TARGET: BP™

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Apply Evidence to Improve Blood Pressure Control: Target: BP and the M.A.P. Framework

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High Blood Pressure: the Problem

Gregg Fonarow, MD
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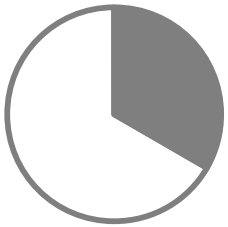
Co-Director, UCLA Preventative Cardiology Program
Co-Chief, UCLA Division of Cardiology

80 million adults have HBP

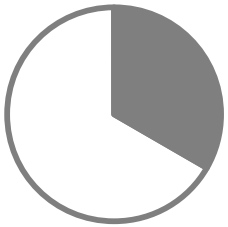
Blood Pressure Category	Systolic (mmHg)		Diastolic (mmHg)
Normal / Ideal	less than 120	and	less than 80
Prehypertension	120-139	or	80-89
Hypertension stage 1	140-159	or	90-99
Hypertension stage 2	160 or higher	or	100 or higher
Hypertensive crisis	higher than 180	or	higher than 110

Prevalence of HPB varies by race and ethnicity:

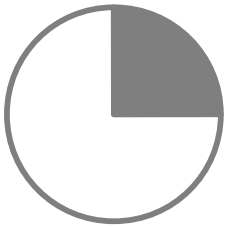
Whites roughly 1 in 3



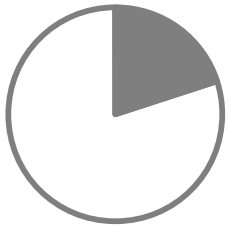
Blacks roughly 2 in 5



Latinos roughly 1 in 4



Asians roughly 1 in 5



AHA 2015 Statistical Update

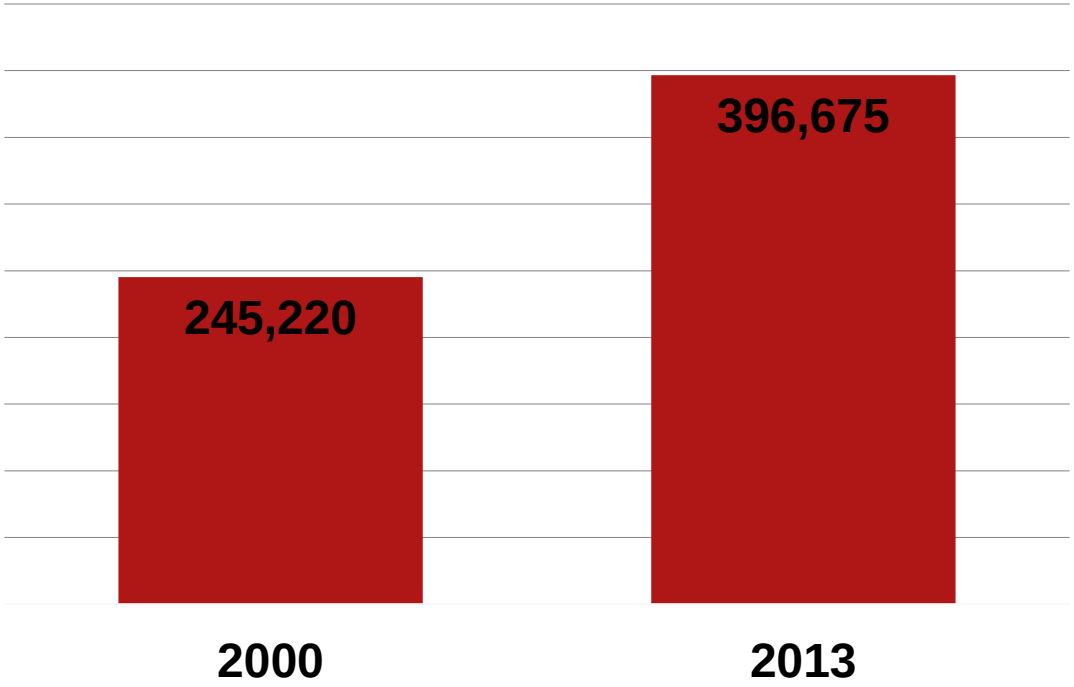
80 million
U.S. adults have high blood pressure

46% are uncontrolled

Most adults with uncontrolled HTN have health insurance and a usual source of care

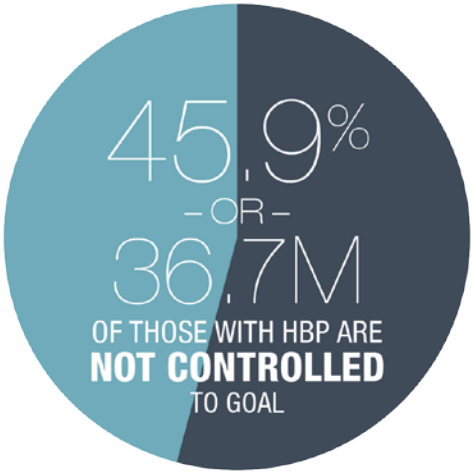
2015 – Prevalence rate 33%
2030 – Prevalence rate 41% (projected)

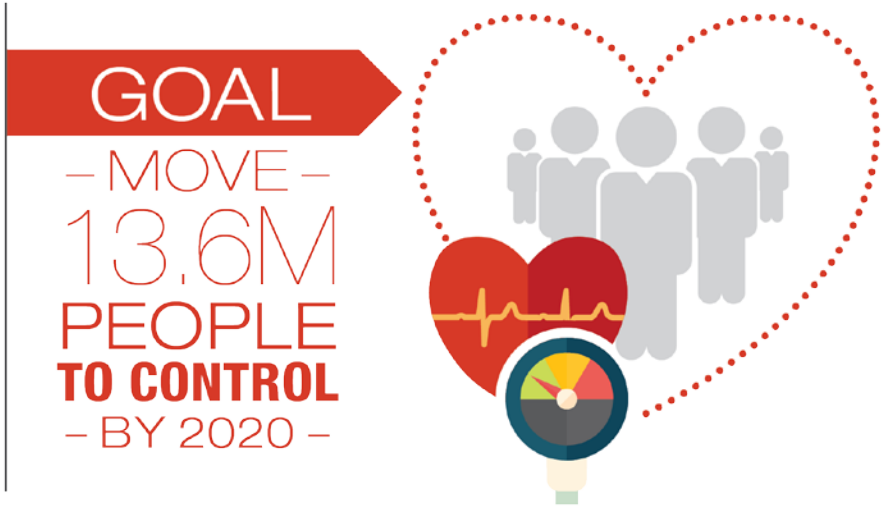
62% increase in annual deaths related to hypertension



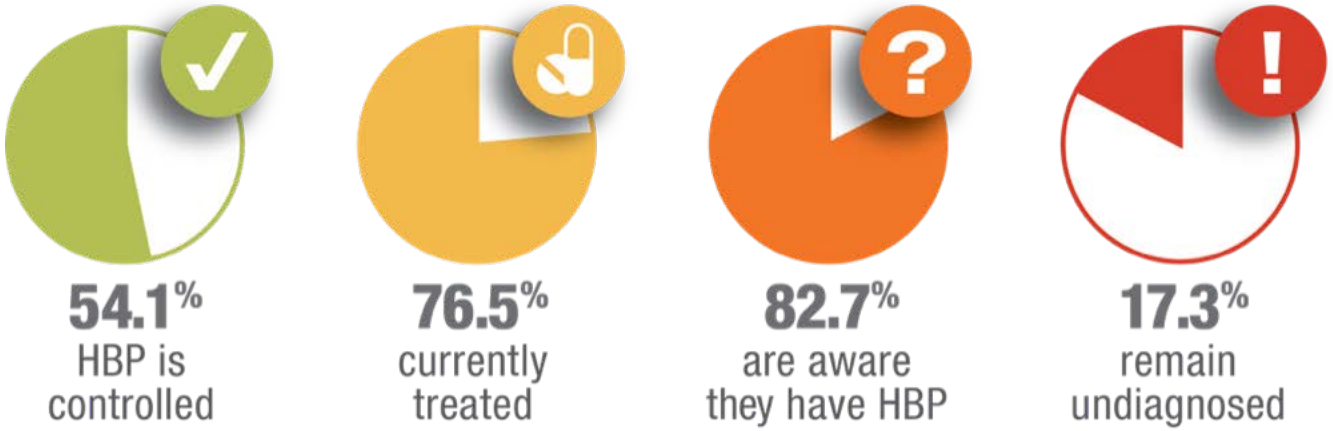
Source: CDC, AHA

Our Goal for Better Control





From 2009 to 2012 among US adults with HBP



AHA 2015 Statistical Update

Why controlling BP is important

- Morbidity and mortality due to cardiovascular diseases are directly related to BP.
- In people with hypertension (HTN) and elevated BP, when BP is lowered there, is less vascular damage to organs (i.e. heart, brain, eyes and kidneys).
- We have known since the 60s and the landmark VA-1 and VA-2 trials that treating high blood pressure with medication reduces risk for heart attacks, strokes and death.

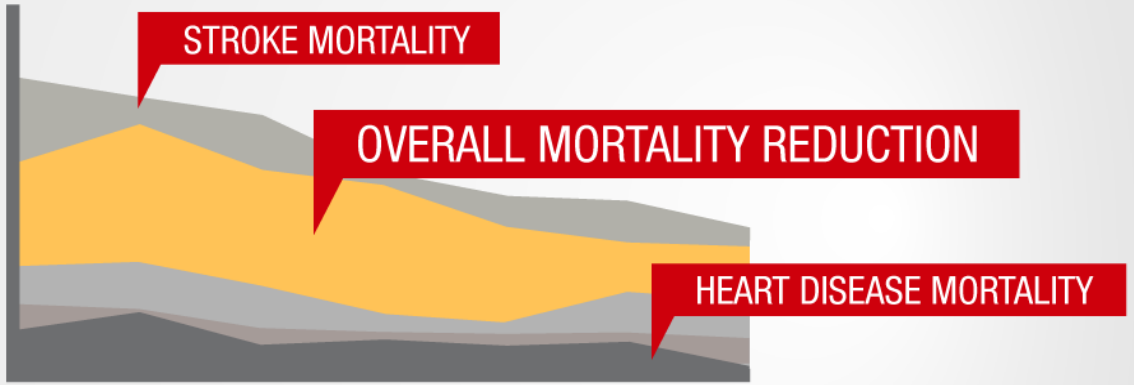
DROP
IN SYSTOLIC
blood pressure

5
mmHg

9% REDUCTION IN heart disease mortality

14% REDUCTION IN stroke mortality

WHAT DO THESE RESULTS MEAN?



7% overall REDUCTION IN mortality

Also, a 5 mmHg reduction in systolic blood pressure would increase the prevalence of ideal blood pressure from 44.26% to 65.31%

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What is Target: BP?

Gregg Fonarow, MD

What is Target: BP?

- A call to action motivating medical practices, practitioners and health services organizations to prioritize blood pressure control
- Recognition for healthcare providers who attain high levels of blood pressure control in their patient populations, particularly those who achieve 70, 80 percent or higher control
- A source for tools and assets for healthcare providers to use in practice, including the AHA/ACC/CDC Hypertension Treatment Algorithm and the AMA's M.A.P. Checklist

Who is our Target Audience?

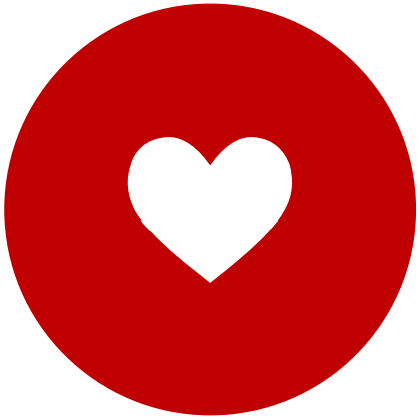
- Primary Care System
  - Federally Qualified Health Clinic (FQHC)
  - Federally Designated Rural Health Clinic (RHC)
  - Indian Health Service practice/clinic
  - Practice/Clinic with mission to serve publicly insured, underinsured, or uninsured
  - Private Clinical System (non-FQHC)
- Government Agency or Organization providing care to patients

Why launch Target: BP now?

SPrINT study results

Increased access to care

Policies incentivize HCP's to better control



AHA 2020 goals are imminent

Support and sync with MH initiatives for higher BP Control

Why should a clinic participate?

- We know what medicines work but systems aren't in place to drive control rates
- Algorithm and systems approach described in AHA's treatment algorithm are proven to increase control rates within a clinical setting
- Sites will received recognition from the AHA and AMA
- Help meet required performance metrics
- ***Improved health and care of their patients!***

http://targetbp.org/

Target:BP™ Recognition Program

- Overview
  - Recognize clinical practices and health care systems for:
    - Participation in the Target: BP program;
    - Improvement in blood pressure control; and
    - Achievement of a designated blood pressure control rate threshold

    Accommodate either self-reported aggregate data or patient population data submission and validation, providing flexible options for practices with varying resources
  - Provide performance and benchmark data in dashboard
  - Offer opportunities for improvement and achievement through adoption and implementation of program tools/resources

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M.A.P. Overview

Michael Rakotz, MD
Vice President, Chronic Disease Prevention
American Medical Association

Barriers to success

- Patient factors
  - Non-adherence
  - Financial
  - Literacy
- Physician factors
  - Time
  - Financial
  - Knowledge of evidence
- System factors
  - Quality reporting
  - Work flow
  - Leadership (buy-in)

The M.A.P. framework

Actionable data

Evidence-based tools

Adaptive change

The **2015 M.A.P. checklists** for improving BP control

Measure accurately

Screening checklist

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- ☐ Use the correct cuff size on a bare arm[2-10]
- ☐ Ensure patient is positioned correctly[2,3,11-19]

Confirmatory checklist

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Evidence-based tips for correct positioning

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- Back supported
- Arm supported
- Cuff at heart level
- Legs uncrossed
- Feet flat on the ground or supported by a foot stool
- No one talking during the measurement

Act rapidly

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- ☐ Use evidence-based protocol to guide treatment[24-26]
- ☐ Re-assess patient every 2-4 weeks until BP is controlled[27-29]
- ☐ Whenever possible, prescribe single-pill combination therapy[30-32]

Evidence-based protocols typically include

- Counsel on and reinforce lifestyle modifications
- Ensure early follow-up and add preferred medications in a step-wise fashion, until BP is controlled
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  - Thiazide diuretics
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  - ACE inhibitors (ACEI) or
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Partner with patients, families and communities

To empower patients to control their blood pressure:

- ☐ Engage patients using evidence-based communication strategies[33-35]
- ☐ Help patients accurately self-measure[36,37]
- ☐ Direct patients and families to resources that support medication adherence and healthy lifestyles

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Evidence-based lifestyle changes to lower BP include

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Why measuring blood pressure (BP) accurately is important

- Naturally occurring BP variability exists in all patients, contributing to uncertainty of what a patient's true BP is

- Uncertainty of patients' true BP is the leading cause for failure of a clinician to act on a high blood pressure in the office

- Poor measurement technique decreases reliability of a patient's BP, which can lead to poor clinical decisions, adversely affecting the health of a patient

How does this impact clinicians in practice?

Common errors made during office BP measurement

Observer factors	Patient factors	System factors
Wrong cuff size	Full bladder	Location of monitor/device
Cuff placed over clothing	Stimulants	Noise
Improper positioning	Recent exercise	Work flows
No rest period	Recent meal	
Terminal digit preference	Talking, texting, reading	
Talking to patient		
Rapid cuff deflation		

Why use office BP measurement?

- Opportunity to obtain BPs
- Technology has improved measurement reliability (validated, automated machines → less human error)
- Protocols improve reliability, reduce variability and errors and can improve workflow efficiency
- Obtaining confirmatory measurements increases diagnostic accuracy and reduces misclassification of hypertension
- By reducing errors and increasing reliability of BP measurement, clinicians are less likely to hesitate when initiating or escalating treatment (clinical inertia)

Correct patient position for BP measurement

For screening BP measurement

- Automated, validated device
- Sitting in a chair with back and arm supported (1)
- Legs uncrossed, feet on the ground or a stool (2)
- Cuff over a bare arm (3)
- Correct cuff size
- No talking or texting

If the screening BP is ≥ 140/90 mm Hg, obtain confirmatory BP measurements

For confirmatory BP measurements, same as above, plus

- Ensure patient has an empty bladder
- Rest for at least five minutes
- Obtain the average of at least three measurements

Most common factors contributing to uncontrolled hypertension

1. Clinicians miss opportunities to treat a patient with a BP $\geq$ 140/90
   - Fail to initiate or escalate therapy during an office visit
   - Fail to stress frequent follow up until BP is controlled

CLINICAL INERTIA

2. Patient non-adherence to treatment plan
   - Usually due to not taking medications as instructed

The **2015 M.A.P. checklists** for improving BP control

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Factors leading to clinical inertia

CLINICIAN

- **Failure to initiate treatment**
- **Failure to titrate to goal**
- **Failure to recommend follow-up**
- Failure to set clear goals
- Underestimating patient needs
- Failure to identify and manage comorbid conditions
- Not enough time
- Insufficient focus or emphasis on goal attainment
- Reactive rather than proactive

Factors leading to clinical inertia

PATIENT

- **Medication side effects**
- **Failure to take meds**
- **Too many medications**
- **Cost of medications**
- Denial of disease
- Forgetfulness
- Perception of low susceptibility
- Absence of symptoms
- Poor communication
- Mistrust of clinician
- Mental illness
- Low health literacy

Factors leading to clinical inertia

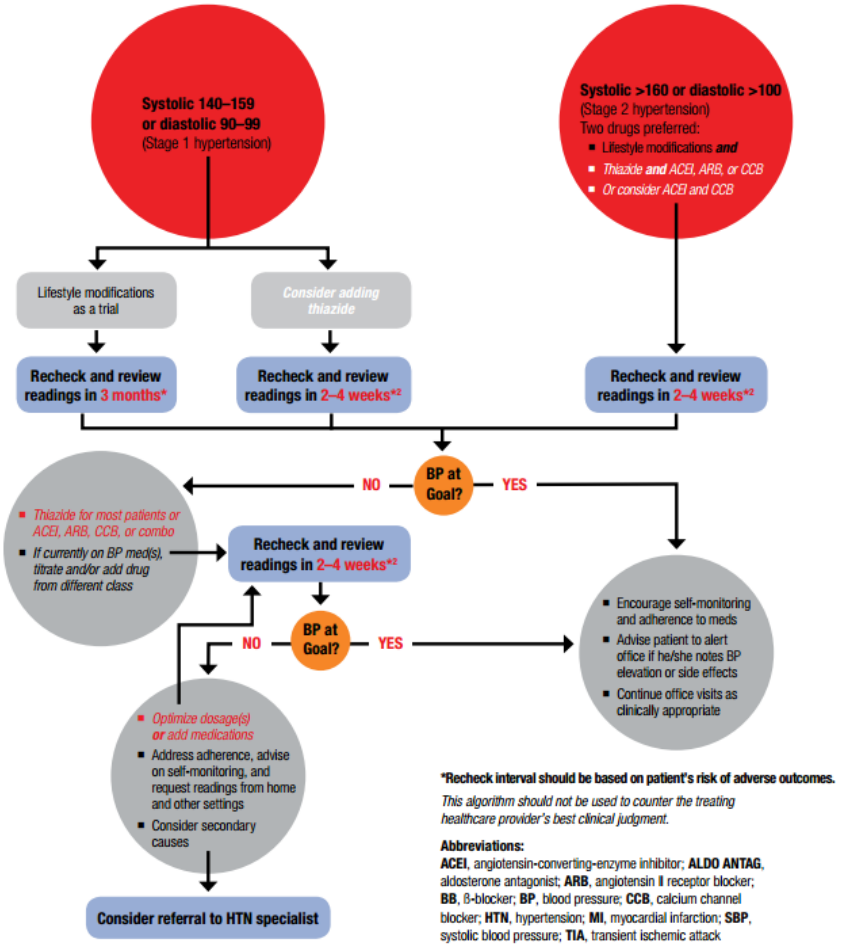
HEALTH SYSTEM

- Lack of clinical guidelines
- **Lack of care coordination**
- No visit planning
- Lack of decision support
- **Poor communication among office staff**
- No disease registry
- No active outreach

Why standardized treatment protocols are important

In patients with HTN with systolic BPs >150 mm Hg, increased risk of acute cardiovascular events or death can occur with

- Delays in medication intensification >6 weeks
- Delays in follow-up appointments >10 weeks after medication intensification



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Use evidence-based communication strategies

- Patient engagement is important if we expect patients to adhere to therapy
- When clinicians use this style of communicating – which is essentially talking less and listening more – we often learn important details that help us determine a preferred treatment approach
- When patients use this kind of communication, they are more engaged/committed, and as a result, are more likely to adhere
- Using these communication techniques does not lengthen visits (it actually shortens them), especially if all practice staff are using them

Use evidence-based communication strategies

STRATEGY
Begin with open-ended questions about adherence, including recent medication use
Explore reasons for possible non-adherence
Elicit patient views on options and priorities to customize a care plan for each patient
Remain non-judgmental at all times
Use teach-back to ensure understanding of the care plan

Key takeaways

Goals for collaboration:

- To understand patients, not interrogate them
- To encourage patients, not persuade them
- To support patients, not fix them

Why Self-measured BP (SMBP) is useful

SMBP is an important addition to office BP

- Helps provides assessment of blood pressure control
- Empowers patients to self manage their HTN
- May improve medication adherence

Empower patients to self-manage

SMBP empowers patients to:

- Check their BP
- Communicate results
- Make adjustments between visits
- Self-manage HTN

Richard J McManus, Jonathan Mant, Emma P Bray, Roger Holder et al. **Telemonitoring and self-management in the control of hypertension (TASMINH2): a randomised controlled trial.** ***Lancet*** **2010; 376: 163–72**

How to use SMBP in clinical practice

Educating staff to train patients on proper use of SMBP is critical and includes:

- Proper measurement technique

  Proper frequency to measure SMBPs
- How to record SMBPs
- A plan for patients to act if BPs are out of the desired range
- How to communicate SMBP readings to the clinical team

Lifestyle changes for hypertensive patients

- Healthy diet, such as DASH diet
- Reduced sodium intake
- Weight loss
- Aerobic exercise
- Moderate alcohol consumption
- No smoking

Taking a pill to lower BP

Lifestyle changes for improving blood pressure in patients with HTN

Lifestyle change
Dietary Approaches to Stop Hypertension (DASH) Diet
Reduce sodium intake
Weight loss to ideal body weight when able
Promote physical activity

Key messages when advising patients about healthy lifestyle choices to lower blood pressure

- Reduce the amount of salt in food and processed foods
- Try to eat at least five servings of fruits and vegetables per day
- Choose whole-grain products and high-fiber foods over refined grains (avoid white bread, rice and pastas)
- Gradually build up physical activity, like brisk walking, most days of the week
- Use personalized and cultural food preferences (eat the foods you like – don’t over eat)

Partner with patients, families and communities checklist

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Tools & Resources for Successful Control