# Hypertension MA or CHW Telehealth Appointments Workflow[i]

# 1. Rationale

- Hypertension is a major risk factor for heart disease, stroke, and kidney disease. [ii]
- Heart disease and stroke are some of the most widespread and costly health problems in the US. [iii]
- Controlling blood pressure is the single most effective clinical intervention (in terms of lives saved). [iv]
- Only about half those patients with hypertension have it controlled. [v]
- Self-measured blood pressure monitoring (SMBP) is an effective approach to lowering BP and improving control but is significantly underutilized in the US. [vi]
- The 2017 guidelines issued by the American College of Cardiology, and American Heart Association, and others recommends out-of-office BP measurement to confirm HTN diagnosis and medication titration in addition to telehealth counseling or other clinical interventions. [vii]
- Self-monitoring alone has not been associated with lower BP or better BP control, but clinically significant reduction in BP over 12 months is associated with self-monitoring and a co-intervention (such as medication titration by doctors, pharmacists, or patients; education; or lifestyle counseling). [viii]
- Bandura's Social Cognitive Theory suggests that self-efficacy is a major determinant in self-care behavior, and higher self-efficacy was associated with engagement in hypertension self-care behaviors. [ix]
- Home blood pressure monitoring can increase self-efficacy. [x]

# 2. Overview

**Self-Measured Blood Pressure**

SMBP may be used for diagnosing HTN as well as managing HTN. This workflow focuses on managing HTN but may be expanded to include diagnosing HTN.

SMBP uses patient-generated health data.

SMBP may be used interchangeably with RPM, remote pressure monitoring, in this document.

**Blood Pressure Cuffs**

Home BP cuffs will be initially purchased from grant funds.

In the future, cuffs may be covered by insurance. For example, the MassHealth Non-Drug Product List states automatic blood pressure monitors are covered with no PA; see https://mhdl.pharmacy.services.conduent.com/MHDL/pubdownloadpdfwelcome.do?docId=8&fileType=PDF .

**Team-Based Care**

A systematic review has shown that team-based care increases the proportion of patients with controlled BP, and reduces systolic and diastolic BP. Team-based interventions typically do the following: facilitate communication and coordination of care support; enhance use of evidence-based guidelines; establish regular and structured follow-up mechanisms to monitor patients' progress and schedule visits; and actively engage patients by providing them with education, adherence support, and tools and resources for self-management.[xi]

**Overall Goals for Patients:**

1. Improve patients' health self-management skills.
2. Improve patients' perception of self-efficacy.
3. Improve BP control.

**Overall Programmatic Goals:**

1. Improve team-based care.
2. Promote patient self-care (engagement).
3. Promote consistent medication use (adherence).

**Target Population: Uncontrolled HTN**

- Risk stratify uncontrolled HTN patients – most recent office BP was Stage 2 (systolic greater than or equal to 140 or diastolic greater than or equal to 90), and/or HTN with co-morbidities (diabetes, hypercholesterolemia) – SMBP to help highest risk patients achieve BP control.

**Target Population: Patients Experiencing Barriers to Health or Access to Care**

- Use a self-reported tool like the Hill-Bone scale to assess medication adherence among HTN patients – use SMBP to engage and help titrate medications for HTN patients with medication adherence barriers.
- Target HTN patients with office visit barriers (transportation barriers, frequent N/S) – SMBP to engage HTN patients who are better served out of the clinic.

**Future Potential Target Populations: Newly Diagnosed**

- Newly diagnosed patients within the last 6 months – SMBP to engage and help titrate medications.

**Future Potential Target Populations: Elevated Readings with No Diagnosis**

- Patients with multiple elevated BP readings in last 12 months but don't have a diagnosis of HTN – SMBP to improve timely and accurate HTN diagnosis, including ruling out the white coat effect.

**Key SMBP Staff**

- SMBP Coordinator/Coordinator of Chronic Disease Management
  - Researches opportunities to engage with community partners
  - Order, organize, and track equipment
  - Organize HTN program
  - Conduct gap analysis and follow up activities
- SMBP Clinical Champion
  - Provides clinical oversight and clinical contact
  - Key influencer
- SMBP Non-Licensed Staff
  - Delivers patient education on device use, general lifestyle and HTN education, importance of medication adherence (either in-person or remotely via telephone or Zoom)
  - Checks in with patients on readings, device use, and general lifestyle modifications
  - Generates follow up TEs to provider if necessary (within defined parameters)
  - Connects patients to resources identified during visits (e.g., food resources, transportation options)

**Scope of Practice**[xii]

| Patient | Non-Licensed Staff | Licensed Clinician |
|---|---|---|
| Take SMBP measurements | Provide home BP monitor | Diagnose hypertension |
| Take medication as prescribed | Provide training on using the home BP monitor and expectations of the program (including log books, check in calls) | Prescribe medications |
| Make recommended lifestyle modifications | Validate home BP monitor against clinic instruments | Provide SMBP measurement protocol |
| Convey SMBP measurements to care team | Reinforce clinician-directed SMBP measurement protocol | Interpret patient-generated SMBP readings |
| Convey medication side effects and unusual symptoms to care team | Provide outreach support to patients using SMBP | Provide medication titration advice |

| | | |
|---|---|---|
| | Share medication adherence strategies | Provide patient-specific lifestyle modification recommendations |
| | Provide general lifestyle modification education | |

**Medical Assistant or Community Health Worker Health Education Topics Within Scope of Practice**[xiii]

- Support people in their health care needs
    - Remind community members to get screened for high blood pressure, high blood cholesterol, and high blood glucose.
    - Remind community members to check their blood pressure on a regular basis.
    - Tell community members about places in their community (for example, fire stations, community centers, drug stores) where they can get their blood pressure checked for free.
    - Help people make and keep appointments and follow-up visits with their doctors.
    - Assist community members who do not speak English.
    - Help community members who do not have a doctor to find one.
    - Help those who cannot afford a doctor to find free health care or places where cost is based on ability to pay (for example, public health departments, clinics run by churches, community clinics).
    - Help community members who do not have transportation or do not know how to use public transportation to get to the clinic.
    - Act as a bridge between the stroke survivor and the health care team (for example, the doctors, nurses, pharmacists).
    - Tell the health care team about specific patient needs, successes, and barriers to self-care (for example, cultural beliefs, motivation, disability, safety issues).
- Help people make better lifestyle choices
    - Help people choose a diet with plenty of vegetables, fruits, and grain products. Encourage people to eat foods rich in minerals and vitamins, such as citrus fruits, tomatoes, and bananas; grains; leafy green vegetables; and navy, pinto, and kidney beans.
    - Help people choose a diet low in fat, saturated fat, trans fat, and cholesterol.
    - Encourage people to eat less fatty food and to decrease the foods they fry.
    - Help community members learn how to reduce their intake of salt and sodium.
    - Get families involved in making healthy choices about eating—both at home and away from home.
    - When making home visits, look for clues that the family may need tips for eating healthier foods (for example, if the family has lots of snack foods, sodas, or high-fat items in the house).
    - Encourage people to limit alcohol intake to no more than one (for women) or two (for men) drinks a day. One drink is 1 oz. of hard liquor, 4 oz. of wine, or 12 oz. of beer.
    - Work with community members to find ways to make low-cost fruits and vegetables and low-salt and low-fat foods available in the community, in schools, and at work sites.
    - Encourage people to be more active.
    - Get families involved in making healthy choices about being active.
    - Work with community leaders to find safe places for people to walk and encourage the use of other physical activity resources in the community and at work sites. CHWs can start and lead walking groups.
    - Encourage overweight people to lose weight.
    - Encourage people to quit smoking.

# 3. Process Map

# 4. Panel Identification and Outreach Protocol

**Panel Identification**

Potential methods:

1. Risk stratification.
2. Registry report with inclusion/exclusion criteria and provider review to select pilot population.
3. Self-referral through notification in provider visit or conversation with support staff (e.g., case managers).

After panel has been identified and is up and running, perform a gap analysis to ensure all eligible patients have been offered the opportunity to engage.

*Inclusion Criteria*

- Diagnosis of hypertension (BP more than 140/90).
- Completed a visit with a primary care provider in the last 6 months (optimally, 3 months) where medication verification was done.
- Interest in monitoring blood pressure at home.
- Access (either scheduled or regular) to a phone or other device capable of phone calls, preferably one with video capabilities.
- Willing to come to the clinic for the initial visit.

*Exclusion Criteria*

- No diagnosis of hypertension.
- No visit with primary care in the last 6 months (optimally, 3 months) with medication verification.
- No interest in or unable to monitoring blood pressure at home.
- No access (either scheduled or regular) to a phone or other device capable of phone calls, preferably one with video capabilities.
- No interest in engaging with MA or CHW for remote monitoring and/or education.

*Discharge Criteria*

- Education content is finished and they do not wish to continue reporting their values in a weekly telehealth visit.
- The provider indicates the patient is stable on current treatment.

**Outreach Protocol: Identify, Engage, Prepare, and Support**

1. Brochures explaining the program are available throughout the clinic.
2. Contact the patient through a warm handoff if transportation or trust is a concern of the patient, or via phone, text, or portal.
3. Determine best communication method for communication in between appointments and note in the chart.
4. Review eligibility criteria to ensure patient meets criteria.
5. Outline the program content:

   a. Initial in-person visit at clinic or home.
   b. Weekly phone or video calls from a MA or CHW.
   c. Monitor BP using the BP monitor at home two times a day every day.
   d. The patient can keep the BP monitor.
   e. Results will be communicated to their PCP for review.
6. Assess potential readiness to start and readiness to make lifestyle changes using the adapted Readiness to Change Ruler.[xiv]
7. If appropriate, conduct the first visit at this time to orient the patient to the equipment and program protocol.

# 5. Visit Content and Documentation[xv]

**First Visit with Medical Assistant or Community Health Worker**

**Duration: Schedule for 1 hour**

1. State the purpose of the visit to the patient.
2. Confirm the patient meets the eligibility criteria.
3. Outline the general program content:
    a. Initial in-person visit at clinic or home.
    b. Weekly Zoom calls (preferred) or phone calls from a MA or CHW.
    c. Monitor BP using the BP monitor at home two times a day every day.
    d. The patient can keep the BP monitor.
    e. Results will be communicated to their PCP for review.
4. Patient completes the PRAPARE SDOH screening questions and they are entered into the smart form. Review the results together.
5. Review the patient's best communication method for communication in between appointments and note in the chart.
    a. Phone call.
    b. Text message.
    c. Patient portal message.
    d. Other.
6. Ask how the patient prefers to receive education materials:
    a. Pick up at Duffy.
    b. Mailed through the post office.
        i. Confirm mailing address.
    c. Sent through the patient portal.
        i. Verify their email address.
    d. Emailed.
        i. Verify their email address.
7. Interview the patient.
    a. If not already done, assess potential readiness to start and readiness to make lifestyle changes using the adapted Readiness to Change Ruler.[xvi]
    b. Patient fills out or is asked the Self-Efficacy Scale questions.
    c. Ask about the patient's preferred learning style:
        i. Audio materials.
        ii. Demonstrations.
        iii. Written materials.
        iv. Verbal explanation.
        v. Videos.
    d. Ask the patient what their goals for this program are:
        i. Take twice daily BP measurements?
        ii. Take medications regularly and as prescribed?
        iii. Understand more about HTN?
        iv. Make some changes towards healthier behaviors and choices?
    e. Ask about Zoom:

        i. Have they used it before? What was their experience? What device did they use? Do they have enough bandwidth to keep the video on?
        ii. If they haven't used it before, are they interested in using it for this type of appointment? Assist them in setting it up if needed.
    f. Ask the PRAPARE questions.
8. Give the patient education packet (includes pens, BP log book, printed education materials).
9. BP home monitoring device.
    a. Review the proper technique (preparation, positioning, measurement technique) using the "Small Changes Make a Big Difference" brochure.
    b. Explain how the device works and how to read the digital display.
    c. Fit the cuff on the patient's arm. Take it off, then have the patient do it for themselves.
    d. Use the device to take a measurement.
        i. Use the teach back method to ensure the patient understands how to use the device.
        ii. Write the measurement in the patient's log book.
    e. Use the clinic's BP machine to calibrate the home device.
    f. If the patient's BP is 160/100, bring a nurse into the visit for triage.
10. Discuss the timing and recording of home BP measurements.
    a. In the AM before taking any medications or drinking caffeine.
    b. In the PM before supper.
    c. Three readings: disregard the first reading. Take the next one, wait a minute, then take another one.
    d. Write all 3 measurements in the log book.
    e. Do this for 7 days. If having trouble finding a routine, at least 3 consecutive days are needed for meaningful clinical application.
11. Schedule the next telehealth visit.

**Follow Up Visit with Medical Assistant or Community Health Worker**

**Duration: Schedule for ½ hour**

*Prior to Visit*

1. Check if the patient is web enabled and has accessed the patient portal (check blue Healow sticky note).
2. Check if there have been any medication changes in the last 7 days. If so, note this in the progress note.
3. Review the patient's learning preferences and strengths and barriers to learning.
4. Review the patient's goals for this program.
5. Check which topics the patient has already received education about, and which topics still need to be addressed.
    a. Mail or email or send through the portal the printed education materials at least 1 week prior to the visit.
6. Check if the patient has a future nurse or provider appointment and the reason for the appointment.

*In the Telehealth Visit*

1. State the purpose of the visit to the patient.
2. Review current medications.
    a. Looking if there have been medication changes for BP management.
3. Review the patient's goals for the program and ask about a goal for this visit.
    a. The patient-generated goal can include learning about a particular topic or can simply be to report the results.
    b. Frame goals with the "Healthy Monday" idea – you review your status towards the goal on Mondays and adjust or restart if needed.
4. Monthly ask the patient the Self-Efficacy Scale questions and document in the progress note.
5. Patient reads the results from the last 7 days, which are recorded in the body of the progress note.
    a. If the measurement that day is greater than 160/100, bring a nurse into the phone call.
6. Enter all of the values into the body of the progress note.
7. If this is a Zoom call, the patient can take 3 BP readings in the visit and show the display to the clinical staff for each of the readings.
    a. Disregard the first reading.
    b. Enter the average of the second and third readings into the Vitals section.
8. Tell the patient, "This information will go to your PCP for their review."
9. Follow the curriculum to discuss education topics with the patient.
10. Schedule the next telehealth visit.

*After the Visit*

1. If HTN medications have been adjusted in the last 7 days, note this in the progress note.
2. Average measurements
    a. Average the measurements in the SMBP use period (the previous 7 days prior to the appointment) into 1 systolic and 1 diastolic BP average for treatment decisions.
        i. At least 3 consecutive days of measurements are needed for clinically significant application.
        ii. Use the Blood Pressure Average Calculator at https://www.ama-assn.org/node/27271
        iii. Document in the body of the note.

iv. Categorize the average reading using the Interpreting SMBP table.

3. That day's measurements:
    a. Zoom call – if the patient showed you the measurements in the telehealth visit:
        i. Disregard the first reading.
        ii. Average the two subsequent readings together.
        iii. Enter the average reading into the Vital section.
    b. Phone call -
        i. Disregard the first reading.
        ii. Average the two subsequent readings together.
        iii. Enter the average reading into the body of the progress note (NOT the Vitals section).
4. Send the note to the PCP for review and co-sign.
5. If the PCP wishes to adjust medication, the PCP will send a TE to the nurse for follow up.

**Discharge/Last Telehealth Visit**

*Prior to Visit*

1. Check if there have been any medication changes in the last 7 days. If so, note this in the progress note.
2. Review the patient's learning preferences and strengths and barriers to learning.
3. Review the patient's goals for this program.
4. Check which topics the patient has already received education about and which topics still need to be addressed.
    a. Mail printed education materials at least 1 week prior to the visit.
5. Check if the patient has a future nurse or provider appointment.

*In the Telehealth Visit*

1. State the purpose of the visit to the patient.
2. Review current medications.
3. Review the patient's goals for the program and ask about a goal for this visit.
    a. The patient-generated goal can include learning about a particular topic or can simply be to report the results.
    b. Frame goals with the "Healthy Monday" idea – you review your status towards the goal on Mondays and adjust or restart if needed.
4. Monthly ask the patient the Self-Efficacy Scale questions and document in the progress note.
5. Patient reads the results from the last 7 days, which are recorded in the body of the progress note.
    a. If the measurement that day is greater than 160/100, bring a nurse into the phone call.
6. Enter all of the values into the body of the progress note.
7. If this is a Zoom call, the patient can take 3 BP readings in the visit and show the display to the clinical staff for each of the readings.
    a. Disregard the first reading.
    b. Enter the average of the second and third readings into the Vitals section.
8. Tell the patient, "This information will go to your PCP for their review."
9. Follow the curriculum to discuss education topics with the patient.
10. Form a plan:
    a. Encourage the patient to continue taking measurements and bring the log book to medical appointments.
    b. Ask if the patient needs any more supplies (pens, log book) to keep measuring BP.
    c. Make sure the patient has a nurse or PCP appointment scheduled and ask about barriers to attending this appointment.

*After the Visit*

1. If HTN medications have been adjusted in the last 7 days, note this in the progress note.
2. Average measurements
    a. Average the measurements in the SMBP use period (the previous 7 days prior to the appointment) into 1 systolic and 1 diastolic BP average for treatment decisions.
        i. At least 3 consecutive days of measurements are needed for clinically significant application.
        ii. Use the Blood Pressure Average Calculator at https://www.ama-assn.org/node/27271
        iii. Document in the body of the note.

iv. Categorize the average reading using the Interpreting SMBP table.

3. That day's measurements:
    a. Zoom call – if the patient showed you the measurements in the telehealth visit:
        i. Disregard the first reading.
        ii. Average the two subsequent readings together.
        iii. Enter the average reading into the Vital section.
    b. Phone call -
        i. Disregard the first reading.
        ii. Average the two subsequent readings together.
        iii. Enter the average reading into the body of the progress note (NOT the Vitals section).
4. Send the note to the PCP for review and co-sign.
5. If the PCP wishes to adjust medication, the PCP will send a TE to the nurse for follow up.

**Education Curriculum**[xvii]

NOTE: The patient will choose the goal for their telehealth visit and optimally will include an education goal. Patients should be encouraged to choose the education topic or the clinical staff can suggest a topic for the visit.

Health coaching will use motivational interviewing and the idea of "The Monday Campaigns" (see https://www.mondaycampaigns.org/ ). The teachback method is effective in making sure the educational content is understood.

*Overview*

1. What is hypertension? Why is it important to measure BP? How is hypertension treated?
2. Taking medications and attending appointments.
3. Smoking cessation and exercise.
4. Healthy eating and reduction in alcohol intake.

1. *What is hypertension? Why is it important to measure BP? How is hypertension treated?*

Take home messages:

1. High blood pressure can increase the risk of heart attack or stroke.
2. There may be no signs of high BP.
3. BP is treated with medications and lifestyle changes.

Supporting materials:

- "Small Changes Make a Big Difference" brochure
- "What is Blood Pressure Medicine?" brochure

**"Small Changes Make a Big Difference"**

https://www.heart.org/-/media/Files/Health-Topics/High-Blood-Pressure/Tylenol-HBP/AHA19_TylenolBroch_web2.pdf

- What is blood pressure?
- What do blood pressure numbers mean?
- What is high blood pressure?
- How do you know if you have high blood pressure?
- Why is high blood pressure harmful?
- How do you measure blood pressure?
- What causes high blood pressure?

**"What is High Blood Pressure Medicine?"**

https://www.heart.org/-/media/Files/Health-Topics/Answers-by-Heart/What-Is-HBP-Medicine.pdf

- How is high blood pressure treated? (lifestyle changes and medication)
- What should I know about high blood pressure medication?
- What are the side effects of medication?
- What Can Community Health Workers Do to Support People at Risk for High Blood Pressure or Who Already Have High Blood Pressure?

*2. Taking medications and attending appointments.*

Take home messages:

1. I need to take my medications as prescribed to treat my HTN.
2. Attending scheduled appointments is important to me because: _____.
3. If I am missing appointments or not taking my medications, I can make a plan to change this.

Supporting materials:

- Duffy Health Center's "Taking Medications" handout
- Duffy Health Center's "Making a Plan" handout
- Duffy Health Center's "Medication Tracker" handout

**"Taking Medications"**

- Taking medications properly is important to controlling high BP.
- You may need to take more than 1 medication to help your BP.
- Interview the patient:
    a. Review all prescribed medications: when and how much should be taken.
    b. Ask the Hill-Bone questions. Note the score for entry into the progress note.
- If the patient is having difficulty taking all medications, help them formulate a plan using the "Making a Plan" handout.

**"Making a Plan"**

- Both taking medications properly AND attending appointments will help your health.
- Use motivational interviewing to ask the patient the questions in the handout.

*3. Smoking cessation and exercise*

Take home messages:

1. The number one thing you can do to improve your health is to quit smoking or vaping. Tobacco smoke damages the function of the heart and the structure and function of the blood vessels.
2. Exercise works your heart and can reduce your BP over time.
3. Exercise includes aerobic activity and strength building.

Supporting materials:

- Duffy Health Center's "Teamwork Makes the Quit Work" handout
- Duffy Health Center's "Monday Quit Check In" handout
- "What's Your Move?" handout or video on Youtube https://www.youtube.com/watch?v=0i1lCNHaxhs&t=19s
- Move Your Way Activity Planner at https://health.gov/moveyourway/activity-planner
- American Heart Association and Leslie Sansone walk at home on Youtube:
    - 1 mile walk https://www.youtube.com/watch?v=u08lo0bESJc
    - 3 mile walk https://www.youtube.com/watch?v=DYuw4f1c4xs

**"Teamwork Makes the Dream Work"**

- Mondays are a day to review your activities from last week, adjust, and start again! Plan – Quit – Check-in – Recommit.
- Review the questions and help the patient formulate a quit plan.
- Offer the "Monday Quit Check In" handout as a resource.

**"What's Your Move?"**

- Adults are recommended to get 2.5 hours of moderate physical activity a week = 30 minutes each day.
- Muscle strength activities are recommended twice a week.
- How to use the talk test to determine if activity is moderate or vigorous.

**Move Your Way Activity Planner**

- Help the patient click through the screens to come up with an activity plan.

4. *Healthy eating and reduction in alcohol intake*

Take home messages:

1. Too much alcohol can raise your blood pressure. Men should have no more than 2 drinks/day and women no more than 1 drink/day.
2. Reducing salt intake can help your BP. The most salt comes from packaged and restaurant foods – read the labels!
3. A healthy plate is half vegetables, a quarter protein, and a quarter carbohydrates. Fruit for dessert!

Supporting materials:

"Alcohol Use and Your Health" handout

"DASH Eating Plan" handout

"Healthy Eating Plate" handout

**"Alcohol Use and Your Health"**

- Review standard drink sizes.
- Review definition of moderation (men = 2 drinks/day, women = 1 drink/day).
- Emphasize high blood pressure, heart disease, and stroke as long-term health risks.

**"DASH Eating Plan"**

- General advice – if the patient wants specific meal planning, book an appointment with the nutritionist.
- Review the:
    - Food groups
    - Servings per day (can vary based on recommended calorie intake)
    - Serving size
- Where do I start?
    - Write down what you eat.
    - Compare to the DASH eating plan.
    - Try 1 adjustment at a time.
- Where's the salt? Most comes from packaged and restaurant foods.
- Review how to read a nutrition label.

**"Healthy Eating Plate"**

- Review the distribution of food on the plate.
- Ask if the person would like an appointment with the nutritionist and if they do, schedule it.

# 6. Quality

Quality will initially be monitored through the Mass League "Strengthening CHWs" grant, which includes a PDSA specific to this program.

Periodic reporting may touch on the following topics:

- Process measures
    - EMR tools used.
    - % of patients with a diagnosis of essential HTN who receive a SMBP referral or warm handoff over total # of patients with essential HTN seen in a specified time period.
    - Patients referred who completed the first and follow up appointments.
    - Appropriate follow up made to nurse or provider if the patient has elevated measurements.
    - Patient counseled with general language to improve hypertension as within the scope of practice.
    - Appropriate use of technology (either video via Zoom or other app or phone only) in the telehealth visits.
- Clinical quality measures
    - Change in blood pressure over time (comparison groups: patients who saw CHW or MA only compared to patients who received no education compared to patients who received nurse education only).
    - Change in overall practice BP as measured through HEDIS.

**Health Equity**

Using the HEDIS report from 12/28/21 (reporting period 12/1/20 - 11/30/20), Duffy's blood pressure control for African Americans was at a 47.27% compliance rate (52/110).

Per the "Improving Blood Pressure Control for African Americans Roadmap,"[xviii] Duffy's performance was below 60% control for African American patients. Therefore, Duffy will proceed with a "Core Strategy" goal of ≥15% improvement in BP control for African Americans OR ≥10% mmHg reduction in average systolic BP for African Americans from the initiation of this hypertension SMBP protocol.

# 7. Resources

**Readiness to Change Ruler[xix] -** This will be adapted to ask patients 1) if they are ready to start taking home BP measurements, and 2) if they are ready to make changes to help improve their hypertension.

## Changing Behavior for Your Health

1. On the line below, mark where you are now on this line that measures change in behavior. Are you not prepared to change, already changing or someplace in the middle?

Not prepared to change ——— Already changing

2. Answer the questions below that apply to you.

- If your mark is on the left side of the line:
  - How will you know when it's time to think about changing? . . . . .
  - What signals will tell you to start thinking about changing? . . . . .
  - What qualities in yourself are important to you? . . . . .
  - What connection is there between those qualities and "not considering a change"? . . . . .

- If your mark is somewhere in the middle:
  - Why did you put your mark there and not further to the left? . . . . .
  - What might make you put your mark a little further to the right? . . . . .
  - What are the good things about the way you're currently trying to change? . . . . .
  - What are the not-so-good things? . . . . .
  - What would be the good result of changing? . . . . .
  - What are the barriers to changing? . . . . .

- If your mark is on the right side of the line:
  - Pick one of the barriers to change and list some things that could help you overcome this barrier. . . . . .
  - Pick one of those things that could help and decide to do it by _____ (write in a specific date).

- If you've taken a serious step in making a change:
  - What made you decide on that particular step? . . . . .
  - What has worked in taking this step? . . . . .
  - What helped it work? . . . . .
  - What could help it work even better? . . . . .
  - What else would help? . . . . .
  - Can you break that helpful step down into smaller pieces? . . . . .
  - Pick one of those pieces and decide to do it by _____ (write in a specific date).

- If you're changing and trying to maintain that change:
  - Congratulations! What's helping you? . . . . .
  - What else would help? . . . . .
  - What are your high-risk situations? . . . . .

- If you've "fallen off the wagon":
  - What worked for a while? . . . . .
  - Don't kick yourself—long-term change almost always takes a few cycles.
  - What did you learn from the experience that will help you when you give it another try? . . . . .

3. The following are stages people go through in making important changes in their health behaviors. All the stages are important. We learn from each stage.

We go ***from*** "not thinking about it" ***to*** "weighing the pros and cons" ***to*** "making little changes and figuring out how to deal with the real hard parts" ***to*** "doing it!" ***to*** "making it part of our lives."

Many people "fall off the wagon" and go through all the stages several times before the change really lasts.

**Self-Efficacy Scale**[xx]

## General Self-Efficacy Scale (GSE)

| | Not at all true | Hardly true | Moderately true | Exactly true |
|---|---|---|---|---|
| 1. I can always manage to solve difficult problems if I try hard enough | ☐ | ☐ | ☐ | ☐ |
| 2. If someone opposes me, I can find the means and ways to get what I want. | ☐ | ☐ | ☐ | ☐ |
| 3. It is easy for me to stick to my aims and accomplish my goals. | ☐ | ☐ | ☐ | ☐ |
| 4. I am confident that I could deal efficiently with unexpected events. | ☐ | ☐ | ☐ | ☐ |
| 5. Thanks to my resourcefulness, I know how to handle unforeseen situations. | ☐ | ☐ | ☐ | ☐ |
| 6. I can solve most problems if I invest the necessary effort. | ☐ | ☐ | ☐ | ☐ |
| 7. I can remain calm when facing difficulties because I can rely on my coping abilities. | ☐ | ☐ | ☐ | ☐ |
| 8. When I am confronted with a problem, I can usually find several solutions. | ☐ | ☐ | ☐ | ☐ |
| 9. If I am in trouble, I can usually think of a solution | ☐ | ☐ | ☐ | ☐ |
| 10. I can usually handle whatever comes my way. | ☐ | ☐ | ☐ | ☐ |

**Scoring:**

| | Not at all true | Hardly true | Moderately true | Exactly true |
|---|---|---|---|---|
| All questions | 1 | 2 | 3 | 4 |

The total score is calculated by finding the sum of the all items. For the GSE, the total score ranges between 10 and 40, with a higher score indicating more self-efficacy.

**Interpreting SMBP and Corresponding Value Table**[xxi]

**Interpreting and Using SMBP Data to Control Hypertension**

SMBP readings can be interpreted using the Categories of BP in Adults table from the *2017 Guideline for the Prevention, Detection, Evaluation, and Management of High Blood Pressure in Adults* paired with the corresponding values of SBP/DBP for Clinic and HBPM measurements in the following table.

**Categories of BP* in Adults (Clinic Measurements)**

| BP Category | Systolic Blood Pressure (SBP) | | Diastolic Blood Pressure |
|---|---|---|---|
| **Normal** | <120 mm Hg | and | <80 mm Hg |
| **Elevated** | 120–129 mm Hg | and | <80 mm Hg |
| **Hypertension** | | | |
| Stage 1 | 130–139 mm Hg | or | 80–89 mm Hg |
| Stage 2 | ≥140 mm Hg | or | ≥90 mm Hg |

*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 DBP, diastolic blood pressure; and SBP systolic blood pressure).

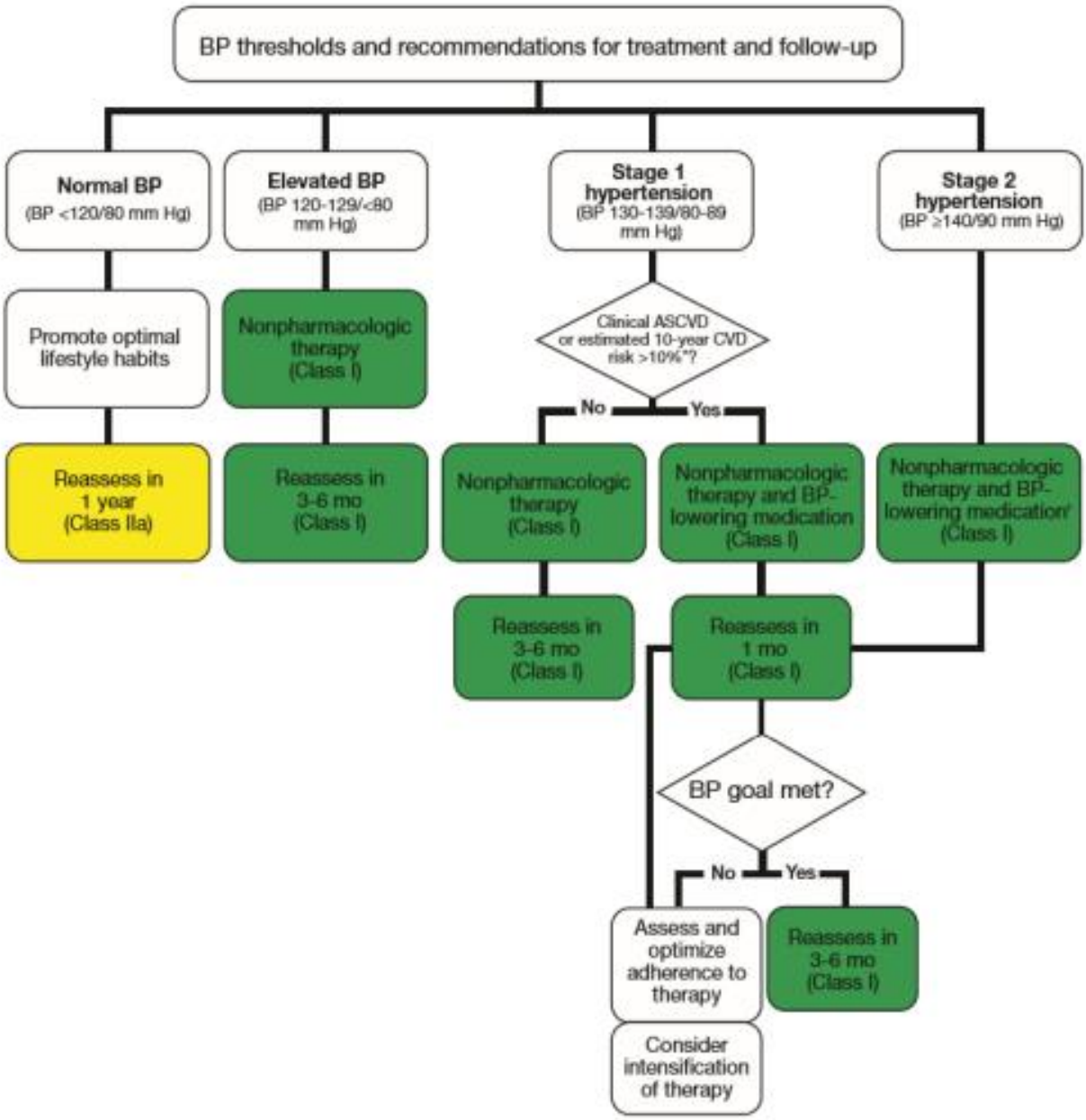
**Corresponding Values of SBP/DBP for Clinic and HBPM Measurements**

| Clinic | HBPM |
|---|---|
| 120/80 | 120/80 |
| 130/80 | 130/80 |
| 140/90 | 135/85 |
| 160/100 | 145/90 |

Treatment and follow-up recommendations for managing high blood pressure in patients should be guided by the *2017 Guideline for the Prevention, Detection, Evaluation, and Management of High Blood Pressure in Adults*; individual patient management should be based on clinical judgment, risk/benefit analysis, and patient preference. The following diagram can be used to understand BP thresholds and recommendations for treatment and follow-up.[viii]

**PROVIDERS – BP Thresholds and Recommendations for Treatment and Follow-Up**[xxii]

**BP Thresholds and Recommendations for Treatment and Follow-up.**[4]



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[i] NACHC 2018
[ii] NACHC 2018: 1.
[iii] NACHC 2018: 1.
[iv] NACHC 2018: 1.
[v] NACHC 2018: 1.
[vi] NACHC 2018: 1.
[vii] NACHC 2018: 1.
[viii] Tucker et al 2017.
[ix] Tan, Oka, Dambha-Miller, and Tan 2021.
[x] Muldoon et al. 2021.
[xi] "Team-based Care Improves Blood Pressure Control and is Cost-effective", accessed 12/28/21.
[xii] NACHC 2018: 9.

[xiii] NCCDM & HP 2016: xiv – xv.
[xiv] Adapted from Figure 1, Zimmerman, Olsen, and Bosworth 2000.
[xv] NACHC 2018: 40 – 42.
[xvi] Adapted from Figure 1, Zimmerman, Olsen, and Bosworth 2000.
[xvii] Adapted from CDC 2016: 155 – 209.
[xviii] NACHC nd. "Improving Blood Pressure Control for African Americans Roadmap."
[xix] Zimmerman, Olsen, and Bosworth, Figure 1.
[xx] Schwarzer and Jerusalem 1995.
[xxi] NACHC 2018: 42.
[xxii] NACHC 2018: 43.