# Self-Measured Blood Pressure





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### Purpose

This toolkit will help health centers improve hypertension control among their patients through the use of selfmeasured blood pressure (SMBP) in patients' homes. In 2018, only 54% (750 out of 1,373) of health centers throughout the United States met or exceeded the Healthy People 2020 Hypertension Objective. This objective is that 61.2% or more of the health center's patients diagnosed with hypertension currently have their blood pressure under control. Controlled blood pressure is defined as having a systolic blood pressure of <140mm Hg and diastolic blood pressure of <90mm Hg. Uncontrolled hypertension can lead to multiple negative health outcomes and health centers that are struggling to help their patients achieve normal blood pressure may want to offer SMBP as one tool to improve these outcomes.

### What is Blood Pressure?

Blood pressure is the force of blood circulating against the blood vessel walls as it flows through the body from the heart and to the circulatory system. There are two types of blood pressure, systolic and diastolic. Systolic blood pressure is how much pressure is exerted against the vessel walls when the heart contracts. Diastolic blood pressure is how much pressure is exerted against the vessel walls when the heart relaxes (HHS, 2016).

### What is Hypertension?

Hypertension, also known as high blood pressure, is defined as systolic blood pressure greater than 140mm Hg and diastolic blood pressure greater than 90mm Hg (HHS, 2016). For this toolkit, the terms hypertension and high blood pressure will be used interchangeably. Patient screening for hypertension must be performed at a clinic or with the use of a self-measured blood pressure (SMBP) device. If left untreated, hypertension can lead to heart attack, stroke, kidney disease, kidney failure, vision loss, sexual dysfunction, heart disease , or peripheral artery disease (AHA, 2021). Researchers have discovered that patients with hypertension may have an increased risk of dementia (ladecola & Gottesman, 2019). A patient with hypertension needs to be monitored closely due to the seriousness of these sequelae.

#### Figure 1. What is hypertension?

| Systolic mm Hg  |      | Diastolic mm Hg | Blood Pressure                                  |
|-----------------|------|-----------------|---|
| Less than 120   | &    | Less than 80    | Normal  |
| 120-129         | &    | Less than 80    | Elevated  |
| 130-139         | or   | 80-89           | Hypertension stage 1 (High Blood Pressure)      |
| 140 or higher   | or   | 90 or higher    | Hypertension stage 2 (High Blood Pressure)      |
| Higher than 180 | &/or | Higher than 120 | Hypertension Emergency (See doctor immediately) |

Hypertension is often referred to as the "Silent Killer" due to the lack of symptoms in many patients. Research has shown that as many as one in three patients with hypertension have not been diagnosed (Virani et al., 2020). Many patients believe that hypertension only affects the elderly; however, research shows that one in four people between the ages of 20-44 has high blood pressure (ladecola & Gottesman, 2019).





### Causes and Prevention

A variety of conditions increase the risk of hypertension. A few examples include:

- Inactive lifestyle
- Pregnancy
- Diabetes

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- Obesity
- Genetic makeup

Other risk factors for hypertension include age, sex, and race or ethnicity. As people age, their risk of hypertension increases. Men younger than 55 have a higher diagnosis rate of hypertension than women; however, women over 55 are more likely to be diagnosed with hypertension than men over 55. High blood pressure is disproportionately represented in African American men and women compared to other racial and ethnic groups (NIH, 2021).

Some lifestyle changes can reduce the risk of developing hypertension or help to lower blood pressure, including:

- Regular Exercise
- Tobacco Cessation
- Stress Management
- Maintaining a Healthy Diet
- Limited Alcohol Intake
- Maintaining a Healthy Weight

Patients should discuss these interventions with their healthcare team to determine an appropriate action plan.

## White Coat and Masked Hypertension

Many people are anxious when in a clinic. This can cause blood pressure to raise in that setting. As a result, patients with normal blood pressure could have an elevated blood pressure reading while in a clinic. This phenomenon is known as White Coat Hypertension. Masked Hypertension is the exact opposite of White Coat Hypertension. Masked Hypertension happens when a patient who has high blood pressure tests normal when inside a clinic. The percent of patients believed to experience White Coat Hypertension is around 10%-30%. The percent of patients with Masked Hypertension is around 10%-15% (Unger, et al., 2020).

There are other behaviors that may contribute to a temporary increase in blood pressure if they are done within 30 minutes of getting tested, including eating, smoking, drinking alcoholic or caffeinated drinks, and exercising (CDC, 2021). For these reasons, it is ideal to test blood pressure both inside and outside of a clinic to get the most accurate picture.

#### How to take blood pressure at home

- Be still. Advise patients to not eat, smoke, drink caffeinated beverages or alcohol, or exercise within 30 minutes of measuring blood pressure. Ask patients to empty their bladder and ensure at least 5 minutes of quiet rest before measurements.
- Sit correctly. Ask patients to sit with their back straight and supported (for example, on a firm chair, rather than a sofa). Feet should be flat on the floor and legs should not be crossed. The arm should be supported on a flat surface (such as a table) with the upper arm at heart level. Make sure the bottom of the cuff is placed just above the bend of the elbow. Check the monitor's instructions for an illustration of the correct placement.
- Measure at the same times every day. For athome blood pressure monitoring, it is important to take the readings at the same times each day, morning and evening. It is best to take readings daily.
- Take multiple readings and record the results. Advise patients to take one or two readings one minute apart and record each of the results. If the monitor has built-in memory to store readings, advise patients to take the monitor with them to appointments.
- Don't take the measurement over clothes.



## Why does taking an accurate blood pressure matter?

Measuring blood pressure regularly can help diagnose hypertension early and can demonstrate whether medications and lifestyle changes are effective, but only if the readings are accurate. To get the most accurate readings, both in a clinic and at home, patients should follow this checklist:

Do not eat or drink anything 30 minutes before you take your blood pressure.

Empty your bladder before your reading.

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Sit in a comfortable chair with your back supported and rest for at least 5 minutes before your reading.

Put both feet flat on the ground and keep your legs uncrossed.

Rest the arm you will be checking on a table or other surface at chest height.

Place the cuff just above the fold of the elbow. Make sure the blood pressure cuff is snug but not too tight. The cuff should be against your bare skin, not over clothing.

Do not talk or use an electronic device while your blood pressure is being measured.

When reading your blood pressure at home make sure that you log your blood pressure every time, take your blood pressure at the same times of day, and take at least two readings - 1 to 2 minutes apart – for accuracy (NIH).

Self-measured blood pressure (SMBP) is having a patient check their blood pressure. This is usually done outside of the clinic. Measuring blood pressure in a more familiar environment results in more accurate measurements. The process of taking these readings can also result in patients being more engaged in their health.

## SMBP Integration into the workflow overview

Integrating SMBP into normal clinic workflow requires collaboration. Clinics may want to involve community or public health organizations to assist patients who are using SMBP. If a clinic is collaborating with external partners, all individuals need to be clear about which team members can and cannot perform certain tasks.

These checklists show key tasks required for a successful SMBP program:

- 1. Patient education see patient education checklist
- 2. SMBP scope/protocol see SMBP scope checklist
- 3. Home BP Monitors see home BP monitors checklist and list of validated monitors
- 4. SMBP Patient Identification see SMBP patient identification checklist
- 5. SMBP training see SMBP training checklist
- 6. SMBP outreach support and follow up see SMBP outreach support and follow up checklist
- 7. SMBP Data Management see SMBP data management checklist
- 8. Community Linkages see community linkages checklist

Other things to consider are whether patients doing SMBP will be loaned a monitor by the clinic or be required to purchase one. If the patients will be transferring data to the clinic, they will need education on how to do this. Patients' arms should be measured by clinic staff to ensure that the patient receives the correct cuff size. Arm sizes 8.7" – 10.4" should use a small adult cuff; 10.5" – 13.6" should use a standard adult cuff; 13.7" – 17.5" should use a large adult cuff; and 17.6" – 21.2" should use an extra- large cuff. Using a cuff that is too small or too large can result in inaccurate blood pressure readings. (Target BP)

Determining organizational goals for using SMBP is essential, too, to ensure that all team members are working towards the same goals. For example, team members should agree on which patients will be prioritized for SMBP and what the protocol for its use will be. Clinics may want to use risk stratification to identify patients most likely to benefit. The key is to have a plan that all team members are aware of and support.



### Tasks by Role

Licensed clinicians will begin the process of introducing SMBP. The roles of licensed clinicians include diagnosing hypertension and, where appropriate, prescribing medication and lifestyle changes to control it. The clinician will prescribe the patient a SMBP protocol to utilize at home. The clinician must also interpret blood pressure readings from the patient to monitor the patient's progress and adjust medications where necessary. These medications and lifestyle recommendations will hopefully lead to better hypertension control. The clinician may work directly with a nurse or medical assistant (MA) who is part of the care team. The nurse or MA will help the patient understand how to use the SMBP device and protocol.

Pharmacists are part of the care team in many health centers and can help patients with hypertension to understand potential side effects or drug-to-drug interactions of their hypertension management medications.

SMBP supporters, such as medical assistants, community health workers (CHWs), or health department representatives, can help promote the use of SMBP devices. These supporters can provide the patients with additional training to operate their monitors and provide a connection between the clinician and the patient. SMBP supporters can encourage patients and help direct questions to clinicians or other members of the care team. Providing training to other clinic staff on how to properly document SMBP readings in the patient chart is extremely important. This reporting can be done through many different platforms, such as device memory, a smartphone application, or through a patient portal. Clinics must identify who will be responsible for making sure the clinicians review these readings.

### Patient Education Checklist

developed by the American Heart Association

https://www.ama-assn.org/system/files/2020-11/smbp-patient-training-checklist-in-person.pdf

#### **PROVIDE EDUCATIONAL MATERIALS**

| What is SMBP?<br>https://www.ama-assn.org/system/files/2021-01/what-is-smbp.pdf   |
|---|
| SMBP infographic.<br>https://www.ama-assn.org/system/files/2020-11/smbp-infographic.pdf (English)<br>https://www.ama-assn.org/system/files/2020-11/smbp-infographic-spanish.pdf (Spanish)       |
| SMBP recording log.<br>https://www.ama-assn.org/system/files/2020-11/smbp-recording-log.pdf (English)<br>https://www.ama-assn.org/system/files/2020-11/smbp-recording-log-spanish.pdf (Spanish) |
| SMBP device accuracy test.<br>This can be used to calibrate a patient's BP measurement device.<br>https://www.ama-assn.org/system/files/2021-01/smbp-device-accuracy-test.pdf                   |

#### PROVIDE BACKGROUND INFORMATION ON SMBP

Explain how SMBP allows the provider to get a more accurate and complete picture of the patient's blood pressure outside of the office (more readings, over a longer period of time, in the patient's usual environment) Tip: Hand out the "What is SMBP?" document.

#### DETERMINE CORRECT SMBP CUFF SIZE

Use tape measure to measure the circumference of patient's mid-upper arm in centimeters (refer to SMBP cuff selection resource for more detail) Cuff Selection Resource <u>https://targetbp.org/patient-measured-bp/implementing/smbp-selecting-the-right-cuff-size/</u>

#### TEACH PATIENT HOW TO PROPERLY PREPARE FOR SELF-MEASUREMENT

Instruct patient to avoid caffeine, alcohol, food, tobacco and exercise for at least 30 minutes before measurements.

Instruct patient to empty bladder before taking blood pressure measurements.

If blood pressure is measured in the morning, instruct the patient to take BP measurements before taking blood pressure medications.

| Tip: Show SMBP training video and/or the SMBP infographic to train patients. |
|--|
| <u> https://www.youtube.com/watch?v=S1esBNGtfJc (English)</u>                |
| <u>https://www.youtube.com/watch?v=QVdvbymoyOU</u> (Spanish)                 |





| TEACH PATIENT THE PROPER POSITIONING FOR SELF-MEASUREMENT   |
|---|
| Seated with back supported on a firm chair.   |
| Feet flat on floor or firm surface.   |
| Legs uncrossed.   |
| Cuff placed on bare upper arm.  |
| Arm supported with middle of cuff at heart level.   |
| Tip: Use SMBP training video to teach these points and save time.   |
| TEACH PATIENT HOW TO USE DEVICE (IF APPLICABLE)   |
| How to turn on device.  |
| How to start measurement.   |
| How to troubleshoot.  |
| How to calibrate device.  |
| Refer to device manual as needed.   |
| TEACH PATIENT HOW TO PROPERLY SELF-MEASURE  |
| Rest quietly for five minutes.  |
| Take two measurements, one minute apart.  |
| Avoid conversations and the use of electronic devices during measurement  |
| Perform this process once in the morning and once in the evening for seven consecutive days.  |
| Tip: Show SMBP training video and/or the SMBP infographic to reference later.   |
| TEACH PATIENT HOW TO RECORD SMBP MEASUREMENTS AND HOW AND WHEN TO SHARE RESULTS   |
| Educate patient on what to do if blood pressure measurements are above or below specified ranges.   |
| If the patient will be using a mobile application, patient portal, or other digital health tool, ensure patient is able to correctly use the technology to collect and share results. |
| If the patient will be using a paper SMBP Recording Log, show the patient how to enter the results.   |
| Use teach back method to ensure patient understands the education provided and address any additional questions or concerns from patient.   |

### SMBP Scope (NACHC)

Determine organizational goals for using SMBP SMBP GOALS:

Determine Priority Populations(s) SMBP TARGET POPULATIONS:

Determine if SMBP is having desired effect (i.e. how will you know it's working?) SMBP TARGET RESULTS:

| 12  | 2   |
|-----|---|
|     | Home BP Monitors  |
| Val | FERMINE WHICH HOME BP MONITORS TO USE. CHOOSE A VALIDATED UPPER ARM DEVICE (see list of<br>idated Devices). CONSIDER: WHETHER IT COMES WITH AN XL CUFF, BLUETOOTH CAPABILITY, MEMORY<br>DRAGE CAPACITY, ABILITY TO HAVE MULTIPLE USERS, EASE OF USE, INSURANCE COVERAGE, COST |
|     | Select a Home BP Monitor:   |
| DE  | FERMINE HOW PATIENTS WILL OBTAIN HOME BP MONITORS   |
|     | Loaned  |
|     | Purchased by health center (for patient to keep)  |
|     | Purchased by patient  |
|     | Purchased by outside organization   |
|     | Purchased through insurer   |
|     | FERMINE HOW PATIENTS WILL PHYSICALLY RECEIVE THEIR HOME BP MONITOR, IF LOANED OR<br>RCHASED BY OTHER THAN THE PATIENT   |
|     | Full face-to-face visit   |
|     | Mailed to patient   |
|     | Patient stops by the health center  |
|     | Staff delivers to patient   |
| KEI | EP AN INVENTORY OF MONITORS   |
|     | Number of home BP monitors purchased:   |
|     | Number of home BP monitors donated:   |
|     | Identify staff member responsible for tracking SMBP inventory   |
| DE  | TERMINE NUMBER OF CUFF SIZES TO PURCHASE  |
|     | Number of Small Adult Cuffs (Fits arm sizes 8.7" – 10.4"):  |
|     | Number of Standard Adult Cuffs (Fits arm sizes 10.5" – 13.6"):  |
|     | Number of Large Adult Cuffs (Fits arm sizes 13.7" – 17.5"):   |

Number of Extra-Large Cuffs (fits arm sizes 17.6" - 21.2"):\_\_\_\_\_

### Home BP Monitors

DETERMINE HOW LONG PATIENTS WILL KEEP MONITORS (IF LOANED) (E.G., 2 WEEKS, 1 MONTH, ETC.) Our protocol:

DETERMINE WHAT CONTROLS TO PUT IN PLACE IF PATIENTS DO NOT RETURN HOME BP MONITORS (E.G., # OF PHONE CALLS, # LETTERS, ETC.) Our protocol:

DETERMINE WHERE HOME BP MONITORS WILL BE PHYSICALLY STORED (CONSIDER SEPARATE LOCATIONS FOR "CLEAN" VS. "DIRTY") Our protocol:

DETERMINE HOW HOME BP MONITORS ARE TRACKED, INVENTORIED, CLEANED, AND MANAGED. Our protocol:

DETERMINE WHERE ADDITIONAL FUNDING FOR MONITORS AND ADDITIONAL STAFF TIME WILL COME FROM. Our protocol:





### Validated SMBP Devices

#### Omron

#### **10 SERIES WIRELESS - ECW COMPATIBLE**

https://omronhealthcare.com/products/10-series-wireless-upper-arm-blood-pressure-monitor-bp7450/

#### **3 SERIES**

https://omronhealthcare.com/products/3-series-upper-arm-blood-pressure-monitor-bp7100/

#### **5 SERIES**

https://omronhealthcare.com/products/5-series-upper-arm-blood-pressure-monitor-bp7200/

#### **5 SERIES WIRELESS**

https://omronhealthcare.com/products/5-series-wireless-upper-arm-blood-pressure-monitor-bp7250/\_\_\_\_

#### 7 SERIES WIRELESS - ECW COMPATIBLE

https://omronhealthcare.com/products/7-series-wireless-upper-arm-blood-pressure-monitor-bp7350/\_\_\_\_

#### **COMPLETE WIRELESS**

https://omronhealthcare.com/products/complete-upper-arm-blood-pressure-monitor-ekg-bp7900/\_\_\_\_

#### A&D Medical

#### ADVANCED MANUAL INFLATE BLOOD PRESSURE MONITOR

https://medical.andonline.com/product/advanced-manual-inflate-blood-pressure-monitor/ua-705vl?commerce\_product=12\_

#### TALKING+ BLOOD PRESSURE MONITOR

https://medical.andonline.com/product/premium-blood-pressure-monitor-verbal-assistance/ua-1030t?commerce\_product=14\_

#### ULTRACONNECT WIRELESS BLOOD PRESSURE MONITOR

https://medical.andonline.com/product/ultraconnect-premium-wireless-wrist-blood-pressure-monitor/ub-1100ble?commerce\_product=30\_

#### Hillrom-Welch Allyn

#### WELCH ALLYN HOME BLOOD PRESSURE MONITOR, 1700 SERIES - ECW COMPATIBLE

https://www.welchallyn.com/en/products/categories/welch-allyn-home/connected-blood-pressure-monitors/ home-bp-monitor.html\_

### SMBP Patient Identification

DETERMINE ANY SELECTION CRITERIA BEYOND ELIGIBILITY FOR PATIENTS (E.G. CONSIDER THE NEED FOR AND AVAILABILITY OF INTERPRETERS, PATIENTS' PHYSICAL OR MENTAL CAPACITY TO USE A HOME BLOOD PRESSURE MONITOR, SAFE PLACE TO STORE A HOME BLOOD PRESSURE MONITOR, NO SHOW HISTORY, PATIENT INTEREST, ETC.)

Our protocol:

#### DETERMINE PATIENT IDENTIFICATION METHODS:

Clinician decision support in EHR

Clinician recommends

Patient screening/preference survey

Pre-visit planning

Patient request

Registry queries and targeted outreach

**DETERMINE HOW TO ASSESS IF APPROPRIATE PATIENTS ARE BEING IDENTIFIED AND OFFERED SMBP** Our protocol:





### SMBP Training

#### DETERMINE WHO TRAINS THE PATIENT ON SMBP (Check all that apply)

| Clinician                        |
|----------------------------------|
| Nurse                            |
| Medical Assistant                |
| Community Health Worker          |
| Health Department Representative |

### DETERMINE HOW THE PATIENT WILL CONNECT WITH THE SMBP TRAINER (PHONE CALL, VIDEO CALL, IN PERSON APPOINTMENT, ETC.)

Our protocol:

DETERMINE SMBP TRAINING CURRICULUM/RESOURCES (E.G., WHAT IS SMBP?; PROTOCOL (TWO MEASUREMENTS AM AND PM FOR SEVEN DAYS), HOW TO USE THE DEVICE; HOW TO TAKE BP AT HOME PROPERLY, ETC.)

Our protocol:

## SMBP Outreach Support and Follow-up

#### DETERMINE HOW OUTREACH SUPPORT WILL BE PROVIDED

|     | Electronic patient communication (text or email programs)                                  |
|-----|--|
|     | Home visit   |
|     | Scheduled telehealth check-in  |
|     | Unscheduled telephone call   |
| DE. | TERMINE ENCOUNTER TYPE FOR INITIAL FOLLOW-UP APPOINTMENT                                   |
|     | Face-to-face visit with:   |
| [   | Nurse  |
| [   | Pharmacist   |
| [   | Clinician  |
| [   | Other support staff, such as a medical assistant, CHW, or health department representative |
|     | Telehealth visit with:   |
| [   | Nurse  |
| [   | Pharmacist   |
| [   | Clinician  |
| [   | Other support staff, such as a medical assistant, CHW, or health department representative |





### SMBP Data Management

**DETERMINE HOW PATIENTS WILL RECORD/SHARE DATA WITH THE CARE TEAM** Our protocol:

#### DETERMINE WHAT TYPES OF SMBP MEASUREMENTS CLINICIANS WANT TO SEE

7-day SMBP averages

All individual home BP readings

Outlier BP readings (very high or very low)

#### DETERMINE WHAT ADDITIONAL SMBP-RELATED DATA ELEMENTS ARE IMPORTANT TO CAPTURE (E.G., DATE STARTED/COMPLETED, NUMBER OF MEASUREMENTS/DAYS, TREATMENT DECISIONS, ETC.) Our protocol:

#### DETERMINE WHERE SMBP DATA WILL BE DOCUMENTED (MAY REQUIRE CUSTOM HIT CONFIGURATION)

| Direct | from | home | ΒP       | monitor | to | EHR |
|--------|------|------|----------|---------|----|-----|
| 2      |      |      | <u> </u> |         |    |     |

- Manually document in EHR
- Population health management system
- Spreadsheet
- Patient Portal
- Other

DETERMINE WHEN AND HOW OFTEN CLINICIANS WANT TO REVIEW SMBP DATA (I.E., WHERE AND IN WHAT FORMAT DOES IT FIT IN THE WORKFLOW) AND WHO IS RESPONSIBLE FOR MAKING SURE THE DATA GET REVIEWED.

Our protocol:

### DETERMINE WHAT ROLE COMMUNITY PARTNERS COULD PLAY TO SUPPORT OR OPTIMIZE THE EFFICIENCY/CAPACITY OF YOUR SMBP EFFORT

| Conduct outreach                                      |
|---|
| Provide lifestyle support programs/education          |
| Provide SMBP training and/or ongoing support          |
| Supply funds to purchase home blood pressure monitors |
| Others  |
|   |

#### **DETERMINE COMMUNITY PARTNERS AND ROLES THAT ARE PART OF THE SMBP EFFORT** Our protocol:

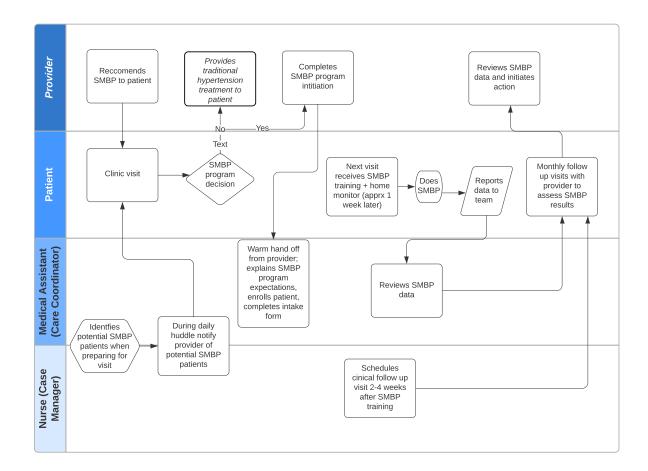




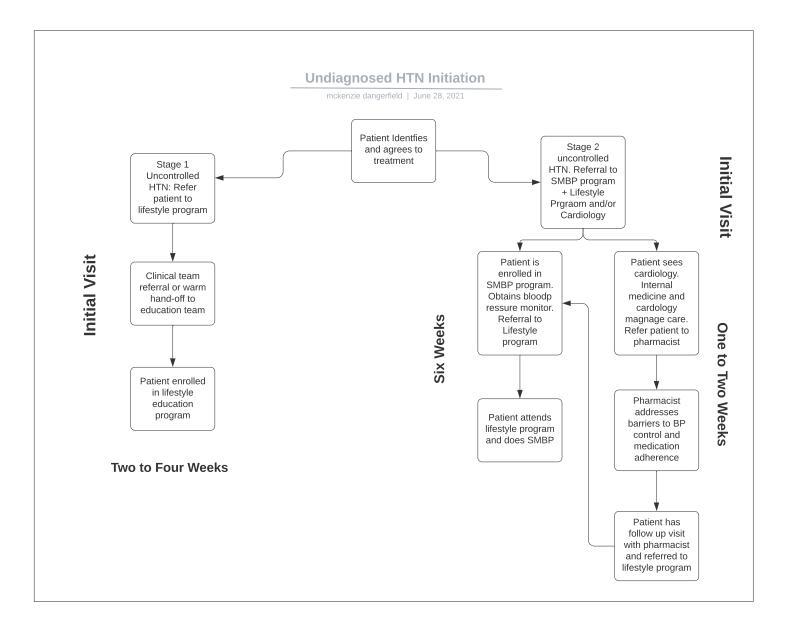
### SMBP Workflow 1

#### Sample Workflow 1

mckenzie dangerfield | June 28, 2021



### SMBP Workflow 2





### eCW and Healow Tracker Integration (Healow)

#### FOR PATIENT:

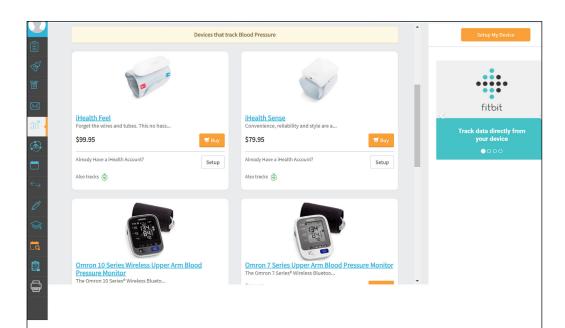
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1. Have patient log into Healow. Below is the initial page after login.

| ≡ ()  | healow   | HELP   Hi, Debra G 🗸  |
|---|--|---|
|   | Showing health summary for Debra G (Association For Utah Community Health Salt Lake City UT) | VIEW PHR  |
|   | Looks like you have no <b>Allergies</b> listed.  | You have no<br>Upcoming Appointments  |
| ©•<br>1   | Allergies(0)   |   |
| <-><br>2<br 30</th <th></th> <th>Looking for an Appointment? Search and book from a network of 2000+ doctors</th> |  | Looking for an Appointment? Search and book from a network of 2000+ doctors |
| <b>5</b>  | Looks like you have no <b>Allergies</b> listed.  | 2 Search 2  |
|   | Conditions (0)   |   |

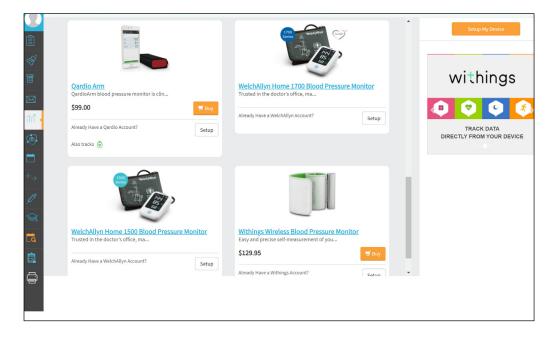
#### 2. Click on the trackers icon. Click on blood pressure to select the blood pressure tracker.

| - •   | Paulti and Onion Wellinso   |   |           |   |
|---|---|---|-----------|---|
|   | Showing trackers for Debra G (Association For Utah Community He   | Search blood pressure devices   | Q         | Setup My Device                                   |
| *<br>10<br>10<br>10<br>10<br>10<br>10<br>10<br>10<br>10<br>10<br>10<br>10<br>10 | Distance Calories BMI   | Sileep Heart Rate Blood Press<br>bscribed to Blood Pressure tracker         | ,<br>10   | fitbit<br>Track data directly from<br>your device |
|   | The practice does not routinely monitor health tracker data<br>Linked device health data may be available to your healthc | are providers. Call the practice directly to discuss any concerns with your | readings. | • • • • •   |
| Ø   | Devices ti  | at track Blood Pressure   |           |   |
|   | 13 10   |   |           |   |



#### 3. Below is the list of devices that integrate with Healow

#### 4. Continued list. Click Setup My Device. A page to select device or to track manually will appear.







|                   | Readings from this device may be available to any practice that you've linked, but<br>contacting you | this information is not monitored. If yo<br>r doctor's office. | u have a reading ti           | hat concerns you, consider | P   Hi, Debra G <del>+</del> |
|-------------------|--|--|-------------------------------|----------------------------|------------------------------|
| Showing t         | 😰 New Entry  | Average  | 7 da                          | ys 30 days 90 days         | evice                        |
| 1 <b>·</b>        | Date 02/03/2021 - Time 12:30 PM Systolic / Diastolic (mmHg)  | What   | L2/80                         |                            |                              |
|                   |  | As per the Am<br>Category                                      | erican Heart Asso<br>Systolic | Diastolic                  |                              |
|                   | Heart Rate (bpm)   | Normal   | < 120                         | And < 80                   | C I                          |
|                   |  | Prehypertension  | 120-139                       | Or 80-89                   | SLEEP                        |
|                   | e.g 122/85   | Hypertension   | ≥140                          | Or ≥90                     | th ≯                         |
| 111 ·             |  | Hypertensive Crisis  | ≥180                          | Or ≥110                    |                              |
| •                 | Week: 01/31/2021 - 02/06/2021 >  |  | Week                          | Month Date Range           | ATA<br>IR DEVICE             |
|                   | 125  | ELOGS  |                               | All 1                      |                              |
| $\Leftrightarrow$ | •  | Source Date Time Systolic                                      | Diastolic Rate                | Notes                      |                              |
| 2                 | 75 · · · · · · · · · · · · · · · · · · ·   | 02/03 12:22     PM     112                                     | 80 23                         |                            |                              |
|                   | Ē <sub>50</sub>  |  |                               |                            |                              |
| ta i              | 25   |  |                               |                            |                              |
|                   | 003. Feb   |  |                               |                            |                              |
|                   | - Systolic - Diastolic   |  |                               |                            |                              |

#### 5. Enter in the blood pressure with the date, time, and the heart rate.

#### 6. Now the blood pressure and heart rate are documented.

| ≡ (           | D healow  | HELP   Hi, Debra G▼                     |
|---------------|---|---|
|               | Showing trackers for Debra G (Association For Utah Community Health Salt Lake City UT)                                  |   |
|               |   | Setup My Device                         |
|               | My Trackers All Trackers  |   |
| Ś             | Blood Pressure as recorded on 3 Feb 2021 12:22 PM   |   |
|               | 112/80 mmHg         23 bpm         112/80 mmHg           Systolic / Diastolic         Heart Rate         30 day average |   |
| <u>ا</u> ژن ا | O Low   | < iHealth >                             |
| ٦             | ADD DEVICE  | TRACK DATA<br>DIRECTLY FROM YOUR DEVICE |
|               | Heart Rate as recorded on 3 Feb 2021 12:22 PM   | 0000                                    |
| <-→           | 23 bpm  |   |
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#### FOR CLINIC STAFF:

7. Healow Tracker data will show *No* until the patient has entered in their data. Click on the *No* and the next page will appear.

| MD - eClinicalWork Pa   | tient Hub G, Debra 🛓 Nov 8, 2020 (12 wo F) 📫 Acc No. 9171  |  | 9   | 🛛 Т 🕕 L 💿 М ( |
|---|--|--|---|---------------|
| < 02/03/2021  | t<br>co<br>co<br>co<br>co<br>co<br>co<br>co<br>co<br>co<br>co  | Insura           Lastv           0         PCP           0         Rende           dd: Yes         Defau | /Msg :<br>:<br>ering Pr :<br>Jit Facility :       |               |
| 08:45 AM<br>09:00 AM<br>09:15 AM<br>09:30 AM<br>09:45 AM            | Vr.7a)<br>Patient Balance : \$0.00<br>Account Balance : \$0.00<br>Collection Status :<br>Assigned to :   | Veteran<br>Seasonal<br>Migrant<br>Homeless   | 0   0   0     Labs   DI   Referrals     0   0   0 |               |
| 10:15 AM Enco<br>10:30 AM C<br>10:45 AM C<br>11:00 AM C<br>11:15 AM | Billing Alert Guarantor Balance<br>Soss<br>Account Inquiry  Billing Logs<br>Account Society Billing Logs | Limited English<br>Proficiency<br>Public Housing<br>Reason patient not<br>qualified for<br>sample (ACO   | Actions Tel Enc Web Enc<br>0 0<br>Docs P2P        |               |
| 11:45 AM N<br>12:00 рм<br>12:15 рм<br>12:30 рм                      | Last Appointments<br>Facility :<br>Next Appointment :<br>Facility :                                      | Progress Notes Progress Notes Progress Notes Medical Summary Devices Medical Record Consult Note         | Logs A New Web Enc                                |               |
| 12:45 PM<br>Reminders   | Bumped Appt: NONE Case Manager Hrc 🖶<br>New Appointment  | Problem List   Flowsheets  Cliniform: >>   | Print Labels  Messenger                           | one No        |

#### 8. Below is where data is entered for each of the patient's trackers.

| ×≡,           | MD -                 |          | Healow Hub G, Debra 🛓 N | ov 8, 2020 (12 wo F) 📫 A       | cc No. 9171     |        | ⊗   | ο ι ο | м 💿 🗉                |
|---------------|----------------------|----------|-------------------------|--------------------------------|-----------------|--------|---|-------|----------------------|
| Favorites     |                      | < 02/03/ | G, Debra 0 Years        | i, female<br>🕻 💼 🖬 debg@gmail. | com             |        | Overview         DRTLA         Histo         IK € > >           G, Debra ▲         Nov 8, 2020 (12 wo F)         ♣ Acc No.           9171         ✓         Medical History |       |                      |
| Admin         | 08:00 AM             |          | Questionnaires          | Trackers                       | External Health |        | GYN History   |       | 08:00 AM             |
|               | 08:15 AM             |          |                         |                                | Records         |        | ▼ OB History  |       | 08:15 AM<br>08:30 AM |
| Practice      | 08:45 AM             |          |                         |                                |                 |        | ▼ Surgical History  |       | 08:45 AM             |
| R<br>Registry | 09:00 AM<br>09:15 AM |          |                         |                                |                 |        | ▼ Family History  |       | 09:00 AM<br>09:15 AM |
| ⊷egisary<br>↓ | 09:15 AM             |          | Blood Pressure          |                                |                 |        | ▼ Social History  |       | 09:15 AM<br>09:30 AM |
| Referrals     | 09:45 AM             |          |                         | View                           |                 |        | <ul> <li>Hospitalization History</li> </ul>   |       | 09:45 AM             |
| สไ            | 10:00 AM<br>10:15 AM |          |                         | . view                         |                 |        |   |       | 10:00 AM<br>10:15 AM |
| Analytics     | 10:15 AM             |          | 1 W 1 M 90 D            |                                |                 |        |   |       | 10:15 AM             |
| Messages      | 10:45 AM             |          | 150                     |                                |                 |        |   |       | 10:45 AM             |
|               | 11:00 AM             |          | 100                     |                                |                 |        |   |       | 11:00 AM             |
| Healow        | 11:15 AM<br>11:30 AM |          | STEE FO                 | +                              |                 |        |   |       | 11:15 AM<br>11:30 AM |
| Documents     | 11:45 AM             |          | E 50                    |                                |                 |        |   |       | 11:45 AM             |
|               | 12:00 PM             |          |                         |                                |                 |        |   |       | 12:00 PM             |
| Billing       | 12:15 PM             |          | 0                       | 02/03                          |                 |        |   |       | 12:15 PM             |
| EVa           | 12:30 PM<br>12:45 PM |          |                         |                                |                 |        |   |       | 12:30 рм<br>12:45 р  |
|               |                      | eminders |                         | - Systolic - Diast             | olic            |        |   |       | 12.45 P              |
|               | R                    | eminders |                         |                                |                 |        |   | Vo    |                      |
|               |                      |          |                         |                                |                 |        |   |       |                      |
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|               |                      |          | ( )                     |                                |                 | Cancel |   |       |                      |
|               |                      |          |                         |                                |                 | Cancel |   |       |                      |





9. Scroll right and click on *Tracker Details* to see more detailed information about the patient tracker data.

| ■ 11/08/2020<br>• , , | s, female<br>🕻 💼 🖀 debg@gma | il.com          |                 | Overview         DRTLA         Hist         K < >           G, Debra ≟         Nov 8, 2020 (17 wo F)         ➡ Acc           No. 9171         Nov 8, 2020 (17 wo F)         ■ Acc |
|-----------------------|-----------------------------|-----------------|-----------------|---|
|                       |                             |                 |                 | <ul> <li>Medical History</li> </ul>   |
| Questionnaires        | Trackers                    | External Health |                 | ▼ GYN History   |
|                       | · · ·                       | Records         |                 | ▼ OB History  |
|                       |                             |                 | Tracker Details | ▼ Surgical History  |
|                       |                             |                 |                 | ▼ Family History  |
|                       |                             |                 |                 | ▼ Social History  |
|                       |                             |                 |                 | <ul> <li>Hospitalization History</li> </ul>   |
|                       |                             |                 |                 |   |
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|                       |                             |                 |                 |   |

10.See patient's blood pressure and heart rate and rate it on a hypertension scale, as well as an average.

| G, Debra 0 Years, | female<br>female debg@gmail.co | m               |                 |                    | Overvie |                 |              |     |
|-------------------|--------------------------------|-----------------|-----------------|--------------------|---------|-----------------|--------------|-----|
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|                   |                                |                 |                 |                    | ▼ Medi  | al History      |              |     |
| Questionnaires    | Trackers                       | External Health |                 |                    | ▼ GYN   | History         |              |     |
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|                   |                                |                 |                 |                    | 🔻 Fami  | y History       |              |     |
| Blood Pressure    |                                |                 |                 |                    | 🔻 Socia | l History       |              |     |
|                   |                                |                 |                 |                    | ▼ Hosp  | italization His | tory         |     |
| <b>~</b>          | 109/56<br>Systolic / I         |                 | _<br>Heart Rate | –<br>30 day averaį |         |                 |              |     |
|                   |                                |                 |                 |                    |         |                 |              |     |
| Low Normal        | Prehypertension 🌘              | Hypertension    | 9               |                    |         |                 |              |     |
| L                 | Prehypertension ●              | Hypertension (  | Θ               |                    |         |                 |              |     |
| L                 |                                |                 | 9               |                    |         |                 |              |     |
| L                 | Prehypertension •              |                 | Ð               |                    |         |                 |              |     |
| £                 |                                |                 | 9               |                    |         |                 |              |     |
| Low Normal        |                                |                 | 9               |                    | •       |                 |              |     |

#### 11. Scroll and click on the Plus Sign

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|------------|-----|----------------|----------------------------|--------------------------|-----|
| Questionna | res | Trackers       | External Health<br>Records |                          |     |
|            |     |                | Records                    |                          |     |
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| -          |     | -              |                            |                          |     |
| Heart Rate |     | 30 day average |                            |                          |     |
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| n 😧        |     |                |                            |                          |     |
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#### 12. See 7 day, 30 day, and 90 day averages.

| Average             |  | 7 day | s 30 days | 90 days |
|---------------------|--|-------|-----------|---------|
|                     | 0/0  |       |           |         |
|                     | 0/0  |       |           |         |
| As per              | What does this means the American Heart As |       |           |         |
| Category            | Systolic                                   |       | Diastolic |         |
| Normal              | < 120                                      | And   | < 80      |         |
| Prehypertension     | 120-139                                    | Or    | 80-89     |         |
| Hypertension        | ≥140                                       | Or    | ≥ 90      |         |
| Hypertensive Crisis | ≥ 180                                      | Or    | ≥110      |         |



### Self-Measured Blood Pressure Monitoring (NACHC)

#### Patient Enrollment Orientation

28

Patient:\_\_\_\_\_ Date:\_\_\_\_\_ Orientation checklist will be completed upon enrollment in the self-measured blood pressure monitoring loan program.

| · |   |
|---|---|
|   | Confirm the patient meets the criteria for patient selection  |
|   | Instruct the patient on the loaner program and expectations of measurements                               |
| ( | Complete the SMBP Patient agreement   |
| E | Educate the patient on the use of the blood pressure monitor  |
| 7 | Teach the patient how to measure blood pressure accurately  |
| [ | Demonstrate the functionality and use of the blood pressure monitor                                       |
| 5 | Show the patient how to read and understand the digital display   |
| ŀ | Have patient re-demonstrate the application and use of the blood pressure monitor                         |
| F | Provide the following handouts to the patient and review them together                                    |
|   | Self-measured blood pressure at home: patient information   |
|   | Self-measured blood pressure technique  |
|   | High blood pressure flow sheet  |
|   | Self-measured blood pressure flow sheet   |
| F | Fill out the "BP monitor loan log", if applicable   |
| ( | Complete and have the patient sign the loaner device agreement, if applicable                             |
|   | Inform patient on specifics of how they should communicate blood pressure measurements back to the office |
| [ | Document participation in SMBP program in patient medical record  |





### **My Blood Pressure Log**

Name:

#### My Blood Pressure Goal: \_\_\_\_\_ mm Hg

#### Instructions:

- Measure your blood pressure twice a day—morning and late afternoon—at about the same times every day.
- For best results, sit comfortably with both feet on the floor for at least two minutes before taking a measurement.
- When you measure your blood pressure, rest your arm on a table so the blood pressure cuff is at about the same height as • your heart.
- Record your blood pressure on this sheet and show it to your doctor at every visit. •
- You can also use AHA's Check. Change. Control.® Tracker (ccctracker.com/aha), a free online tool to help you track and • monitor your blood pressure. Just find the campaign code on the map for your state and sign up.

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### Blood Pressure Monitor Loan Agreement

 Patient:\_\_\_\_\_
 Date:\_\_\_\_\_

 Monitor Serial Number \_\_\_\_\_\_
 Date:\_\_\_\_\_\_

#### I agree to the participate in the blood pressure self-management program.

Systole

Diastole

- I will take my blood pressure every morning and every night for \_\_\_\_\_consecutive days.
- I will record my blood pressure levels on the recording sheet provided
- I will return the completed recoding sheet and blood pressure monitor at my next visit on \_\_\_\_\_\_ at \_\_\_\_\_ am/pm.
- If I have any questions, I will call \_\_\_\_\_.

Your goal blood Pressure level \_\_\_\_\_\_

Your blood pressure is too high if it is more than Your blood pressure is too low if it is less than 180 90 Systole Systole 120 Diastole 60 Diastole Recheck in 1 minute. Recheck in 1 minute. If it remains in this range, call your doctor, If it remains in this range, call your doctor, especially if you feel dizzy, have a headache or do especially if you feel dizzy, have a headache or do not feel well. not feel well.

Signature \_\_\_\_\_ Today's Date \_\_\_/\_\_\_

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