Improving Patient Outcomes Using Remote Patient Monitoring (RPM)

Joe Pinto, Jr., Practice Transformation Specialist, Quality Insights

Host: Joe Pinto, Jr.

- Practice Transformation Specialist with Quality Insights since 2011.

- Previously worked as a HIT Workflow and Implementation Coordinator for the PA REACH project.

- Has a combined 30 years of experience in various aspects of the health care field having previously worked as a Provider Relations Representative delivering the Medicaid managed care programs in both Pennsylvania and Illinois, as well as Operations Manager and Billing Supervisor for two DME suppliers in the Northeastern Pennsylvania area.

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Housekeeping Notes

- All attendee lines are muted.

- Please submit your questions to our panelists via the Q&A feature.

- Questions will be addressed at the end of the session, as time permits.

- A copy of the slide deck will be emailed to you after the session.

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Quality Insights Overview

- Non-profit organization focused on data community solutions to improve health care quality in pursuit of better care, smarter spending and healthier people.

- Change agent, trusted partner and integrator of organizations collaborating to improve care.

Continuing Education Credit

- To complete the course, the learner must:
    - Complete the 60-minute webinar
    - Complete the evaluation and post-test

- Continuing Education
    - **Physicians/Nurses:** In support of improving patient care, this activity has been planned and implemented by Quality Insights and CAMC Health Education and Research Institute. CAMC Health Education and Research Institute is accredited by the American Nurses Credentialing Center (ANCC), the Accreditation Council for Pharmacy Education (ACPE) and the Accreditation Council for Continuing Medical Education (ACCME), to provide continuing education for the health care team.

Learning Outcomes

- After this course, the learner will:
  - Describe the prevalence of prehypertension and hypertension.
  - Define remote patient monitoring.
  - Explain how remote patient monitoring improves hypertensive outcomes.
  - State how to develop a remote patient monitoring process in a healthcare organization.

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Welcome: Guest Speakers from The Wright Center

Kari Machelli, RN, CM
Asst. Vice President of
Integrated Primary Health
Services, The Wright Center

Amanda Vommaro, CCHW
Director- Patient Centered Services,
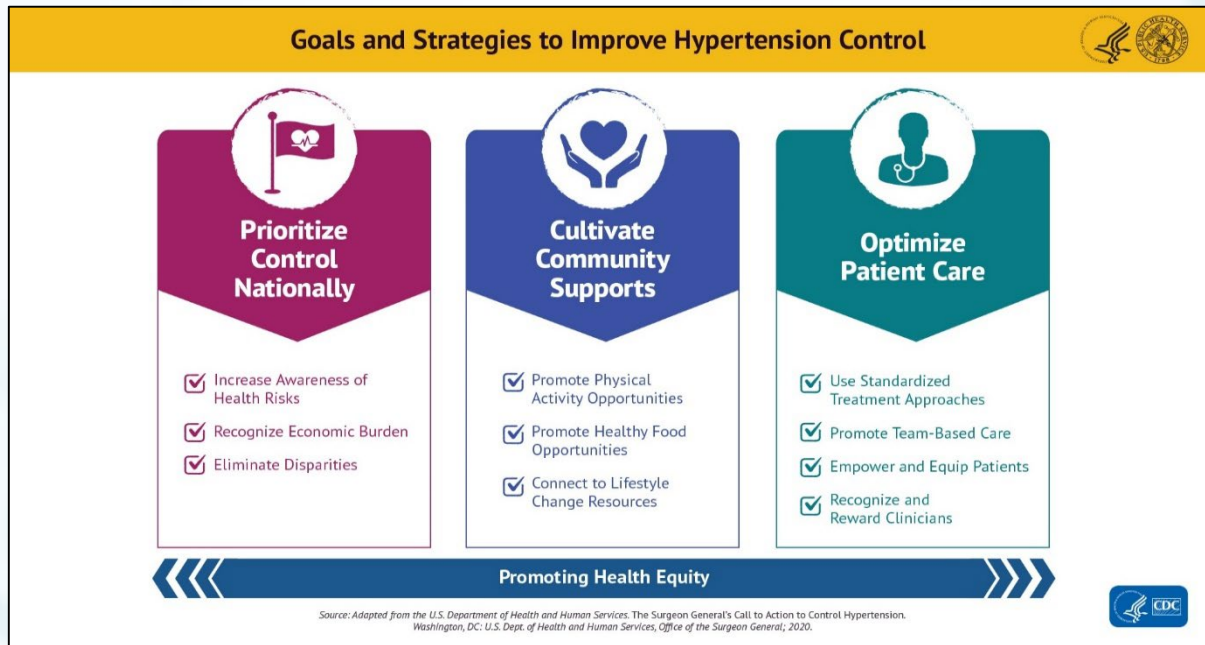Co-Director- Patient & Community
Engagement, The Wright Center

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Surgeon General's Call to Action

From *Partner Toolkit*, by Centers for Disease Control and Prevention, 2022.

Goals & Strategies to Improve Hypertension Control

From *Partner Toolkit*, by Centers for Disease Control and Prevention, 2022.

What is Hypertension?

- "High blood pressure, also called hypertension, is blood pressure that is higher than normal. Your blood pressure changes throughout the day based on your activities. Having blood pressure measures consistently above normal may result in a diagnosis of high blood pressure (or hypertension)."

- "The higher your blood pressure levels, the more risk you have for other health problems, such as heart disease, heart attack, and stroke."

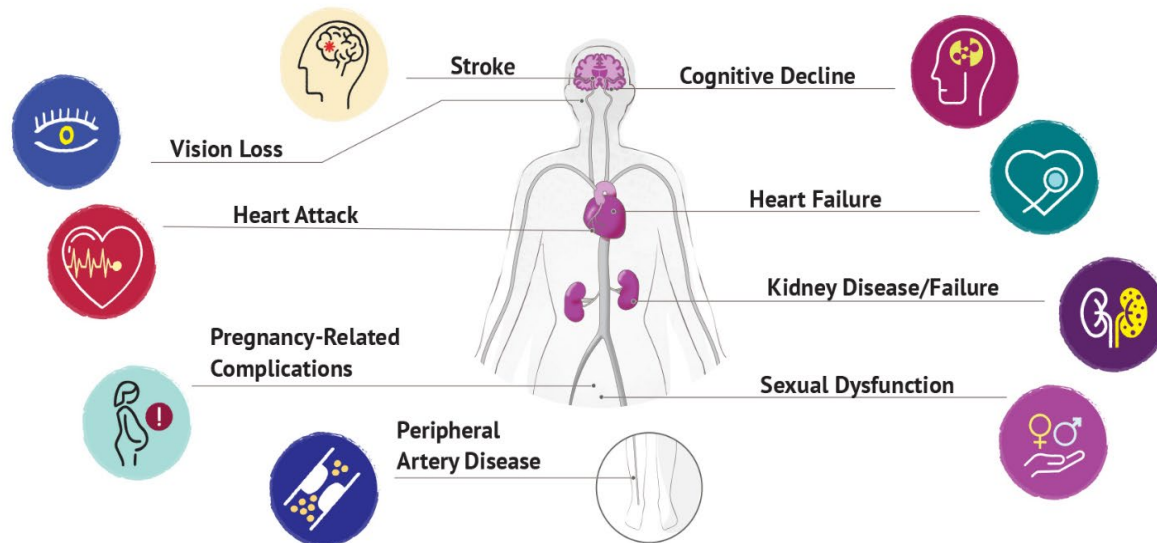Source: Division for Heart Disease and Stroke Prevention, 2021

Hypertension

- Factors that contribute to increased risk for cardiovascular disease in adults with hypertension:[1]
  - Smoking
  - Diabetes
  - Excessive weight
  - Low fitness
  - Unhealthy diet
  - Dyslipidemia

- "For an adult 45 years of age without hypertension, the 40-year risk for developing hypertension is 93% for African Americans, 92% for Hispanics, 86% for whites, and 84% for Chinese adults."[1]

Sources: [1]Rubenfire, 2018; [2] PA Department of Health, 2021

In Pennsylvania:

1 in 3 adults in Pennsylvania have high blood pressure.[2]

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Health Problems Caused by Hypertension

From *Partner Toolkit*, by Centers for Disease Control and Prevention, 2022.

The Cost of Hypertension

- The recommendation is to treat adults with hypertension to reach a blood pressure target of less than 140/90 mmHg

  o From 2017 to 2018, total medical expenses for heart disease were $228.7 billion annually in direct and indirect costs.

  o For the same time period (2017 to 2018), stroke costs were $33.4 billion in direct medical costs and $19.4 billion in indirect medical costs.
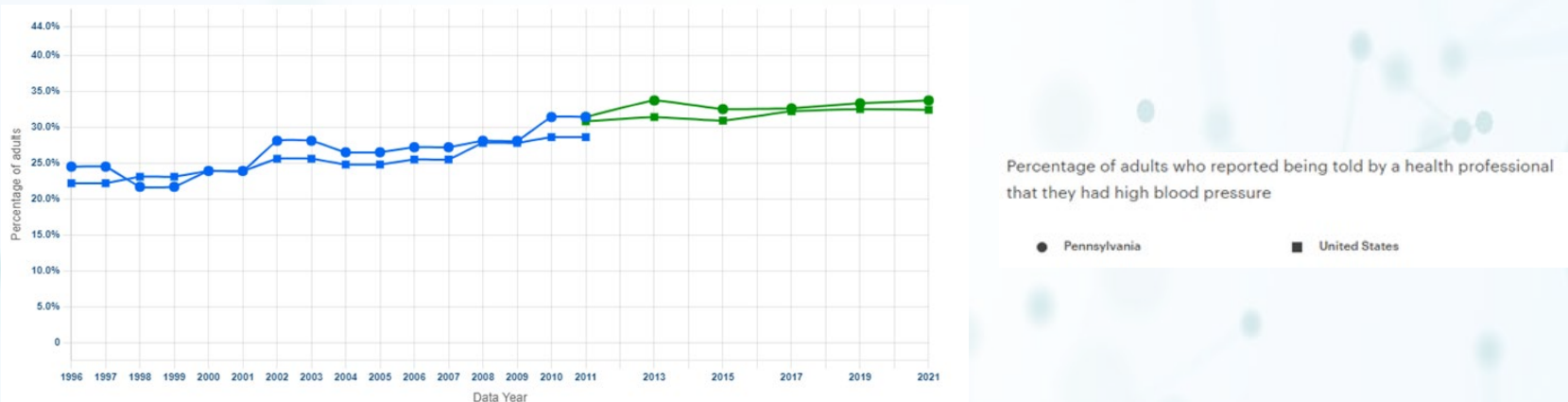
Sources: CDC, 2022; Tsao et al., 2022

2017 Guidelines for High Blood Pressure

BLOOD PRESSURE CATEGORY	SYSTOLIC mm Hg (upper number)	and/or	DIASTOLIC mm Hg (lower number)
NORMAL	LESS THAN 120	and	LESS THAN 80
ELEVATED	120 – 129	and	LESS THAN 80
HIGH BLOOD PRESSURE (HYPERTENSION) STAGE 1	130 – 139	or	80 – 89
HIGH BLOOD PRESSURE (HYPERTENSION) STAGE 2	140 OR HIGHER	or	90 OR HIGHER
HYPERTENSIVE CRISIS (consult your doctor immediately)	HIGHER THAN 180	and/or	HIGHER THAN 120

From _Understanding Blood Pressure Readings,_ by American Heart Association, n.d.

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Hypertension Burden

- In 2021, PA ranked **29th** with 33.7% of patients reporting they have been told they have hypertension.

Percentage of adults who reported being told by a health professional that they had high blood pressure
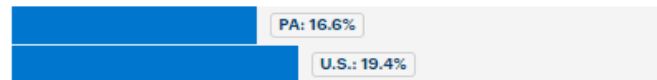
● Pennsylvania   ■ United States

From *Annual Report: High Blood Pressure in Pennsylvania*, by America's Health Rankings, 2022.

Hypertension Burden

RACE/ETHNICITY

High Blood Pressure - Asian

PA: 16.6%

U.S.: 19.4%

High Blood Pressure - Black

PA: 42.6%

U.S.: 42.8%

High Blood Pressure - Hispanic

PA: 24.6%

U.S.: 24.4%

High Blood Pressure - Multiracial

PA: 31.5%

U.S.: 30.4%

High Blood Pressure - White

PA: 34.3%

U.S.: 34.5%

Percentage of adults

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Remote Patient Monitoring (RPM) for Hypertension Management

- RPM is defined as "a subset of telehealth that facilitates patient monitoring as well as the timely transfer of patient-generated data from patient to care team and back to the patient."

Source: AHA, 2019

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What is RPM?

- "Remote patient monitoring (RPM) technologies are a type of digital health platform which enable patients to be evaluated outside of a typical clinical visit, in their home or in their community."

- RPM programs collect and send data to the designated healthcare provider to facilitate assessment and treatment.

Source: Mantena & Keshavjee, 2021

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"Insider Intelligence estimates 30 million U.S. patients, or 11.2% of the population, will use RPM tools by 2024 - marking 28.2% growth from 23.4 million patients in 2020."

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What are the most common RPM devices?

- Blood pressure monitor

- Weight scale monitor

- Blood glucose monitor

- Pulse oximeter

- Thermometer

Source: Health and Human Services, 2022

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Benefits of RPM

- Reduced hospitalizations
- Shorter hospital stays if the patient can be discharged with a remote monitoring device to use at home
- Fewer visits to the emergency room
- Better health outcomes for patients in rural areas
- Better preventative management for chronic conditions
- Reduced risk of COVID-19 exposure, along with other illnesses, for patients and health care workers

Source: Health and Human Services, 2022

Guest Speakers from The Wright Center, Scranton, PA

Kari Machelli, RN, CM
Asst. Vice President of
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Amanda Vommaro, CCHW
Director- Patient Centered Services,
Co-Director- Patient & Community
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Questions for Kari Machelli

- Tell me about The Wright Center's implementation of RPM.

- Which RPM devices are used?

- How does RPM work within your organization?

- Who sets up the patient with The Wright Center app, and how does it work?

Questions for Amanda Vommaro

- How many patients are participating in RPM?

- Where and how are a patient's vitals tracked?

- Once a patient is set up for usage of The Wright Center app, who monitors the patient's readings from the device they have in their home?

- How long does a patient stay on RPM?

Questions for Kari & Amanda

- Can you please identify who can deliver RPM services and explain a bit in detail the role for both the Physician, Nurses and Community Health Workers?

- Since you began offering RPM services at The Wright Center, what are some of the benefits you believe are the result of implementing RPM? And can you elaborate on those benefits?

- How is RPM different from telehealth services?

- Can RPM and Chronic Care Management be billed together?
    - And if so, what does that process include?

Humhealth

- Key features of the Humhealth RPM program

- Review of the Humhealth RPM workflow process

Humhealth (cont.)

Key Features

Multiple Choices of FDA Approved Devices (Bluetooth and 4G)

Vital Alert to Care Team

Automatic Time Tracker for Physiologic Monitoring and Patient Communication

Vital Measurement Compliance Tracking

Comprehensive RPM Analysis Report

Text Message Alert to Take Missed Vital Readings

From *Remote Patient Monitoring*, by Humhealth, n.d.

Humhealth (cont.)

RPM Workflow

1. Patient Enrollment
2. Device Setup (Bluetooth, 4G, Gateway)
3. Device Demo and Training
4. Vital Measurement
5. Physiologic Monitoring
6. Vital Alert for readings outside Normal Range
7. Interactive communication with patient (Text Message, Voice Call, Video Call)
8. RPM Reimbursement

From *Remote Patient Monitoring*, by Humhealth, n.d.

Dashboard

- The app has role-specific features for the clinical staff and the patient. Active alerts allow the team to respond to a patient's vital signs that are outside the provider's parameters. This allows the team to follow the patient's action plan and respond per practice protocols for next steps. It also tracks the patients in the program.

From *Mobile App Features*, by Humhealth, n.d.

2023 CPT Code Information

CPT 99453

- Set-up patient instructions and education regarding the use of RPM equipment
- Must be ordered by physician or Qualified Health Care Professional (QHCP)
- Billed one-time per patient, minimum 16 calendar days of monitoring through device readings

CPT 99454

- Devices supply with daily recordings or programmed alerts transmission
- Must be ordered by physician or QHCP
- Billed for a calendar month, minimum 16 calendar days of monitoring through device readings

2023 CPT Code Information (cont.)

CPT 99457

- RPM treatment management services, requiring interactive communication with the patient/caregiver
- Performed by clinical staff under general supervision
- Billed for a minimum of 20 minutes in a calendar month

CPT 99458

- Reported in conjunction with 99457 to report each additional 20 minutes of time
- Performed by clinical staff under general supervision
- Billed for additional 20 minutes in a calendar month as an add-on to 99457

2023 CPT Code Information (cont.)

CPT 99091

- RPM treatment management services, requiring interactive communication with the patient/caregiver
- Performed by physician, other QHCP
- Billed for a minimum of 30 minutes in a calendar month

Questions

Additional Resources

- [Quality Insights Pennsylvania Hypertension and Diabetes Resources](#)

- [Target:BP SMBP Training Video](#)

- [Target:BP SMBP Patient Training Checklist](#)

- [AMA: 8 Steps to Ensure Your Patients Get Their BP Right](#)

The Wright Center on the Web

For more information on The Wright Center, The Wright Center for Community Health, and The Wright Center for Graduate Medical Education, visit their website at: https://thewrightcenter.org.

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For more information on Quality Insights, visit our website at: www.qualityinsights.org/stateservices/projects/pa-1815.

Connect with Quality Insights on social media via Twitter and LinkedIn.

@Qual_Insights

www.linkedin.com/company/1259377

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Evaluation

- Improving Patient Outcomes Using Remote Patient Monitoring

- **Evaluation & Post-Knowledge Check: http://bit.ly/3Eaicks**

QR Code
Activate the camera on your smart phone and scan this QR code to link to the **evaluation.**

THANK YOU!

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