



COMPASS

COMPREHENSIVE POST-ACUTE STROKE SERVICES

Early Results

NC Stroke Advisory Council Meeting
Tuesday, May 23, 2017

Jacquie Halladay, MD, MPH

Associate Professor, Department of Family Medicine, UNC School of Medicine

Director, NCTracs Trial Innovation Network Hub

Co-Director, North Carolina Network Consortium

Sylvia Coleman, MPH, RN, BSN

Director of Implementation, COMPASS Study

Million Hearts: Preventing Heart Attacks and Strokes

- Cardiovascular prevention works in two realms: the **clinic** and the **community**.
- Clinical and community interventions each contributed about equally to the 50% reduction in U.S. mortality due to heart attacks between 1980 and 2000.



The NEW ENGLAND JOURNAL *of* MEDICINE

Perspective



The “Million Hearts” Initiative — Preventing Heart Attacks and Strokes

Thomas R. Frieden, M.D., M.P.H., and Donald M. Berwick, M.D., M.P.P.

Agenda

- **COMPASS Study**
- Participant flow
- Early results of 342 participants



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COMPASS Study Objectives

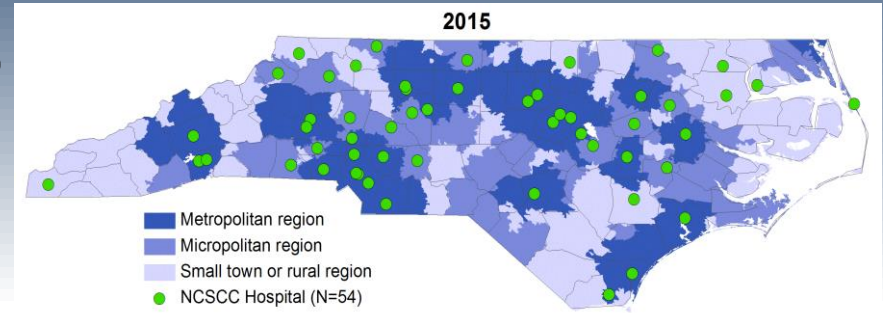
- Address the needs of stroke survivors and their caregivers
- Connect hospitals, community providers, and agencies
- Develop individualized eCare Plan for each patient



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Why Post-Acute?



~ Half of stroke patients in NC are discharged directly home

~ 44% cannot walk independently

< ½ have risk factors assessed, treated, or controlled

Kopunek. Am J Prev Med 2007

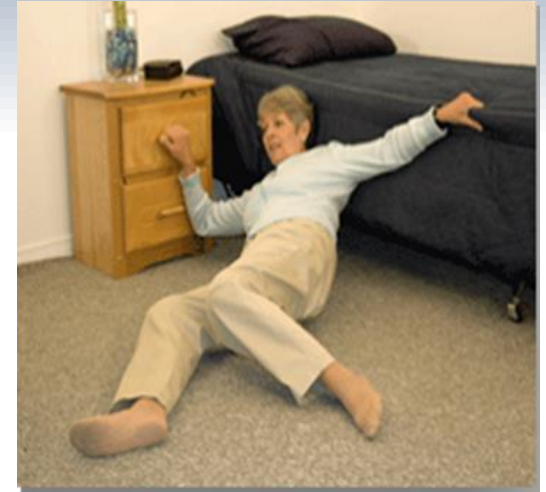
Rosamond NC Med J 2012



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Why Post-acute?

Patients discharged home struggle:



25% readmitted within 90 days

66% readmitted within 1 year



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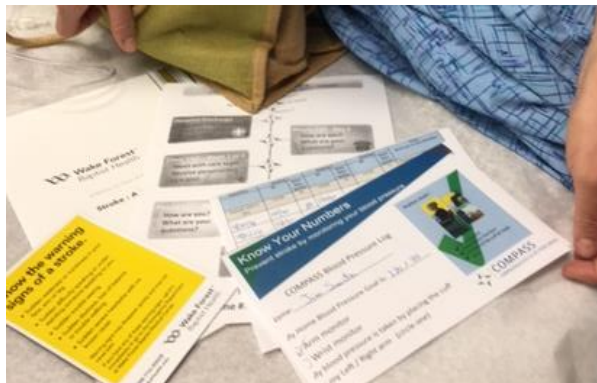
- COMPASS Study
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Patient experience with COMPASS

Study recruitment

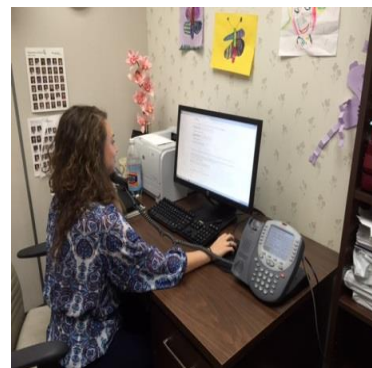


PAC



2 day call

New symptoms?
F/u with PCP?
S/S of stroke
Connected to services?
Transportation?



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7-14 day visit: Assess and Plan

- F/u with PCP
- Medications
- Engagement with therapists
- Access to other community resources



PAC

- Examine
- Review
- Inform



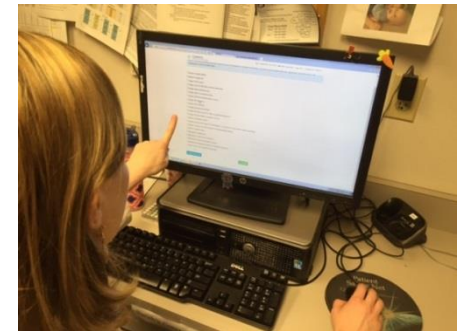
APP



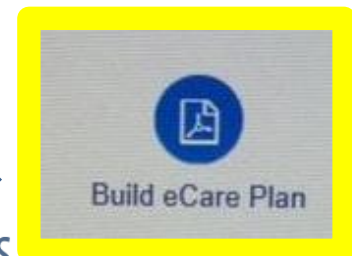
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APP Visit

- Cardiac monitoring
- Discuss recovery
- F/u care – PCP, other providers, back to work, driving, other needs/resources
- Generate eCare Plan



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Agenda

- COMPASS study
- Participant flow
- **Early results of 342 participants**



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Data Source:

- Post-Acute Functional Assessment
- Advanced Practice Provider Assessment

eCare Plan: Numbers

COMPASS: Finding my Way for Recovery, Independence, and Health
Name: Christina Condon ID: 7 January 19, 2016 Page 1

My Goals for My Recovery, Independence, and Health are:
~work ~friends

 COMPASS <small>COMPREHENSIVE POST-ACUTE STROKE SERVICES</small>	What are my concerns?	Why is this important to me?	How do I find my way forward?
Numbers: Know My Numbers 	My Blood Pressure is 170 / 80	High blood pressure damages the arteries that bring blood to the brain. This can cause another stroke. A blood pressure less than 120/80 is considered normal.	Healthy numbers lead to a healthy life. Keeping track of my numbers will decrease my chances of having another stroke.
	My LDL (bad) cholesterol level is 120	A high LDL (bad) cholesterol level puts me at risk for another stroke. My bad cholesterol level should be less than 70.	
	I do not know all of the risk factors for stroke	There are risk factors I didn't realize could cause another stroke. It's important that I am aware of these risk factors, and my own specific risk factors, so I can make correct lifestyle choices to prevent or manage them.	There are many factors that can put me at a higher risk of having another stroke. These risk factors are: <ul style="list-style-type: none">• High blood pressure• Smoking• Diabetes or high blood sugar• Irregular heartbeat or atrial fibrillation• Heart disease• High cholesterol• Physical Inactivity

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Risk Factor Recognition

Among 342 stroke survivors who are discharged to home and seen by the PAC/APP team.....



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All Participants:

NOT noting specific risk factors for stroke

125 (36.5%) did **NOT** note High Blood Pressure as a risk factor for stroke

247 (72 %) did not note....smoking.....

271 (79 %) did not note....diabetes.....

159 (57%) did not note....high cholesterol...



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All Participants:

NOT noting specific risk factors for stroke

320 (94%) did not note.....atrial fibrillation...

304 (89%) did not note.....heart disease.....

288 (84%) did not note a lack of physical activity



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Among those **with the conditions or condition surrogates**, “n” (%) that **did note such risk factors....**

Among ...116 subjects with a SBP of ≥ 140 ,
79 (68%) recognized...HTN as a risk factor

Among 58 that smoked,
39 (67%) recognized....smoking as a risk factor....

Among 28 with a HbA1c of $>8\%$,
18 (64%)....recognized DM as a risk factor.....



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Condition specific:

Among 38 with a Hx. of atrial fibrillation/flutter,
11 (29%) recognized it as a risk factor.....

Among 89 with a Hx. of heart disease*,
16 (18%) recognized it as a risk factor.....

109 with an LDL of > 100 mg/dl,
61 (56%) recognized high cholesterol.....

144 with ≤ 20 minutes of physical activity/day,
20 (14%) recognized **physical inactivity**.....

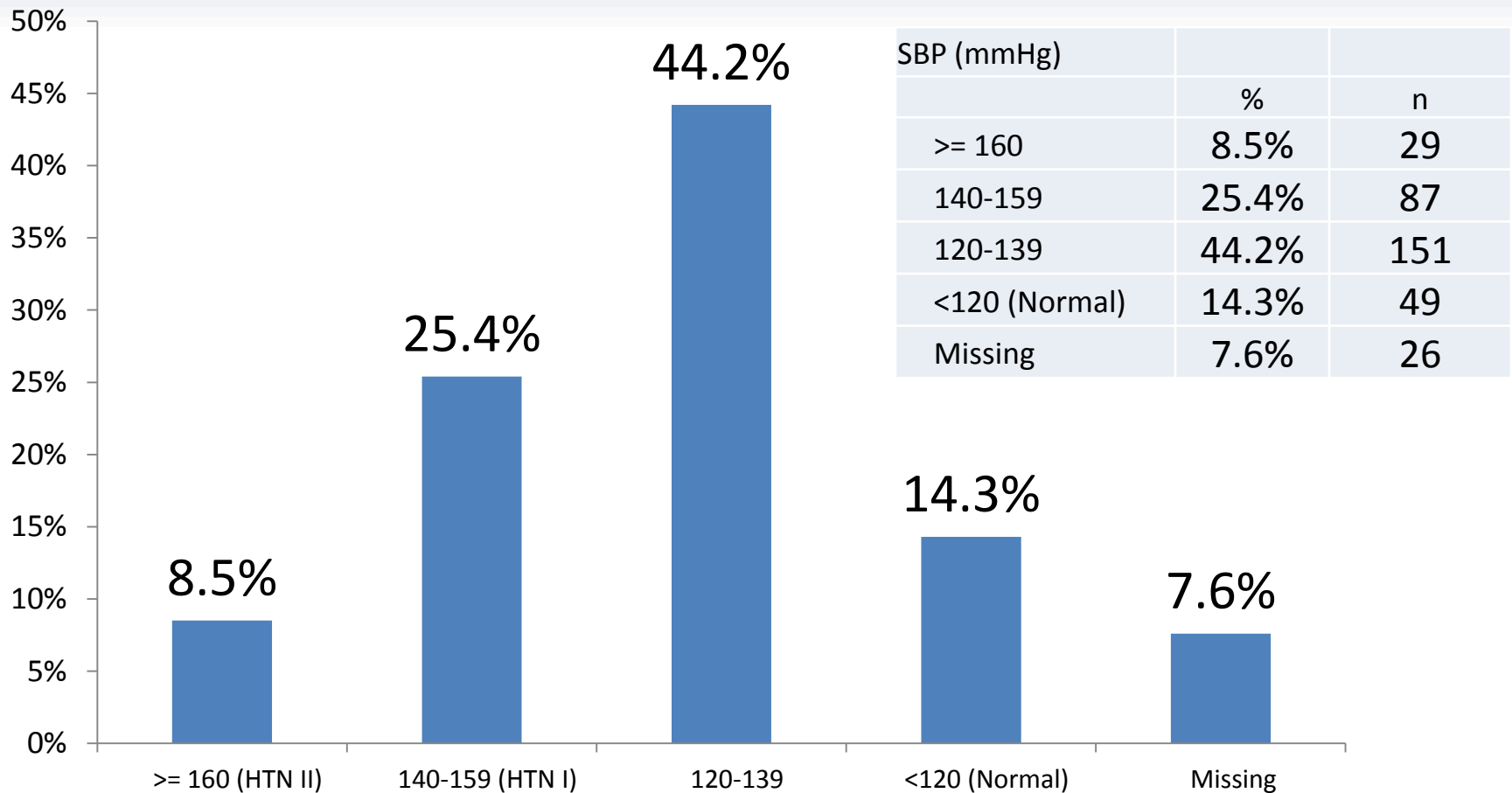


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*Heart Disease = CAD/MI/CHF/Valve Disease

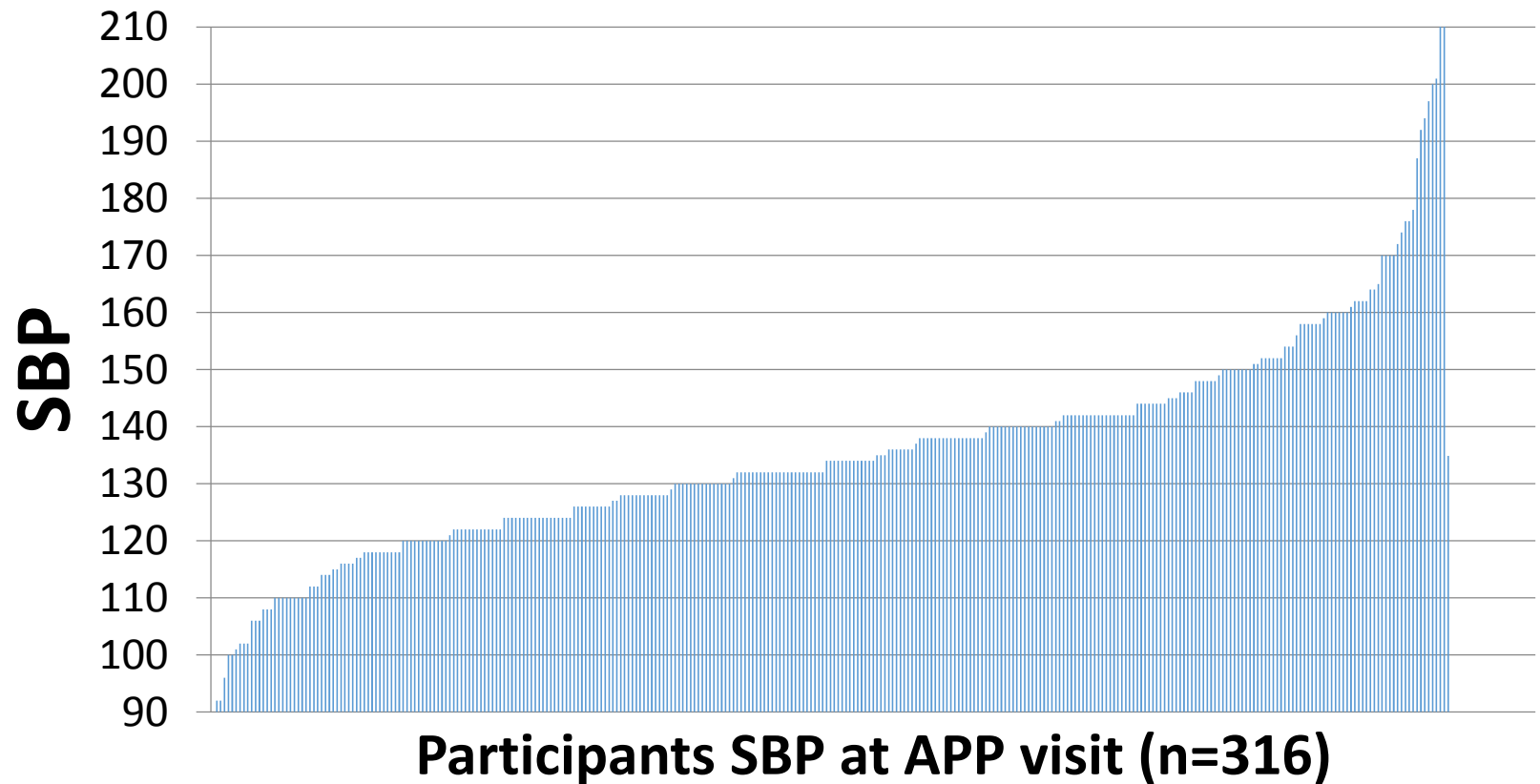
SBP Data at APP Visit



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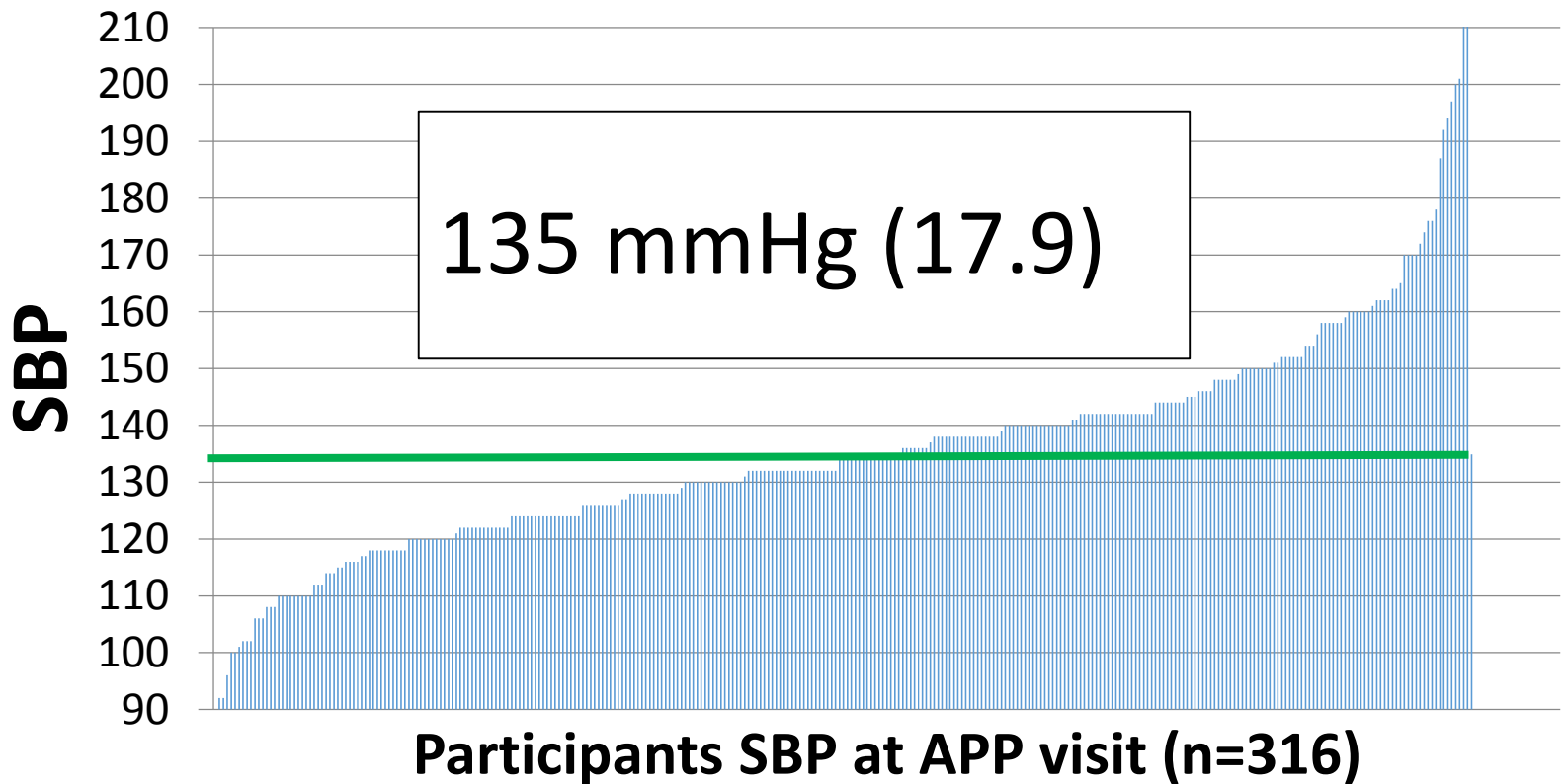
Frequency Distribution

SBPs at APP Visit (n=316/342)



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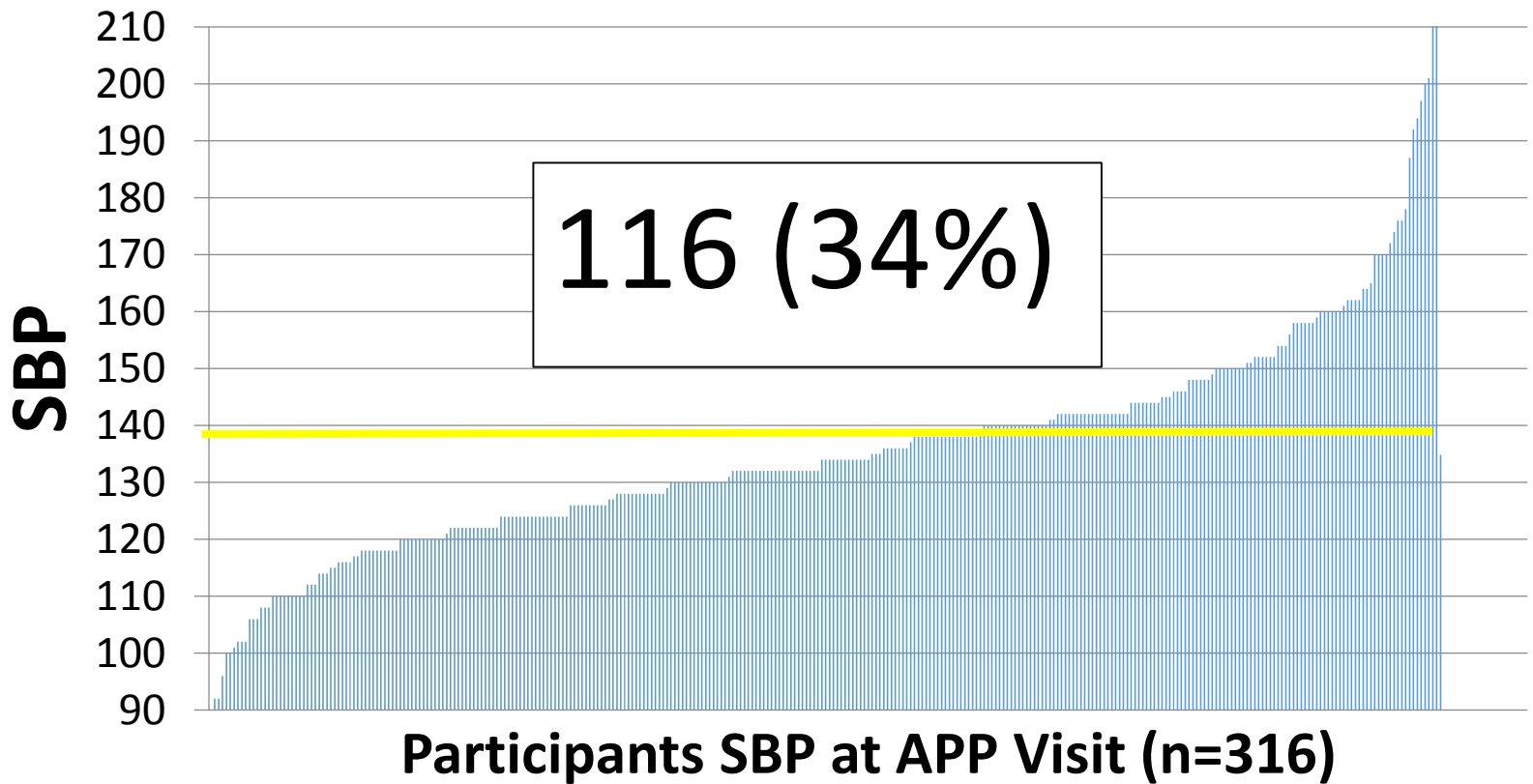
Systolic BP Mean (SD)



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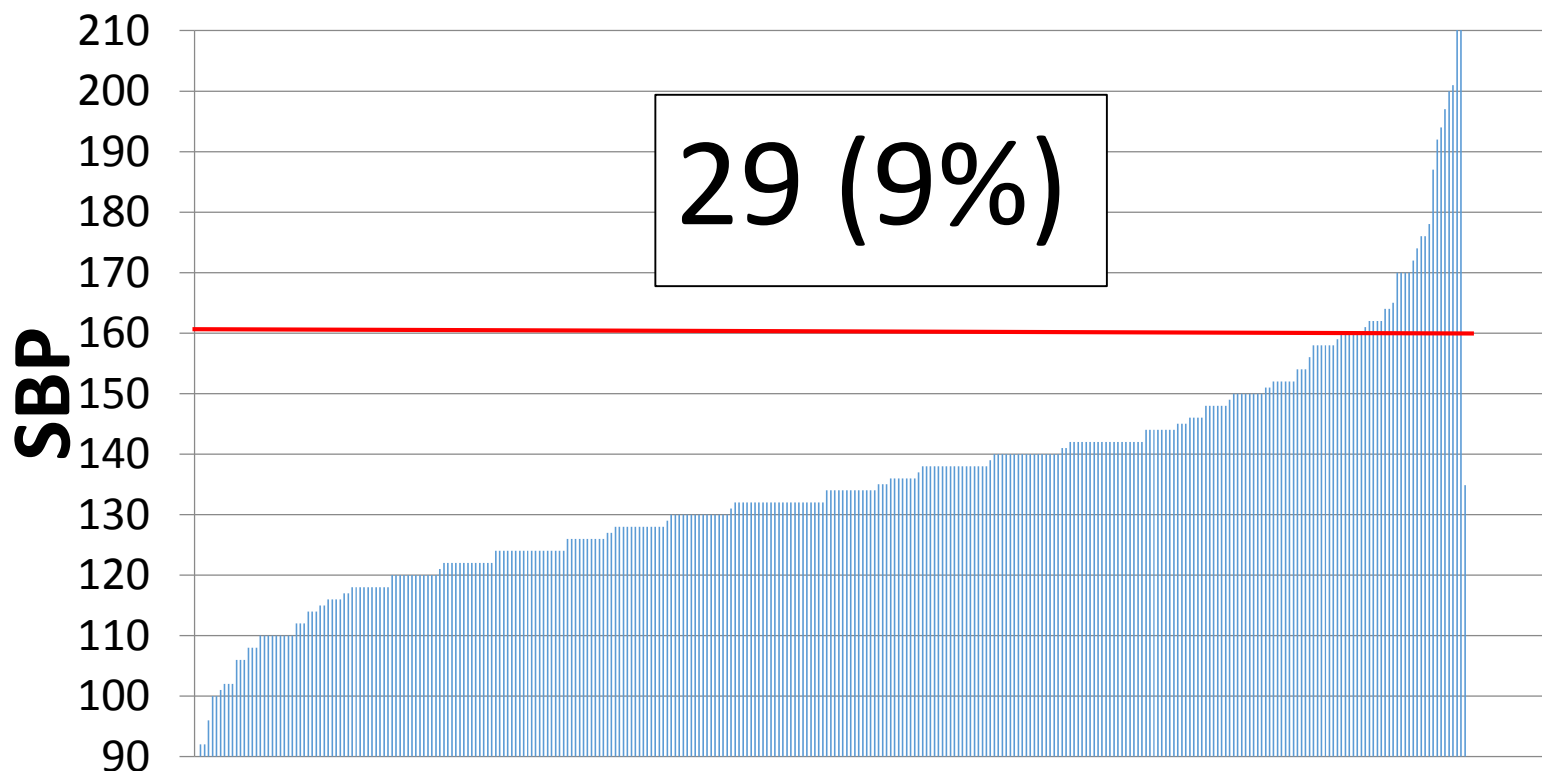
Number (%) SBP \geq 140mm Hg



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Number (%) SBP \geq 160 mm Hg



Participants SBP at APP Visit (n=316)



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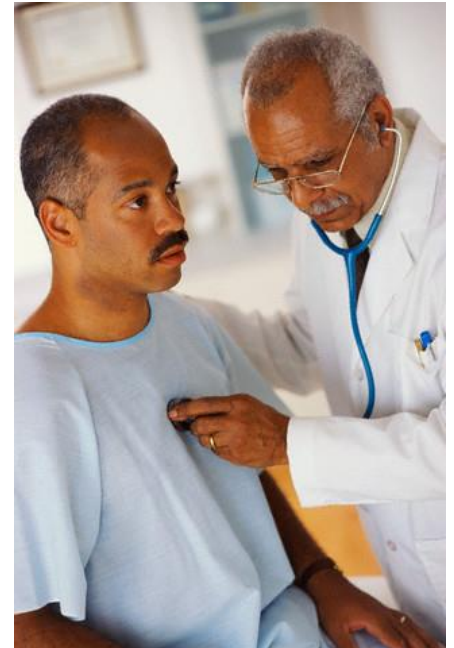
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Visits with PCPs

Do you have one doctor that knows you and all of your medical conditions?

Have you seen him/her in the past 3 months?

Have you seen him/her since your stroke?



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Visit with PCPs



Do you have one doctor that knows you and all of your medical conditions?

- **319/342 (93%) “Yes”**

Have you seen him/her in the past 3 months?

- **270/319 (85%) “Yes”**

Have you seen him/her since your stroke?

- **175/270 (65%) “Yes”**



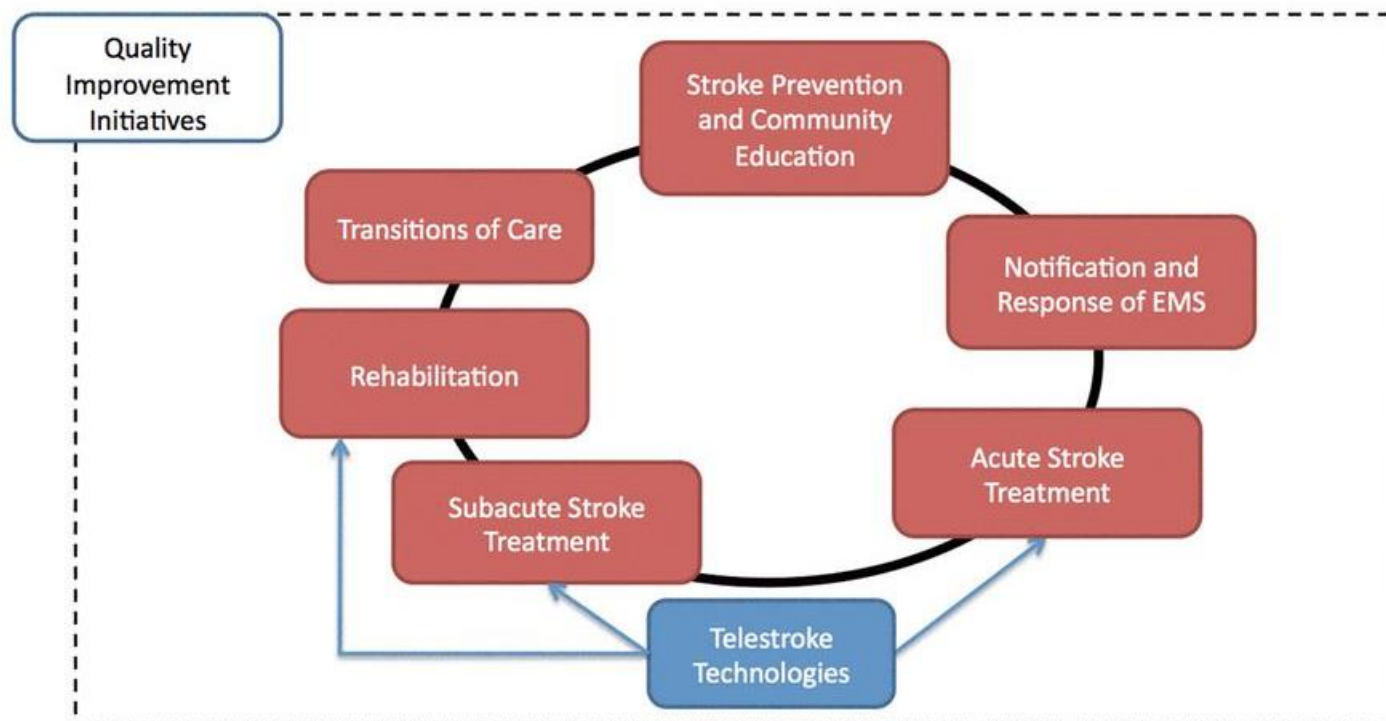
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Stroke Advisory Council

Work Groups

Stroke Advisory Council Work Groups reflect components of a comprehensive Stroke System of Care which is depicted below. The long-term objective of the comprehensive Stroke Systems of Care is to reduce disparities in stroke by increasing communication and coordination with everyone involved- individuals who have suffered a stroke, family members, health care professionals, community partners and legislative entities.



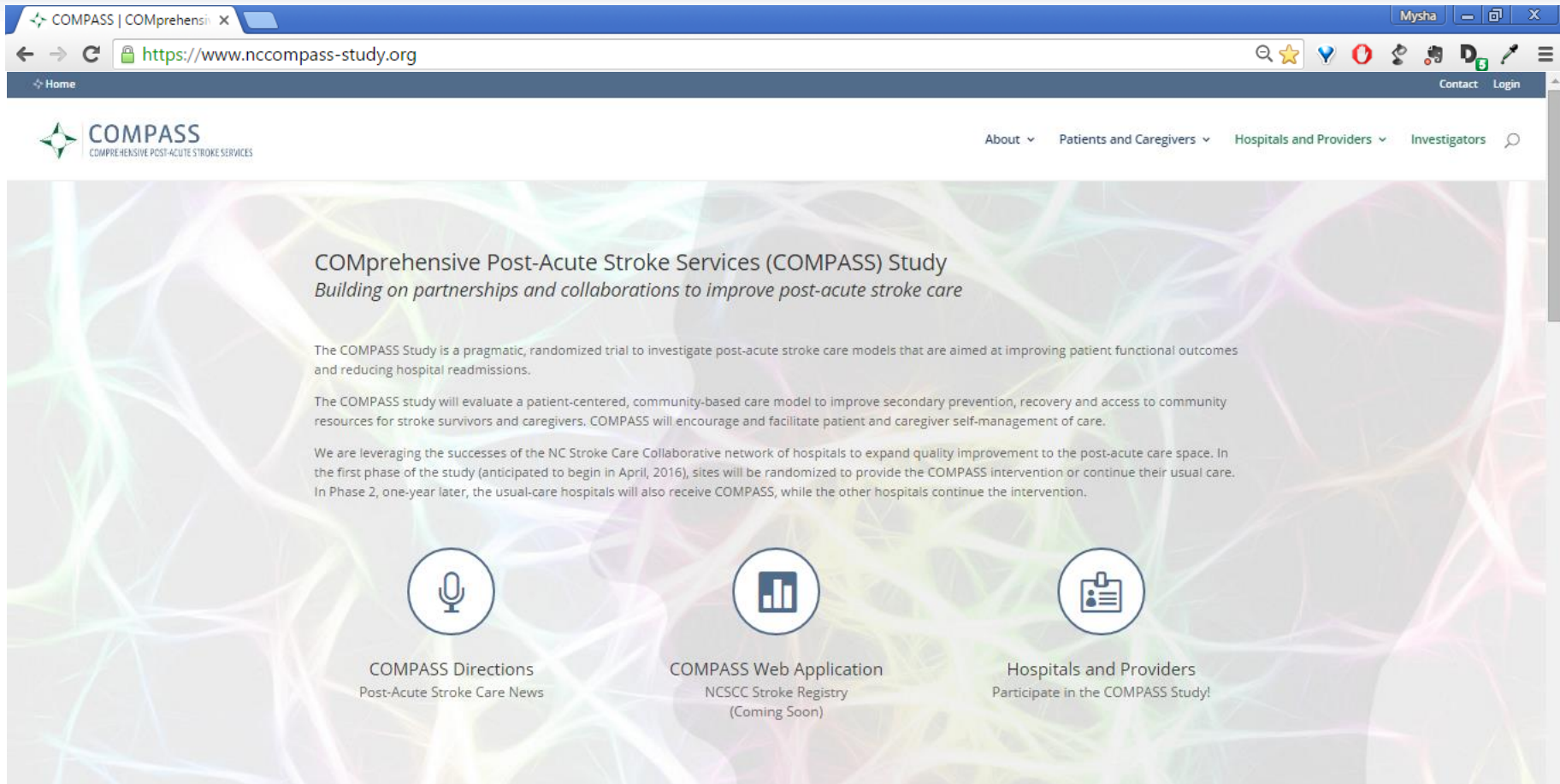
Adapted from Schwamm, L.H, Pancioli, A., Acker, J.E., Goldstein, L.B., Zorowitz, R.D., Shepherd, T.J., ... Adams, R.J. (2005). Recommendations for the establishment of stroke systems of care: Recommendations from the American stroke association task force on the development of stroke systems. *Circulation*, 111(8), 1078-1091.



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COMPASS Website

<https://www.nccompass-study.org/>



The screenshot shows the homepage of the COMPASS website. The browser address bar displays <https://www.nccompass-study.org/>. The website header includes the COMPASS logo (a green star-like icon) and the text "COMPASS COMPREHENSIVE POST-ACUTE STROKE SERVICES". Navigation links for "About", "Patients and Caregivers", "Hospitals and Providers", and "Investigators" are visible. The main content area features a large background image of colorful, abstract, flowing lines. The title "COMprehensive Post-Acute Stroke Services (COMPASS) Study" is followed by the subtitle "Building on partnerships and collaborations to improve post-acute stroke care". Three paragraphs of text describe the study's purpose, evaluation, and phases. Below the text are three circular icons: a microphone for "COMPASS Directions", a bar chart for "COMPASS Web Application", and a clipboard for "Hospitals and Providers".

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Home

Contact Login

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COMPREHENSIVE POST-ACUTE STROKE SERVICES

About Patients and Caregivers Hospitals and Providers Investigators


COMprehensive Post-Acute Stroke Services (COMPASS) Study


Building on partnerships and collaborations to improve post-acute stroke care


The COMPASS Study is a pragmatic, randomized trial to investigate post-acute stroke care models that are aimed at improving patient functional outcomes and reducing hospital readmissions.

The COMPASS study will evaluate a patient-centered, community-based care model to improve secondary prevention, recovery and access to community resources for stroke survivors and caregivers. COMPASS will encourage and facilitate patient and caregiver self-management of care.

We are leveraging the successes of the NC Stroke Care Collaborative network of hospitals to expand quality improvement to the post-acute care space. In the first phase of the study (anticipated to begin in April, 2016), sites will be randomized to provide the COMPASS intervention or continue their usual care. In Phase 2, one-year later, the usual-care hospitals will also receive COMPASS, while the other hospitals continue the intervention.

 COMPASS Directions
Post-Acute Stroke Care News

 COMPASS Web Application
NCSCC Stroke Registry
(Coming Soon)

 Hospitals and Providers
Participate in the COMPASS Study!



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Post-Stroke Health Work Group Members

Chair: Pam Duncan

Vice Chair: Sylvia Coleman

Staff: Anna Bess Brown

Cheryl Bushnell, Betsy Vetter, Wayne Rosamond,
Sue Ashcraft, Wanda Moore, Robin Jones, Amy
Jones, Kimberly Elks, David Huang, Maura
Sliverman, and Melissa Hanrahan



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SAC Post-Stroke Health Work Group

Recommendations:

- Work with Medicaid to write a letter to providers describing stroke patients' available benefits.
- Develop a list of key messages for providers to be used in provider training and posted on the Start With Your Heart website.
- Develop a strategic plan to educate providers (primary care providers and other post-acute providers) on the challenges of managing on secondary prevention.



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Thank you for your interest, attention, and all of the support and resources!

Jacquie Halladay, MD, MPH

Sylvia W. Coleman, RN, BSN, MPH, CLNC



Health Care Provider Blood Pressure Refresher

Learn proper protocol for taking blood pressure correctly and accurately. This short video shows proper techniques for blood pressure measurement and is especially useful as a refresher for midlevel health care providers and nonclinical community health workers.



Self-Monitoring Blood Pressure

Learn proper protocol for taking blood pressure correctly and accurately using an automatic blood pressure device. The video, produced by the Mayo Clinic, provides instruction for those who check their own blood pressure at home.



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Pressing on...

“Know that your life matters to many, so do good work, laugh every day, and press on”.



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