Engaging Community Paramedics and Pharmacists in Self-Measured Blood Pressure Monitoring Loaner Programs – Challenges and Successes
Learning Objectives

After this presentation, learners will be able to:

• Describe a Self-Measured Blood Pressure Monitoring Loaner Program
• List at least two benefits of a Self-Measured Blood Pressure Monitoring Loaner Program
• Identify at least two non-physician team members that can be engaged in hypertension management
Local Public Health

Kristin Erickson, MS, APHN-BC, RN

- Fergus Falls, MN
  - Otter Tail County Public Health Nurse
    - Assigned to PartnerSHIP 4 Health (PS4H) – local public health and community partners
      - Funded by the Minnesota Statewide Health Improvement Partnership (SHIP) and Community Wellness Grant (CWG) Dollars
Clinical Pharmacist

Brody Maack, PharmD, BCACP, CTTS

- Assistant Professor of Practice and Clinical Pharmacy Specialist at NDSU
- Family Healthcare, Fargo, ND

www.partnership4health.org
Community Paramedic

Jason Jordahl, NRP-CP

- Community Paramedic
- F-M Ambulance Service, Fargo, ND
Today’s WebEx Agenda

- Why Self-Measured Blood Pressure (SMBP) Monitoring?
- What is SMBP Monitoring?
- PartnerSHIP 4 Health Partner Opportunity
- Clinical Pharmacist Journey
- Community Paramedic Journey
- Outcomes
- Questions
Why a Self-Measured Blood Pressure Monitoring Program?

- Intel from Community Paramedics Network Meeting
  - “If we only had access to BP cuffs for our patients with high blood pressure...”

- Community Wellness Grant (CWG) Strategy 2.4
  - “Increase use of self-measured blood pressure monitoring tied with clinical support”

- Evidence
  - Strong scientific evidence shows that self-measured blood pressure monitoring (SMBP), also known as home blood pressure monitoring, plus clinical support, helps people with hypertension lower their blood pressure (https://millionhearts.hhs.gov/tools-protocols/smbp.html)
Summary of the Evidence Supporting Self-Monitoring

SMBP + ADDITIONAL CLINICAL SUPPORT = A PROVEN APPROACH TO REDUCING THE RISK OF DISABILITY OR DEATH DUE TO HYPERTENSION

ADDITIONAL CLINICAL SUPPORT INCLUDES:

ONE-ON-ONE COUNSELING

TELEPHONIC OR WEB-BASED SUPPORT

EDUCATIONAL CLASSES

https://www.healthit.gov/sites/default/files/final_smbp_sect_508_tested_no_watermark.pdf
Why Implement an SMBP Program in Your Practice?

Burden of the disease

1/3 of Americans (age 18 and older) are hypertensive (72 million adults)

nearly 1/2 are not under control (35 million adults)

Hypertension is the most common reason chronically ill patients visit a provider.

17 million people are aware of their hypertension and are being treated, but their blood pressure is still not under control.

$131 billion each year Direct health care costs related to hypertension.
Payment reform and how providers may be reimbursed for SMBP

Health care payment reform is shifting from fee-for-service to pay-for-value reimbursement, which supports compensation for self-measured blood pressure monitoring.

Currently, reimbursement for SMBP varies by health plan for both blood pressure monitors and the service of monitoring blood pressure.

Some medical practices loan monitors to patients or offer group purchasing programs for monitors at cost.
What is Self-Measured Blood Pressure Monitoring (SMBP)?

Self-Measured Blood Pressure Monitoring is the regular measurement of blood pressure by a patient at home or elsewhere outside of the clinical setting using a personal home measurement device.
How to Successfully Implement an SMBP Program in Your Practice

Click on the buttons to learn more:

- Learn Methods for Monitoring
- Teach SMBP to Patients
- Use EHR Technology Effectively
- Communicate with Patients
- Develop Practice Workflow Steps
- Get Involved

www.partnership4health.org
Why Community Paramedics and Pharmacists?

- Community Wellness Grant (CWG) Strategy 2.3
  - "Increase engagement of non-physician team members in hypertension management in community health care systems"

- Community Wellness Grant (CWG) Strategy 2.7
  - "Increase engagement of community pharmacists in the provision of medication –self management for adults with high blood pressure"
What is a Self-Measured Blood Pressure Monitoring Program?

A. The regular measurement of blood pressure by a patient at home using a personal home measurement device
B. The regular measurement of blood pressure by a patient outside of the clinical setting using a personal home measurement device
C. Plus clinical support
D. A, B, and C
Knowledge Check

What is a Self-Measured Blood Pressure Monitoring Program?

A. The regular measurement of blood pressure by a patient at home using a personal home measurement device
B. The regular measurement of blood pressure by a patient outside of the clinical setting using a personal home measurement device
C. Plus clinical support
D. A, B, and C

www.partnership4health.org
SMBP Partner Opportunity

PartnerSHIP 4 Health Deliverables
- 7 Blood Pressure Cuffs
- $4,000
- Technical Assistance

Partner Deliverables
- Self-Measured Blood Pressure Monitoring Loaner Program Policy and Protocol
- One Screening Event with a Vulnerable Population
- Completion of MDH Pharmacy Survey
- Completion of PartnerSHIP 4 Health Pre and Post-Intervention Survey

www.partnership4health.org
SMBP Program Partners

Community Paramedic Partners
- F-M Ambulance Service
- Perham Area EMS
- Ringdahl EMS

Pharmacy Partners
- Family Healthcare – Clinical Pharmacist
- Moorhead Medical Pharmacy
- Perham Health Pharmacy

www.partnership4health.org
Spotlight: Pharmacy

Brody Maack, Family Healthcare - Clinical Pharmacist

- Overview
- Program Development
- Challenges
- Successes
- Lessons Learned
- Moving Forward

Success Story: Blood Pressure Program Empowers Patients
Family Healthcare

Clinical Pharmacist SMBP Program

- High Blood Pressure is common among patients at Family HealthCare (Fargo, ND)
- Wishlist: help with accurate diagnosis of hypertension and empower patients to monitor their blood pressure at home
- Partnered to offer a Self-Measured Blood Pressure Monitoring Loaner program
SMBP Monitoring Program Development Process

- reviewed best practices
- engaged pharmacy students
- created a patient education protocol
- created a patient follow-up protocol
- created a cleaning and re-loanung policy
- developed a referral system
Challenges and Supports

- Implementation Challenges: Low utilization
- Implementation Supports
  - Medication adherence problems
  - Lack of ability to purchase a BP monitor
  - Lack of any current home BP monitoring program
  - Best practice
Successes

- identified several patients previously undiagnosed with hypertension
- helped patients identify additional lifestyle methods
- connected patients with services like FMACP
- partnering with PS4H has enabled FHC to intentionally engage patients in self-management activities, which in turn helps keep patients at home, out of the hospital and emergency departments, as well as improve individual patient outcomes
Collaborative management = key to patient health

- NDSU pharmacy student interns
- Fargo-Moorhead (F-M) Ambulance Community Paramedics (FMACP)
- FHC dietitian
- FHC providers + clinical pharmacist = medication therapy management
Moving Forward

- Continue to educate provider and nursing staff about the program
- Promote program use among provider and nursing staff
- Continue to expand upon collaboration with the local community paramedic programs to help with home BP monitoring and medication reconciliation/adherence
Knowledge Check

What are some of the benefits of the Family Healthcare Self-Measured Blood Pressure Monitoring Loaner Program? (Select all that apply)

A. Identification of patients previously undiagnosed with hypertension
B. Provider collaboration with the clinical pharmacist in regards to medication therapy management
C. Improved patient outcomes
D. All of the Above
What are some of the benefits of the Family Healthcare Self-Measured Blood Pressure Monitoring Loaner Program? (Select all that apply)

A. Identification of patients previously undiagnosed with hypertension
B. Provider collaboration with the clinical pharmacist in regards to medication therapy management
C. Improved patient outcomes
D. All of the Above
Spotlight: Community Paramedic

F-M Ambulance Service
- Overview
- Development
- Patient Scenarios
- Challenges/Supports
- Lessons Learned
- Moving Forward

Success Story: Partnering For Better Blood Pressure Control
Overview

- January 2016 - Sanford Health’s F-M Ambulance (FMA) Service Community Paramedic Program met with PartnerSHIP 4 Health (PS4H)
- PS4H offered funds and guidance to develop and implement the Self-Measured Blood Pressure (SMBP) Monitoring Loaner Program
- FMA partnered with a clinical pharmacist and pharmacy students from Family Healthcare in Fargo, North Dakota
- Promoted the program in conjunction with Sanford Health, and started offering it to patients in August 2016
- Referrals are made through Sanford Health’s primary care clinics, walk-in clinic, and inpatient settings
According to Jason Jordahl, FMA Community Paramedic, “Many patients did not realize they could check their blood pressure at home. Now that they are doing it, seeing their numbers on a daily basis gives them peace of mind.”

Patients are encouraged to bring their daily pressures to their medical appointments and share them with their medical team.

Sherm Syverson, FMA senior director, understands the value of this program for vulnerable populations and explains, “Many of the patients in the SMBP program are not able to access care due to mobility or transportation issues. This program offers another way these patients can partner to manage their own care in their own home.”
Patient #1

- 89-year-old female with history of high blood pressure
- No primary care provider
- On a medication to control her blood pressure with little effect
- After enrolling in SMBP, had consistent morning readings of 179/90-190/110 with slightly lower readings in the evening of 150/90-160/100
- Urged to connect with a provider to manage her blood pressure.
- CPs continue to visit
Patient #2

- 78-year-old female with cognitive issues
- Referred by provider who wanted insight into the patient’s home environment
- The patient’s blood pressure readings varied
- Initial home visit, patient had difficulty using the blood pressure cuff, but the CP continued to help.
- After a few days of home blood pressure monitoring, readings decreased from 190/100 to 130/80.
Patient #3

- 74-year-old female with moderate to severe anxiety triggered by high blood pressure readings
- Older wrist-style blood pressure cuff replaced with a new cuff
- Consistently well-controlled pressures
- Doctor adjusted her medication
- Average reading 120/70 - controlled daily pressures along with the bi-weekly CP visits lowered her anxiety level
Challenges and Supports

- Implementation Challenges: finding our own work flow
- Implementation Supports: increase community knowledge and encourage people to be more accountable for their own health
According to EMS Director Sherm Syverson, “Prolonged unmanaged high blood pressure often leads to stroke and prolonged nursing home stays, which is an expensive way to manage health care.”

PartnerSHIP 4 Health connects the dots, and together, we are teaching patients how to manage their care at home. It also increases patient satisfaction and lowers overall health care costs.”
Moving Forward

- Continue our current plan and increase as we can. We want to partner with clinics and physicians and APP's to continue to do this - it helps when we have a focused population.

- PartnerSHIP 4 Health promotes preventive care, innovatively bringing community paramedics, pharmacists and clinics together to make an impact on blood pressure.
What are some of the benefits of the F-M Ambulance Self-Measured Blood Pressure Monitoring Loaner Program? (Select all that apply)

A. Teaches patients how to manage their care at home
B. Increases patient satisfaction
C. Lowers overall healthcare costs
D. All of the above
What are some of the benefits of the F-M Ambulance Self-Measured Blood Pressure Monitoring Loaner Program? (Select all that apply)

A. Teaches patients how to manage their care at home
B. Increases patient satisfaction
C. Lowers overall healthcare costs
D. All of the above
July 2016: F-M Ambulance Community Paramedics Chris Neu and Jason Jordahl, Family Healthcare Clinical Pharmacist Brody Maack and NDSU Pharmacy Students spent the day at the local Emergency Food Pantry checking blood pressures for those who may not have access to healthcare, or those who don’t actively seek it out. They also educated participants about the importance of continuing to monitor their blood pressure.

## Outcomes

### August-December 2016 SMBP Monitoring Outcomes

<table>
<thead>
<tr>
<th>Item</th>
<th>Family Healthcare</th>
<th>F-M Ambulance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Referral sources</td>
<td>Physicians, Nurse Practitioners, Physician Assistants</td>
<td>Clinics, Hospitals, Community, Paramedics, Pharmacists, Home Health Agency, Physicians, Nurse Practitioners, Physician Assistants, Health Coach</td>
</tr>
<tr>
<td># referrals</td>
<td>NA</td>
<td>20</td>
</tr>
<tr>
<td># patients receiving BP cuff</td>
<td>9</td>
<td>14</td>
</tr>
<tr>
<td># SMBP patients better able to manage BP</td>
<td>7</td>
<td>10</td>
</tr>
<tr>
<td># SMBP patients able to decrease BP medications</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>% return rate of BP cuffs</td>
<td>100%</td>
<td>60%</td>
</tr>
</tbody>
</table>
Resources

Improve Your Patients’ Health:

CDC REPORT:

“SELF-MEASURED BLOOD PRESSURE MONITORING: ACTION STEPS FOR CLINICIANS”

Be sure to read this very worthwhile report to learn more about how self-measured blood pressure monitoring can effectively improve your patients’ health.

https://www.healthit.gov/sites/default/files/final_smbp_sect_508_tested_no_watermark.pdf

www.partnership4health.org
Self-Measured Blood Pressure Monitoring: Action Steps for Clinicians

SMBP plus additional clinical support is one strategy that can reduce the risk of disability or death from high blood pressure. The purpose of this CDC guide is to help clinicians implement SMBP in their practices by providing evidence-based action steps and resources.

https://millionhearts.hhs.gov/tools-protocols/smbp.html

This program, from the American Medical Association and Johns Hopkins Medicine, is designed for use by physician offices and health centers to engage patients in SMBP. This program describes various ways that the patient can obtain blood pressure measurements outside of the clinical office either through the purchase of a device or a physician-led blood pressure monitor loaner program.

https://millionhearts.hhs.gov/tools-protocols/smbp.html
Self-Measured Blood Pressure Monitoring: Action Steps for Public Health

Strong evidence suggests that SMBP—when combined with regular support from trained health care professionals—is effective in lowering blood pressure among hypertensive patients. This Centers for Disease Control and Prevention (CDC) guide outlines action steps that public health practitioners can take to support SMBP.

https://millionhearts.hhs.gov/tools-protocols/smbp.html
Discussion