CARE TRANSFORMATION COLLABORATIVE RHODE ISLAND

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ADVANCING INTEGRATED HEALTHCARE

Welcome

Improving Hypertension Patient Care: a Team-Based Approach

Best Practices in Team-Based Care | October 18, 2022

Ambra Dailey, PCMH Care Coordinator, Women's Medicine Collaborative

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Jennifer Nappi, RN, MS, CDOE, Women's Medicine Collaborative

Iris Tong, MD, Women's Medicine Collaborative

Objectives & CME Credits

1. Apply evidence-based hypertension guideline recommendations to determine appropriate blood pressure goal based on patient-specific factors
2. Differentiate between key roles involved in hypertension management in primary care
3. Describe a team-based workflow to support hypertension management applicable to your practice

Claim CME credit here: https://www.surveymonkey.com/r/Team-Based-Care-CME-evaluation

The AAFP has reviewed 'Advancing Comprehensive Primary Care Through Improving Care Delivery Design and Community Health,' and deemed it acceptable for AAFP credit. Term of approval is from 03/18/2022 to 03/18/2023. Physicians should claim only the credit commensurate with the extent of their participation in the activity. NPs and RNs can also receive credit through AAFP's partnership with the American Nurses Credentialing Center (ANCC) and the American Academy of Nurse Practitioners Certification Board (AANPCB).

Improving Hypertension Patient Care: a Team-Based Approach

October 18, 2022

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Disclosures

- Safiya Naidjate owns individual stocks in Johnson & Johnson, Pfizer, and Abbott
- All relevant financial relationships have been mitigated
- Other speakers do not have financial relationships to disclose

Learning Objectives

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3. Describe a team-based workflow to support hypertension management applicable to your practice

Issues of Hypertension Quality Management in Primary Care

- Hypertension (HTN) is a difficult measure to move
- Lower blood pressure targets create a larger population meeting HTN criteria
- Managing HTN requires close monitoring and follow up- limited resources to maintain follow up
- High risk of unnecessary ED/hospital use

Hypertension – Definition and Management

Medical Societies

- 8th Joint National Committee (JNC8)
- American Heart Association/American College of Cardiology
- American College of Physicians/American Academy of Family Physicians
- American Diabetic Association

Definition of Hypertension

- BP > 140/90
- At least 2 separate occasions, 1 week apart

AHA/ACC 2017

- In 2017, AHA/ACC defined HTN as > 130/80
  - Stage I > 130/80
  - Stage II > 140/90

TABLE 6 Categories of BP in Adults*

BP Category	SBP		DBP
Normal	<120 mm Hg	and	<80 mm Hg
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Hypertension			
Stage 1	130–139 mm Hg	or	80–89 mm Hg
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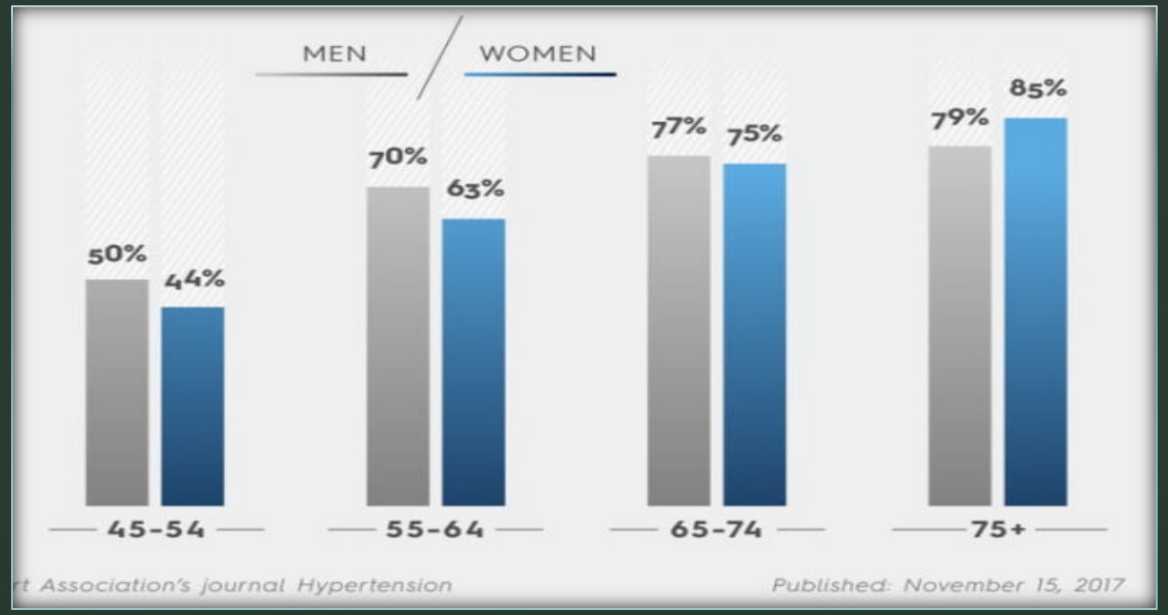
*Individuals with SBP and DBP in 2 categories should be designated to the higher BP category.

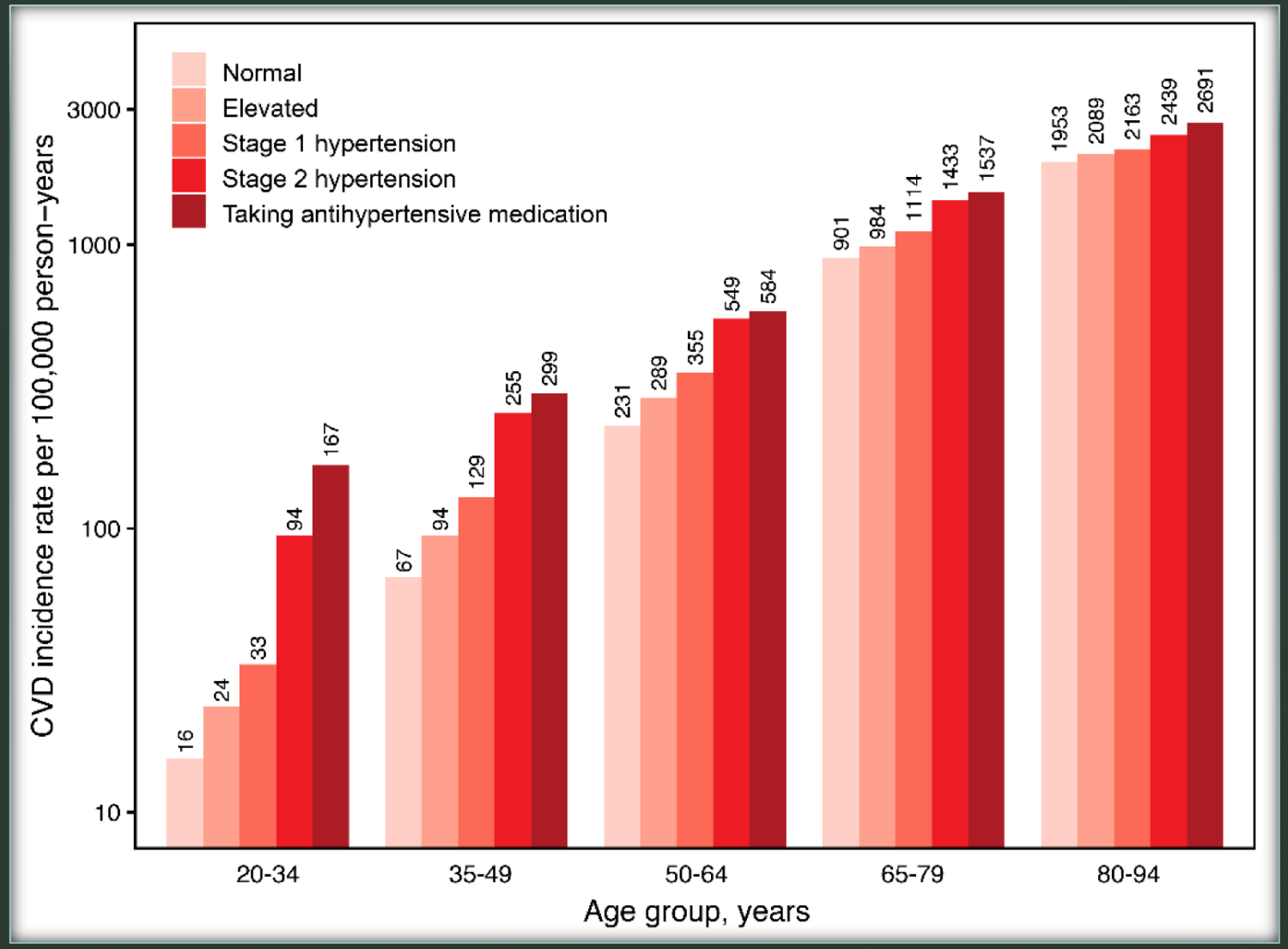
BP indicates blood pressure (based on an average of ≥2 careful readings obtained on ≥2 occasions, as detailed in Section 4); DBP, diastolic blood pressure; and SBP, systolic blood pressure.

HTN in the US

- 47% (116 million) with HTN
  - Only 24% controlled (< 130/80)
  - 45% (37 million) uncontrolled > 140/90
- Incidence increases with age



Risk of CVD Increases with Severity of HTN



Management Guidelines by Society

- 8th Joint National Committee (JNC8), 2014
- American Heart Association/American College of Cardiology, 2017
- American College of Physicians/American Academy of Family Physicians, 2018
- American Diabetic Association, 2022

JNC 8, 2014

Special Communication

FREE

February 5, 2014

2014 Evidence-Based Guideline for the Management of High Blood Pressure in Adults

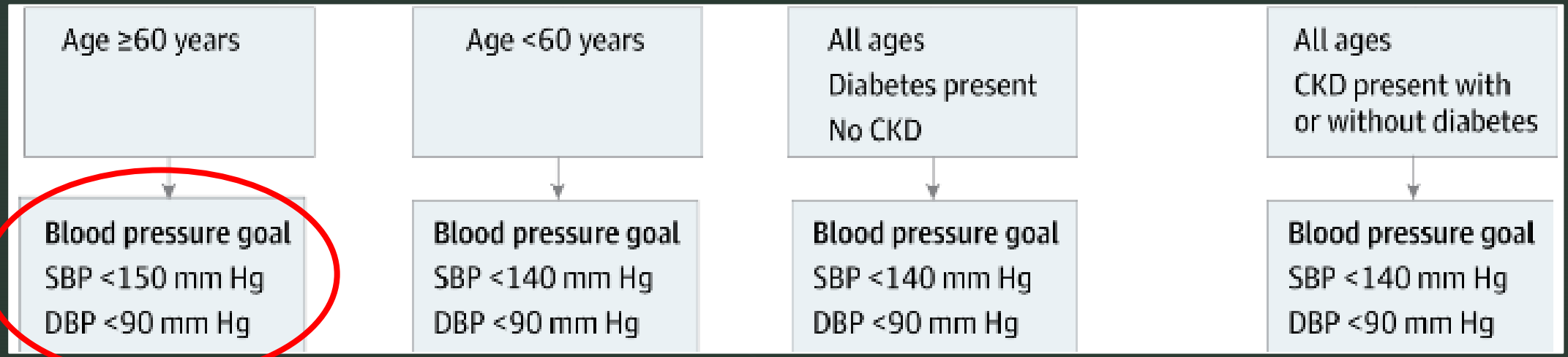
Report From the Panel Members Appointed to the Eighth Joint National Committee (JNC 8)

Paul A. James, MD[1]; Suzanne Oparil, MD[2]; Barry L. Carter, PharmD[1]; et al

» Author Affiliations | Article Information

JAMA. 2014;311(5):507-520. doi:10.1001/jama.2013.284427

JNC 8, 2014


Age ≥60 years
Blood pressure goal
SBP <150 mm Hg
DBP <90 mm Hg
Age <60 years
Blood pressure goal
SBP <140 mm Hg
DBP <90 mm Hg
All ages
Diabetes present
No CKD
Blood pressure goal
SBP <140 mm Hg
DBP <90 mm Hg
All ages
CKD present with
or without diabetes
Blood pressure goal
SBP <140 mm Hg
DBP <90 mm Hg

SPRINT, 11/2015

N = 9361 participants

- Age > 50
- SBP > 130mm Hg AND
- Increased CV risk
  - CAD other than CVA
  - CKD (eGFR 20- 60)
  - ASCVD ≥15%
  - Age ≥75 years
  - No DM

Intervention- randomized:

- SBP < 120 mm Hg vs. < 140 mm Hg

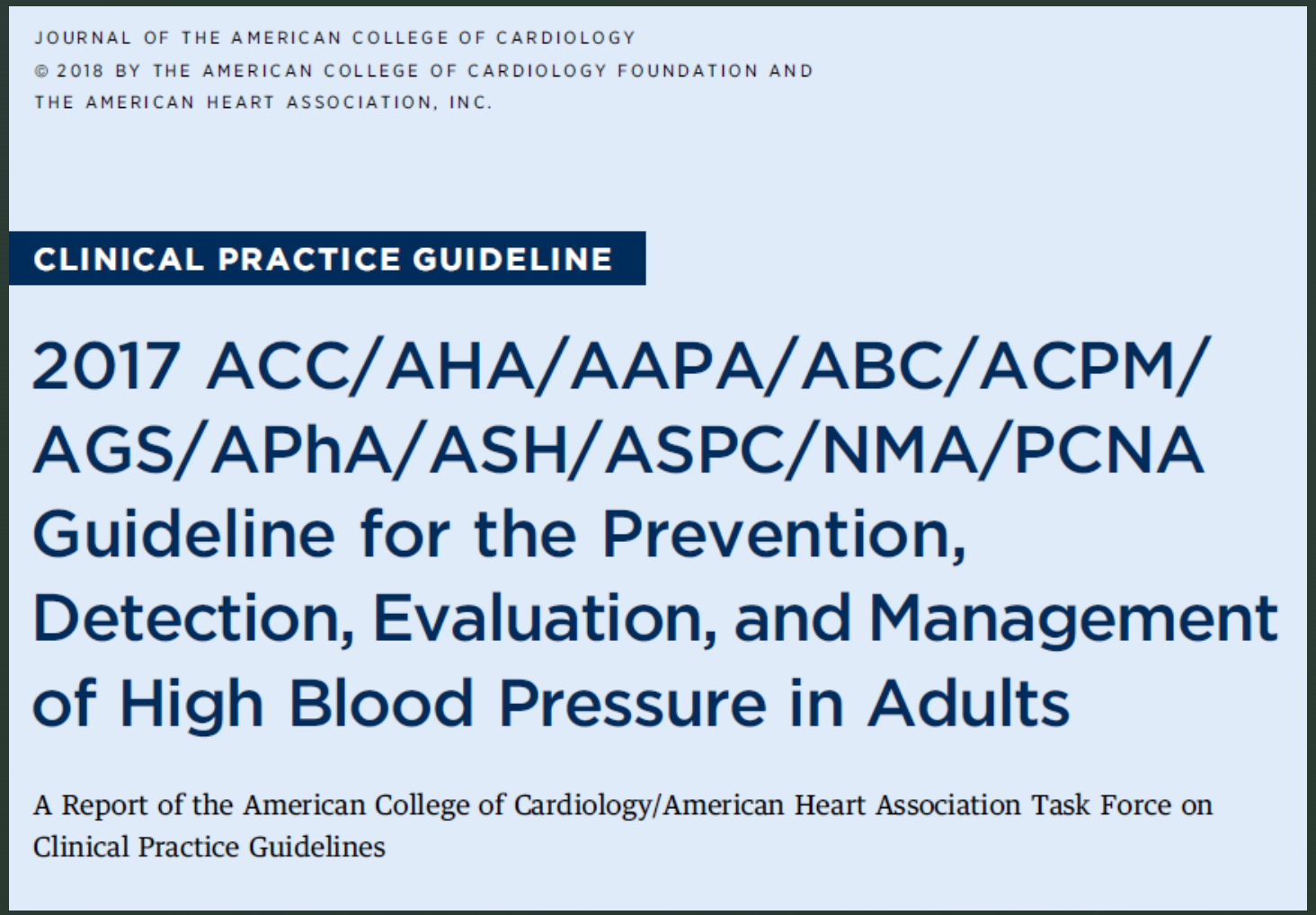
Primary outcome

- composite = MI, ACS, CVA, HF, CV death

SPRINT, 11/2015

- Stopped early - 3.26 yrs secondary to lower rates
  - Primary composite outcome (MI, ACS, CVA, HF)
    - 1.65% vs. 2.19% per yr
    - HR = 0.75 [0.64- 0.89]; P<0.001
  - All-cause mortality
    - HR = 0.73 [0.60 - 0.90] P = 0.003
- Higher rates of serious adverse events in intensive rx group
  - Hypotension, syncope, electrolyte abnormalities, and AKI

AHA/ACC 2017 HTN Guidelines



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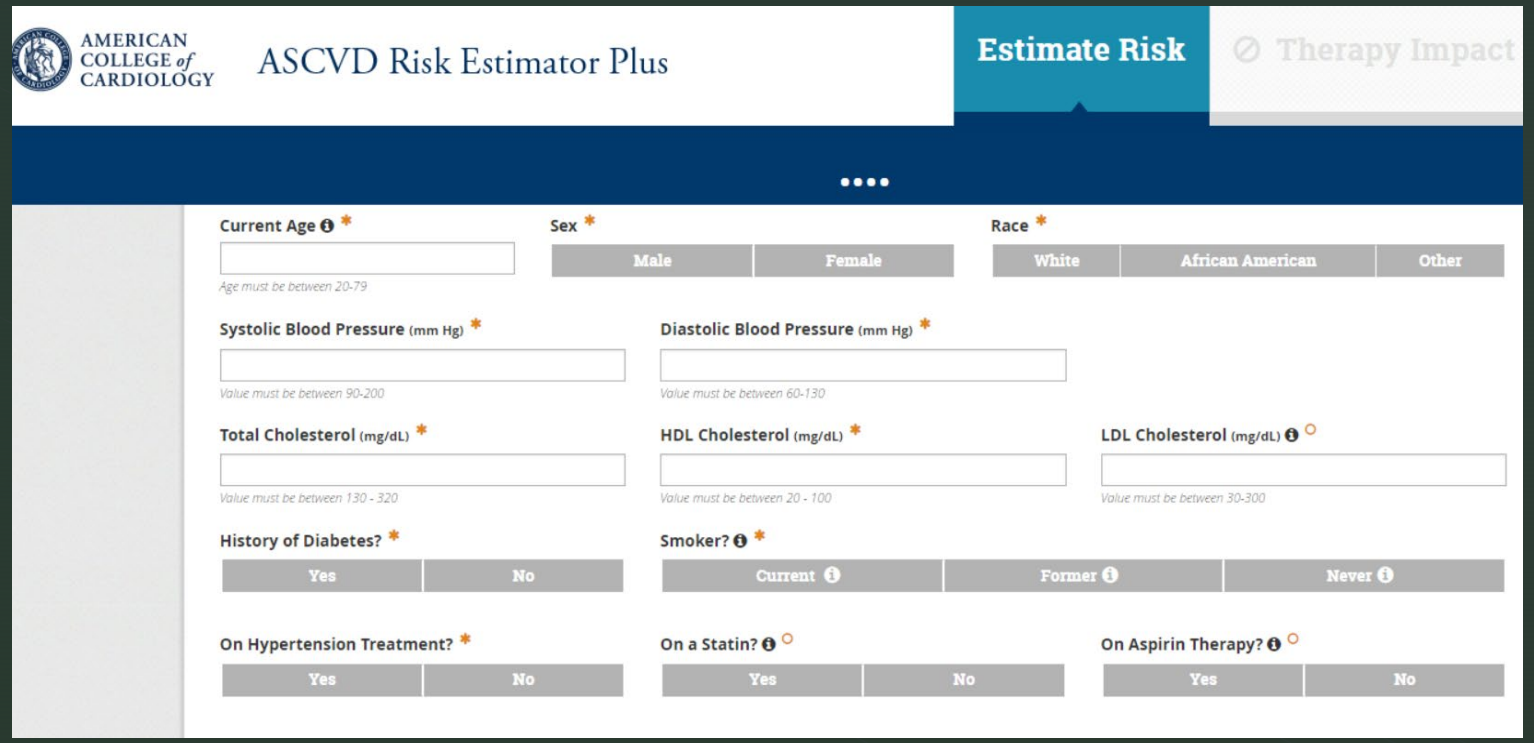
- Target BP <130/80 mm Hg
  - Immediate med rx not needed in all
  - Higher-risk pts at >130/80 (ASCVD ≥ 10%)
  - Non-high risk pts at ≥140/90
  - 2 drugs when BP >20/10 mm Hg above goal

ASCVD Risk

ASCVD PLUS

ASCVD Risk Estimator Plus

AMERICAN COLLEGE of CARDIOLOGY



AHA/ACC 2017 HTN Guidelines

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ACP/AAFP 2017 HTN Guidelines for ≥60 yrs

Annals of Internal Medicine®

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‹ PREV ARTICLE | THIS ISSUE | NEXT ARTICLE ›

CLINICAL GUIDELINES | 21 MARCH 2017

Pharmacologic Treatment of Hypertension in Adults Aged 60 Years or Older to Higher Versus Lower Blood Pressure Targets: A Clinical Practice Guideline From the American College of Physicians and the American Academy of Family Physicians FREE

*Amir Qaseem, MD, PhD, MHA; Timothy J. Wilt, MD, MPH; Robert Rich, MD; Linda L. Humphrey, MD, MPH; Jennifer Frost, MD; Mary Ann Forciea, MD; for the Clinical Guidelines Committee of the American College of Physicians and the Commission on Health of the Public and Science of the American Academy of Family Physicians **

Article, Author, and Disclosure Information

ACP/AAFP 2017 HTN Guideline Recommendations

1	Target BP < 150/90 mm Hg in adults >60 yrs • Strong recommendation; high-quality evidence
2	Target SBP <140 mm Hg in adults >60 yrs with h/o CVA/TIA • Weak recommendation; moderate-quality evidence
3	Target SBP < 140 mm Hg in adults >60 yrs at high CV risk • Weak recommendation; low-quality evidence

AHA 4/2020

- Target < 140/90 mm Hg in most patients
- Consider < 130/80 mm Hg if additional risk factors for stroke or microvascular complications

ADA 2022 Guidelines

- DM with ASCVD risk <15% < 140/90
- DM with ASCVD risk ≥15% < 130/80

Target BP

Population	
• CAD • CKD • DM with ASCVD ≥ 15%	<130/80
• DM with ASCVD<15% • Age <60 w/o co-morbidities	<140/90
• Age > 60 w/o co-morbidities	<150/90

- CMS target for ages 18 - 85 < 140/90

Self-Measured Blood Pressure (SMBP)

- May lead to greater decreases in BP readings
  - Greater patient engagement and adherence
- www.validatebp.org
- Correlate home cuff with office cuff readings annually
- Technique
  - Proper positioning
  - Appropriate cuff size
  - Rest prior to measurement
  - Avoid caffeine/tobacco prior to measurement

Uhlig K, Patel K, Ip S, et al. Ann Intern Med. 2013;159(3):185.

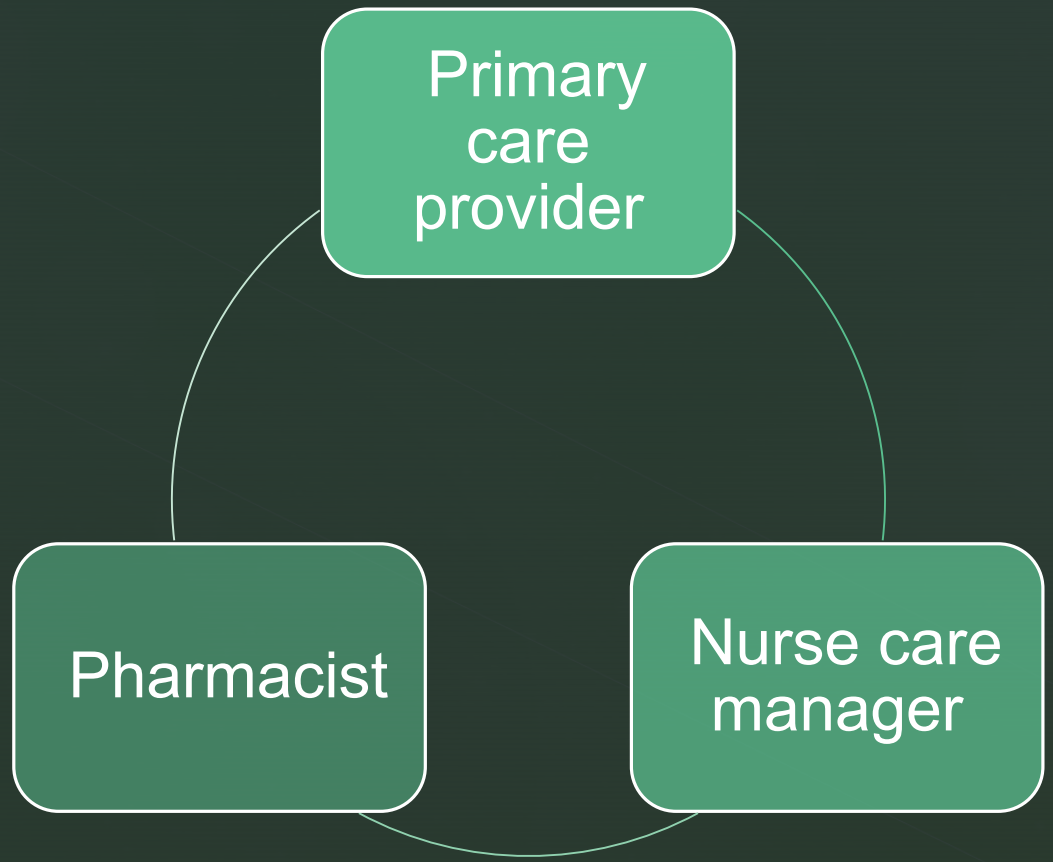
Hypertension Management:

Team-Based Approach

Women's Medicine Collaborative

- Opened in 2011
- Multidisciplinary, multispecialty clinic
- Integrated behavioral health
- Laboratory and diagnostic testing on site

Initial Quality Team



Initial Quality Team

- Monthly provider huddles with PCP + NCM + RPh
- Focus on high-risk patients initially
- Shift to focus on prevention (i.e. HTN and DM quality measures)
- Identified a large gap for administrative and time-consuming tasks outside of professional scope
  - Identifying which patients had actual gaps in care (e.g. labs done at an outside facility)
  - Collecting and entering home BP readings
  - Reminding patients to complete outstanding lab work
  - Rescheduling patients with missed appointments

- CTC and RI DOH in collaboration with URI College of Pharmacy and funded by United Healthcare
- Support practices with pharmacist to participate in data driven quality improvement
- Focus on improving patient care through team-based approach
- WMC area of focus: hypertension

Aim

1. Reduce hypertension-related ED visits and hospitalizations by optimizing BP control among patients with HTN

2. Institute a loaner-system SMBP program

Problem

- HTN can be a difficult measure to assess
- Limited staff to address issue
  - Clinical staff spread thin (e.g wide NCM scope, RPh present 2x/week)
  - Several non-clinical tasks required to address issue
  - Prior SMBP loaner program attempted; patients lost to follow up and cuffs not retained

Goals

- Achieve 82% clinic-wide HTN control by creating a SMBP program
- Enroll 50 patients into SMBP program over a 9-month period (6/2021-3/2022)
- Optimize workflow to maximize team efficiency in identifying, enrolling, and monitoring patients with uncontrolled HTN

Select Key Measures

1. # of patients completing 12 weeks of SMBP program
2. % of patients with BP <140/90 achieved within 12 weeks
3. Mean # of follow up encounters needed to reach BP control
4. Overall % of patients with controlled HTN by 12/31/2021
5. # of patients discharged with possible HTN-related ED visit or hospitalization

PCMH Care Coordinator

- Use reporting tools to create specified care quality data for each clinic provider
- Lead huddles with quality team
- Outreach to patients to remind of pending next steps (e.g. follow up BP readings, pending lab orders, appointments)
- Ensures in-office appointment scheduled

Care Navigators

- Co-lead quality team huddles
- Conduct patient outreach and engagement via telephone, patient portal and in person to assist clinical team
- Schedule chronic care visits and preform in office BP checks
- Report to provider if elevated readings with 2-4 weeks follow up care

Workflow

1. PCP refers patient for SMBP program; Care Coordinator notified and enrolls patient
2. Care Coordinator follows up with patient every 2-4 weeks by portal or phone to obtain BP readings; Reports to PCP and RPh
3. PCP/RPh review; Make or recommend medication changes as needed
4. Continue BP monitoring (steps 2 & 3) every 2-4 weeks until sustained BP <140/90 achieved

Social Worker

- Identified several barriers related to social determinants of health
- Refer patients with issues related to insurance, food insecurity, lack of transportation, etc
- Collaborates with WMC team and outside resources

Optimizing Existing Roles of NCM & Pharmacist

- BP cuff teaching (NCM & Pharmacist)
- Improved use of limited pharmacist time
- PCMH Care coordinator tracks follow-up

Select Outcomes & Results

Outcome of SMBP Program

- Patients used own cuff (did not secure cuffs in time)
- 27 out of 31 enrolled patients completed SMBP program
- 100% of patients achieved sustained BP <140/90 by 12 weeks

WMC 2021 Primary Care Quality Score Results

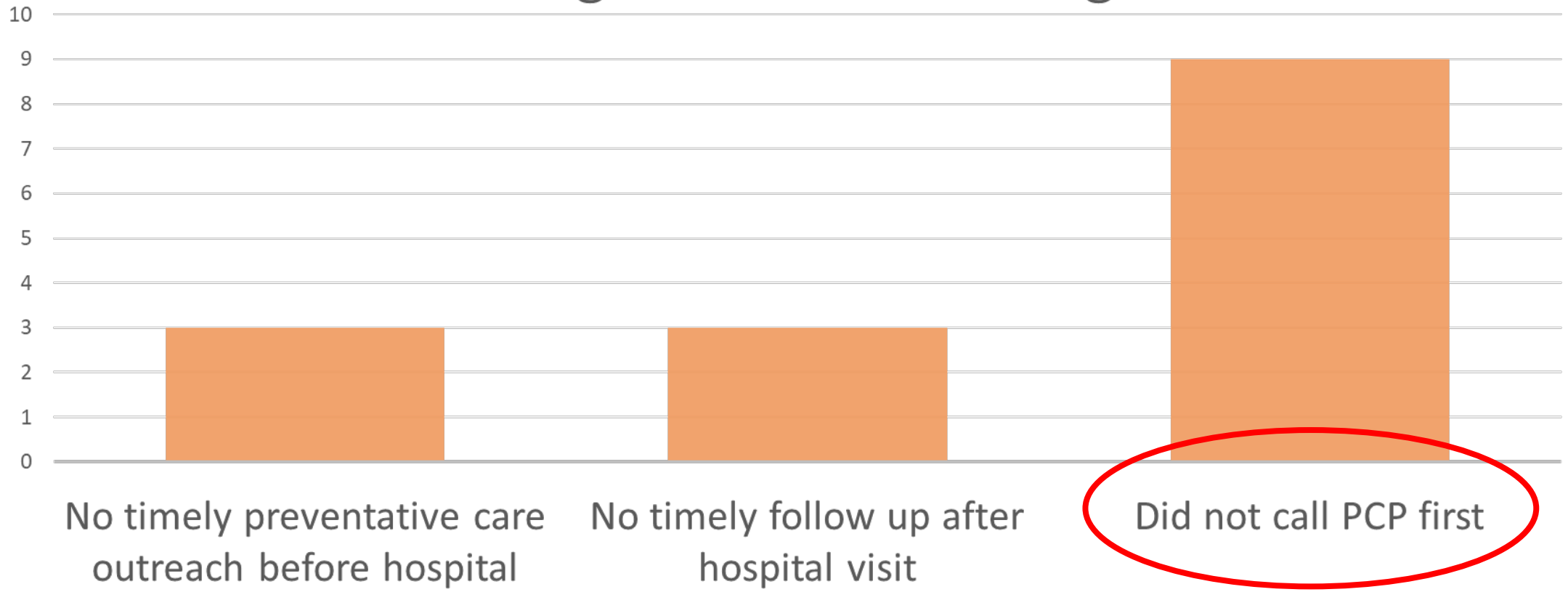
- HTN: 80% achieved BP of <140/90 by 12/31/2021
- 6% improvement from 74% in 2020

Outcomes & Results

Review of HTN-related Hospital Visits

- Total of 55 hospital discharges between 6/1/21 and 3/1/22 with chief complaint possibly linked to HTN
- Identified 10 patients with uncontrolled HTN prior to hospital visit
- Root cause analysis performed to identify common patterns leading to hospital use, or risking repeat hospital use

Potential Root Causes of Hospital Use Among Patients Discharged

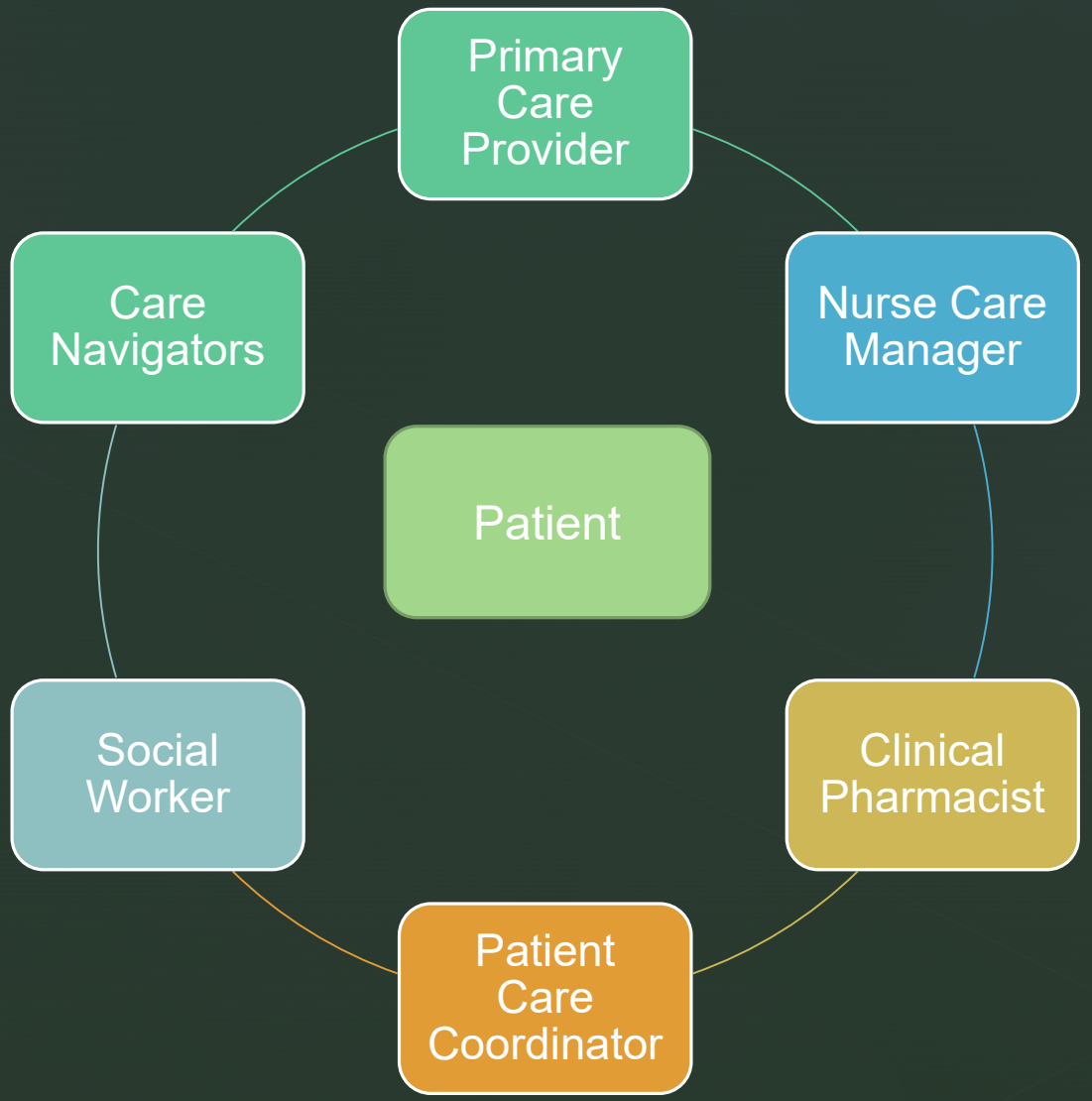


Lessons Learned & Next Steps

Care Team Development:

- Addition of PCMH Care Coordinator and Care Navigators
- Bolstered team collaboration with providers at huddles
- Monthly review of overall performance with wider management team

Our Quality Team Today



Lessons Learned & Next Steps

Improvements in SMBP Program workflow:

- PCMH Care Coordinator is now single point of contact- improve efficiency and optimize clinical staff time
- Increased use of patient portal for efficiency
- Revamped SMBP loaner cuff program
  - Hard deadline of 12 weeks to increase cuff retention
  - Established strict criteria for inclusion
  - Required teaching by NCM or RPh

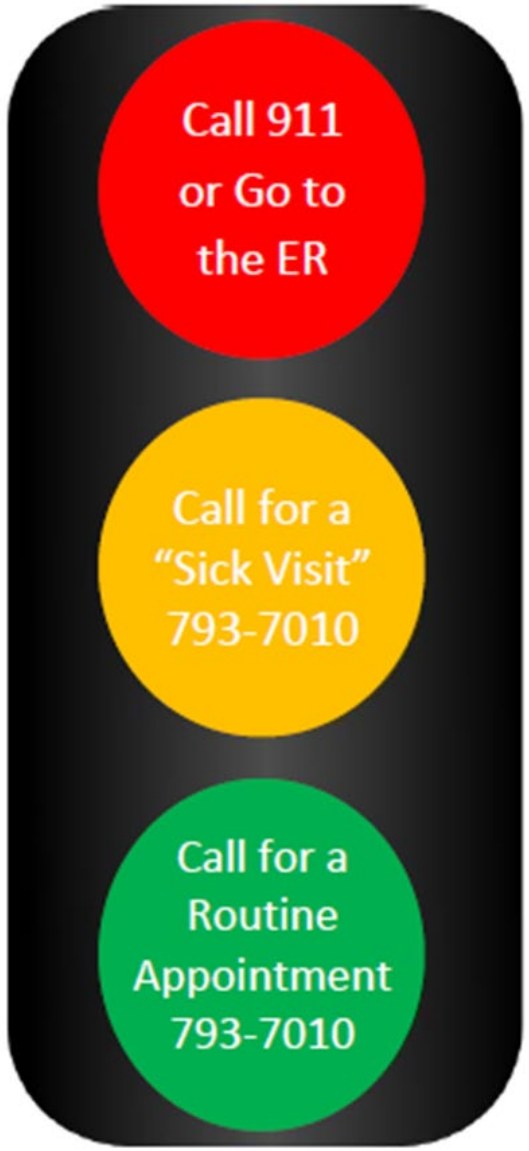
Lessons Learned & Next Steps

Identified Clinic Workflow Improvements

- Improve current appointment accessibility to ensure timely follow up
- Reassess HTN ED visits/hospitalizations quarterly
- Providers: review with patients if inappropriate ED/hospital use
- Collaborate with clinical leadership to improve patient education messaging (emphasize “call us first” policy)
  - Include “stoplight” reference in all patient rooms
- Provide patients with copy during SMBP teaching

Deciding when to go to the Emergency Room

An on-call physician is available 24/7 to help guide your decision to go to the ER or not.
Call 793-7010 and you will be directed to the Call Center.



- Major injuries (broken bones)
- Uncontrolled bleeding
- Coughing or vomiting blood
- Sudden severe pain
- Poisoning
- Sudden facial drooping or weakness in an arm or leg
- Difficulty breathing
- Fainting
- Chest pain or pressure

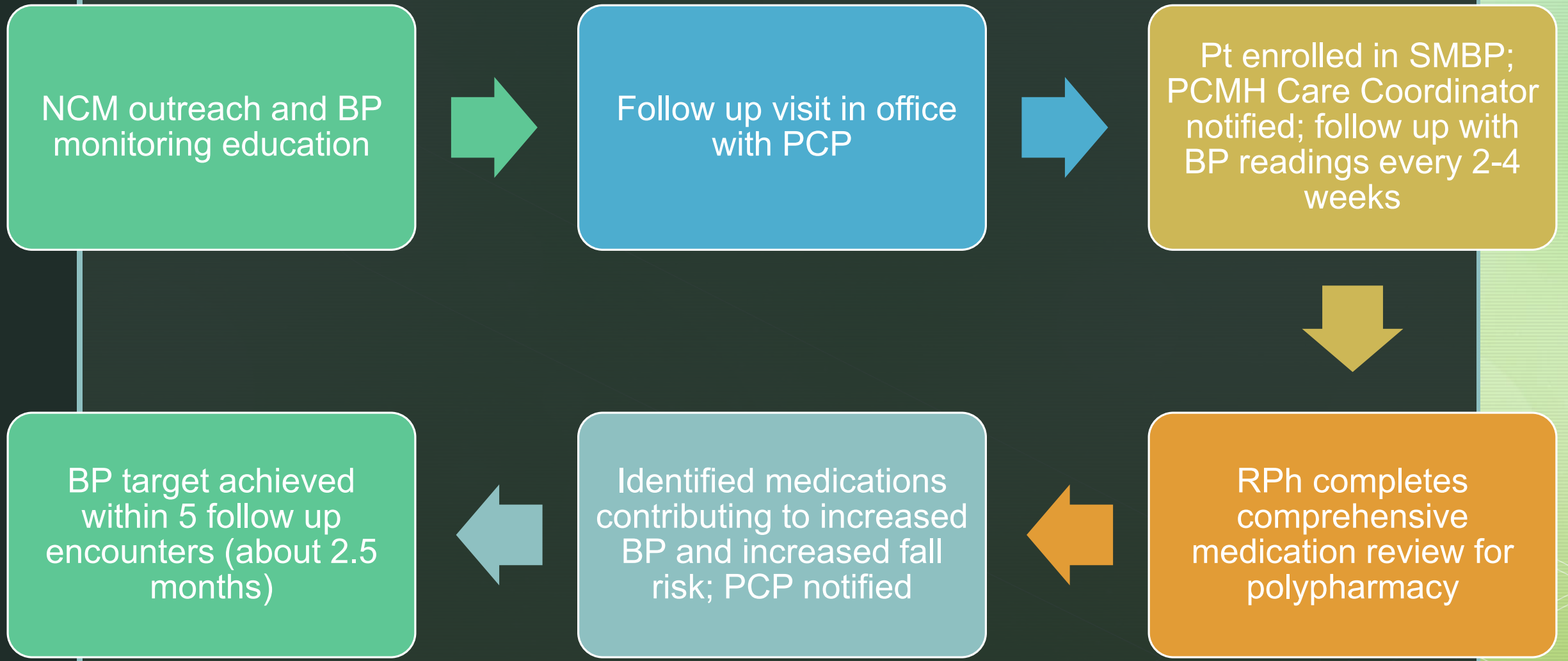
- Flu symptoms
- Fever
- Earache
- Sore throat
- Non-life-threatening illness or injury

- Check-up/Annual visit
- Vaccinations/Immunizations
- Discuss starting a new medication
- Discuss symptoms that don't seem to be going away

09.10.19

Patient Case

- 69 y/o female with PMH of rheumatoid arthritis, fibromyalgia, ***HTN***, ***CKD***, dyslipidemia, GERD, obesity, osteopenia, arthritis, anemia, urinary incontinence, depression, ***impaired balance***, memory loss, and indigestion
- 11/2021: referred by specialist to ED for hypertension
  - BP at visit: 178/110 without HA, CP, SOB, fever, chills, or other sx
  - BP in ED: 164/104
  - Discharged from ED without changes to regimen
  - Seen for f/u in office and given Home BP Cuff
  - Patient is following up every 2 weeks with readings. Medications being adjusted as needed


NCM outreach and BP monitoring education
Follow up visit in office with PCP
Pt enrolled in SMBP; PCMH Care Coordinator notified; follow up with BP readings every 2-4 weeks
RPh completes comprehensive medication review for polypharmacy
Identified medications contributing to increased BP and increased fall risk; PCP notified
BP target achieved within 5 follow up encounters (about 2.5 months)

Questions?

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Evaluation & CME Credits

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Topics to look forward to in 2022

November 15: *Best Practices in Lead Screening*

December 20: *Urinary Incontinence*

January 17:

Mark your calendars **3rd Tuesday of the month at 8AM**


thank you
danke
謝謝
ngiyabonga
рахмат
teşekkür ederim
спасибо
gracias
dank je
tapadh leat
Баярлалаа
faafetai lava
vinaka
спасибі
blagodaram
mersi
barka
welalin
tack
misaotra
matondo
paldies
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