture points per day (wearable).
- Vitals Sign Values Per Day (wearable): 96 data capture points * 5 individual vitals sign values = 480 individual data point per patient.

Clinical Best Practice Build (to consider)

- RPM Encounter
- Flowsheet Tab
- Episodes
- Progress Note/ RPM Template



Why is interfacing important?

- Prevents logging into dashboard (or lessens dependence).
- Brings the data right to the clinical workflow by pulling critical data elements into notes.
- Allows us to act on the data in real time.
- Ensures we have proof of documentation for billing.
- Charging data flow help us with automated billing.

RPM Billing – CPT Codes[2]

Remote Patient Monitoring CPT Codes		
CPT Code	**Description**	**Reimbursement**
99453	Initial set-up & patient education on equipment (one-time fee)	$19.32
99454	Supply of devices, collection, transmission, and report/summary of services to the clinician	$50.15
99457	Remote physiologic monitoring services by clinical staff/MD/QHCP first 20 cumulative minutes of RPM services over a 30-day period	$48.80
99458	Remote physiologic monitoring services by clinical staff/MD/QHCP for an additional cumulative 20 minutes of RPM services over a 30-day period	$39.65
99091	Collection and interpretation of data by physician or QHCP, 30 minutes	$54.22

RTM Billing – CPT Codes[2]

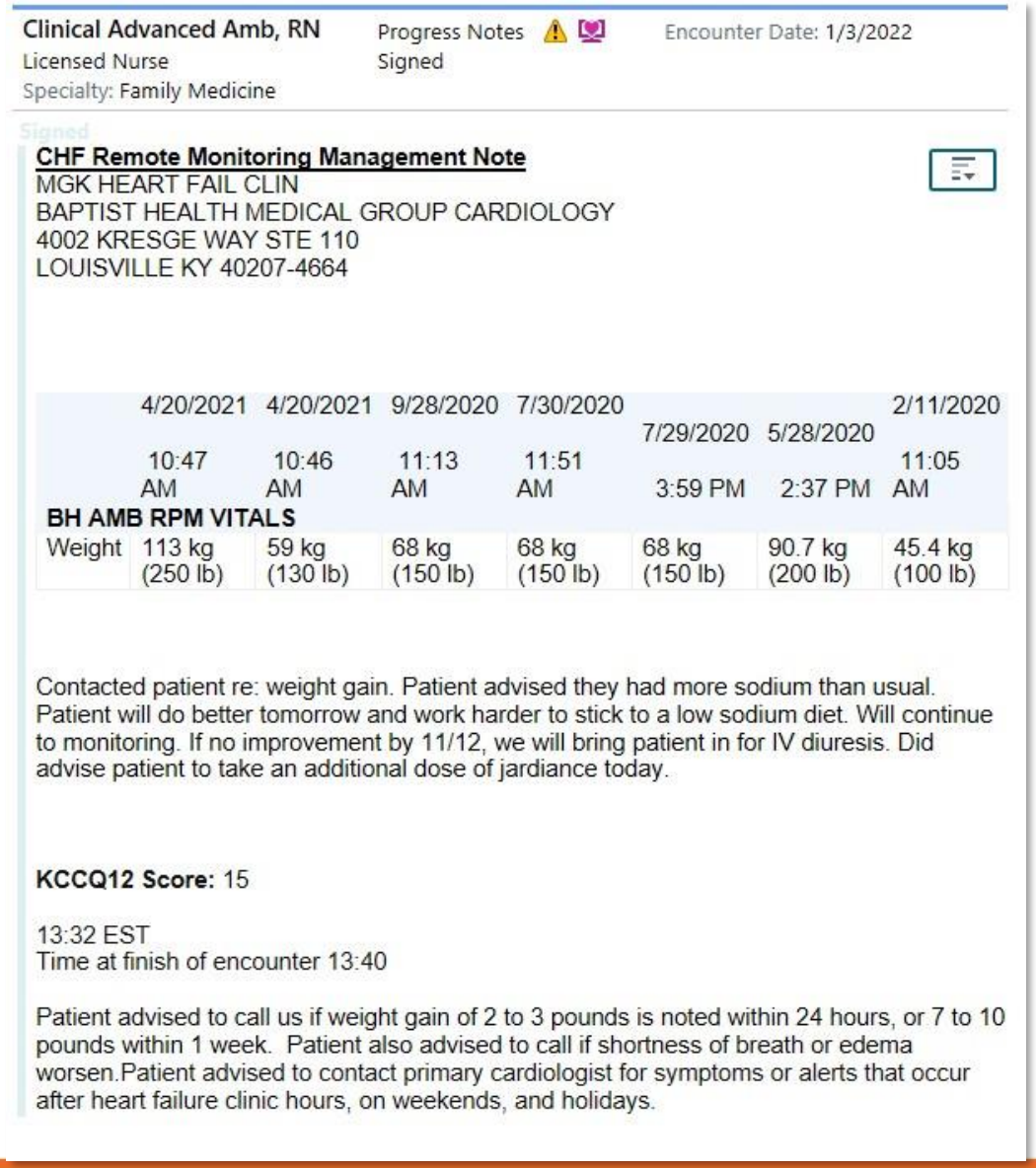
Remote Therapeutic Monitoring CPT Codes		
98975	Initial set-up and patient education on use of equipment for respiratory system status and musculoskeletal system status.	**$19.38**
98976*	Supply of RTM device(s) with scheduled recording and/or programmed alert transmission to monitor musculoskeletal system for each 30 day period. (Respiratory)	**$55.72**
98977**	Supply of RTM device(s) with scheduled recording and/or programmed alert transmission to monitor musculoskeletal system for each 30 day period. (Musculoskeletal)	**$55.72**
98980	First 20 minutes of RTM services provided by clinical staff, MD, or QHCP over a 30-day period. Requires at least one interactive communication within the calendar month.	**$50.18**
98981	Each additional 20 minutes of RTM services provided by clinical staff, MD, or QHCP during a 30-day period. Requires at least one interactive communication within the calendar month.	**$40.84**

*Device monitoring respiratory system status

**Device monitoring musculoskeletal system status

Billing Integration Opportunities

- Complete revenue capture to offset costs
- Automation of 99453 (Set-up and Education) and 99454 (Supply of device/16-days of data)
- Send a message to our payers that RPM utilization is occurring



Clinical Advanced Amb, RN
Licensed Nurse
Specialty: Family Medicine

Progress Notes
Signed

Encounter Date: 1/3/2022

Signed

CHF Remote Monitoring Management Note
MGK HEART FAIL CLIN
BAPTIST HEALTH MEDICAL GROUP CARDIOLOGY
4002 KRESGE WAY STE 110
LOUISVILLE KY 40207-4664

	4/20/2021 10:47 AM	4/20/2021 10:46 AM	9/28/2020 11:13 AM	7/30/2020 11:51 AM	7/29/2020 3:59 PM	5/28/2020 2:37 PM	2/11/2020 11:05 AM
BH AMB RPM VITALS							
Weight	113 kg (250 lb)	59 kg (130 lb)	68 kg (150 lb)	68 kg (150 lb)	68 kg (150 lb)	90.7 kg (200 lb)	45.4 kg (100 lb)

Contacted patient re: weight gain. Patient advised they had more sodium than usual. Patient will do better tomorrow and work harder to stick to a low sodium diet. Will continue to monitoring. If no improvement by 11/12, we will bring patient in for IV diuresis. Did advise patient to take an additional dose of jardiance today.

KCCQ12 Score: 15

13:32 EST
Time at finish of encounter 13:40

Patient advised to call us if weight gain of 2 to 3 pounds is noted within 24 hours, or 7 to 10 pounds within 1 week. Patient also advised to call if shortness of breath or edema worsen.Patient advised to contact primary cardiologist for symptoms or alerts that occur after heart failure clinic hours, on weekends, and holidays.

Preparing for Billing Integration

Understand your Payer Mix and Guidelines

Are you mostly Medicare / Medicaid?

- Does your state Medicaid Reimburse for RPM?

Who are your top commercial payers?

- Do your commercial payers cover the services and what do reimbursement amounts look like?

Map out Pre-Service Workflows

Do you currently pre-screen patients for RPM?

- If not, you may need to, so you are prepared to speak to patients about shared payment responsibility.

What if a Patient Cannot Afford Attributed Fees like Co-pays for RPM Services?

Will the organization choose to write these off

Provide charity care/grant funding

Not offer the service to the patient

Preparing for Billing Integration (Cont.)

Have you determined the Date of Service for your claim?

Order date

First data transmission by patient

Have you determined a Place of Service for your claim?

Generic department for all RPM Services

Provider associated billing department

- (log-in location of provider be it the Clinic or HOPD)

Do you need to optimize your documentation?

Are all required documentation elements included in your note – or the Legal Medical Record?

- Review with Coding Education Department and Compliance
- Baptist created a Tipsheet for this – see next slide!

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Tip Sheet

SCOPE: Coder Education

Remote Physiologic Monitoring (RPM)

CPT Codes:

#99453 – Remote monitoring of physiologic parameter(s), initial; set-up and patient education on use of equipment
- Do not report 99453 more than once per episode of care
- Do not report 99453 for monitoring of less than 16 days

#99454 – device(s) supply with daily recording(s) or programmed alert(s) transmission, each 30 days
- For physiologic monitoring treatment management services, use 99457
- Do not report 99454 for monitoring of less than 16 days
- Do not report 99453, 99454 in conjunction with codes for more specific physiologic parameters
- For self-measured blood pressure monitoring, see 99473, 99474

#99091 – Collection and interpretation of physiologic data requiring a minimum of 30 minutes of time, each 30 days
- Do not report 99091 in conjunction with 99457, 99458

#99473 – Self-measured blood pressure using a device validated for clinical accuracy; patient education/training and device calibration
- Do not report 99473 more than once per device
- For ambulatory blood pressure monitoring, see 93784, 93786, 97388, 93790

#99474 – separate self-measurements of two reading one minute apart, twice daily over a 30-day period (minimum 12 readings), collection of data reported by the patient and/or caregiver to the physician or other qualified health care professional, with report of average systolic and diastolic pressures and subsequent communication of a treatment plan to the patient
- Do not report 99474 more than once per calendar month

Documentation Requirements:

Providers should initially obtain informed beneficiary consent to receive RPM services. To document CPT **99453**, include the following:
- Practitioner order for device deployment
- Condition(s) for which the patient is being monitored
- Device identification
- Date of delivery of the device to the patient
- Date(s) on which training is provided to the patient

For time-based codes (CPT **99457** and **99458**), document the time spent on each.

In recent years, CMS has finalized payment for seven remote physiologic monitoring (RPM) codes. In response to stakeholder questions about RPM, CMS clarified in the CY 2021 PFS final rule our payment policies related to the RPM services described by CPT codes **99453, 99454, 99091, 99457**, and **99458**. In addition, we finalized as permanent policy two modifications to RPM services that we finalized in response to the COVID-19 PHE.

- We clarified that after the COVId-19 PHE ends, there must be an established patient-physician relationship for RPM services to be furnished.
- We finalized that consent to receive RPM services may be obtained at the time that RPM services are furnished.
- We finalized that auxiliary personnel may provide services described by CPT codes **99453** and **99454** incident to the billing practitioner's services and under their supervision. Auxiliary personnel may include contracted employees.

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Tip Sheet

SCOPE: Coder Education

- We clarified that the medical device supplied to a patient as part of RPM services must be a medical device as defined by Section 201(h) of the Federal Food, Drug, and Cosmetic Act, that the device must be reliable and valid, and that the data must be electronically (i.e., automatically) collected and transmitted rather than self-reported.
- We clarified that after the COVID-19 PHE ends, ***16 days of data each 30 days*** must be collected and transmitted to meet the requirements to bill CPT codes **99453** and **99454**.
- We clarified that only physicians and NPPs who are eligible to furnish E/M services may bill RPM services.
- We clarified that RPM services may be medically necessary for patients with acute conditions as well as patients with chronic conditions.
- We clarified that for CPT codes **99457** and **99458**, an "interactive communication" is a conversation that occurs in real-time and includes synchronous, two-way interactions that can be enhanced with video or other kinds of data as described by HCPCS code **G2012**. We further clarified that the 20 minutes of time required to bill for the services of CPT codes **99457** and **99458** can include time for furnishing care management services as well as for the required interactive communication.

Must patients provide consent to receive RPM services?

Yes, and providers must obtain and document consents in patients' medical records. Medicare allows for informed verbal consent, but other payers may require written.

Who can deliver RPM services?

Physicians and other qualified healthcare professionals (QHCPs) can provide and bill for RPM. Clinical staff can furnish and manage RPM under the general supervision of the billing provider.

Who can receive RPM services?

Any patient. With that said, a provider should only order/prescribe RPM if captured data is directly relevant to managing a patient's condition(s) (i.e., medical necessity), with such justification documented in the medical record.

What devices are approved for RPM services?

Any device used must meet the FDA's definition of a "medical device". The RPM device must digitally (i.e., automatically) upload patient physiologic data (i.e., data cannot be self-recorded or self -reported by the patient). While self-reporting measurements into a patient portal or app or otherwise manually conveying measurements to providers may qualify for other Medicare covered services, data captured in such a fashion cannot be counted towards Medicare RPM. RPM device measurements must automatically sync with a provider's remote patient monitoring platform without any patient transcription. Devices must transmit valid physiologic data that is reasonable and necessary to diagnose or treat and allow understanding of the patient's health status to develop and manage a plan of treatment.

Examples include:
- Blood pressure cuff
- Pulse oximeter
- Heart rate monitor
- Glucometer
- Thermometer
- Weighing scale
- Spirometer

Billing Integration: Lessons Learned

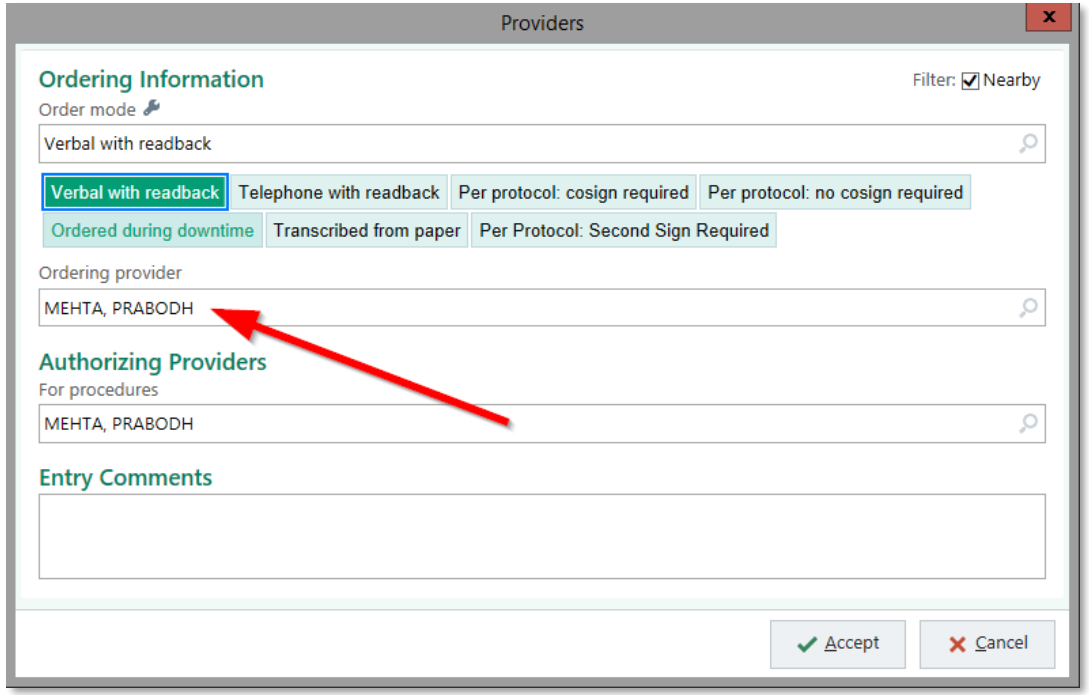
Complete thorough testing

- Clinicians at multiple levels order RPM
- Need to make sure the correct person is being tagged as the Billing Provider

Test ordering workflows at all levels

- MAs/RNs on behalf of MD/ACP
- MD/ACP on behalf of themselves
- ACP on behalf of MD

Partner closely with both your Integration and Professional Billing IT Teams through all phases of testing.



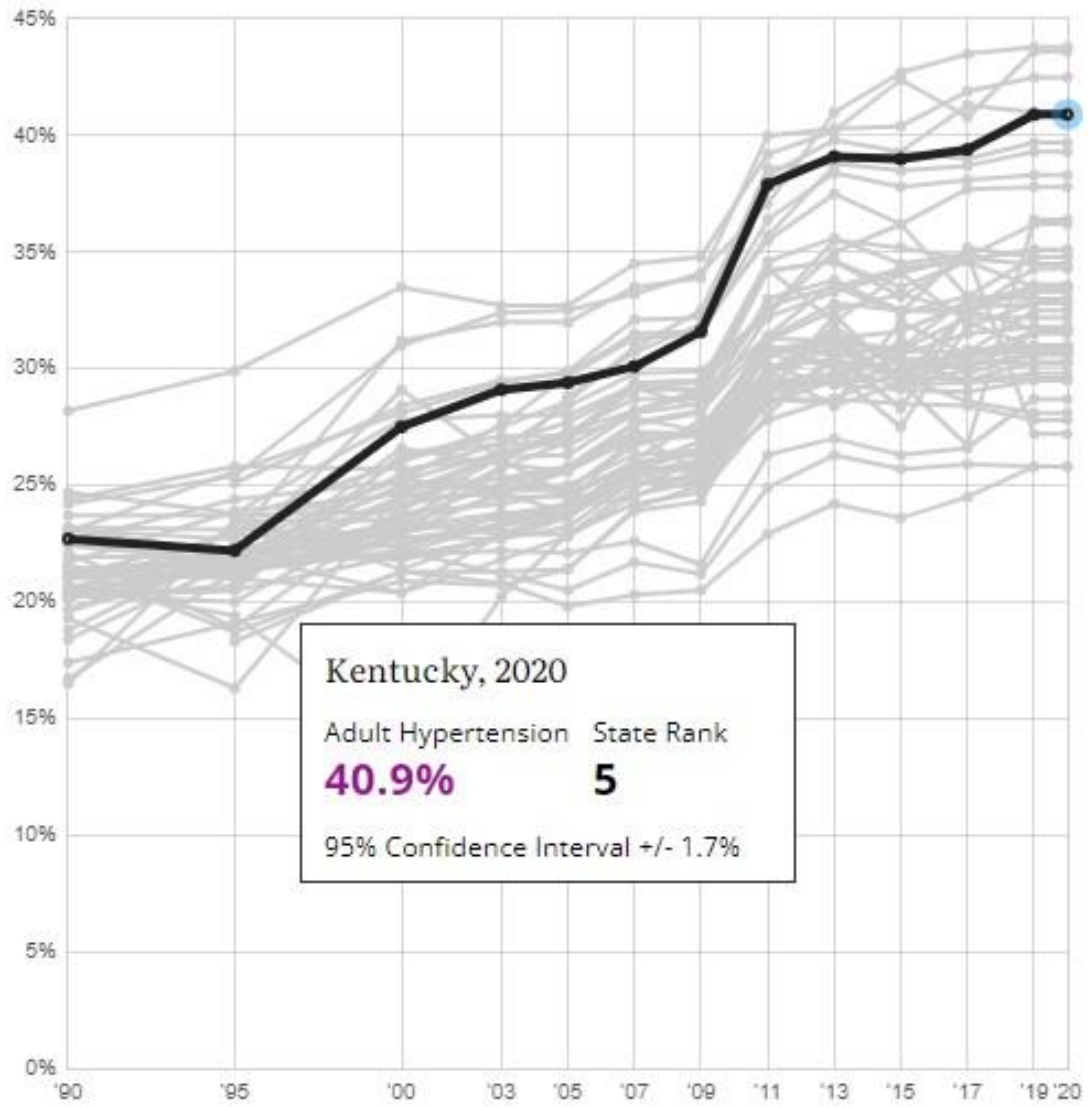
Billing Integration: Lessons Learned

- Our charge router required department and billing provider.
  - Testing revealed that it was not an option that Current Health could send back in the interface.
  - Partnered with Current Health Development to allow department to be stored and sent back in the billing integration.

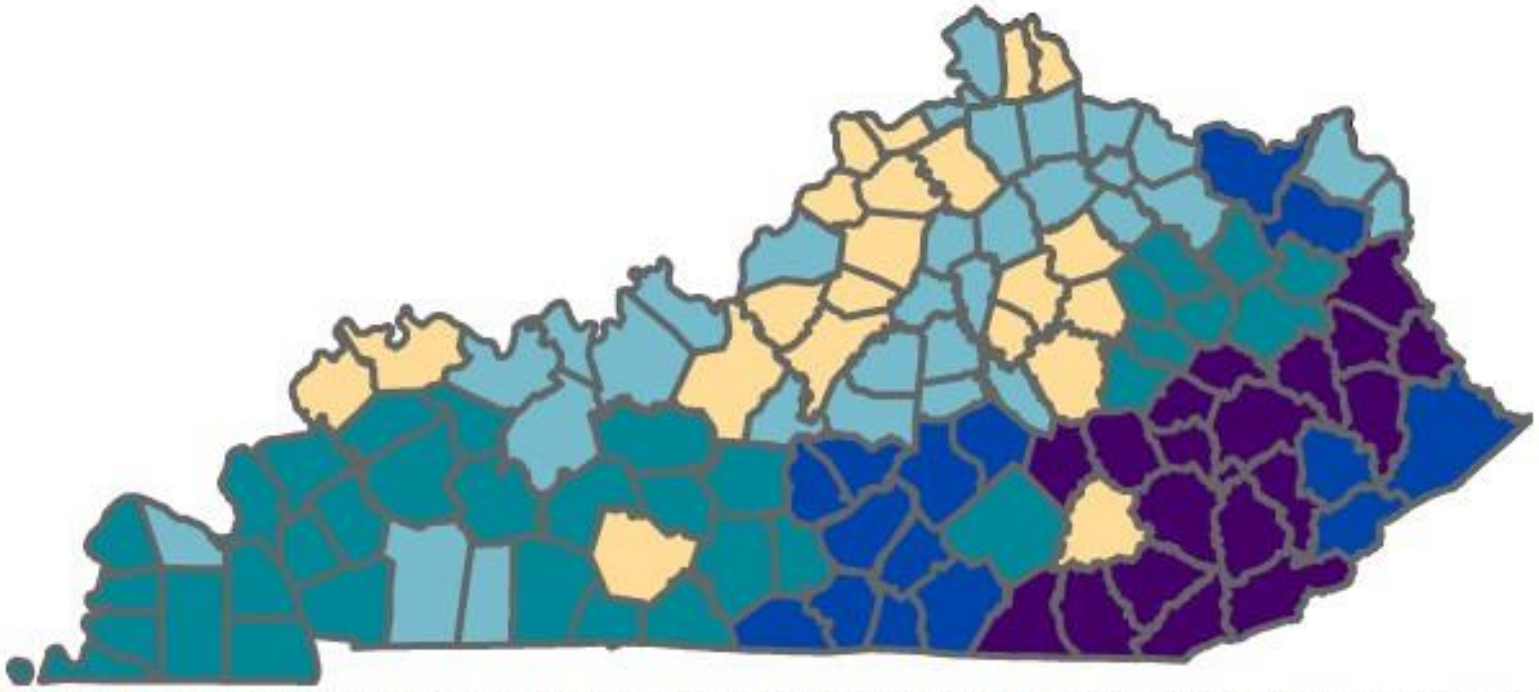
- Engage Clinicians, Coding, Billing Operations, and Compliance EARLY!
  - Use this folks to help educate providers and optimize note templates

- Do **not** underestimate the operational complexity of billing this service.

The Opportunity



The Opportunity – Prevalence of HTN

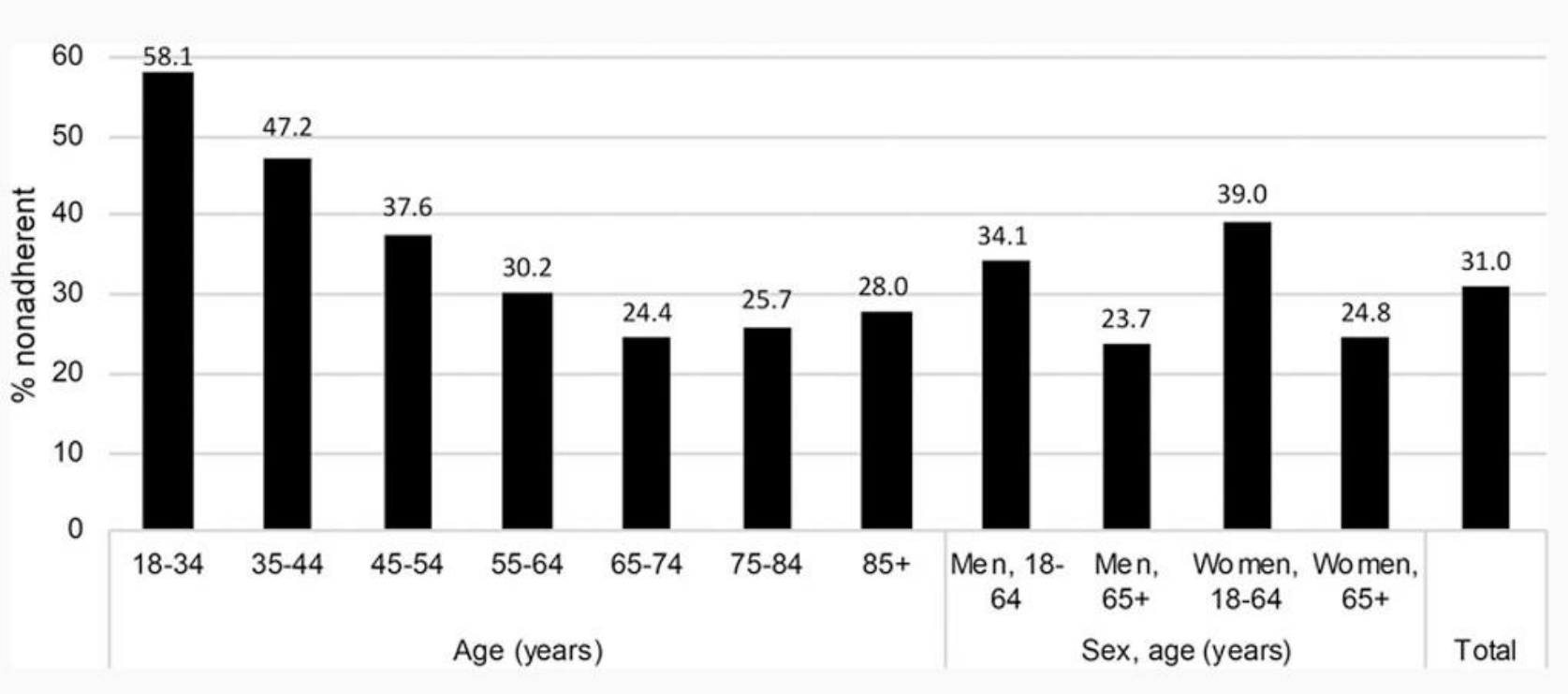


Notes on this indicator: Percent of adults who report they have been told they have high blood pressure or hypertension by a health care professional.

Poor Control of HTN

- Lack of Medication Adherence
  - #1 reason for uncontrolled HTN
  - MyChart CC helps with medication reminders / education
- Quality of care – decrease the risk of heart attacks, strokes and kidney failure with better control
- CMS has selected HTN as one of three quality measures to be submitted electronically (i.e. HTN focus will be a key strategy moving forward)

National Non-Adherence Numbers



Care Companion Overview

- MyChart Care Companion is an interactive app designed to be an extension of the patient's support system; it is a highly individualized plan of care delivered to at-risk patients through user-friendly, accessible technology.

Self-Measured Blood Pressure Monitoring at Home: A Joint Policy Statement From the American Heart Association and American Medical Association

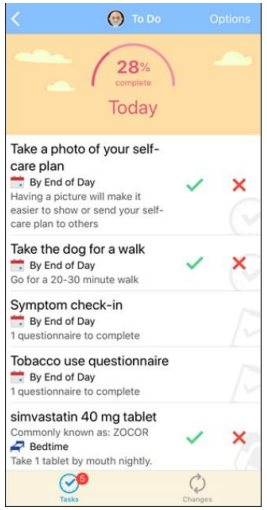
Daichi Shimbo, Nancy T. Artinian, Jan N. Basile, Lawrence R. Krakoff, Karen L. Margolis, Michael K. Rakotz, Gregory Wozniak and On behalf of the American Heart Association and the American Medical Association

Originally published 22 Jun 2020 | https://doi.org/10.1161/CIR.0000000000000803 | Circulation. 2020;142:e42–e63

- The interactive plan of care:
  - Delivers notifications to care team members
  - Analyzes data provided by patients via questionnaires/symptom checkers
  - Captures self-reported data like vital sign reads and medication adherence prompts
  - Provides iterative education to the patient regarding management of their condition.

MyChart CC – Example Using Hypertension

George is a patient with newly diagnosed HTN – his care manager or physician encourages him to use MyChart CC to help him manage the condition; he uses amlodipine to manage his HTN



- Each day, medication reminders prompt George to take his medications at scheduled times. George marks that he took his amlodipine.
- His physician asked him to track his daily weight. George's smart scale links to Care Companion and pulls his weight directly into Epic or can be manually entered.
- George is assigned periodic check-ins through Care Companion where he answers a few short questions about his symptoms and how he is feeling.
- George is prompted to review educational materials to help him learn about symptoms to watch for as he learns to manage his hypertension.

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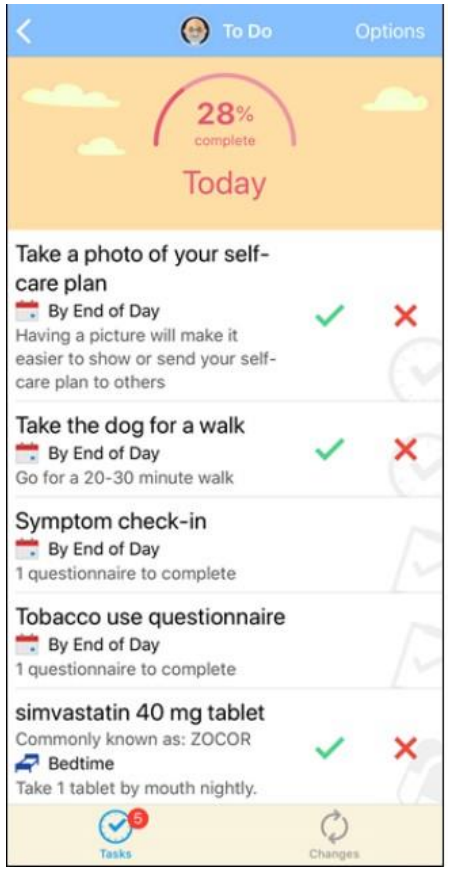
MyChart CC – Example Using Hypertension



- When George reports that he's experiencing headaches and his weight tracking shows elevated BP, Care Companion adjusts the frequency of George's check-ins to more closely monitor how he's doing.
- If George's symptoms continue to worsen, Care Companion escalates to someone on his care team for the appropriate follow up.

Medication Tracking

Push notifications prompt patients to take medications each day and at the right time, improving medication adherence. Patients can snooze medication reminders if needed and record that individual medications were taken or not taken. The timing of each medication notification can also be personalized if appropriate.

Tracking Health and Vitals

Patients can view goals and track their progress towards them in MyChart. For example, a patient might have goals for monitoring blood glucose or maintaining an HbA1C value in a certain range. Care Companion enables you to send nudges to remind the patient to record the values or use a connected device to update their data.

Educational Content

Patients can view educational materials, including videos, to help them learn more about their health conditions or related treatments. For example, physical therapy patients can watch how-to videos and indicate that they understand or if they have questions.

Periodic Check-Ins

Patients can respond to daily, weekly, or ad-hoc check-in questionnaires that are tailored to collect information you need, such as how the patient is feeling or specific symptoms she's experiencing. This information can be sent to the patient's care manager to keep him in the loop.

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AHA Grant

- Baptist Health has secured a $87,200 grant to assist in costs leaving just 16K for Baptist to fund first year (26K / year after) for MyChart CC for HTN
  - Funding for BP cuffs and staff to help us scale quickly the Epic build work.
- Opportunity for significant improvement in care
- Opportunity for just under $1.5 million (increased quality payments, star ratings, etc.

MyChart Care Companion

American Heart Association.

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Other Care Companion Modules

Current (Mayo Content)

- Asthma
- Breast Cancer Survivorship
- COPD
- Diabetes, type 2
- Healthy Pregnancy
- Insomnia
- Migraine
- Systolic Heart Failure
- Total Joint Replacement – Hip and Knee

MyChart Care Companion

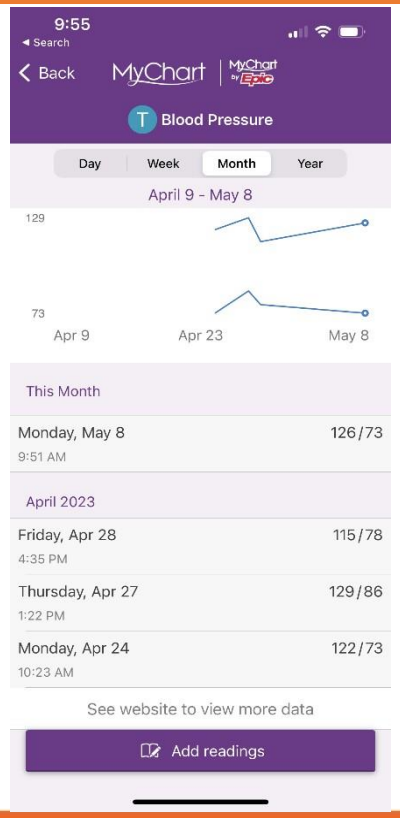
Future

- Cardiovascular Rehab (Mayo Clinic)
- Childhood Obesity (Epic)
- Chronic Kidney Disease (Epic)
- Chronic Liver Disease (Epic)
- Diabetes - Type 1 (Epic)
- Gastroenterology (Epic)
- Pediatric Asthma (Epic)
- Postpartum Care (Epic)
- Transplant (Epic)
- Wellness (Epic, tentatively planned for November 2022)
- Weight Management (Epic, tentatively planned for November 2022)

MyChart Care Companion - HTN

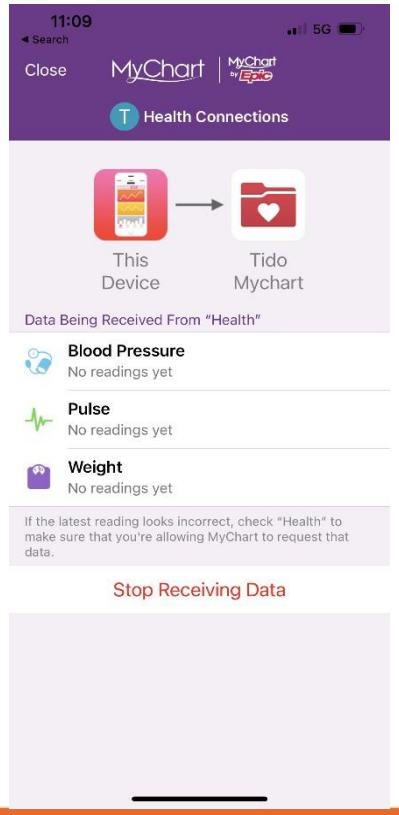
West Pilot Market (4 practices)

(Go-live 05/10/23)



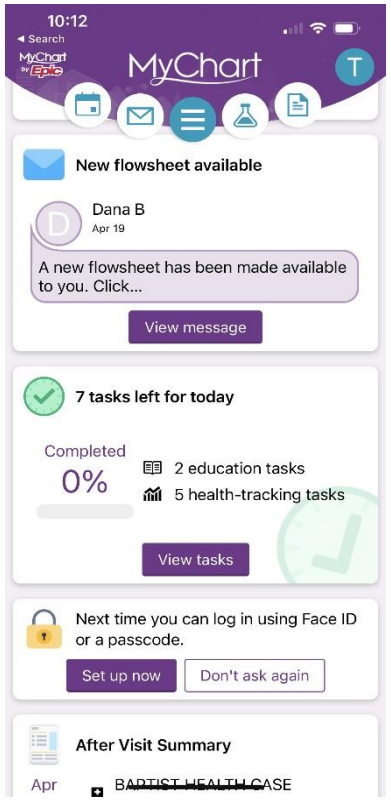
West Market Live

(July 2023)



System Expansion

(Fall 2023 and beyond)



Overview Data from Paducah Pilot

Enrolled Patients: 243

Engaged Patients: 160

Engagement Rate: 66%

Payer Mix

- Commercial: 88
- Medicare: 94
- Medicaid: 33
- Tricare: 5
- Self-Pay: 23

Outcomes Data from Paducah Pilot

Average Systolic Decrease: 9.70 mmHG

Average Diastolic Decrease: 3.31 mmHG

Systolic Measure Met: 98

Diastolic Measure Met: 124

Combined Measure Met (140/90): 85

53% of patients met both measures.

Reflection/Patient Story

Final thoughts on Remote Patient Monitoring

Understand what problem you are trying to solve (clinically)

Be Patient and Fail Fast– implementing RPM is a big initiative.

Billing is Hard (so is proving ROI) – if billing a new service line is your organizations only reason for doing this, then you may be doing it for the wrong reasons.

When Billing and proving ROI – consider the big picture

- ROI from direct code/charge drops
- Soft dollar savings from readmission avoidance, ED utilization.
- Look at other outcomes like Care Quality and Patient Experience.

Final thoughts on Remote Patient Monitoring

Consider your referral source

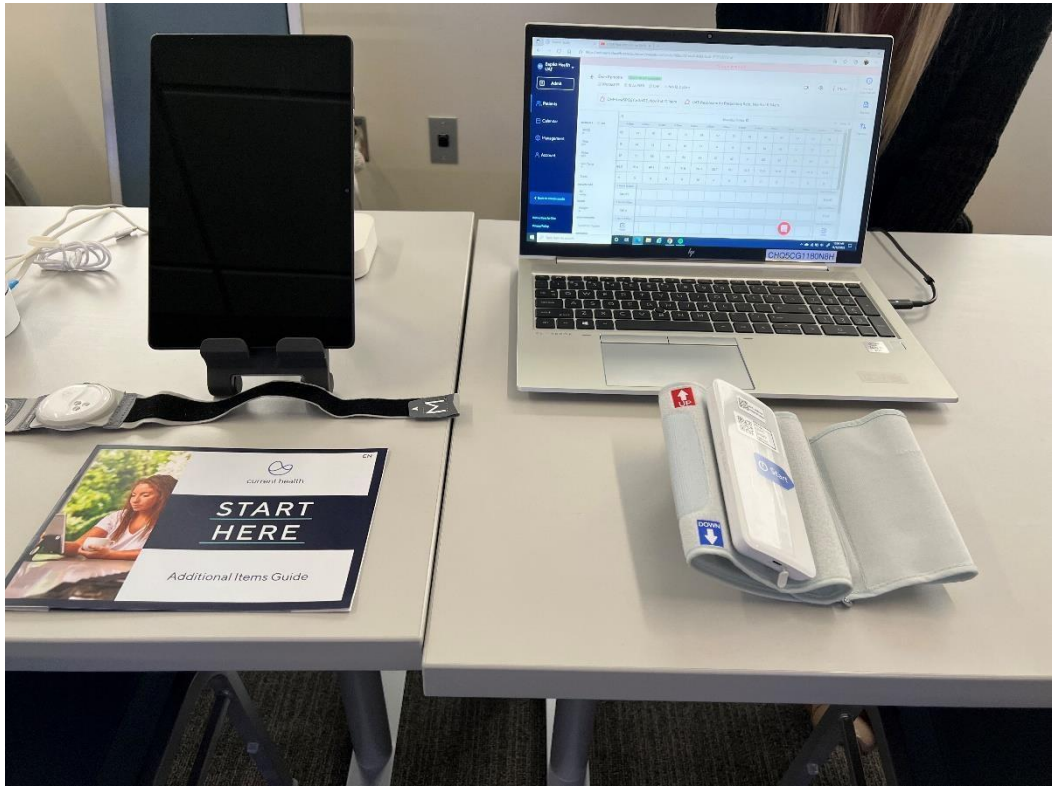
- Getting patient enrolled VERY SOON following discharge from hospital admission is key.
- Are you open to referrals from an Outpatient Clinic, Hospital IP stay, Hospital ED, Homecare, or a combination of ALL.

Find good partners

- Third Party Vendor
- Logistics
- Clinical SMEs willing to try RPM

Sources of Information

- [1]2021 Medicare Remote Patient Monitoring FAQs | Foley & Lardner LLP
- [2]https://www.healthrecoverysolutions.com/events/webinar-series/2024-telehealth-reimbursement-updates?fbclid=IwAR1q8BA6Eb9RpvrIZ0a-bTZNzhxUjwtdJcQuIhjVyEYcHIuAo7CEd2dee7g

Questions and Contact Information

- What questions do you have for me?
  - Email: evan.harmon@bhsi.com
  - Phone: 502-663-1821
- Specific questions for Baptist?
  - Email: mitsy.harned@bhsi.com