

Engineering the extraordinary

Considerations to establish a hypertension program

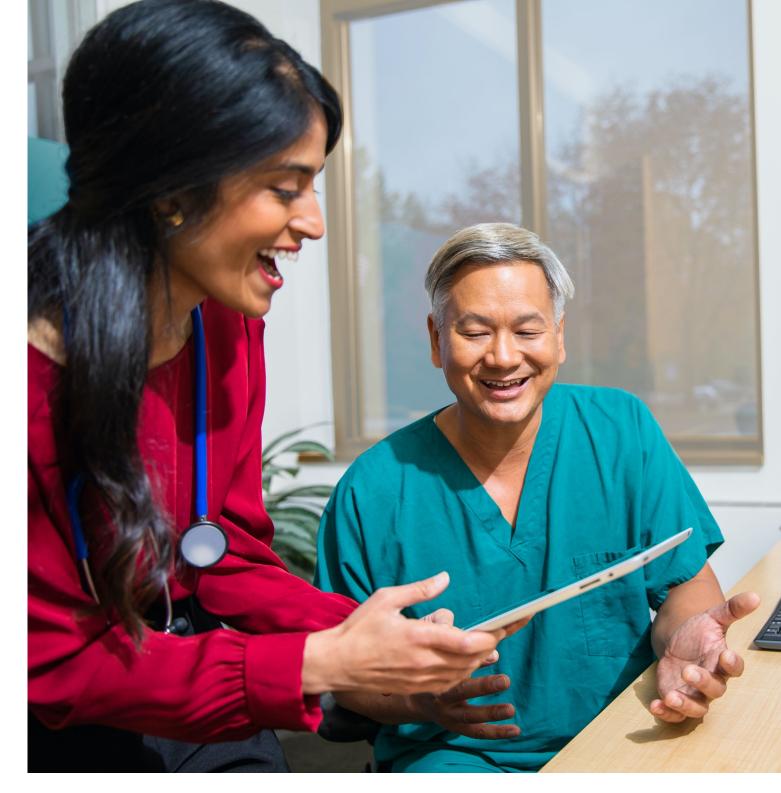
Agenda

Considerations to establish a hypertension program

The urgency to act

- A manageable approach to build a hypertension program
- 3 Program examples

Assessment and tools to get started



Disclaimer

This presentation is provided for general education purposes only and should not be considered the exclusive source for this type of information. The presentation is intended to highlight disease state awareness, resources, program examples, and tools for developing a hypertension program.

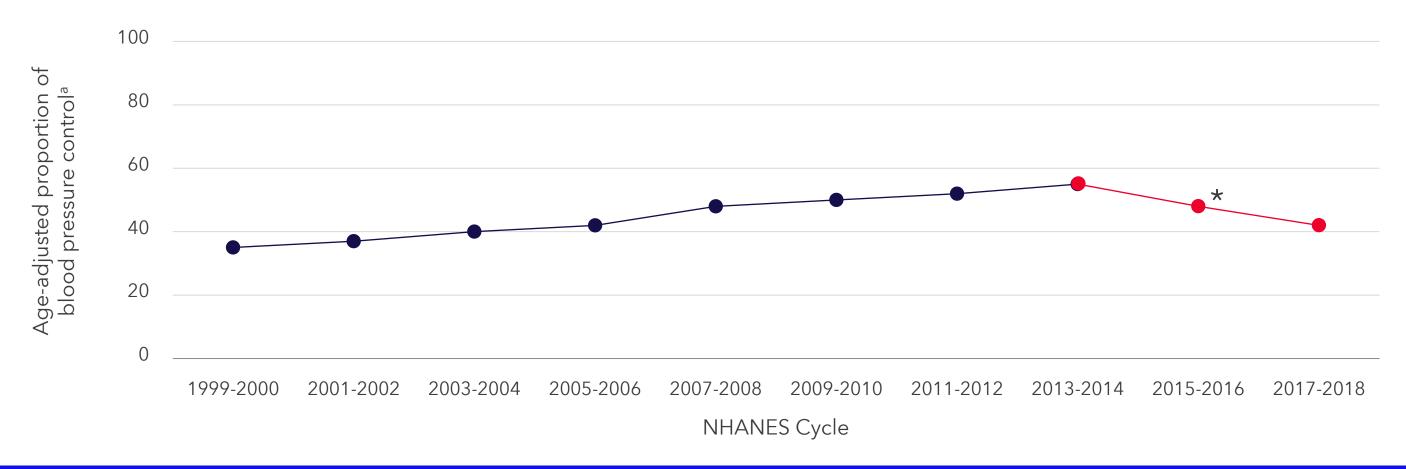
Urgency to act



Fewer HTN patients are achieving controlled hypertension¹

While cardiovascular events continue to be the leading cause of death in the U.S²

BP control is decreasing among U.S. adults taking antihypertension drugs¹



*from 2013-2014 through 2017-2018, P = 0.03 for trend

¹ Muntner P, et al. *JAMA*. 2020;324:1190-1200

² 2021 Heart Disease and Stroke Statistics Update Fact Sheet

Even modest BP reduction can impact cardiovascular events

Lancet Publications – 2016 and 2021^{1,2}; analysis of nearly 1M hypertensive patients

N = 613,815

Blood pressure lowering for prevention of cardiovascular disease and death: a systematic review and meta-analysis



Dena Ettehad, Connor A Emdin, Amit Kiran, Simon G Anderson, Thomas Callender, Jonathan Emberson, John Chalmers, Anthony Rodgers, Kazem Rahimi

//

Every **10 mm Hg reduction** in systolic blood pressure significantly reduced the risk of major cardiovascular disease events... "heterogeneity for major cardiovascular disease events was 41%, for coronary heart disease 25%, for stroke 26%, for heart failure 37%, for renal failure 28%, and for all-cause mortality 35%."

N = 348,854

Pharmacological blood pressure lowering for primary and secondary prevention of cardiovascular disease across different levels of blood pressure: an individual participant-level data meta-analysis



oa

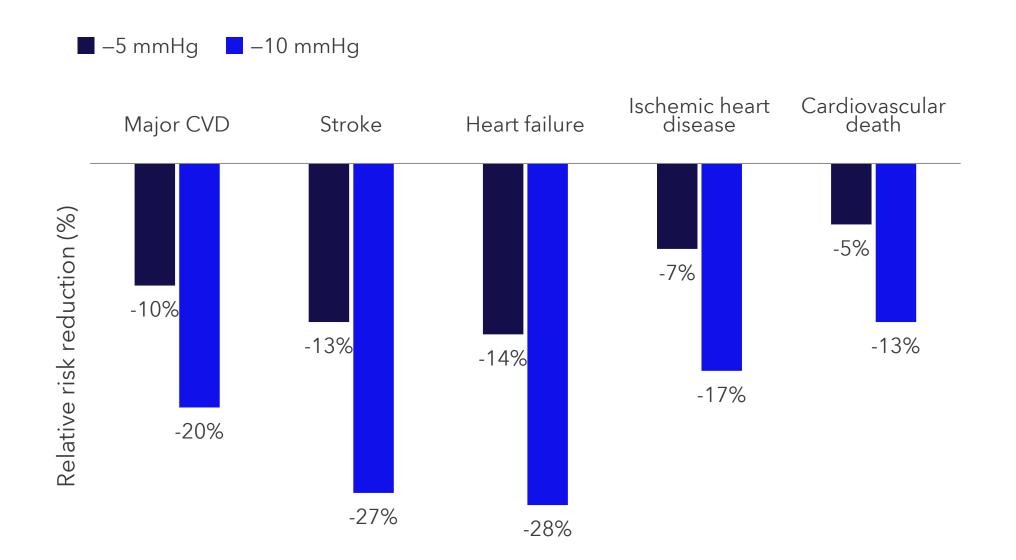
The Blood Pressure Lowering Treatment Trialists' Collaboration*

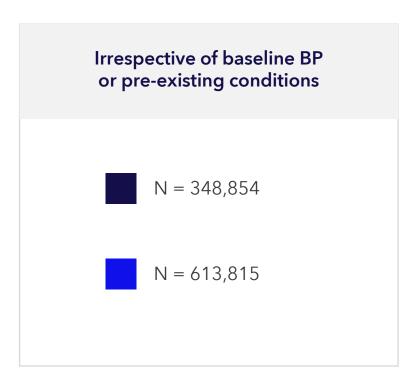
These findings suggest that a fixed degree of pharmacological blood pressure lowering is similarly effective for primary and secondary prevention of major cardiovascular disease, even at blood pressure levels currently not considered for treatment. Physicians communicating the indication for blood pressure lowering treatment to their patients should emphasize its importance on reducing cardiovascular risk rather than focusing on blood pressure reduction itself."

- 1. Ettehad D, et al. Lancet. 2016;387:957-967.
- 2. Rahimi K, et al. Lancet. 2021;397:1625-1636.

5 or 10 mmHg^{1,2} drop in OSBP can be meaningful as reported in meta analysis

Correlates to a 10% or 20% relative risk reduction in CV events





¹ Rahimi K. Blood pressure-lowering is even more beneficial than previously thought. Presented at ESC Congress 2020.

² Ettehad D, et al. *Lancet*. 2016;387:957-967.

A manageable approach to build a hypertension program



Different approaches to developing HTN care pathways

Informal Semi-formal Formal

HTN referral networking

Proactive outreach to further serve uncontrolled HTN patients



Hypertension program

Integrated care team evaluating current HTN patient path, adjusting where needed, advancing communication internal and external





AHA certified HTN center

Center of Excellence for Hypertension



CERTIFIED HYPERTENSION CENTERS

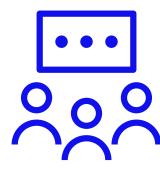


Four key criteria to develop a hypertension program

May improve long-term reduction of CV events









- 1. Develop HTN care team
- 2. Build HTN focus
- 3. Educate referrers
- 4. Educate patients

Framework to establish an HTN program

Communicate change plans internally and to

referring physicians

Focus for today is defining the HTN patient care process Review electronic health records Take assessment Understand current uncontrolled Gain leadership Identify HTN team and set HTN ••••• ••••• •••••• patient population support • Who is managing their care? program goals • How many are lost to follow-up? • What are their demographic profiles and how do we adapt to their needs?

•••••

Communicate

• Why HTN is important

to their well-being

• Share care expertise

•••••

to patients

offered

Track metrics & ongoing program management

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Define HTN patient

care process

Defining the hypertension patient care process



To develop a HTN care process, gain alignment on





Program goals



HTN guidelines and current practice protocols



Health equity considerations



Accurate measurements



Leadership support

Goals to consider



Increased collaboration across specialties to improved HTN control rates



Increased referring
physician confidence
that patients will return to their primary
physician for follow-up



Increased patient awareness of and commitment to the importance of lifestyle and adherence



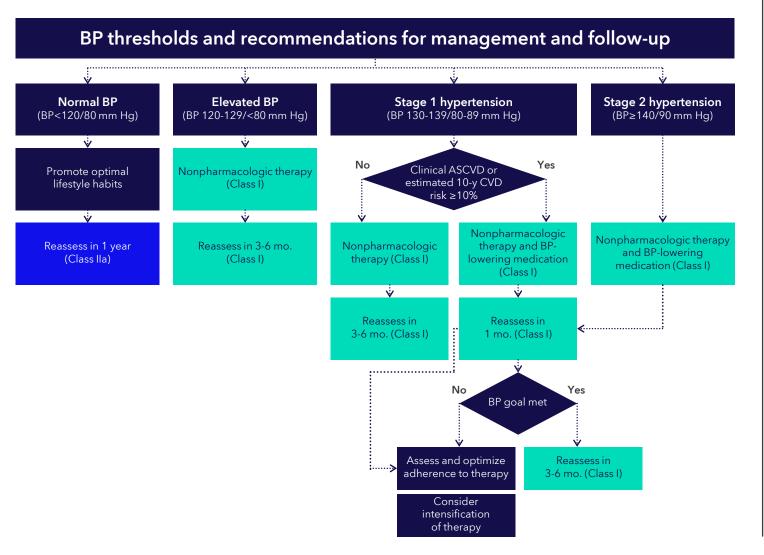
Improved BP rates for overall CV risk reduction is helpful even if goal pressure is not achieved



Evaluate what you do today versus guidelines

To determine if any updates to patient care protocols could be beneficial

Patient pathway



Patient follow-up

BP status	Recommended follow-up/Reassessment
Normal	1 year
Elevated	3-6 months
Stage 1 hypertension	 Monthly until BP goal met with BP lowering medication + nonpharmacologic interventions 3-6 months after BP goal met
Stage 2 hypertension	 Monthly until BP goal met with BP lowering medication + nonpharmacologic interventions 3-6 months after BP goal met



Guidelines reference tool

- http://aha-clinicalreview.ascendeventmedia.com/books/aha-high-bloodpressure-toolkit/
- https://www.ahajournals.org/doi/pdf/10.1161/HYPERTE NSIONAHA.120.15026

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Casey, et al. Am Journal of Medical Quality. 2021 May doi: 10.1097/01 Whelton et al . Hypertension ; 2018 June; e13-115

Improve health equity within the screening and care process



Utilize the CMS screening tool to

Evaluate

- >> Transportation needs
- Adequate access to a healthy diet
- Access to lost cost medications
- Safe environments for exercise
- (>) Homelessness
- Behavioral issues

Integrate

- EMR system to document and monitor
- Community health workers or social workers

Partner

- Ommunity organizations to help with nutrition
- > Pharmacies for home delivery options and adherence support
- Ocmmunity-based education: barber shops, salons, churches, workplaces, retail health clinics

Adopt

Oceanizations to help with nutrition



Higher at-risk groups include¹:

- Young
- Non-Hispanic black

- Uninsured
- Lack of access to a consistent clinic

https://innovation.cms.gov/files/worksheets/ahcm-screeningtool.pdf

Casey, et al. Am Journal of Medical Quality. 2021 May doi: 10.1097/01.

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Ensure accurate measurements across the system

Suggest refresh or annual training

Proper technique

Variations in technique can affect reading by 2 to 50 mm Hg

- Properly position the patient
- Use proper measuring technique and cuff sizing
- Take proper measurements
- Properly record readings
- Average the readings
- Provide readings to the patient
- https://targetbp.org/tools_downloads/achieving-accuracy-bp-measurement-e-module/
- https://targetbp.org/tools_downloads/cme-course-measuring-blood-pressure-accurately-step-1-in-hypertension-control/

ACVD risk assessment

(>) https://tools.acc.org/ldl/ascvd_risk_estimator/index.html#!/calulate/estimator/

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BP classifications

PD catagony	BP (MM HG)				
BP category	Systolic		Diastolic		
Normal	<120	and	<80		
Elevated	120-129	and	<80		
Hypertension					
Stage 1	130-139	or	80-89		
Stage 2	≥140	or	≥90		
Hypertensive crisis	>180	and/or	>120		

Corresponding BP values

Table 11. Corresponding Values of SBP/DBP for Clinic, HBPM, Daytime, Nighttime, and 24-Hour ABPM Measurements (Table view)

Clinic	НВРМ	Daytime ABPM	Nighttime ABPM	24-Hour ABPM
120/80	120/80	120/80	100/65	115/75
130/80	130/80	130/80	110/65	125/75
140/90	135/85	135/85	120/70	130/80
160/100	145/90	145/90	140/85	145/90

ABPM indicates ambulatory blood pressure monitoring; BP, blood pressure; DBP, diastolic blood pressure; HBPM, home blood pressure monitoring; and SBP, systolic blood pressure.

Get leadership support to create focus and program updates



HTN strategic imperative



Engaged patients



Accreditation agencies

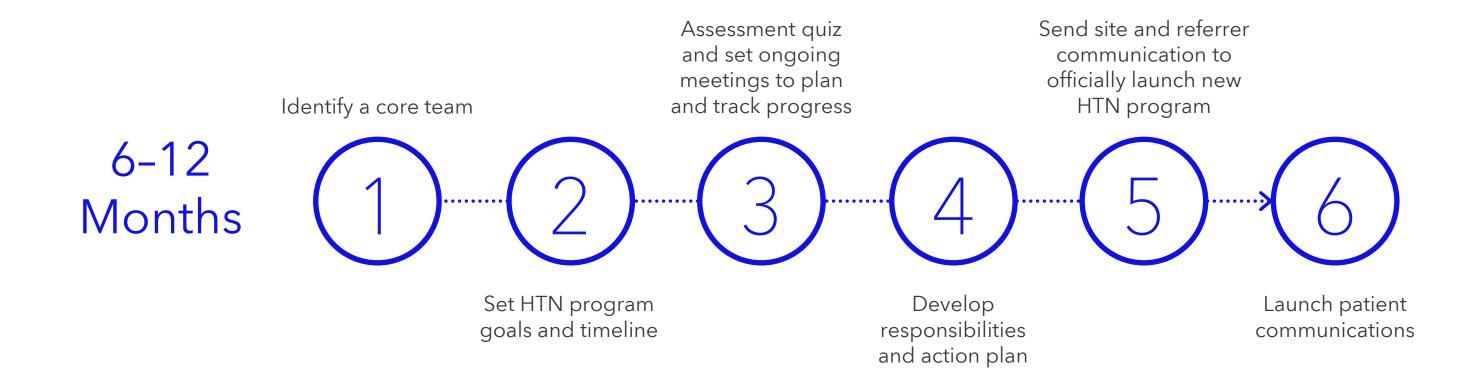






Electronic health record analytics

Timeline to build a hypertension patient care program Illustrative process



Program examples



Where should I start and who has a clinic I can model after?



Target BP.org

2 Hospital/practice website: Services offered

3 AHA certification program requirements and network

Community hospital and academic institution models

Join the target BP program

Take the assessment. Build it. Get recognized







You can make a difference

By using an evidence-based protocol to guide the way you and your team assess and manage people with high blood pressure, following clinical best practices, and enabling patient self-measurement where appropriate, you can have an impact on one of the biggest health challenges we face today.

Levels of Recognition

There are several levels at which your organization may be recognized.

Gold Status

Recognizes practices that have 70 percent or more of their adult patient population with high blood pressure controlled.



Participant Status

Recognizes practices that have submitted data and committed to reducing the number of adult patients with uncontrolled blood pressure.



New for 2021! In addition to submitting annual data for BP control rates, participants can be recognized for their team's commitment to accuracy in BP measurement. Is your practice completing these evidence-based BP activities?

Gold+ Status

Recognizes practices that meet the Gold status criteria and attest to completing at least 4 of 6 evidence-based BP activities.



Silver Status

Recognizes practices that submit data and attest to completing at least 4 of 6 evidence-based BP activities.



Pre-assessment Act rapidly



Instructions: Check all the boxes that apply to your practice.

1. What office protocols are in place?

- Provider is notified if patient has high blood pressure (BP)
- ☐ High BPs are flagged in electronic health record (EHR)

2. What treatment protocol is used?

- □ None
- ☐ Your practice's customized protocol
- ☐ Clinical decision support guidance within EHR (including embedded treatment protocol)
- □ AHA/ACC/CDC high blood pressure algorithm
- ☐ Million Hearts* protocol for controlling hypertension in adults
- ☐ Kaiser Permanente Clinical Practice Guideline for Adult Hypertension
- National Institute for Health and Care Excellence (NICE) protocol for hypertension in adults
- U Other:____

3. How are medical records used?

- ☐ Identify patients with uncontrolled BP using EHR report
- Identify clinical inertia
- Initiation or intensification of antihypertensive medication
- Initiation or continuation of non-pharmacological therapy
- Schedule follow-up visits
- Use of self-measured BP measurements
- Use of 24-hour ambulatory BP monitoring
- Identify contributing factors of clinical inertia
 - Provider's lack of knowledge on treating hypertension
- ☐ Unsure about "true" BP
 ☐ Medication complexity
- Medication adherence
- Patient does not want or agree with treatment plan
- ☐ Follow-up issue

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Build patient awareness for hypertension services

Patients and caregivers are looking services offered online for experts to help them

Include high blood pressure as a service offered along with differentiated descriptions

Go beyond just ,"We are experts in hypertension"



Explain the goal of the hypertension team



Review how the team approaches advanced HTN work up



Discuss why controlling HTN is important to reducing CV risk



Provide contact information to make it easy for patients to get an appointment

Review examples from AHA certified HTN centers for ideas

Consider what certified HTN centers are offering

Network to connect with others for guidance

Potential benefits of certification



Patient

- Greater confidence in management plan
- Assurance that center has been vetted and recognized by AHA



Provider

- Promote and recognize role and function of the HTN experts
- Referral source for other non-HTN specialists
- Establish pathway for appropriate reimbursement
- Access to AHA live and online education



Research and Training

- Opportunity to participate in research
- Serve as impetus to expand HTN training at all levels



Controllers	C'h-	Ct-t-	Medical Director	T of C. atification
Center Name	City	State		Type of Certification
Allegheny Health Network – General	Pittsburgh	PA	Khaled Nashar	Comprehensive HTN Center
Allegheny Health Network – Western Pennsylvania	Pittsburgh	PA	Raghu Tadikamalla	Comprehensive HTN Center
Beth Israel Deaconess Medical Center Hypertension Center	Boston	MA	Jennifer Cluett	Comprehensive HTN Center
Cleveland Clinic Nephrology and Hypertension	Cleveland	OH	George Thomas	Comprehensive HTN Center
Loyola University Comprehensive Hypertension Center	Maywood	IL	Karen A. Griffin	Comprehensive HTN Center
The Christ Hospital Advanced Hypertension Center	Cincinnati	OH	John Joseph Szawaluk	Comprehensive HTN Center
The Nephrology Group	Fresno	CA	Sreedhar Adapa	Comprehensive HTN Center
The Stanford University Hypertension Center	Stanford	CA	Vivek Bhalla	Comprehensive HTN Center
Thomas Jefferson University Hypertension Program	Philadelphia	PA	Seyed Mehrdad Hamrahian	Comprehensive HTN Center
University of California – Irvine (UCI)	Orange	CA	Ekamol Tantisattamo	Comprehensive HTN Center
University of Chicago Medicine Comprehensive Hypertension Center	Chicago	IL	George Bakris	Comprehensive HTN Center
University of North Carolina Hypertension Clinic	Chapel Hill	NC	Raven Voora	Comprehensive HTN Center
University of Miami	Miami	FL	Maria Delgado-Lelievre	Comprehensive HTN Center
University of Pennsylvania Hypertension Program	Philadelphia	PA	Raymond Townsend	Comprehensive HTN Center
University of Rochester Medical Center Hypertension Center	Rochester	NY	Hanna Mieszczanska	Comprehensive HTN Center
University of Texas Southwestern	Dallas	TX	Wanpen Vongpatanasin	Comprehensive HTN Center
University of Wisconsin Advanced Hypertension Program	Madison	WI	Theresa Gassman	Comprehensive HTN Center
Vanderbilt Hypertension Center	Nashville	TN	Nancy Brown	Comprehensive HTN Center
Alexian Brothers Specialty Group, Amita Health	Elk Grove Village	IL	John Furiasse	HTN Practice Center
King's Daughters Medical Center - Nephrology	Ashland	KY	Charbel Salem	HTN Practice Center
Kidney & Hypertension Group of South Florida	Ft. Lauderdale	FL	Gabriel Valle	HTN Practice Center
New Jersey Kidney Care, Fresenius Medical Care	Jersey City	NJ	Narender Goel	HTN Practice Center
OSF St. Francis Hypertension Center	Peoria	IL	Robert Sparrow	HTN Practice Center
Princeton Hypertension - Nephrology Associates	Princeton Junction	NJ	Michael C. Ruddy	HTN Practice Center
RTANE - Renal Transplant Associates of New England	Springfield	MA	Barbara Greco	HTN Practice Center
St. Clair Specialty Physicians Hypertension Clinic	Roseville	MI	Christopher R. Provenzano	HTN Practice Center

Last Updated: June 2021



Consider AHA's framework as a best practice

Leverage this guidance even if you do not seek certification

REQUIREMENT NUMBER	HYPERTENSION CENTER CERTIFICATION ELIGIBILTY OVERVIEW	PRACTICE CENTER	COMPREHENSIVE CENTER
1	Director must be a Certified as a Hypertension Specialist by the American Hypertension Specialist Certification Program. (Resources located here: www.ptcny.com)	٧	√
2	Director must hold an academic appointment		√
3	Director must be a current Premium Professional or Premium Professional Plus member of the American Heart Association with membership on the Council on Hypertension. (www.professional.heart.org)		٧
4	Practice must be registered for the Target: BP program (www.targetbp.org).	√	√
5	Majority of practice must be devoted to patients with hypertension and related disorders.	٧	√
6	Recognition as referral and treatment resource for resistant and secondary hypertension, and alternative therapies.	٧	٧
7	Personnel are competent in recording blood pressure and in maintaining equipment for both the Center and self-monitoring for patients	٧	√
8	Performs and interprets 24-hour ambulatory blood pressure recording	√	√
9	Has facilities available to perform extensive multi-specialty examination and treatment to assess complicated hypertension problems	V	4
10	Participates in investigator-initiated research and/or in appropriate multi-center trials and observational studies	٧	٧
11	Center performs ongoing quality improvement	√	√
12	Personnel participate in ongoing hypertension educational activities	٧	√
13	Personnel participate in teaching hypertension to medical students, house officers and fellows		4
14	Personnel participate in the publication of scholarly articles or abstracts related to the field of hypertension and related disorders		√

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REQUIREMENT NUMBER	HYPERTENSION CENTER CERTIFICATION REQUIREMENT OVERVIEW	PRACTICE CENTER	COMPREHENSIVE CENTER
1	The Hypertension Center defines its mission, goals, scope, and organizational structure. Outlines rationale for application and desired pursuit of certification as a Hypertension Center	٧	√
2	Center performs or has access to risk assessments, diagnostic evaluation tools, and interventions to perform extensive multi-specialty examination and treatment to assess complicated hypertension process.	٧	٧
3	The Center has a process in place to monitor staff competence in the accurate measurement and documentation of blood pressure.	√	٧
4	The Center has a process in place for the selection of independently validated stationary blood pressure monitoring equipment.	٧	٧
5	The Center has a process in place that addresses patient education including the anticipation of the patient's individualized needs and patient-centered goals.	√	√
6	The Center has a protocol for 24-Hour Ambulatory Blood Pressure Monitoring.	√	√
7	The Center performs ongoing quality improvement measuring adherence to evidence-based guidelines aimed at improving hypertension control and related outcomes of the patient population.	٧	√
8	The Center's staff have education, experience, training or certification consistent with scope of hypertension services and care provided.	٧	٧
9	The Center participates in research activities		√

https://www.heart.org/-/media/files/professional/quality-improvement/healthcare-certification/hypertension-2020/hypertension-program-overview-282020.pdf?la=en

American Heart
Association

CERTIFICATION
HYPERTENSION
CENTER

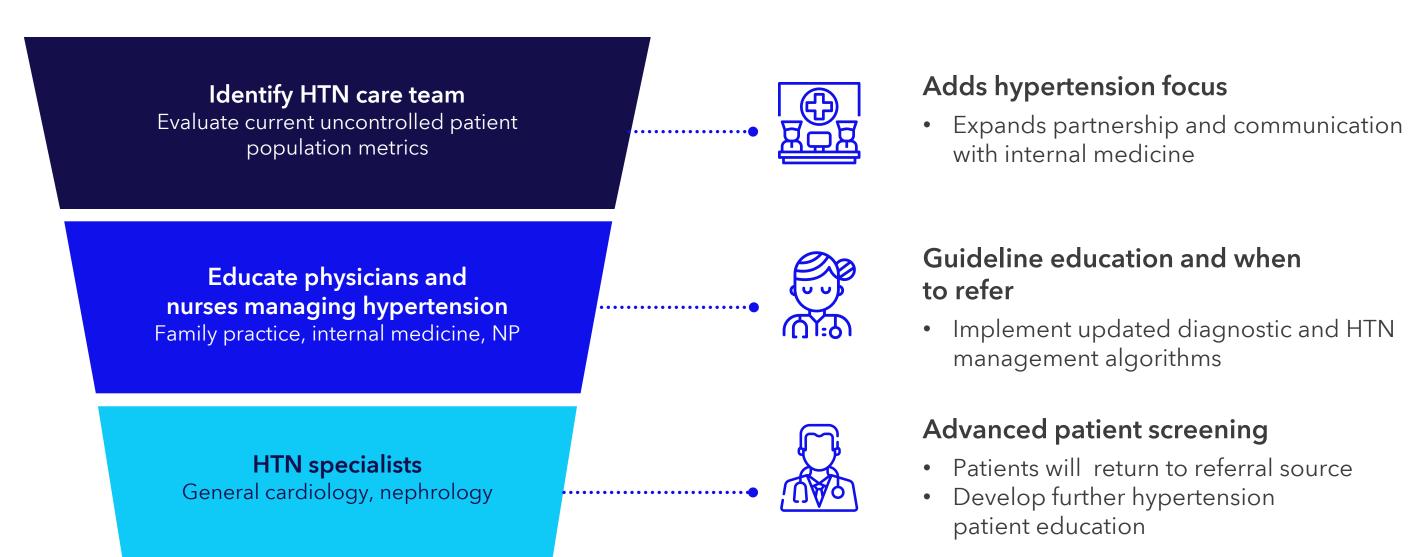
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How to advance to the next level of care with current resources

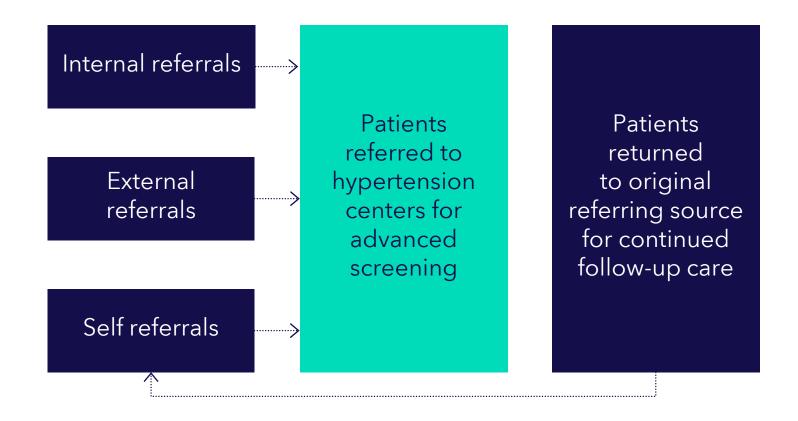
Community hospital example





How to advance patients to a full-scale hypertension clinic

Academic program





Build referring network knowledge of expertise



Improve care and return patients to referral source



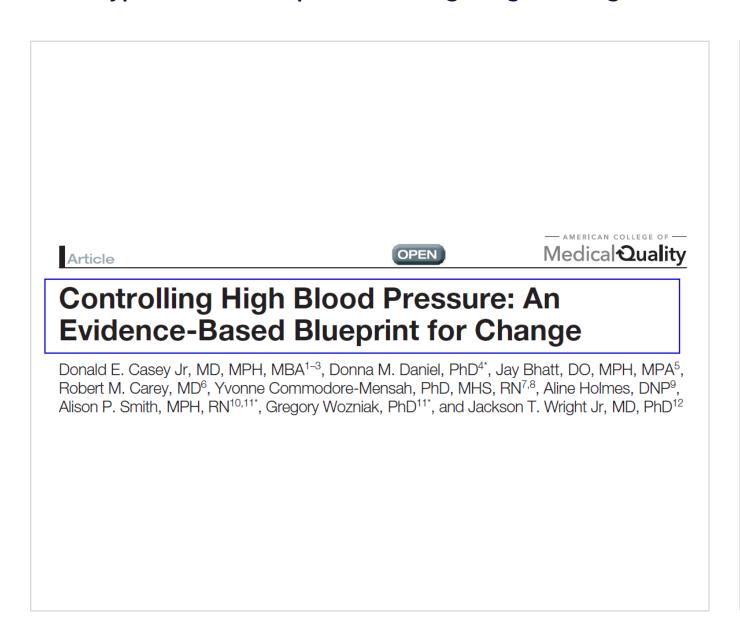
Develop further hypertension patient education

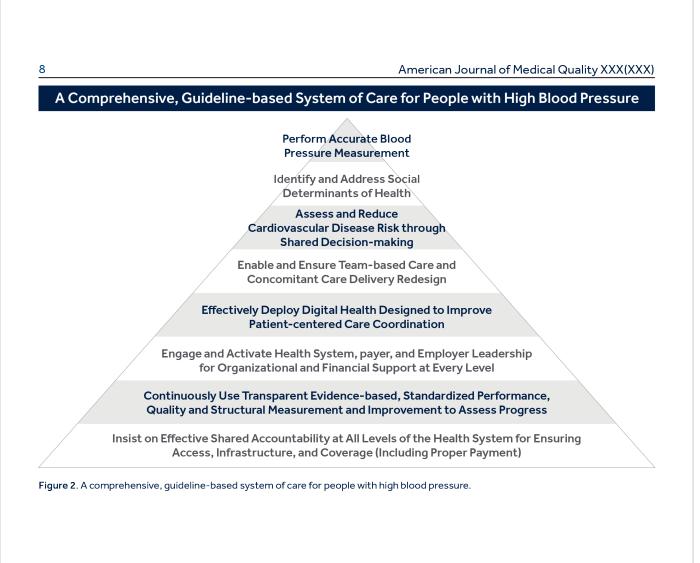
Site assessment and tools to get started



Change ideas to develop "the best HBP care"

2021 hypertension blueprint for change aligns with guidelines





Target bp toolkit downloads and newsletter







Templates from aha to get started and beyond

	V WELL								
	k the box	es that	apply	y to you	ır practio	ce.			
Do yo	Have a	a nurse	or m	nedical	assista	nt take a patient's BP?		1	
Ш	Use a	HOV	V RA	\PIDL\	/ DO Y	OU <u>ACT?</u>			
	Meas supp	Check Do yo		boxes t	hat appl	y to your practice.		g (e.g., quiet, chairs with back support, hard surface to	
	Prope patie		No Fla	Check Do yo	k the box	L DO YOU PARTNER? Exest hat apply to your practice.			
	Take	H	Us Ide		Enga	HOW WELL DO YOU USE SMBR			
			lde	H	Enco	Do you Train your staff on the correct	use of SMBP tech	nniques?	
					Pron	Identify patients who would be			
					Foste	Inform patients how to share t	•	their BP (e.g., device and cuff selection, preparation, positioning, timing)'	
			l			Average and interpret SMBP re	esults?		
								Check My Score	

Tools kit offering: 50+ downloads

- Measure and diagnose high BP
- Create and update a management plan
- Manage BP
- Patient measured BP
- Recognition program
- Best practices

nttps://targetbp.or	<u>rg/tools-downlo</u>	<u> ads/?sort=topic8</u>	<u>K</u>
		•	

Target BP Newsletter Sign up

https://targetbp.org/receive-newsletter/

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New HTN program planning tool

Coming in June 2022

HTN Program Planning Guidebook



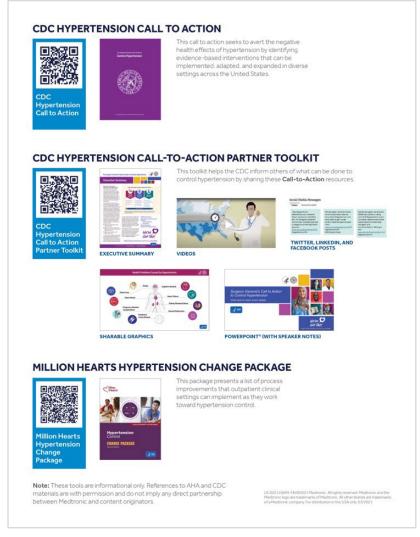


- Checklist for meeting prep and agendas
- Topics and links by chapter to help organize key discussion points for each meeting

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Use this resources reference sheet





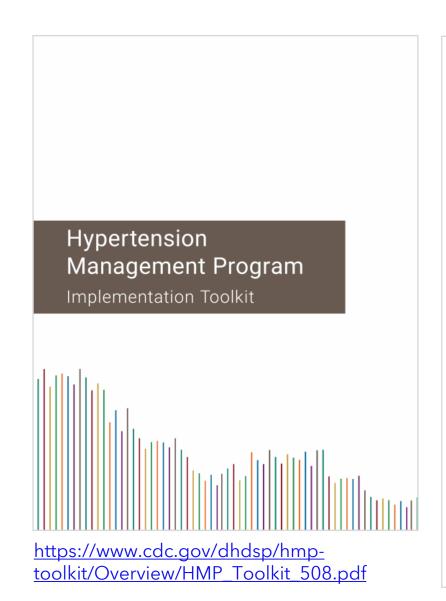
- 1 Quick reference to guidelines
- What do the best HTN clinics offer?
- What can I present to others around hypertension awareness?
- What can we do on social media to build education for patients and our employees?
- What does an ideal hypertension program include?

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AHA and CDC awareness toolkits

Available online for site and patient education



Surgeon general's call to action

https://www.cdc.gov/dhdsp/pubs/toolkits/hmp-toolkit/index.htm



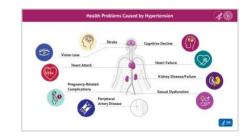
Where to follow



PPT (with speaker notes) executive summary



Social posts (FB, TW, LI)

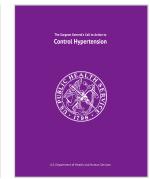


Shareable graphics



Videos



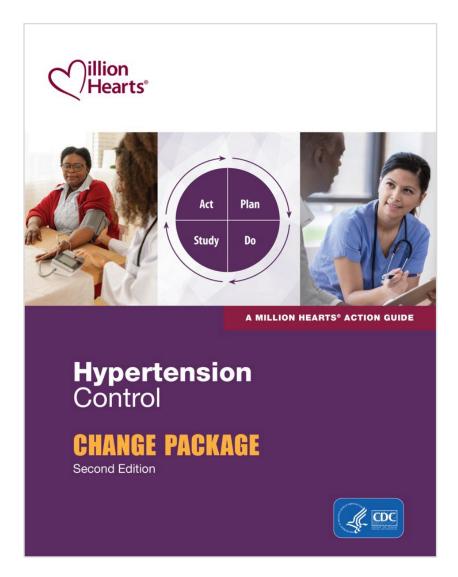


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Hypertension change control package includes best practices

And cases studies from comprehensive HTN programs



Focus areas:



Make HTN a priority



Train and evaluate



Identify patients and practice data to make improvements



Patient education and support

Case studies within change package

Case Study by Provider or Setting Name	Location	Description
Ellsworth Medical Clinic	Ellsworth, WI	Small rural practice
Jennifer Brull, MD	Plainville, KS	Small rural practice
Broadway Internal Medicine	Queens, NY	Small urban, Spanish-speaking family practice
Community Health Centers, Inc.	West Valley City, UT	Community health center

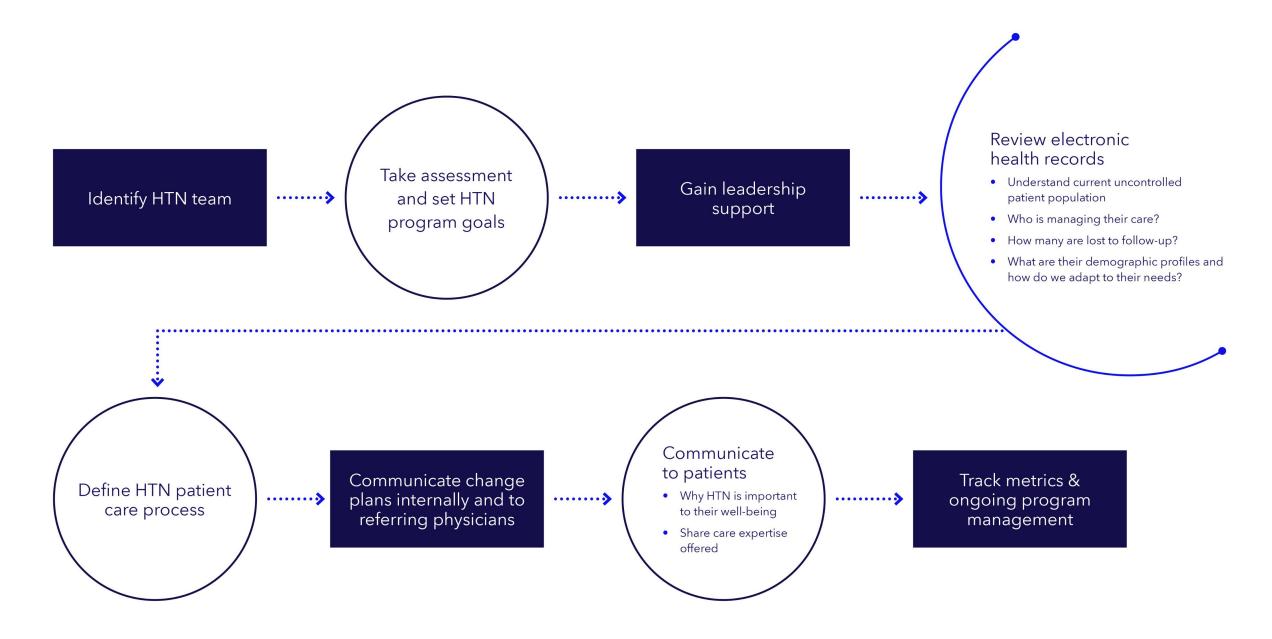
Case Study by Provider or Setting Name	Location	Description
Zufall Health	Dover, NJ	Community health center
Reliant Medical Group	Worcester, MA	Large multi-specialty group practice
Cheshire Medical Center/ Dartmouth-Hitchcock Keene	Keene, NH	Large health system
NorthShore Health Centers	Northwestern IN	Large multisite primary care organization

https://millionhearts.hhs.gov/files/HTN Change Package.pdf

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Framework to establish an HTN program





Discussion



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