



Native-CHART Webinar Series

Agenda

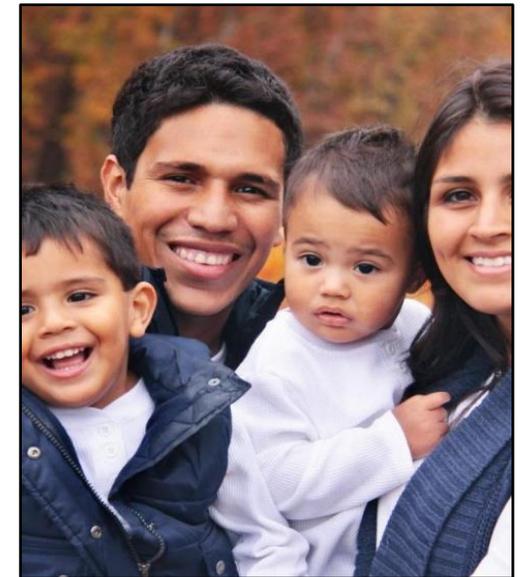
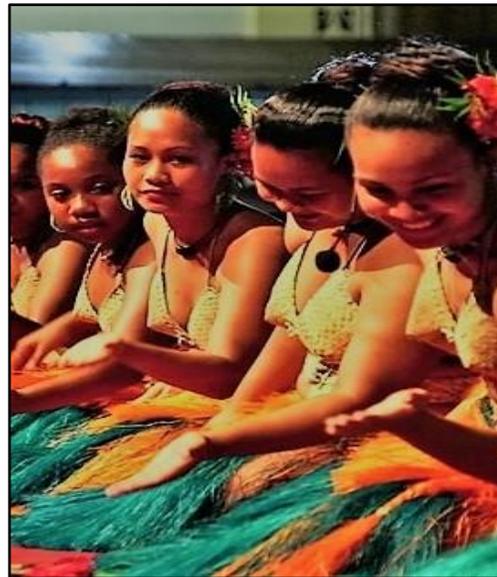
- Welcome, Zoom, Initiative for Research and Education to Advance Community Health (IREACH) and Partnerships for Native Health Introductory Slides (10 minutes)
- Native CHART Presentation: Provider Patient Partnerships: Working Together for Better Blood Pressure Outcomes in Communities, Dr. Charles Magruder (40 minutes)
- Question and Answer, Closing (10 minutes)
- Post-webinar survey link: \$30.00 gift card drawing



WASHINGTON STATE UNIVERSITY

Initiative for Research and Education to Advance Community Health (IREACH)

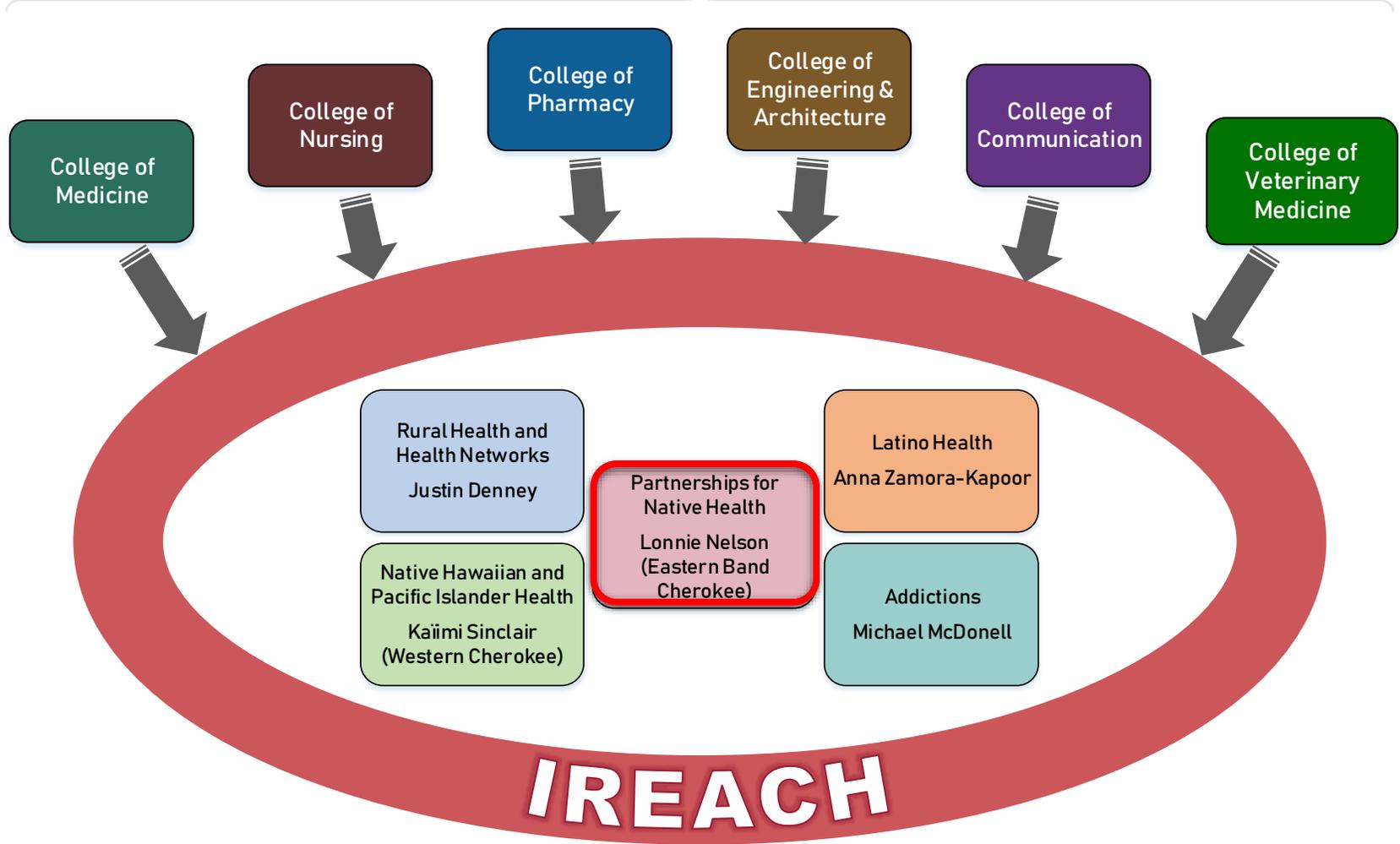
“We challenge the status quo and advance community health through partnerships and collaboration.”





IREACH Structure

WASHINGTON STATE UNIVERSITY



IREACH



Partnerships for Native Health

Community-based research and education to improve health and reduce health disparities





Partnerships for Native Health: Vision

Diverse American Indian and Alaska Native constituents and academic partners working together in real-world settings to improve health through research, education, and technical assistance and by focusing on community strengths.





Partnerships for Native Health

- Prototype for program development for new and novel programs at Washington State University
- Urban and rural American Indian and Alaska Native populations across the lifespan
- Focus on achieving health equity
- Community outreach and engagement
- Training and education
- ~160 partners: tribal colleges, Native organizations, tribes, and universities





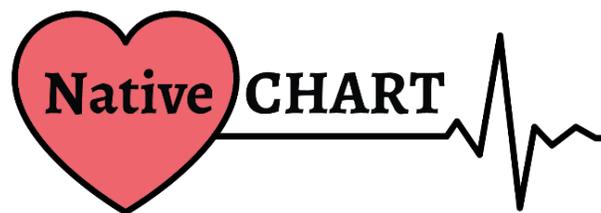
Research Topics

- Alcohol dependence
- Substance abuse prevention
- Smoking and nicotine dependence
- Suicide prevention
- Mental and behavioral health
- Homelessness
- High blood pressure
- Diabetes
- Stroke risk reduction
- Cervical cancer prevention
- Colorectal cancer screening
- Cognitive impairment and Alzheimer's disease



Native Controlling Hypertension and Risk Through Technology (Native-CHART)

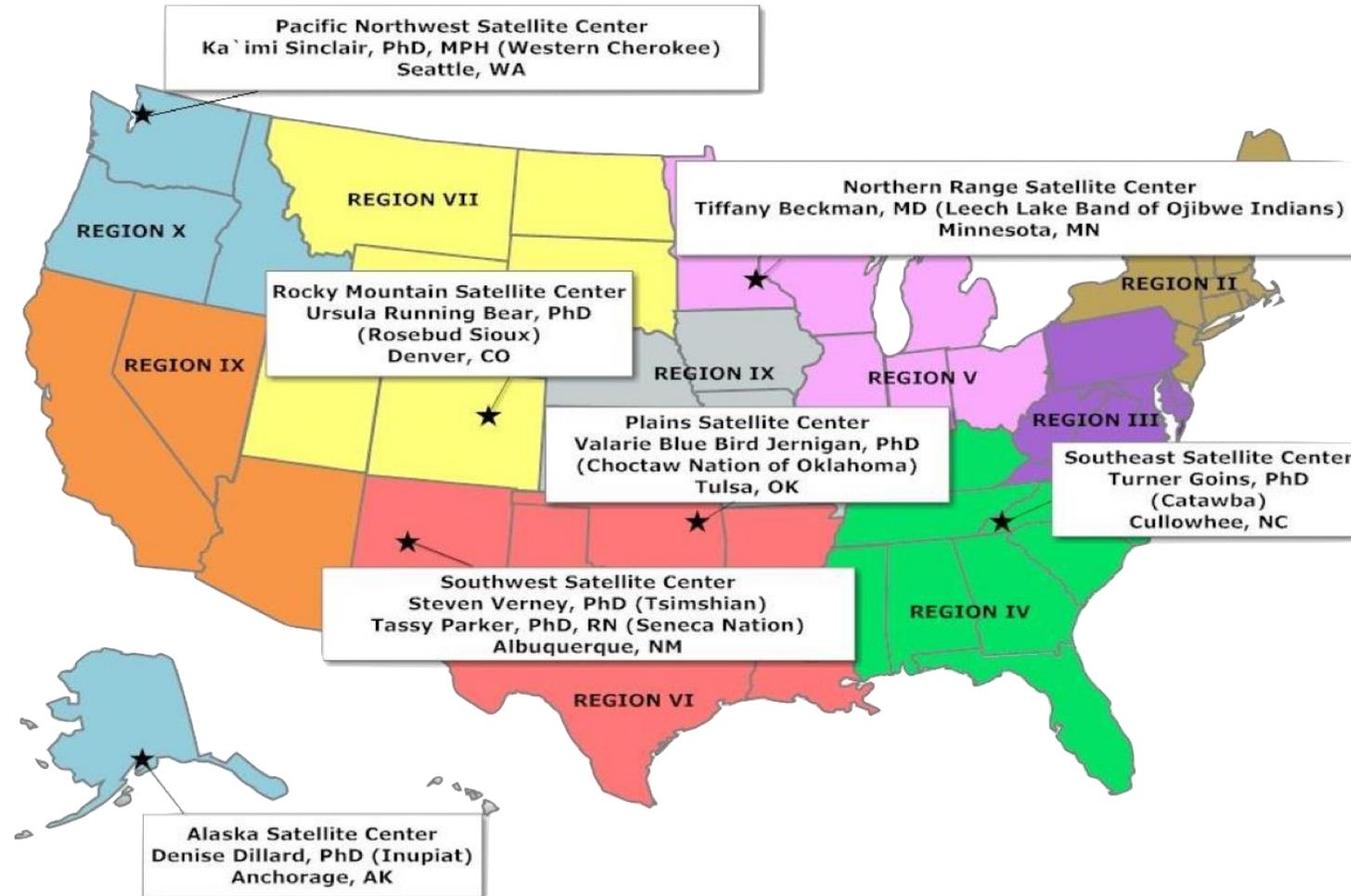
Center aims to improve control of blood pressure and other risk factors for cardiovascular disease in American Indians, Alaska Natives, Native Hawaiians, and Pacific Islanders with diagnosed hypertension. It comprises three community-based intervention projects and four supporting Cores.



PARTNERSHIPS
for NATIVE HEALTH



Native-CHART Satellite Centers





Chickasaw Healthy Eating Environments Research Study

Ada, Oklahoma

 The UNIVERSITY of OKLAHOMA
Health Sciences Center

- A food delivery program, tribally developed and approved, that provides monthly grocery deliveries to American Indians living in remote communities
- A smartphone app, called “AYA,” that encourages healthy eating and exercise practices, informed by Chickasaw traditions
- Cooking demonstrations, given at community centers and tribal farmers markets, of traditional, heart-healthy Chickasaw recipes
- Farmers market vouchers given to participating individuals and families





Blood Pressure-Improving Control Among Alaska Native People

Anchorage, Alaska

Southcentral
Foundation



- At-home blood pressure monitoring equipment provided to participants
- Educational materials and text messages encouraging the achievement and maintenance of a heart-healthy lifestyle
- Tools and resources to assist participants in communicating about heart health with their healthcare providers



Engaging Native Hawaiians and Pacific Islanders and Activating Communities to Take Steps

Seattle, Washington



- Peer-facilitated educational classes emphasizing heart-healthy eating; traditional Native Hawaiian and Pacific Islander foods; physical activity; and social support
- A weekly credit for online grocery shopping
- A smartphone app for participants to track their physical activity
- Community-driven awareness campaigns in local grocery stores, encouraging heart-healthy food choices



Patient Provider Partnerships: Working Towards Better Blood Pressure Outcomes in Communities

Dr. Charles Magruder
Indian Health Service, Chief Medical Officer, California Area Office



***Provider-Patient Partnerships:
Working together for better blood pressure
outcomes in communities***

Charles Magruder, MD MPH

Chief Medical Officer

California Area Office of the Indian Health Service



Uncontrolled Blood Pressure in America

About **103 million adults (nearly half)** in the United States have high blood pressure. Research shows that high blood pressure is a contributing factor to major health conditions including **heart attack, heart failure, stroke, kidney failure**, and other health concerns. Research also shows that **45.9% of those with high blood pressure are not controlled, that's 36.7 million people!**

Age Demographics in Pacific Northwest of Alaska Native, Native American, Native Hawaiian and Pacific Islander Populations

AGE	WASHINGTON		CALIFORNIA		HAWAII		ALASKA		OREGON	
	Native American/ Alaska Native	Native Hawaiian/ Pacific Islander	Native American /Alaska Native	Native Hawaiian/ Pacific Islander	Native American/ Alaska Native	Native Hawaiian /Pacific Islander	Native American /Alaska Native	Native Hawaiian /Pacific Islander	Native American/ Alaska Native	Native Hawaiian/ Pacific Islander
18-24	10,715	5,426	33,755	17,384	241	15,858	11,167	1,138	5,267	2,092
25-34	14,178	8,606	41,998	25,867	564	22,042	14,571	1,610	6,728	3,337
35-44	11,749	6,543	37,883	22,224	385	18,844	10,953	1,101	5,833	2,107
45-54	12,206	4,921	39,967	21,453	491	18,039	11,905	777	5,842	1,608
55-64	11,156	4,117	35,455	15,792	460	14,065	9,702	521	5,722	918
65+	8,275	2,282	27,542	13,296	264	13,587	7,896	308	4,565	769
Total	68,279	31,895	216,600	116,016	2,405	102,435	66,194	5,455	33,957	10,831

Snapshot of CVD and Stroke Risk Factors: *Alaska*

- **28.8%** of **adults** aged 18+ have ever been told by a doctor that they have **high blood pressure** or **hypertension**
- **7.21%** of **adults** aged 18+ have been diagnosed with **diabetes** (age-adjusted rate)
- **Heart Disease Mortality** (age-adjusted rate per 100,000 population) for **Native Americans/Alaskan Natives** is **225**
- **Heart Disease Mortality** (age-adjusted rate per 100,000 population) for **Native Hawaiians/Pacific Islanders** is **96.8**
- **Stroke Mortality** (age-adjusted rate per 100,000 population) for **Native Americans/Alaskan Natives** is **63.4**
- **Stroke Mortality** (age-adjusted rate per 100,000 population) for **Native Hawaiians/Pacific Islanders** is **44.2**



Snapshot of CVD and Stroke Risk Factors: *California*

- **26.21%** of adults aged 18+ have ever been told by a doctor that they have **high blood pressure** or **hypertension**
- **8.33%** of adults aged 18+ have been diagnosed with **diabetes** (age-adjusted rate)
- **Heart Disease Mortality** (age-adjusted rate per 100,000 population) for **Native Americans/Alaskan Natives** is **86.9**
- **Heart Disease Mortality** (age-adjusted rate per 100,000 population) for **Native Hawaiians/Pacific Islanders** is **88.6**
- **Stroke Mortality** (age-adjusted rate per 100,000 population) for **Native Americans/Alaskan Natives** is **16.7**
- **Stroke Mortality** (age-adjusted rate per 100,000 population) for **Native Hawaiians/Pacific Islanders** is **31.5**



Snapshot of CVD and Stroke Risk Factors: *Hawaii*

- **27.05%** of **adults** aged 18+ have ever been told by a doctor that they have **high blood pressure** or **hypertension**
- **7.54%** of **adults** aged 18+ have been diagnosed with **diabetes** (age-adjusted rate)
- **Heart Disease Mortality** (age-adjusted rate per 100,000 population) for **Native Hawaiians/Pacific Islanders** is **132.3**
- **Stroke Mortality** (age-adjusted rate per 100,000 population) for **Native Hawaiians/Pacific Islanders** is **37**



Snapshot of CVD and Stroke Risk Factors: *Oregon*

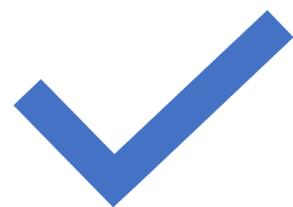
- **25.69%** of **adults** aged 18+ have ever been told by a doctor that they have **high blood pressure** or **hypertension**
- **8.23%** of **adults** aged 18+ have been diagnosed with **diabetes** (age-adjusted rate)
- **Heart Disease Mortality** (age-adjusted rate per 100,000 population) for **Native Americans/Alaskan Natives** is **132.8**
- **Heart Disease Mortality** (age-adjusted rate per 100,000 population) for **Native Hawaiians/Pacific Islanders** is **78.7**
- **Stroke Mortality** (age-adjusted rate per 100,000 population) for **Native Americans/Alaskan Natives** is **37.72**
- **Stroke Mortality** (age-adjusted rate per 100,000 population) for **Native Hawaiians/Pacific Islanders** is **35.77**



Snapshot of CVD and Stroke Risk Factors: *Washington*

- **26.88%** of adults aged 18+ have ever been told by a doctor that they have **high blood pressure** or **hypertension**
- **8.17%** of adults aged 18+ have been diagnosed with **diabetes** (age-adjusted rate)
- **Heart Disease Mortality** (age-adjusted rate per 100,000 population) for **Native Americans/Alaskan Natives** is **198.9**
- **Heart Disease Mortality** (age-adjusted rate per 100,000 population) for **Native Hawaiians/Pacific Islanders** is **73.4**
- **Stroke Mortality** (age-adjusted rate per 100,000 population) for **Native Americans/Alaskan Natives** is **43.5**
- **Stroke Mortality** (age-adjusted rate per 100,000 population) for **Native Hawaiians/Pacific Islanders** is **32.6**





M.A.P
Framework



Who Can Participate?

Hospitals

Medical practices

Practitioners/Care teams

Health service organizations

How Does The Program Work?

1

After the participant registers, local AHA staff will work with the organization to:

2

**Customize a Plan
using the MAP
Framework**

3

**Measure
Improvement &
Report Result**

4

**Strive for
Recognition
ultimately at 70% or
higher**

Overview of the M.A.P. Framework



MEASURE blood pressure accurately, every time.

Accurate measurement and recording of BP is essential to categorize level of BP, ascertain BP-related CVD risk, and guide management of high BP.

Measure Accurately



ACT rapidly to address high blood pressure readings.

Take rapid action and follow treatment protocols to bring BP under control.

Act Rapidly



PARTNER with patients, families, and communities to promote self- management and monitor progress.

Improve adherence to treatment and lifestyle changes through collaborative communication and follow-up visits.

Partner With Patients

M.A.P.:M- Prepare Patient

- Ask your patient to avoid caffeine, exercise, and smoking for at least 30 minutes
- Ask your patient to empty bladder
- Have your patient relax in a chair (feet on floor, back supported) for >5 min. Do not take BP readings while your patient is sitting or lying on an examining table
- Instruct your patient not to talk during the rest period or the measurement
- Ask your patient to bare the arm where you will place the cuff

M.A.P.: M-Use Proper Technique

- Use a validated, calibrated measurement device
- Be sure the patient's arm is supported on a surface at the correct height
- Place the middle of the cuff on the patient's upper arm
- Use the correct cuff size. The bladder should go around 80% of the arm. Make a note if an unusual cuff size is needed
- Use either the stethoscope diaphragm or bell for auscultatory readings

Assessment Asks About Providers: Measuring

Does the provider:

- Use a validated, automated upper arm device to measure BP?
- Obtain the average of ≥ 2 Office BP Measurements (≥ 3 if unattended AOBP used).
- If office BP measurements are $\geq 130/80$ mm Hg, use out-of-office BP measurements to confirm diagnosis of HTN?
- Train patients for out-of-office measurement technique being used (ABPM or SMBP)?
- Consider out-of-office BP measurements when office blood pressure measurements are 120-129 and < 80 mm Hg if you suspect masked hypertension?

M.A.P.: M-Take Measurements to Diagnose & Treat

- At the first visit, take readings from both arms. Take subsequent readings from the arm that gave the higher reading
- Separate repeated measurements by 1–2 minutes
- If you use the auscultation method, prefer a palpated estimate of radial pulse obliteration pressure to estimate SBP. Inflate the cuff 20–30 mm Hg above this level to determine BP
- If you use the auscultation method, deflate the cuff pressure 2 mm Hg per/s and listen for Korotkoff sounds

M.A.P.: M-
Record and
Document
Patient's
Blood
Pressure

- Record both SBP and DBP. If using the auscultatory technique, record SBP and DBP as onset of the first Korotkoff sound and disappearance of all Korotkoff sounds, respectively, using the nearest even number.
- Note how much time had passed between BP medication having been taken and time of measurement
- Use an average based on ≥ 2 readings obtained on ≥ 2 occasions to estimate your patient's BP
- Give patients both their SBP and their DBP readings, verbally and in writing

Does the provider:

- Initiate nonpharmacologic therapy to treat Elevated BP?
- If average office BP is 130-139 mm Hg SBP or 80-89 mm Hg DBP and patient does not have clinical ASCVD, Diabetes, or CKD, and has $\geq 10\%$ ten-year risk, do you consider out-of-office BP measurement using 24-hour ABPM or SMBP to confirm the diagnosis?
- If average office BP is 130-139 mm Hg SBP or 80-89 mm Hg DBP, which is confirmed with SMBP or ABPM, and patient does not have clinical ASCVD, Diabetes, or CKD, with $\geq 10\%$ ten-year risk, do you initiate pharmacotherapy?
- If average office BP is 130-139 mm Hg SBP or 80-89 mm Hg DBP mm Hg, which is confirmed with SMBP or ABPM, and the patient does not have clinical ASCVD, Diabetes, or CKD, ten-year ASCVD risk is $>10\%$, do you follow up every 4 weeks, using treatment algorithm to guide therapy until BP is controlled to $<130/80$ mm Hg?
- If average office BP is confirmed $\geq 140/90$ do you initiate or continue non-pharmacologic therapy and treatment algorithm to guide therapy using two medications from two different classes?

Assessment
Asks About
Providers:
Acting

M.A.P.:A- Act
Rapidly to
Manage
Elevated BP

- Elevated BP:
 - When average office BP 120-129 and <80mm Hg at 2 or more office visits:
 - Start nonpharmacologic therapy
 - Follow up in 3-6 months
 - Consider out-of-office BP measurement using 24-hour ambulatory blood pressure monitoring (ABPM) or self-measured blood pressure (SMBP)

M.A.P.:A- Act Rapidly to Manage Elevated BP

- Stage 1 Hypertension:
 - When average office BP ≥ 130 -139 or 80-89 mm Hg and patient does not have clinical ASCVD, diabetes, or CKD:
 - Use the [AHA/ACC ASCVD Risk Estimator](#) to calculate 10-year risk. If 10-year risk is $\geq 10\%$, start pharmacotherapy. Follow up every 4 weeks, using the [treatment algorithm](#) to guide therapy until BP is $< 130/80$ mm Hg
 - If 10-year risk is $< 10\%$ in low-risk patient, start or continue nonpharmacologic therapy and follow up in 3-6 months
 - Consider out-of-office BP measurement using 24-hour ABPM or SMBP
 - When average office BP ≥ 130 -139 or 80-89 mm Hg and patient has clinical ASCVD, diabetes, or CKD:
 - Start or continue nonpharmacologic therapy. Treat as if 10-year risk is $\geq 10\%$
 - *When starting a diuretic, ACE or ARB, follow up in 2 weeks to check electrolytes and renal function.

M.A.P.:A- Act
Rapidly to
Manage
Elevated BP

- Stage 2 Hypertension:
 - When average office BP ≥ 140 or >90 mm Hg:
 - Start or continue nonpharmacologic therapy
 - Start pharmacotherapy, prescribing 2 different classes of antihypertensive agents in most patients (with caution if patient is elderly)*
 - Follow up every 4 weeks until BP is controlled
 - Consider out-of-office BP measurement using 24-hour ABPM or SMBP
 - Reassess on an ongoing basis using SMBP to identify white coat hypertension and determine a patient's adherence and response to therapy.
 - *When starting a diuretic, ACE or ARB, follow up in 2 weeks to check electrolytes and renal function.

M.A.P.: A- Uncontrolled HBP Needs **Immediate Action**

High blood pressure:

- Accounts for more deaths from CVD than any other modifiable risk factor
- Is second only to cigarette smoking as a preventable cause of death in the US
- Was present in more than half of people who die from coronary heart disease and stroke

Reduce Therapeutic Inertia

- Therapeutic inertia—failing to start or intensify treatment when BP is high—is a common problem. It is also a leading factor contributing to suboptimal BP control rates, along with the failure of patients to schedule or return for follow up appointments. Both can leave your patient with serious unmanaged risk and can be addressed with an evidence-based treatment protocol.

Assessment Asks About Providers: Partnering

Does the provider:

- Engage patients using evidence-based collaborative communication strategies, such as teach-back?
- Encourage patients to self-manage using Self-Measured Blood Pressure (SMBP)?
- Direct patients and families to resources that support medication adherence?
- Promote adoption of healthy habits, and connect patients with resources that can help?
- Foster specific lifestyle changes that can prevent and help manage high blood pressure?

M.A.P.: P- Partner with Patients

The prevalence of high BP rises dramatically with increasing age. By partnering with patients to help remove obstacles to treatment adherence and bring their blood pressure under control, you can save and extend lives. Focus on their overall health, including diet, sodium intake, physical activity, alcohol consumption, and smoking, outlining ways they can reduce their risk of CVD.

Creating a blame-free environment in which patients are recognized for achieving treatment goals and encouraged to answer treatment-related questions honestly is an important step to tackling the problem of treatment nonadherence.

M.A.P.:P- Empower Patients to Control BP

- Guide patients and their families to resources that can help support recommended lifestyle changes and improve adherence to treatment plans
- Encourage patients to self-manage using [SMBP](#)
- Engage your patients in a collaborative approach to care using evidence-based communication skills including the teach-back method, which helps clinicians determine if patients understand information that has been shared with them. Have patients repeat the information back in their own words, describing the actions they need to take concerning their health. Use this method to improve adherence when training patients on SMBP

M.A.P.:P-Foster Ongoing Communications

- Once blood pressure is controlled, patients with a diagnosis of hypertension can use SMBP to monitor their blood pressure.
- Patients need clear instructions about what to do if they get a reading outside of the expected range (low or high) or if they have symptoms (chest pain, shortness of breath, dizziness, etc.). As a basis for clinical decisions, patients should record a full week's worth of SMBP, following the recommended protocol and share all readings with the clinical team.
- Local partnerships can also help some patients—particularly those with lower incomes—achieve their treatment goals. Following through on lifestyle recommendations may be challenging for some patients with poor social support, obstacles to exercise and healthy foods, and challenging finances. When possible, help patients who need support from local partners connect with organizations that can help.
- Simplifying medication regimens, either by less frequent dosing or by single-pill combination drug therapy, also improves adherence

M.A.P.:P-Resources to Help

Sodium (Salt) and Your Blood Pressure

- Help patients understand why too much salt can cause problems, and how to cook tasty food using less salt.

Steps to Improve Blood Pressure

- Help patients improve their blood pressure with five lifestyle modifications.

M.A.P.: M-Treat Patient's Blood Pressure

Encourage patient to stop smoking cigarettes

Control diabetes mellitus if present

Control dyslipidemia or hypercholesterolemia

Counsel overweight or obese patients to reduce weight

Encourage patient who is inactive to begin regular exercise

Promote a healthy diet

Minimizing these risk factors may help patients reduce CVD risk.

M.A.P.: Putting It All Together

- **M, A, and P do not exist in isolation**
- **Measuring accurately is critical to diagnosis, treatment and control**
- **Partnering with patients on lifestyle changes is essential for long-term blood pressure control**

M.A.P.:A- Resources to Help

Use the Treatment Algorithm

- Treat your patients with high BP quickly, using the latest clinical evidence.

Collaborative Communication Strategies

- Ways to collaborate with your patients to control BP, including five communication skills that may help improve engagement.

Questions to Ask Your Doctor

- Patients often have questions but aren't sure how to ask. This handout can help.

Target: BP Can Make A Difference

The AHA and AMA partnered to launch Target: BP in 2015 to **improve blood pressure control** and **build a healthier nation**. This national initiative aims to **reduce the number of** Americans who have **heart attacks and strokes** by urging medical practices, health service organizations, and patients to prioritize blood pressure control.

Target: BP supports physicians and care teams by offering **access to the latest research, tools, and resources** to reach and **sustain blood pressure goal rates** within the patients populations they serve.

Working together, medical practices and health service organizations can **significantly improve the nation's current national blood pressure control rate of 54 percent**. Join Target: BP and be a part of this national movement to build a healthier America, starting today.

Measuring Accurately: New BP Guidelines

BP Category	SBP		DBP
Normal	<120 mm Hg	and	<80 mm Hg
Elevated	120-129 mm Hg	and	<80 mm Hg
Stage 1 Hypertension	130-139 mm Hg	or	80-89 mm Hg
Stage 2 Hypertension	≥140 mm Hg	or	≥90 mm Hg

Assign patients with SBP and DBP in two categories to the higher BP category.

Case Studies

- *Chapa De Indian Health, Auburn, CA:* In August 2017, Chapa De's CMO conducted a training on how to measure blood pressure correctly using tools and training resources from the M.A.P. framework. He also did q.a. checks on the medical staff using the bp measurement checklist. Subsequently, the clinic's blood pressure control rate from 58% in August 2017, to 72% in January 2018.
- *Ravenswood Health Clinic, Redwood City, CA:* In June 2018, Ravenswood Health Clinic's Health Educator for the Tongan community began to recruit participants for a 4-month blood pressure program from the Tongan community. Materials around blood pressure education have been customized to be culturally appropriate and are being translated into Tongan. The first class is set for September 2018. The expected outcome is that the participants will have an 11 point drop in the systolic bp after going through this evidence based program.

Questions?





Native-CHART Webinar Series

Thank you for your participation!

Our next webinar will be Monday, October 1, 2018, at 12:00 noon Pacific Daylight Time. The title will be:

“The Effects of Racism on Hypertension in Native Hawaiians”

Which topics around hypertension and cardiovascular disease would you like to learn more about?

*Please send your ideas to **cynthia.gamble@wsu.edu***