

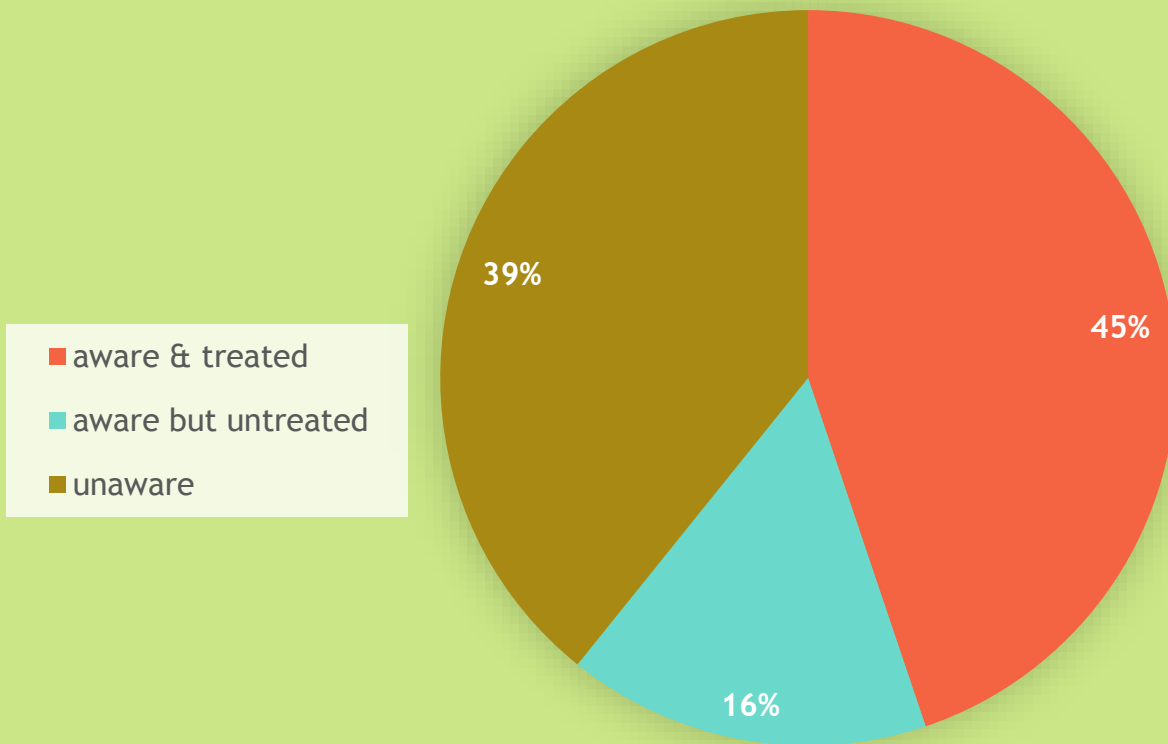
2015-2016 DNP Project:

*The Effect of Faith Community/Public Health  
Nursing Practice in the Prevention and  
Management of Hypertension*

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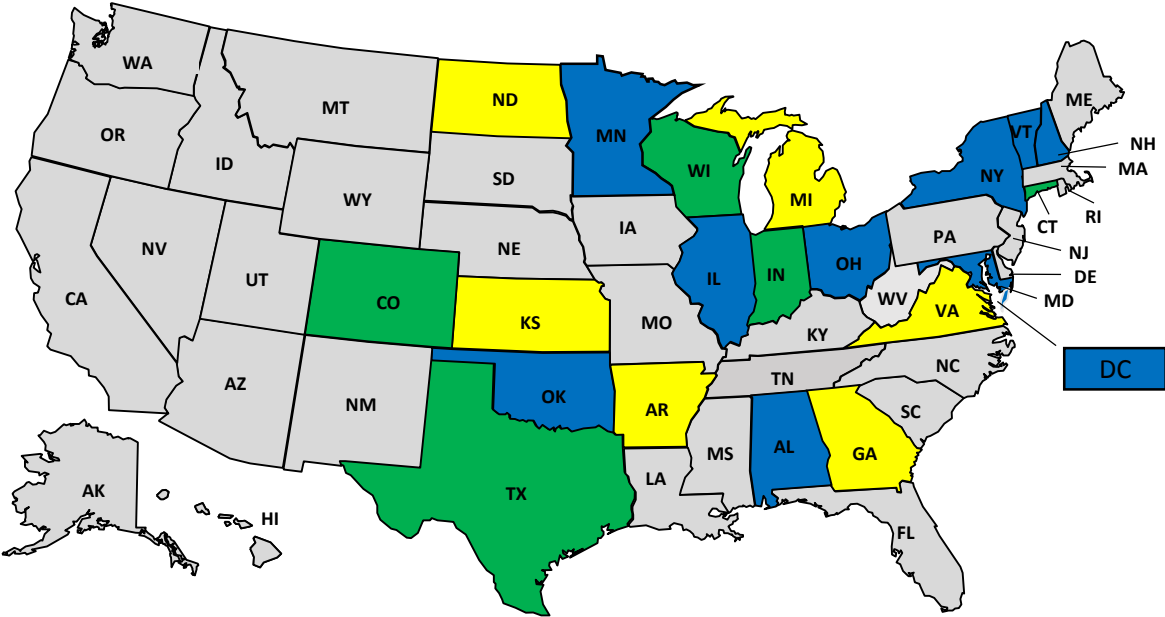


## Hypertension in the US



- Goal: to prevent one million hearts attacks and strokes by 2017.
- Intervention needed at all levels, and especially where people live, learn, work, play & pray.
- Nurses in community/public health roles well-positioned to address the need.

# Map of 22 Learning Collaborative States, Territories, and Freely Associated States

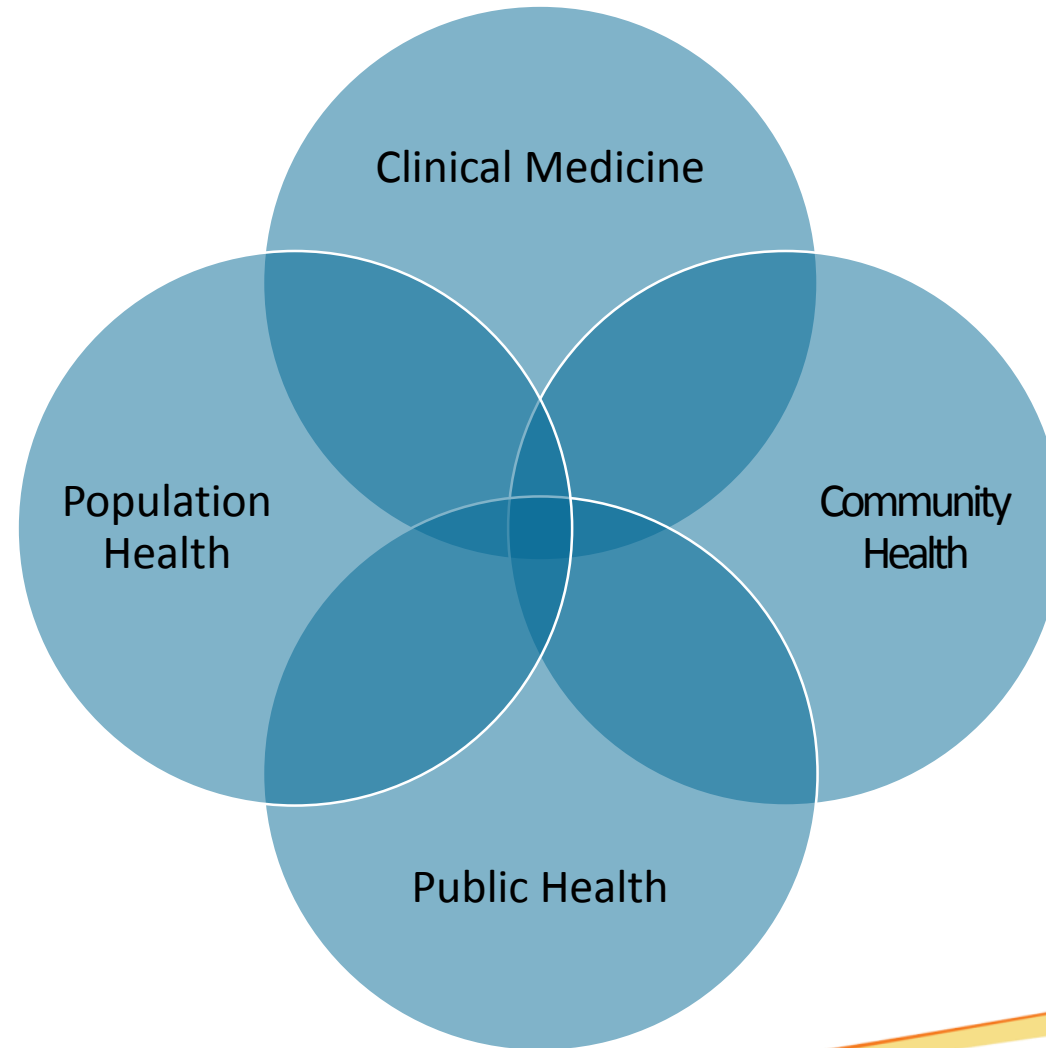


**KEY**

- Blue = Year 1 states
- Yellow = Year 2 states
- Green = Year 3 states



# Complementary Approaches to Identify, Control, and Improve Blood Pressure



## Communication

## Leadership and Vision



Systems Change Video:  
<http://youtu.be/PJsgZZIjoHk>

# A Collaborative Effort



- Million Hearts Initiative (CMS/CDC)
- ASTHO Million Hearts State Learning Collaborative
- APHN
- Maryland Department of Health and Mental Hygiene
- Washington County Health Department
- Meritus Health
- Meritus Health Parish Nurse Network
- GWU DNP Project (2015-2016)
- AACN/CDC Academic Partners to Improve Health



# The Meritus Health Parish Nurse Network Intervention

## Educating Nurses:

- Competency in BP measurement
- Motivational interviewing
- Teaching tools
- Documentation

## Monitoring & Coaching Participants:

- Provided free digital blood pressure monitors
- Had participants self-rate lifestyle focus areas
- Provided educational materials based on focus area
- Regular meetings with nurses to monitor BP and provide coaching

# Methods



# Competency in Blood Pressure Measurement

Figure 2



## COMPETENCY: Blood Pressure Measurement

Million Hearts Blood Pressure Project Parish Nurse: \_\_\_\_\_

Performance Steps	Method of Evaluation	Met	*Unmet	Evaluator Date & Initials	Parish Nurse, Date & Initials
View video clip at: <a href="http://www.nejm.org/doi/full/10.1056/nejmvcm0800157">http://www.nejm.org/doi/full/10.1056/nejmvcm0800157</a>	View 100% of video clip				
Describe how to determine the correct cuff size for the patient <ul style="list-style-type: none"> <li>Identify rubber bladder in cuff</li> <li>Bladder covers 80% circumference of arm</li> <li>Width of bladder 40% circumference of arm</li> </ul>	Return Demonstration				
Demonstrates correct patient positioning <ul style="list-style-type: none"> <li>Seated with feet flat on the floor</li> <li>Leaning against back of the chair not on arm</li> <li>Arm fully supported, brachial artery at heart level</li> <li>Upper arm bare, do not apply cuff over clothing</li> </ul>	Return Demonstration				
Demonstrates correct cuff placement <ul style="list-style-type: none"> <li>Apply cuff snugly</li> <li>Center of bladder is directly above brachial artery</li> <li>Bottom edge of cuff is 1" above elbow</li> </ul>	Return Demonstration				
Demonstrates palpatory technique of estimating BP <ul style="list-style-type: none"> <li>Inflate manometer while palpating radial pulse</li> <li>Note level at which radial pulse disappears</li> <li>Release air from cuff slowly</li> </ul>	Return Demonstration				

# Model for Healthy Blood Pressure

- Seven lifestyle areas based on AHAs Simple Seven
- Self-Assessment (1-10)
- Participants chose 1-2 lifestyle areas

Name: \_\_\_\_\_  
Date: \_\_\_\_\_  
Pre or Post (Circle One)

**BP Self-Monitoring**  
Regularly taking your blood pressures at home or at your pharmacy.  
1 2 3 4 5 6 7 8 9 10

**Healthy Activity**  
Finding ways to move around and meet activity guidelines.  
1 2 3 4 5 6 7 8 9 10

**Healthy Weight**  
Maintaining a recommended weight.  
1 2 3 4 5 6 7 8 9 10

**Managing Medications**  
Taking your medications as prescribed.  
1 2 3 4 5 6 7 8 9 10

**Healthy Eating**  
Reducing salt intake and eating more fruits and vegetables.  
1 2 3 4 5 6 7 8 9 10

**Quit Smoking**  
Staying away from cigarettes and tobacco products.  
1 2 3 4 5 6 7 8 9 10

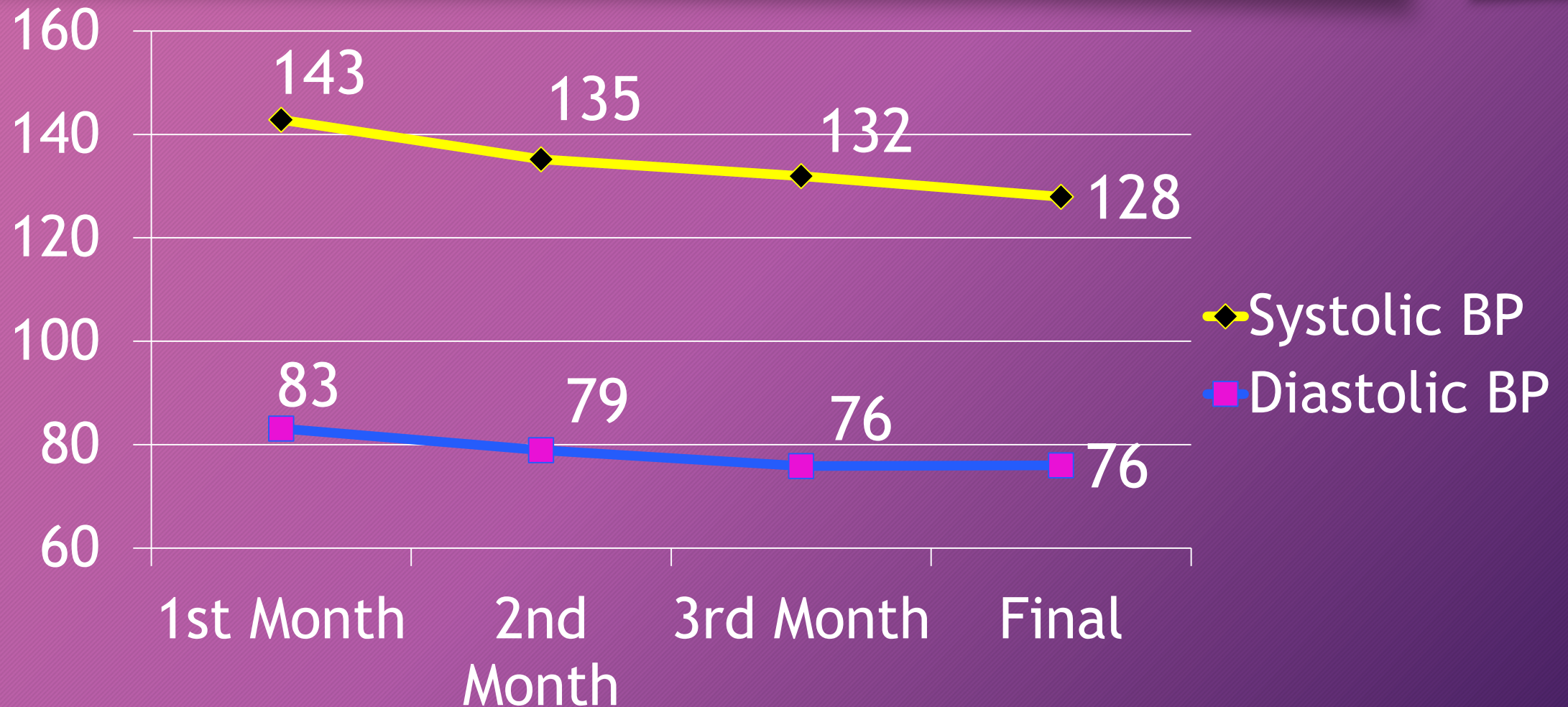
**Managing Stress**  
Reduce the amount of stress in your life and/or find ways to ensure it does not affect you as much.  
1 2 3 4 5 6 7 8 9 10

**Meritus Health | Parish Nursing Program**

This publication was adapted, with permission, from the Model for Healthy Living, designed by the Church Health Center, Memphis Tennessee, [www.churchhealthcenter.org/jcnhome](http://www.churchhealthcenter.org/jcnhome).  
This publication was supported by Delmarva Foundation for Medical Care (DFMC) and Cooperative Agreement Number 2B01DP009025-13 from the Centers for Disease Control and Prevention. Its contents are solely the responsibility of the authors and do not necessarily represent the official views of the Centers for Disease Control and Prevention or the Maryland Department of Health and Mental Hygiene.

# Results

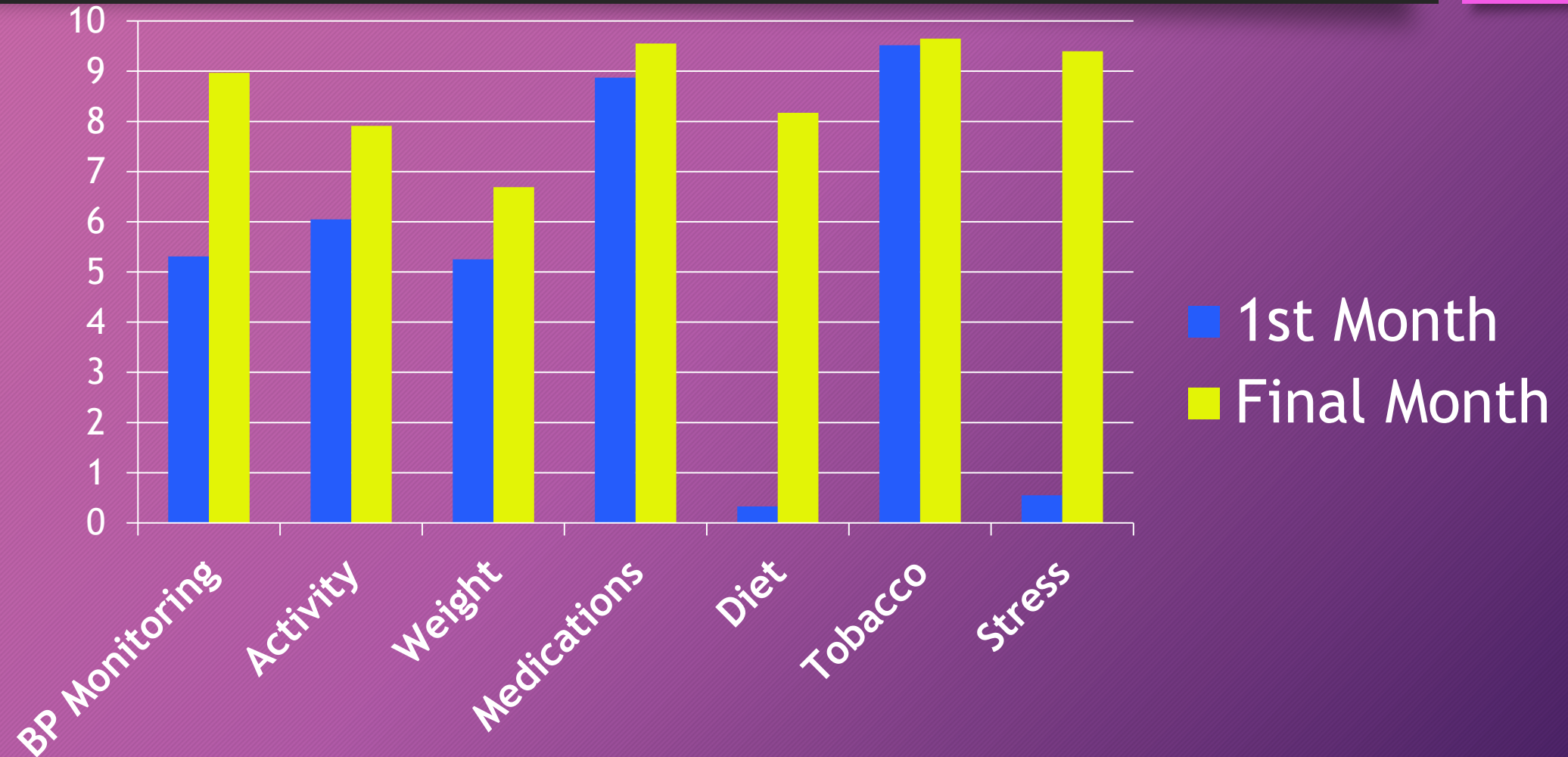
# Analysis of Pre- and Post-intervention Blood Pressure Measures



# Analysis of Pre- and Post-intervention Blood Pressure Measures

Blood Pressure	First Month (n=118)	Second Month (N=113)	Third Month (N=58)	Final (N=109)
Systolic BP (mmHg)	142.82 (17.57) Range: 106-192	135.16 (16.99) Range: 94-218	131.95 (15.53) Range: 104-183	127.95 (15.47) Range: 93-169
Diastolic BP (mmHg)	83.12 (11.49) Range: 55-133	78.95 (10.49) Range: 54-118	75.88 (9.81) Range: 52-103	75.99 (9.49) Range: 52-103
Systolic BP Range				
<140 mmHg	57 (48.3%)	73 (64.6%)	41 (70.7%)	87 (79.8%)
>=140 mmHg	61 (51.7%)	40 (35.4%)	17 (29.3%)	22 (20.2%)
Diastolic BP Range				
<90 mmHg	83 (70.3%)	97 (85.8%)	53 (91.4%)	101 (92.7%)
>=90 mmHg	35 (29.7%)	18 (14.2%)	5 (8.6%)	8 (7.3%)

# Analysis of Lifestyle Scores



# Analysis of Lifestyle Scores

Lifestyle Satisfaction Scores	1 <sup>st</sup> month M (SD)	Final month M (SD)	t value	p
BP self-monitoring	5.31 (3.37)	8.97 (1.66)	11.30	<0.001
Healthy activity	6.05 (2.59)	7.91 (1.82)	10.44	<0.001
Healthy weight	5.25 (2.86)	6.69 (2.56)	6.69	<0.001
Managing Medications	8.87 (2.02)	9.55 (1.19)	4.69	<0.001
Healthy Eating	0.33 (0.47)	8.17 (2.14)	33.99	<0.001
Quit Smoking	9.52 (1.82)	9.65 (1.51)	1.88	0.063
Managing Stress	0.55 (0.50)	7.40 (1.86)	35.09	<0.001

# Conclusions

- Systolic and diastolic BP measures all declined; statistically significant improvement.
- The means of 6 of the 7 lifestyle areas showed significant improvement.
- Overall, the effect of this 3-month faith community nursing intervention of BP monitoring and coaching on lifestyle changes in the at-risk and hypertensive population showed significant improvement in lowering BP and improving satisfaction in lifestyle areas.



# Strengths & Limitations

## Strengths

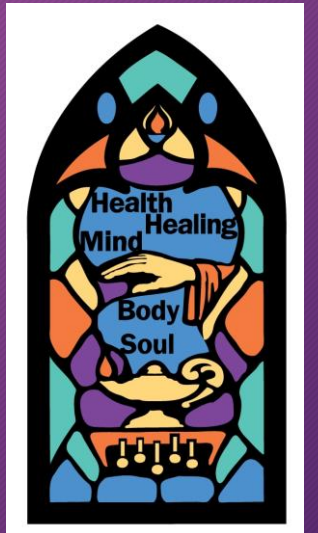
- Strong, established Faith Community Nurse Network
- Stipend to faith communities
- Free BP monitors to participants
- Participant access to a trusted health professional
- Resources of faith community

## Limitations

- Opportunities for the hospital and health dept. collaboration
- Short project time frame and limited resources
- Limited generalizability; lack of control group, small sample
- Communication with PCP

# Recommendations

- Health System/Public Health/Faith Community Partnership
- Valuing the role of nursing in prevention and population health
- Continued work with national partners
- Data collection and analysis
- Dissemination
- More sustainable funding mechanism



# The work goes on...

## Partners

- CDC Nursing Workgroup
- ASTHO
- NACCHO
- NACDD
- National Forum for Heart Disease & Stroke Prevention
- American Heart Association



- Provide targeted technical assistance to communities.
- Provide a platform for sharing success stories.
- Advocate for sustainable funding mechanisms for C/PHN role and future programs.
- APHN Fellow opportunity.

# Faculty Support of DNP Population Health Projects

1. Understand individual vs. population health outcomes.
2. Recognize projects with population health outcomes are equally necessary and important.
3. Consider adding a C/PHN as a secondary advisor.
4. Build academic-practice partnerships that can support population health projects (not just LHD).
5. Think of national initiatives and partners, too!

# Thank you!

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