

# Actions to Decrease Disparities in Risk and Engage in Shared Support for Blood Pressure Control (ADDRESS-BP) Nurse Case Manager (NCM) and Pharmacist Protocol

INTERNAL PROTOCOL

## Section 1: Care Team Protocol Overview

### Purpose

The purpose of this protocol is to provide guidelines for the nurse case manager(s) (NCMs) and pharmacist(s), delivering this intervention.

### Goal

To use this protocol as a standard procedure for NCM(s) and pharmacist(s) to effectively support patients in managing their blood pressure, addressing behavioral health concerns and social determinant of health (SDOH) support utilizing community health workers (CHWs) to improve overall health outcomes. This protocol also includes best practices for team-based care to encourage efficient communication and close referral loops between NCMs, pharmacists, CHWs, and practice providers.

### Intervention Components

Description of Practice support And Community Engagement (PACE): PACE comprises three evidence-based multi-level interventions (EBIs) to address barriers to HTN at the patient, physician, health system and community levels. The 3 EBIs that comprise PACE include remote blood pressure monitoring [RBPM], intensive nurse case management [NCM], and social determinants of health [SDOH] support. NCMs are the primary actor that deliver PACE and will (1) introduce RBPM to patients; (2) engage in behavioral counseling; (3) provide medication regimen recommendations; and (4) provide SDOH support, including assessment and referral to community resources. The intervention components are further outlined below *and in Table 1*.

- **RBPM**: RBPM addresses barriers to HTN control at the patient, physician and health system levels by influencing factors such as clinical inertia, medication titration and adherence. This component engages patients in their care via use of valid automated home blood pressure monitor devices (OMRON) with telemonitoring capability. RBPM is wirelessly transferred from the validated home blood pressure monitor to the patient's portal and EHR after patients take their BP readings. This process is automated once the order for RBPM is placed in patients' EHR and signed off by the primary care provider. The NCM then monitors the patient BP readings (ongoing) and the pharmacist or NCM will immediately reach out to the patient in the event of a very high or low BP value. *Patients primary care physician will be consulted for same or next day appointments if needed, and patients will be advised to call 911 for immediate medical emergencies.* Following American Heart Association guidelines, patients are asked to take their BP twice per day (morning and evening), three days a week, for one week a month, in the 7 days prior to monthly NCM visit. For the purposes of program working hours, patients are asked to take their BP twice per day (morning and late afternoon), three days a week, every week, for at least a total of 16 days of data readings per month.
- **Intensive NCM**: Intensive NCM addresses patient, provider and health system-level barriers to HTN control (e.g., by improving adherence to lifestyle behaviors and medications). Intensive NCM, as part of the PACE intervention, will comprise of 2 activities targeted toward patients: behavioral counseling and medication regimen recommendations. Behavioral Counseling: Patients whose remote BP readings are uncontrolled undergo monthly telephone counseling sessions delivered by the centralized nurse. During these sessions, the centralized nurses address barriers to medication adherence, and adoption of recommended lifestyle behaviors. The centralized nurses also address patient barriers to obtaining their medications, side effects, and other challenges with scheduling clinic visits and medication refills. Medication regimen recommendations: The inclusion of an appropriately licensed health professional (e.g., pharmacist) within the centralized



care team as part of the NCM team may facilitate the use of a standardized algorithm for medication regimen recommendations, as appropriate, to address systems-level and provider-level barriers by reducing clinical inertia. Decisions related to medication regimen are based on at least one week of RBPM readings. Treatment decisions are documented in patients' EHR and approved by the primary care provider.

- **SDOH support:** SDOH support addresses community-level barriers to HTN control. Studies have found that connecting patients to community resources results in enhanced social and family support, improvements in food insecurity, and increases access to other material conditions that impact health. SDOH support includes assessing patients' social needs using EHRs and health information technology (HIT) to identify and link patients to community resources, including social services, and providing strategies to address social needs. As part of PACE, SDOH support includes 3 components: (1) Addressing Technology Barriers: Troubleshooting technology-related barriers to RBPM, including providing technical assistance activating patient portal and with RBPM set up; (2) Screening for SDOH and providing contextually and culturally tailored health information: NCMs conduct brief screening for SDOH using Smartsets built into EPIC, which is used to tailor goal-setting and provide culturally and contextually tailored health education materials/information, and (3) Community Referral: Using EHR-embedded tools, patients' social needs are systematically assessed and referrals are made to social services with support of the NCM/CHW team.

### **Delivery Method**

All PACE components will be provided during both the TAU and PATCH conditions.

- **TAU:** During the 9-month 'training as usual' (TAU) periods, participants will receive the PACE intervention delivered after TAU for practice staff. NCMs are the primary actor that deliver PACE; 2 centralized NCMs will work across practices to (1) introduce RBPM to patients; (2) engage in behavioral counseling; (3) provide medication regimen recommendations; and (4) provide SDOH support, including assessment and referral to community resources. All centralized nurses are employed within NYULH's Clinically Integrated Network (CIN) who provide clinical care coordination such as patient education and post discharge assessments.
- **PATCH:** When practices transition to the PATCH condition, at the end of the 9-month TAU period, participants will still receive the PACE intervention, but practices will also receive PATCH (PF+ SDOH support), which is designed to increase adoption, fidelity, and other implementation outcomes. In this period, 2 practice facilitators, who are NYULH staff trained in practice facilitation (e.g. translating evidence-based systems interventions into routine practice), and 3 CHWs, who are NYULH-employed CHWs who are part of the study team and supported by the grant, and are trained in strategies to enhance patient activation, will assist practices in the integration of PACE. Working through the NYU Clinically Integrated Network, we will be using PFs and CHWs across faculty group practices through a centralized model. Further description about the role of PFs and CHWs can be found in the [Practice Facilitation and Community Health Worker manuals].

The delivery methods and procedures, including who delivers the intervention component, how they are delivered, and the frequency/dose, are outlined in Table 1 and further described below based on the specified delivery method.

### **Remote Blood Pressure Monitoring:**

**1. Mailing Blood Pressure Monitors/Providing Blood Pressure Monitors onsite:**

**a. TAU (9-month period):** Operational/program team organize the delivery of blood pressure monitors to patients homes

**i. Operational Team:** Program staff will monitor the 'RPM-MyChart Home Monitoring- FGP Hypertension Initiative- Operational Project Team Analytics' report in EPIC daily for patients that are enrolled in RBPM by providers. Once a patient is enrolled in the program by a provider, program staff member will outreach patient via phone call to confirm they understand the program and want to move forward with participation. If patient agrees to participate, program staff will mail a monitor, patient letter, patient packet, and instructions for setting up the monitor to patients within one week of patient agreeing to participate. Approximately 24 hours after mailing the monitor, program staff will follow-up with the patient via phone call and MyChart messaging to provide the patient with expected delivery date, tracking number, and instructions on set-up. Program staff will utilize the 'RBPM Tracking' excel spreadsheet to document patient RBPM enrollment date, monitor serial number, date the monitor was mailed, monitor tracking number, MyChart message confirmation, and date the monitor was delivered to the patient. Once the monitor has been tracked as 'delivered,' program staff member will complete documentation in the 'RPM-MyChart Home Monitoring- FGP Hypertension Initiative- CHWs' report to notify the NCM that the patient is ready for their initial phone call. If patient declines participation, program staff will notify the NCM team to resolve the patients RPM encounter in EPIC. Program staff will create a patient outreach encounter in the EPIC report, start a note using the .FGPHTNRPM smartphrase, and note if the patient agrees or declines participation. This will notify the NCM via EPIC that the patient is either ready for their first monthly call, or the patient needs to be resolved and removed from the RPM report.

**b. PATCH (following the 9-month TAU period):** Operational/program team and CHWs organize the delivery of blood pressure monitors to patients homes or primary care office

**i. Operational Team:** Program staff will monitor the 'RPM-MyChart Home Monitoring- FGP Hypertension Initiative- Operational Project Team Analytics' report in EPIC daily for patients that are enrolled in RBPM by providers. Once a patient is enrolled in the program by a provider, program staff member will outreach patient to confirm they understand the program and want to move forward with participation. If patient agrees to participate, program staff will mail a monitor, welcome letter, patient packet, and instructions for setting up the monitor to patients within one week of patient agreeing to participate. Approximately 24 hours after mailing the monitor, program staff will follow-up with the patient via phone call and MyChart messaging to provide the patient with expected delivery date, tracking number, and instructions on set-up. Program staff will utilize the 'RBPM Tracking' excel spreadsheet to document patient RBPM enrollment date, monitor serial number, date the monitor was mailed, monitor tracking number, MyChart message confirmation, and date the monitor was received by the patient. Once the monitor has been tracked as 'received,' program staff member will complete documentation in the 'RPM-MyChart Home Monitoring- FGP Hypertension Initiative- CHWs' report to notify the NCM that the patient is ready for their initial phone call. If patient declines participation, program staff will notify the NCM team to resolve the patients RPM encounter in EPIC. Program staff will create a patient outreach encounter in the EPIC report, start a note using the .FGPHTNRPM smartphrase, and note if the patient agrees or declines participation. This will notify the NCM via EPIC that the patient is either ready for their first monthly call or the patient needs to be resolved and removed from the RPM report.

- ii. **CHWs:** During this phase, given site capacity, CHWs can assist patients at the site with device setup, troubleshooting technology-related barriers to RBPM, and emphasizing importance of continual monitoring. In cases where sites have capacity for CHWs to be onsite, they will assist patients were needed. For patients who will not need assistance at the site or prefer to setup their device on their own, CHW manager and/or CHWs will keep track of monitor mailings and delivery through the 'RBPM Tracking' excel spreadsheet. They will also check the 'RPM-MyChart Home Monitoring- FGP Hypertension Initiative- CHWs' for any patients that have not completed onboarding. If the monitor has been tracked as 'received,' on the excel spreadsheet and a patient has not been onboarded according to the CHW RPM report, a CHW will contact the patient to confirm receipt of the monitor and complete the 'RBPM Setup Form' in REDCAP to ensure that patient has setup their monitor and completed onboarding. Once completed, CHW will create a patient outreach encounter in the EPIC report, start a note using the .FGPHTNRPM smartphrase, and note if the patient agrees or declines participation and has completed onboarding and setup of their monitor. CHWs will make the patient aware of their initial phone call with the NCM which will include 1 counseling session per month to patients to address barriers to medication adherence, behavioral health concerns, complete the SDOH screener, and encourage adoption of recommended lifestyle behaviors. Ongoing data reviews will occur for patients each month and CHWs will continue troubleshooting if patients require additional assistance in which an NCM will outreach via secure chat messaging.

**2. RBPM Setup/Monitor Use: see Track My Blood Pressure Protocols and Appendix 5**

- a. **TAU (9-month period):** NCMs initiate treatment and administer RBPMs and continually monitor patients BP readings as they are wirelessly transferred to patients EHR
  - i. Once per month, or as needed, NCMs conduct an approximately 20-minute remote counseling session with patients to provide behavioral health counseling, medication regimen recommendations in partnership with pharmacist, and educate patients on BP management and proper use of blood pressure monitors. Once patients have been enrolled in RBPM by the provider at the site, they will receive a MyChart welcome message that includes a link to their patient packet. The patient packet includes a 1) behavioral agreement detailing the program, benefits of participating in the program, benefits of monitoring their blood pressure at home, responsibilities of the patient with an informal agreement; 2) guide to using their blood pressure monitor, including detailed instructions for apple and android devices and a video explaining how to properly measure their blood pressure; 3)and educational materials about blood pressure including understanding blood pressure categories, dietary approaches to stop hypertension (DASH) diet, and nutritional facts. As noted above, the patient will receive a monitor in the mail or at the site from program staff to take their BP remotely. Each day, NCMs will filter the 'RPM-MyChart Home Monitoring- FGP Hypertension Initiative- Data Review' report in EPIC to determine patients that have completed onboarding and have not had a monthly call with an NCM. NCMs will outreach patients for their initial or subsequent monthly call which will include an approximately 20-minute counseling session to address barriers to medication adherence, behavioral health concerns, completing an SDOH screener every 12 months, and encouraging patient adoption of recommended lifestyle behaviors. This call will also include assistance with device setup, if needed. Patients will be encouraged to utilize their patient packet as a helpful tool. Please see Appendix 1.
- b. **PATCH (following the 9-month TAU period):** NCMs initiate treatment and administer RBPMs and continually monitor patients BP as they are wirelessly transferred to patients

EHR. CHWs assist with troubleshooting technology-related barriers to RBPM, educating patients on why RBPM is effective, and the importance of continual monitoring

- i. Once per month, or as needed, NCMs conduct remote counseling sessions to provide behavioral health counseling, medication regimen recommendations in partnership with pharmacist, and educate patients on BP management and proper use of blood pressure monitors. Once patients have been enrolled in RBPM by the provider at the site, they will receive a MyChart welcome message that includes a link to their patient packet. The patient packet includes a 1) behavioral agreement detailing the program, benefits of participating in the program, benefits of monitoring their blood pressure at home, responsibilities of the patient with an informal agreement; 2) guide to using their blood pressure monitor, including detailed instructions for apple and android devices and a video explaining how to properly measure their blood pressure; 3) and educational materials about blood pressure including understanding blood pressure categories, dietary approaches to stop hypertension (DASH) diet, and nutritional facts. As noted above, the patient will receive a monitor in the mail or at the site from program staff to take their BP remotely. Once the monitor is delivered, CHWs will call the patient to confirm delivery and if they need assistance setting up their monitor. The CHW will assist the patient and complete the 'RBPM Setup Form' in REDCAP where they record whether set-up assistance was provided or declined from the patient. The CHW will attempt to reach the patient six times for set up all which will be recorded on the REDCap form. Once completed, CHWs will make the patient aware of next steps including the call with the NCM. If the patient is having difficulty setting up the monitor virtually, the CHW will provide additional options such as assisting at the primary care practice site, depending on space capacity, etc. Program staff will run a report in EPIC to determine patient's next follow-up appointment or CHWs can arrange to meet with the patient at a community/public setting of their convenience.
- ii. Each day, NCMs will filter the 'RPM- MyChart Home Monitoring- FGP Hypertension Initiative- Data Review' [See Appendix 1] report in EPIC daily to determine patients that have completed onboarding. For patients that have completed onboarding and have not had a monthly call with an NCM, NCMs will outreach patients for their initial or subsequent monthly call which will include a counseling session to address barriers to medication adherence, behavioral health concerns, completing an SDOH screener [See Appendix 1] every 12 months, and encouraging patient adoption of recommended lifestyle behaviors. This call will also include assistance with device setup, if needed. Patients will be encouraged to utilize their patient packet as a helpful tool. Please see NCM section below for further details. If patients are not submitting readings and/or have not been responsive via 3 phone calls from the NCM, NCM will send CHW a secure chat message and a CHW will contact the patient to troubleshoot technology-related barriers to remote BP monitoring, emphasizing importance of continual monitoring to support adoption and fidelity; educating patients on why RBPM is effective and emphasize importance of continual monitoring.

3. **Tracking/Reporting:** Program staff members will document all monitor distribution and patient training in excel trackers, EPIC, and REDCAP for future reference. All further tracking and reports will be in the EPIC database.

### **Nurse Case Management (NCM):**

#### **1. Behavioral Counseling Sessions:**

- a. **TAU (9-month period):** NCMs will provide behavioral counseling sessions (address barriers to medication adherence and adoption of recommended lifestyle behaviors)

- i. NCMs will review the 'RPM-MyChart Home Monitoring- FGP Hypertension Initiative- Data Reviews' report in EPIC daily and will contact patients that have not received a phone call in the last month and/or had an SDOH screener completed in the last year. The NCM will review the patients' health trends from uploaded BP monitor readings, provide 1 counseling session (20 mins) per month to patients to address barriers to medication adherence, behavioral health concerns, complete the SDOH screener, and encourage adoption of recommended lifestyle behaviors. The NCM will document the RPM time, visit diagnosis, and complete the clinical note using the .RPMFGPHTNNOTE smartphrase. The clinical note will include any information pertinent to the patients counseling sessions and treatment plans, and will be documented in EPIC for comprehensive patient care. Ongoing data reviews will occur for patients each month until they graduate from the program, choose to disenroll, or become unresponsive to phone calls. NCMs will resolve patients encounter in EPIC to indicate that patient is no longer in the program. During this phase, NCMs will outreach to patients 3 times within a 3-month time frame. If no response, patients will remain active until CHWs can begin to outreach patients 6 more times during the PATCH phase. Patients are ready to graduate the program if they follow AMA guidelines which indicate that a patient has stable blood pressure control (BP goal of <130/80) for at least 2 months, with no recent medication changes at their next monthly visit. If this is achieved, NCM will consult with PCP to graduate patient from the program.
- b. **PATCH (following the 9-month TAU period):** NCMs will provide behavioral counseling sessions (address barriers to medication adherence and adoption of recommended lifestyles behaviors). CHWs will prepare patients for upcoming primary care visits, support the adoption of NCM health education and counseling by addressing barriers/providing strategies to improve adherence to counseling recommendations related to patient's lived experiences (eg sharing resources on where to find healthy foods in their neighborhoods to support NCM healthy eating counseling), and support patients to enhance uptake and adherence to NCM counseling/health education recommendations.
  - i. NCMs will review the 'RPM-MyChart Home Monitoring- FGP Hypertension Initiative- Data Reviews' report in EPIC daily (~5 mins a day) and will contact patients that have not received a phone call in the last month and/or had an SDOH screener completed in the last year. The NCM will review the patients' health trends from uploaded BP monitor readings, provide 1 counseling session (20 mins) per month to patients to address barriers to medication adherence, behavioral health concerns, complete the SDOH screener, and encourage adoption of recommended lifestyle behaviors. The NCM will document the RPM time, visit diagnosis, and complete the clinical note using the .RPMFGPHTNNOTE smartphrase. The clinical note will include any information pertinent to the patients counseling sessions and treatment plans, and will be documented in EPIC for comprehensive patient care. Ongoing data reviews will occur for patients each month until they graduate from the program, choose to disenroll, or become unresponsive to phone calls. For patients that are inactive for approximately 2-3 months i.e.: are unresponsive to phone calls from the NCM and/or never engaged after receiving their monitor; NCMs will:
    1. Make 3 call attempts, and document the encounter on Epic
    2. If no answer, escalate to CHW team for an additional 3 attempts, and document the encounter on Epic
    3. If still no answer, NCM resolves flowsheet in Epic
    4. Notify PCP and program team via Epic secure chat that pt has been offboarded from program d/t inactivity

5. Send an FYI MyChart message to pt that they are being offboarded d/t inactivity

[See CHW protocol for further details] CHWs will outreach patients 6 times and/or potentially meet patient at their next appointment to determine participation in the program and assist where needed. If CHWs are unsuccessful in reaching patients, they will secure chat the NCM and the NCM will resolve patients encounter in EPIC to indicate that patient is no longer in the program. Patients are ready to graduate the program if they follow AMA guidelines which indicates that a patient has stable blood pressure control (BP goal of <130/80) for at least 2 months, with no recent medication changes at their next monthly visit. Approximately 1-2 months before a patient is ready to graduate, the NCM will send a secure chat message to the CHW to align communication and continue to motivate patient to reach goals for graduation. If goal is achieved; NCM will consult with PCP to graduate patient from the program. Once the message has been sent, the NCM will notify the CHW so they can prepare the patient for an additional 30 days with CHW support and send the patient a certificate of completion.

- ii. CHWs will support NCM efforts by engaging with patients through virtual group or individual sessions. A month after a patient has been onboarded to the program and once a practice site reaches 10 onboarded patients, CHWs will schedule and launch the health education sessions via WebEx at a time that works for all ten patients. The cohort of 10 patients will participate in one introductory session where the CHW will get to know the group and share the goals of the sessions. A week after the intro session is launched, the patients will participate in five, one hour, monthly health educational sessions: 1) Blood Pressure and the Heart, 2) Stress Management, 3) Diet and Nutrition, 4) Physical Activity and 5) Heart Disease and Risk Factors. During the sessions, CHWs will 1) prepare patients to be active participants in their care, to ask questions, and inquire about care guidelines, evidence and treatments 2) conduct educational meetings to teach patients about the clinical innovation (NCM counseling visits, RBPM) and encourage adoption; and 3) support patients to enhance adherence to RBPM and NCM counseling visits and develop strategies to encourage and problem-solve around challenges to uptake. CHWs will keep track of session completion for each patient on REDCap 'Tracking' form. Additionally, bi-weekly through 1 one 1 interactions, CHWs will support implementation of PACE by addressing barriers and providing strategies to improve adherence to NCM counseling, preparing patients for their primary care visits and facilitate discussions for health behavior through goal setting. All CHW-Patient interactions will be recorded in REDCap through 'Goal Setting Form', 'Progress Note' and 'Virtual Check-in ½' forms.

## **2. Medical Regimen Recommendations:**

- a. **TAU (9-month period):** NCMs will provide medical regimen recommendations in partnership with a pharmacist (adapt patient medication regimen per RBPM readings and counseling sessions)[See Appendix 4]
  - i. NCMs will review the 'RPM-MyChart Home Monitoring- FGP Hypertension Initiative- Data Reviews' report in EPIC daily (~5 mins a day) and will contact patients that have not received a phone call in the last month and/or had an SDOH screener completed in the last year. The NCM will review the patients' health trends from uploaded BP monitor readings, provide 1 counseling session (20 mins) per month to patients to address barriers to medication adherence, behavioral health concerns, complete the SDOH screener, and encourage adoption of recommended lifestyle behaviors. The NCM will document the RPM time, visit diagnosis, and complete the clinical note using the .RPMFGPHTNNOTE

smartphrase. The clinical note will include any information pertinent to the patients counseling sessions and treatment plans, and will be documented in EPIC for comprehensive patient care. Pharmacist will outreach to patients that require an escalation (i.e. patients who have a blood pressure reading that is greater than or equal to 180/110, less than 90/60, or persistently uncontrolled BP). NCMs will route an encounter to pharmacists for patients that are persistently uncontrolled or not meeting their goals. Pharmacist will check their patient escalation in-basket messages daily and offer personalized counseling to patients on the importance of medication adherence and potential side effects in combination with patient PCP. Medication titration/intensification will occur every 2-4 weeks if BP not at goal. Pharmacist will validate BP, address adherence, and pend prescription change requests to providers to sign off on medication titrations when needed. Pharmacist will close the loop with NCM via EPIC in-basket messaging and/or secure chat. Ongoing data reviews will occur for patients each month until they graduate from the program, choose to disenroll, or become unresponsive to phone calls. For patients that don't answer after 3 attempts with the NCM and/or never engaged after receiving their monitor; NCMs will secure chat the CHW pool in EPIC for CHWs to outreach patients. CHWs will outreach patients 3 times and/or potentially meet patient at their next appointment to determine participation in program and assist where needed. If CHWs are unsuccessful in reaching patients, they will secure chat the NCM and the NCM will resolve patients encounter in EPIC to indicate that patient is no longer in the program. Patients are ready to graduate the program if they follow AMA guidelines which indicates that a patient has stable blood pressure control for at least 2 months, with no recent medication changes at their next monthly visit, consult with PCP to graduate from the program.

- b. PATCH (following the 9-month TAU period):** NCMs will provide medical regimen recommendations in partnership with a pharmacist (adapt patient medication regimen per RBPM readings and counseling sessions). CHWs will prepare patients for upcoming primary care visits, support the adoption of NCM health educational and counseling by addressing barriers / providing strategies to improve adherence to counseling recommendations related to patient's lived experiences (eg sharing resources on where to find healthy foods in their neighborhoods to support NCM healthy eating counseling), and support patients to enhance uptake and adherence to NCM counseling/health education recommendations.
  - i.** NCMs will review the 'RPM-MyChart Home Monitoring- FGP Hypertension Initiative- Data Reviews' report in EPIC daily (~5 mins a day) and will contact patients that have not received a phone call and/or had an SDOH screener completed in the last month. The NCM will review the patients' health trends from uploaded BP monitor readings, provide 1 counseling session (20 mins) per month to patients to address barriers to medication adherence, behavioral health concerns, complete the SDOH screener, and encourage adoption of recommended lifestyle behaviors. The NCM will document the RPM time, visit diagnosis, and complete the clinical note using the .RPMFGPHTNNOTE smartphrase. The clinical note will include any information pertinent to the patients counseling sessions and treatment plans, and will be documented in EPIC for comprehensive patient care. Pharmacist will outreach to patients that require an escalation (i.e. patients who have a blood pressure reading that is greater than or equal to 180/110, less than 90/60, or persistently uncontrolled BP). NCMs will route an encounter to pharmacists for patients that are persistently uncontrolled or not meeting their goals. Pharmacist will check their patient escalation in-basket messages daily and

offer personalized counseling to patients on the importance of medication adherence and potential side effects in combination with patient PCP. Medication titration/intensification will occur every 2-4 weeks if BP not at goal. Pharmacist will validate BP, address adherence, and send prescription change requests to providers to sign off on medication titrations when needed. Pharmacist will close the loop with NCM via EPIC in-basket messaging and/or secure chat. Ongoing data reviews will occur for patients each month until they graduate from the program, choose to disenroll, or become unresponsive to phone calls. For patients that don't answer after 3 attempts with the NCM and/or never engaged after receiving their monitor; NCMs will secure chat the CHW pool in EPIC for CHWs to outreach patients. CHWs will outreach patients 3 times and/or potentially meet patient at their next appointment to determine participation in program and assist where needed. If CHWs are unsuccessful in reaching patients, they will secure chat the NCM and the NCM will resolve patients encounter in EPIC to indicate that patient is no longer in the program. Patients are ready to graduate the program if they follow AMA guidelines which indicates that a patient has stable blood pressure control for at least 2 months, with no recent medication changes at their next monthly visit, consult with PCP to graduate from the program

- ii. CHWs will support NCM efforts by engaging with patients through virtual group sessions. A month after a patient has been on boarded to the program and once a practice site reaches 10 on boarded patients, CHWs will schedule and launch the health education sessions via WebEx at a time that works for all patients. The cohort of 10 patients will participate in one introductory session where the CHW will get to know the group and share the goals of the sessions. A week after the intro session is launched, the patients will participate in five, one hour, monthly health educational sessions: 1) Blood Pressure and the Heart, 2) Stress Management, 3) Diet and Nutrition, 4) Physical Activity and 5) Heart Disease and Risk Factors. During Session 1- Blood Pressure and the Heart, CHWs will facilitate a medication management discussion by addressing advantages and barriers of taking blood pressure medication along with strategies to increase adherence. During the sessions, CHWs will 1) prepare patients to be active participants in their care, to ask questions, and inquire about care guidelines, evidence and treatments 2) conduct educational meetings to teach patients about the clinical innovation (NCM counseling visits, RBPM) and encourage adoption; and 3) support patients to enhance adherence to RBPM and NCM counseling visits and develop strategies to encourage and problem-solve around challenges to uptake. CHWs will keep track of session completion for each patient on REDCap 'Tracking' form. Additionally, bi-weekly through 1 on 1 interactions, CHWs will support implementation of PACE by addressing barriers and providing strategies to improve adherence to NCM counseling, preparing patients for their primary care visits and facilitate discussions for health behavior through goal setting. At month 3 and month 5, CHWs will hold 'Virtual Check ins, 1 on 1 calls that will focus exclusively on hypertension management and medication adherence. All CHW-Patient interactions will be recorded in REDCap through 'Goal Setting Form', 'Progress Note' and 'Virtual Check-in 1 and 2' forms.

#### **Social Determinants of Health (SDOH) Support:**

- a. **TAU (9-month period):** NCMs will address technology barriers (Troubleshooting technology-related barriers to remote BP monitoring, including providing technical assistance activating patient portal and with RBPM set up), screen for SDOH and provide



culturally and contextually tailored health information (NCM-led goal-setting is reinforced with the provision of culturally and contextually tailored health education materials/information based on screening results), and community referrals

- i. NCMs will complete an SDOH screener in their EHR during the patient's initial or subsequent phone call, and every 12 months thereafter. If there is a need, CHWs will have a light touch in which they will outreach patients once for assistance, and one additional time for a follow-up. They will provide NCMs with further guidance via EPIC. If the CHW was unable to reach the patient to provide assistance and the patient reaches out to the NCM, the NCMs will provide patient with resources utilizing the CHW resource guide and FindHelp to address any particular need. The NCM will refer to CHWs during the PATCH phase for additional assistance and further counseling sessions.
- b. **PATCH (following the 9-month TAU period):** NCMs will address technology barriers (Troubleshooting technology-related barriers to remote BP monitoring, including providing technical assistance activating patient portal and with RBPM set up), screen for SDOH and provide culturally and contextually tailored health information (NCM-led goal-setting is reinforced with the provision of culturally and contextually tailored health education materials/information based on screening results), and community referrals.
  - i. NCMs will complete an SDOH screener during the patient's initial or subsequent phone call and every 12 months thereafter. NCMs will secure chat the CHW pool for patients that have an SDOH need. CHWs will assess patients social determinants of health needs by reviewing the 'RPM-MyChart Home Monitoring-FGP Hypertension Initiative- CHWs' report for patients that have a completed SDOH screener and potential SDOH needs. In addition, CHWs or manager will monitor the CHW secure chat message group for any patients that an NCM notes has a need. The CHW will connect the patient with community resources, such as food assistance programs, housing support, transportation, etc using Hitsite and their own network. Referrals to community resources and programs will be made based on patient's neighborhood/location. Further SDOH needs are also assessed by the CHW, not covered by the NCM including any technology, childcare and legal needs. The CHW will guide patients through the process of accessing relevant social services and provide ongoing support as needed. CHWs will continue to collaborate with NCMs to develop holistic care plans that address both medical and social needs and refer patients to community-based organizations for needed resources. CHWs will continue to monitor patients' needs throughout the program during the one on one bi-weekly calls in case additional referrals are appropriate or patient's needs have changed. All referrals and discussion addressing SDOH needs are tracked by the CHW team in REDCap in the "Patient Referrals Form".

#### **Utilizing Electronic Health Record Systems:**

- **Documentation:** Ensure all interactions, interventions, and patient information are accurately documented in the EHR
- **Data Sharing:** Share relevant patient data with other members of the healthcare team to facilitate coordinated care
- **Privacy and Security:** Adhere to HIPAA regulations and maintain patient confidentiality when accessing and updating EHRs

#### **Continuing Education and Quality Improvement:**

- **Training Programs:** Participate in ongoing training and education sessions to stay updated on best practices and emerging trends in patient support services

- **Quality Assurance:** Regularly review protocols and outcomes data to identify areas for improvement and implement necessary changes to enhance the quality of care provided. Our efforts to maximize the quality and consistency of the interventions will include: (1) careful training of practice site staff to successfully identify eligible patients and complete EPIC criteria (i.e. BPAs and smartsets) for patient enrollment; (2) strategies to enhance uptake of patients enrolled in the program; and (3) monitoring of adherence to the interventions to evaluate consistency across study sites and NCMs/pharmacists. In addition, trained PFs will meet with NCMs weekly and practice sites quarterly (or more frequently if needed) to follow up on protocols.

#### **Criteria for Discontinuation:**

- Because the study intervention is not a trial of any biologics, pharmacological agents, or intrusive medical procedures, there is no aspect of the intervention that puts patients at any risk beyond routine therapeutic practice. Thus discontinuation of the intervention is not foreseen. If the participants wish to drop out of the study intervention (such as discontinuing the use of the home blood pressure monitor or not participating in scheduled session with the nurse case manager), participants can discontinue at any time.

#### **Nurse Training: See Table 3**

- Centralized nurses will be trained to deliver PACE. Centralized nurses will participate in a 2-day training on patient counseling on adoption of healthy dietary habits, weight loss, and medication adherence as in our prior studies.<sup>99,100</sup> The training will cover principles of behavior change; self-management; and medication titration. They will practice the components of PACE through role-play. Nurse trainings on the intervention are delivered via NYU's employee training platform, FOCUS, and will include knowledge and skills-based assessments and review of the following components:
  1. Accurate BP measurements [See Appendix 2]
  2. American Heart Association guidelines for best practices in remote BP monitoring [See Appendix 3]
  3. Team-based communication
  4. Health coaching and self-management support for HTN
  5. Motivational interviewing
  6. Screening for SDOH using the EHR Tool [See Appendix 1]
  7. Best practices for patient communication about SDOH
  8. Best practices for community referrals and review of the resource guide



**Table 1: PACE Intervention Components**

| Domain    | Component<br>Conduct Remote Blood Pressure Monitoring (RBPM): Use of valid automated remote blood pressure monitor devices (OMRON) with telemonitoring capability to remotely monitor patient BP through wireless transfer of BP readings.  | Component<br>Intensive Nurse Case Management (NCM): NCMs conduct behavioral counseling and medical regimen recommendations, based on patient RBP readings, with patients enrolled in the intervention  | Component<br>Social determinants of health [SDOH] support: Patient will receive culturally/contextually tailored, patient-centered health information, technology support, and community referrals to address SDOH-related barriers to hypertension management  |
|-----------|---|--|---|
| Actor(s)  | NCMs / PF   | NCMs / PF  | NCMs / PF   |
| Action(s) | <p><i>Patient-level</i><br/>Through individual actions:</p> <ol style="list-style-type: none"> <li>1. Centralized Nurses initiate treatment and administer RBPMs</li> <li>2. Patient takes BP remotely</li> <li>3. BP readings are wirelessly transferred to patient EHR</li> <li>4. NCM continually monitors patient BP</li> <li>5. Patient self-monitors BP</li> </ol> <p><i>Nurse-level</i><br/>PFs provide nurse trainings on the intervention:</p> <ol style="list-style-type: none"> <li>1. Accurate BP measurements</li> <li>2. American Heart Association guidelines for best practices in remote BP monitoring</li> <li>3. Team-based communication</li> </ol> | <p><i>Patient-level</i><br/>Through individual phone and 1-on-1 interactions:</p> <ol style="list-style-type: none"> <li>1. Behavioral counseling sessions (address barriers to medication adherence and adoption of recommended lifestyle behaviors)</li> <li>2. Medical regimen recommendations in partnership with pharmacist (adapt patient medication regimen per RBPM readings and counseling sessions)</li> </ol> <p><i>Nurse-level</i><br/>PFs provide nurse trainings on the intervention:</p> <ol style="list-style-type: none"> <li>1. Health coaching and self-management support for HTN</li> <li>2. Motivational interviewing</li> </ol> | <p><i>Patient-level</i></p> <ol style="list-style-type: none"> <li>1. <u>Addressing Technology Barriers</u>: Troubleshooting technology-related barriers to remote BP monitoring, including providing technical assistance activating patient portal and with RBPM set up</li> <li>2. <u>Screen for SDOH and provide culturally and contextually tailored health information</u>: NCM-led goal-setting is reinforced with the provision of culturally and contextually tailored health education materials/information based on screening results</li> <li>3. <u>Community Referral</u>: CHWs will assist NCMs by following up with patients after sessions to support activities that address patients' social needs and provide community referral. Specifically, during phone calls and 1v1 visits CHWs will facilitate linkages between the clinics and the community using EHR-embedded tools</li> </ol> <p><i>Nurse-level</i><br/>PFs provide nurse trainings on the intervention:</p> <ol style="list-style-type: none"> <li>1. Screening for SDOH using the EHR Tool</li> <li>2. Best practices for patient communication about SDOH</li> <li>3. Best practices for community referrals and review of the resource guide</li> </ol> |

|                                  |   |   |  |
|----------------------------------|---|---|--|
| Target(s) of the action          | Patients / Centralized Nurses   | Patients / Centralized Nurses   | Patients / Centralized Nurses  |
| Temporality                      | At month 0  | At month 0  | At month 0   |
| Dose                             | <p>Patient readings: Twice per day (morning and late afternoon), four to five days a week, every week, for at least 16 days of data readings per month</p> <p>NCM review: Ongoing/reach out to patients when values suggest a very high or low BP reading</p> | <p>Counseling: Once per month</p> <p>Medical regimen recommendations: As needed per patient (ongoing)</p> | <p>Addressing Technology Barriers: Quarterly or with a change in patient risk profile</p> <p>Health information: Quarterly or with a change in patient risk profile</p> <p>Community referrals: Quarterly or with a change in patient risk profile</p> |
| Intervention outcome(s) affected | <p>BP control</p> <p>Sustainability</p>   | <p>BP control</p> <p>Sustainability</p>   | <p>BP control</p> <p>Sustainability</p>  |
| Justification                    | Evidence that RBPM leads to improved BP control <sup>10,66-68,75,76</sup>   | Evidence that NCM leads to improved BP control <sup>79</sup>  | Evidence that SDOH support leads to improved BP control <sup>30,31,40,41</sup>   |

**Table 2: Implementation Strategies based on Expert Recommendations for Implementing Change (ERIC) Framework**

|                  |   |  |  |   |
|------------------|---|--|--|---|
| <b>Domain</b>    | <b>Strategy:</b><br><b>Facilitation: A process of interactive problem solving and support that occurs in a context of a recognized need for improvement and a supportive interpersonal relationship</b>   | <b>Strategy:</b><br><b>Prepare patients/ consumers to be active participants: Prepare patients/consumers to be active in their care, to ask questions, and specifically to inquire about care guidelines, the evidence behind clinical decisions, or about available evidence-supported treatments</b>   | <b>Strategy:</b><br><b>Conduct educational meetings: Hold meetings targeted toward different stakeholder groups (e.g., providers, administrators, other organizational stakeholders, and community, patient/consumer, and family stakeholders) to teach them about the clinical innovation</b>   | <b>Strategy:</b><br><b>Support patients/consumers to enhance uptake and adherence: Develop strategies with patients to encourage and problem solve around adherence</b>   |
| <b>Actor(s)</b>  | Practice Facilitators   | CHWs   | CHWs   | CHWs  |
| <b>Action(s)</b> | <ol style="list-style-type: none"> <li>1. Site visits (i.e. workflow assessments) to help set performance goals and coaching on how to implement PACE-related practice changes</li> <li>2. Training staff on QI strategies for practice redesign</li> <li>3. Consulting on methods to identify and track patients via EHR</li> <li>4. Assisting teams in testing system changes and interpreting outcomes based on the PDSA cycle</li> <li>5. Audit and feedback of chart review data</li> <li>6. Creating learning collaboratives across sites to share best practices for integrating PACE</li> <li>7. Reinforcing NCM counseling and use of EHR templates to provide patients support in community settings</li> </ol> | <p>Through 1-on-1 or group-based interactions (remotely or in-person) with patients, CHWs will support each of the components of PACE:</p> <ol style="list-style-type: none"> <li>1. NCM – preparing for upcoming primary care visits</li> <li>2. RBPM – Troubleshooting technology-related barriers to remote BP monitoring</li> </ol> <p>SDOH – eg. discussions and strategies to enhance self-efficacy and healthcare efficacy in clinical encounters with primary care team include engaging patients in coaching sessions that prepare them to understand and ask physicians about their blood pressure readings; ask questions about medication changes); CHWs also help patients to address unmet</p> | <p>Through 1-on-1 or group-based interactions (remotely or in-person) with patients, CHWs will support each of the components of PACE:</p> <ol style="list-style-type: none"> <li>1. NCM – CHWs support the adoption of NCM health educational and counseling by addressing barriers / providing strategies to improve adherence to counseling recommendations related to patient’s lived experiences (eg sharing resources on where to find healthy foods in their neighborhoods to support NCM healthy eating counseling)</li> <li>2. RBPM – eg. emphasizing importance of continual monitoring to support adoption and fidelity; educating patients on why RBPM is effective</li> </ol> | <p>Through 1-on-1 or group-based interactions (remotely or in-person) with patients, CHWs will support each of the components of PACE:</p> <ol style="list-style-type: none"> <li>1. NCM – CHWs will support patients to enhance uptake and adherence to NCM counseling/health education recommendations</li> <li>2. RBPM – eg. trouble shooting technology-related barriers to RBPM and emphasizing importance of continual monitoring</li> <li>3. SDOH – CHWs will support patients to “connect the dots” once referral information is shared by NCM; this may include addressing literacy issues, accessing referral locations, navigating to referral locations,</li> </ol> |

|   |  |  |  |  |
|---|--|--|--|--|
|   |  | social needs such as transportation and other logistical barriers to care; so they feel self-efficacious to attend their healthcare visits | 3. SDOH – eg. discussions and strategies for health behavior change that are tied to context of lived experience   | completing applications, and facilitating direct contact with referral locations in target communities   |
| <b>Target(s) of the action</b>            | Centralized Nurses   | Patients   | Patients   | Patients   |
| <b>Temporality</b>                        | At month 0   | At month 0, CHW will contact patient   | Months 1-12  | Months 1-12  |
| <b>Dose</b>                               | Ongoing; weekly site visits for 6 months; monthly for 6 months   | Frequency: Minimum of 1x and maximum of 15x 1-on-1 interactions or group sessions<br>Duration: Minimum 40 min to 1.5 hours each time       | Frequency: Minimum of 1x and maximum of 15x 1-on-1 interactions or group sessions<br>Duration: Minimum 40 min to 1.5 hours each time   | Frequency: Minimum of 1x and maximum of 15x 1-on-1 interactions or group sessions<br>Duration: Minimum 40 min to 1.5 hours each time   |
| <b>Implementation outcome(s) affected</b> | Centralized Nurse: Adoption of EHR RBPM and SDOH Smartsets<br>Level of implementation fidelity of PACE intervention (adherence, dose, quality, responsiveness)<br>Sustainability of the intervention | Adoption of the NCM-RBPM-SDOH intervention (PACE)<br>Fidelity<br><br>Sustainability of the intervention                                    | Adoption of the NCM-RBPM-SDOH intervention (PACE).<br>Fidelity<br><br>Sustainability of the intervention   | Adoption of the NCM-RBPM-SDOH intervention (PACE)<br>Fidelity<br><br>Sustainability of the intervention  |
| <b>Justification</b>                      | Nurse-led interventions that use structured algorithms and telephone outreach are effective in reducing BP in patients with HTN <sup>91</sup>  | Evidence of CHWs helping to bridge the digital divide and improve digital literacy <sup>92</sup>   | Coaching as an implementation strategy is effective for BP control <sup>93</sup><br>CHWs demonstrated in literature to more effectively provide culturally and contextually appropriate coaching /education to improve behavior change as a result of lived experience with the community they serve | Coaching as an implementation strategy is effective for BP control <sup>93</sup><br>CHWs demonstrated in literature to more effectively provide culturally and contextually appropriate coaching /education to improve behavior change as a result of lived experience with the community they serve |

**Table 3: Implementation & Intervention Activity Protocol**

| <b>Implementation Strategy</b>   | <b>Actions</b>   | <b>Activities</b>   | <b>Audience</b>   | <b>Estimated Length/Temporality</b>  | <b>Major Content</b>   |
|--|--|---|---|--|--|
| <p><b>Facilitation:</b> A process of interactive problem solving and support that occurs in a context of a recognized need for improvement and a supportive interpersonal relationship</p> <p>Actor: Practice facilitators</p> | Site visits (i.e. workflow assessments) to help set performance goals and coaching on how to implement PACE-related practice changes | <ol style="list-style-type: none"> <li><b>CFIR Guided Observational Tool (In-Person/Virtual)</b></li> <li><b>Workflow Analysis Interview Guide (In-Person/Virtual)</b></li> <li><b>PACE Key Drivers Hands-on Training (FOCUS training)</b></li> </ol> | MAs, RNs, NCMs  | <ol style="list-style-type: none"> <li>15 min</li> <li>15 min</li> <li>30 min</li> </ol> <p><b>Timeline:</b> 1-2 months before go-live date; ongoing</p> | <ul style="list-style-type: none"> <li>Reviewing practice assessment findings and developing practice specific strategies to implementation</li> <li>Understanding the system-level factors that can affect implementation effectiveness</li> <li>Assess practice readiness to implement PACE and tailor program to practice needs</li> <li>Learn how PACE can enhance hypertension care in primary care</li> <li>Review steps to identify and track/refer patients via EHR to PACE program</li> </ul> |
|  | Training staff on QI strategies for practice redesign  | <b>Quality Improvement (FOCUS training)</b>   | PACE QI internal team (i.e.: Nurse managers, MAs, RNs) at the practices | <p>20 min</p> <p><b>Timeline:</b> Assign 1 week after the go-live date and allow 1 week to complete module</p>   | <ul style="list-style-type: none"> <li>Review the key principles and model of quality improvement</li> </ul>   |
|  | Consulting on methods to identify and track patients via EHR   | <ol style="list-style-type: none"> <li><b>PACE Key Drivers Hands-on Training (FOCUS training)</b></li> <li><b>SBX Epic Workflows (In-service virtual or in-person)</b></li> </ol>   | Front desk staff, MAs, MDs, RNs & NCMs                                  | <p>30-45 min</p> <p><b>Timeline:</b> 2 weeks before the go-live date</p>   | <ul style="list-style-type: none"> <li>Learn how PACE can enhance hypertension care in primary care</li> <li>Review steps to identify and track/refer patients via EHR</li> <li>Training on EPIC templates and reinforcing accurate use of workflows (via morning huddles, spot checking, etc)</li> </ul>  |



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|  | Assisting teams in testing system changes and interpreting outcomes based on the PDSA cycle  | <b>PDSA Worksheet &amp; Testing for change exercise (In-Person/Virtual)</b>                             | PACE QI internal team at the practices | 20 min<br><b>Timeline:</b> Assign 1 week after go-live date and allow 1 week to complete module | <ul style="list-style-type: none"> <li>Learn how to use PDSA cycles for process improvement</li> </ul>   |
|  | Audit and feedback of chart review data  | <b>Chart Review Protocol (In-Person/Virtual)</b>  | MAs, RNs, & NCMs                       | 20 min<br><b>Timeline:</b> Ongoing after go-live date (bi-weekly)                               | <ul style="list-style-type: none"> <li>Review identified gaps in the workflow from PF treatment fidelity chart reviews and reinforce workflows/protocols</li> </ul>  |
|  | Creating learning collaboratives across sites to share best practices for integrating PACE   | <b>Virtual meetings with site champions to discuss challenges and share best practices</b>              | Champion Team                          | <b>Timeline:</b> Quarterly  | <ul style="list-style-type: none"> <li>Attending quarterly provider meetings, lunch and learns for centralized nurses, meeting key leadership, etc to establish learning collaborative and enhance PACE</li> </ul>   |
|  | Reinforcing NCM counseling and use of EHR templates to provide patients support in community settings  | <b>RN/NCM Role Tipsheet</b>   | RNs, NCMs                              | 15 min<br><b>Timeline:</b> Ongoing after go-live date (as needed)                               | <ul style="list-style-type: none"> <li>Review EHR templates to help manage care</li> </ul>   |
| <b>Prepare patients/consumers to be active participants:</b><br>Prepare patients/consumers to be active in their care, to ask questions, and specifically to inquire about care guidelines, the evidence behind clinical decisions, or about available evidence-supported treatments<br><br>Actor: CHW | <b>Through 1-on-1 or group-based interactions (remotely or in-person) with patients, CHWs will support each of the components of PACE:</b><br><br>NCM – preparing for upcoming primary care visits | <b>1. Monthly virtual group educational sessions.</b><br><br><b>2. Bi-weekly 1-on-1 phone follow-up</b> | Patients                               | 1. 1h per month for 6 months<br>2. 30-45 min bi-weekly, based on need                           | <ul style="list-style-type: none"> <li>Reinforce NCM intervention by supporting patients in preparing for upcoming visits (eg. creating list of questions, asking physicians about blood pressure readings; asking questions about medication changes etc.) and accompanying patients to appointments as needed</li> </ul> |
|  | RBPM – Troubleshooting technology-related barriers to remote BP monitoring   | <b>2. Review RBPM set up guide</b>  | Patients                               | as needed   | <ul style="list-style-type: none"> <li>Review steps on how to set up RBPM and corresponding applications</li> </ul>  |
|  | SDOH – eg. discussions and strategies to enhance self-efficacy and healthcare efficacy in clinical encounters with primary care team (eg   | <b>1. Bi-weekly 1-on-1 phone follow-up: Referrals Guide (CHW form)</b>                                  | Patients                               | 1. 30-45 min bi-weekly, as needed   | <ul style="list-style-type: none"> <li>Facilitate referrals to address SDOH needs identified during nurse screening</li> </ul>   |

|  |  |   |          |   |   |
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|  | understanding and asking physicians about blood pressure readings; asking questions about medication changes); addressing transportation and other logistical barriers to care   | <b>Goal Setting (CHW form)</b>  |          |   |   |
| <b>Conduct educational meetings:</b> Hold meetings targeted toward different stakeholder groups (e.g., providers, administrators, other organizational stakeholders, and community, patient/consumer, and family stakeholders) to teach them about the clinical innovation<br><br>Actor: CHW | <b>Through 1-on-1 or group-based interactions (remotely or in-person) with patients, CHWs will support each of the components of PACE:</b><br>NCM – CHWs support the adoption of NCM health educational and counseling by addressing barriers / providing strategies to improve adherence to counseling recommendations related to patient’s lived experiences (eg sharing resources on where to find healthy foods in their neighborhoods to support NCM healthy eating counseling) | <b>1. Monthly virtual group educational sessions</b><br><b>2. Bi-weekly 1-on-1 phone follow-up: Referrals Guide (CHW form) Goal Setting Training (CHW form)</b> | Patients | 1. 1h per month for 6 months<br>2. 30-45 min bi-weekly, as needed | <ul style="list-style-type: none"> <li>Facilitate referrals to address SDOH needs identified during nurse screening</li> <li>Lead group and individual discussions and share relevant resources to support health behaviors, eg. where to find healthy foods in the neighborhood</li> <li>Use SMART goals and motivational interviewing to support health behavior change and medication adherence</li> </ul> |
|  | RBPM – eg. emphasizing importance of continual monitoring to support adoption and fidelity; educating patients on why RBPM is effective  | <b>1. Review RBPM set up guide</b><br><b>2. Bi-weekly 1-on-1 phone follow-up</b>  | Patients | 1. 30 min as needed<br>2. 30-45 min bi-weekly, as needed          | <ul style="list-style-type: none"> <li>Use motivational interviewing skills to enhance behavior change and medication adherence</li> <li>Identify barriers to support continual adoption</li> </ul>   |
|  | SDOH – eg. discussions and strategies for health behavior  | <b>1. Monthly virtual group</b>   | Patients | 1. 60m<br>2. 2 day training                                       | <ul style="list-style-type: none"> <li>Review motivational interviewing skills to enhance behavior change</li> </ul>  |

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|  | change that are tied to context of lived experience   | <b>educational sessions</b><br><b>2. Bi-Weekly 1-on-1 phone follow-up Referrals Guide (CHW Form) Goal Setting (CHW form)</b>   |          |   | <ul style="list-style-type: none"> <li>Review SMART goal setting skills</li> </ul>  |
| <b>Support patients/consumers to enhance uptake and adherence:</b><br>Develop strategies with patients to encourage and problem solve around adherence<br><br>Actor: CHW | <b>Through 1-on-1 or group-based interactions (remotely or in-person) with patients, CHWs will support each of the components of PACE:</b><br><br>NCM – CHWs will support patients to enhance uptake and adherence to NCM counseling/health education recommendations | <b>1. Monthly Deliver virtual group educational sessions</b><br><b>2. Bi-weekly 1-on-1 phone follow-up:</b><br><b>3. Referrals Guide (CHW Form), Goal Setting (CHW form)</b> | Patients | 1. 1h per month for 6 months<br>2. 30-45 min bi-weekly, as needed | <ul style="list-style-type: none"> <li>Lead group and individual discussions and share relevant resources to support health behaviors</li> <li>Use SMART goals and motivational interviewing to support health behavior change and medication adherence</li> </ul>                                |
|  | RBPM – eg. trouble shooting technology-related barriers to RBPM and emphasizing importance of continual monitoring  | <b>Review RBPM Set up Guide</b>  | Patients | 30min, as needed  | <ul style="list-style-type: none"> <li>Identify barriers to support continual adoption</li> <li>Review steps on how to set up RBPM and corresponding applications</li> </ul>  |
|  | SDOH – CHWs will support patients to “connect the dots” once referral information is shared by NCM  | <b>1. Bi-weekly 1-on-1 phone follow-up: Referrals Guide (CHW form), Goal Setting (CHW form)</b>  | Patients | 1. 30-45 min bi-weekly, as needed                                 | <ul style="list-style-type: none"> <li>Facilitate conversations and assistance with addressing literacy issues, accessing referral locations, navigating to referral locations, completing applications, and facilitating direct contact with referral locations in target communities</li> </ul> |
|  |   |  |          |   |   |

| Intervention Component  | Actions   | Activities   | Audience       | Estimated Length  | Major Content  |
|---|---|--|----------------|---|--|
| <b>Conduct Remote Blood Pressure Monitoring (RBPM):</b><br>Use of valid automated remote blood pressure monitor devices (OMRON) with telemonitoring capability to remotely monitor patient BP through wireless transfer of BP readings. | <b><i>Nurse-level</i></b><br><b>PFs provide nurse trainings on the intervention:</b><br><br>Accurate BP measurements<br><br><b><i>Patient-level</i></b><br><b>Through individual actions:</b> <ol style="list-style-type: none"> <li>Centralized Nurses initiate treatment and administer RBPMs</li> <li>Patient takes BP remotely</li> <li>BP readings are wirelessly transferred to patient EHR</li> <li>NCM continually monitors patient BP</li> <li>Patient self-monitors BP</li> </ol> | <ol style="list-style-type: none"> <li><b>Accurate Blood Pressure Measurement (FOCUS training)</b></li> <li><b>Accurate Blood Pressure Measurement Competency Checklist</b></li> <li><b>Self-Measured Blood Pressure Training (FOCUS training)</b></li> <li><b>Self-Measured Blood Pressure Tip Sheet (Patient)</b></li> </ol> | MAs, RNs, NCMs | 15 min<br><br><b>Timeline:</b> Assign 3 weeks before the go-live date and allow 1 week to complete module | <ul style="list-style-type: none"> <li>Discuss the factors that influence blood pressure (BP) measurements</li> <li>Review the 3 key steps to office blood pressure measurement</li> <li>Review protocols for home blood pressure monitoring</li> <li>Review competency tool and nurse manager will observe staff with 3 patients and complete competency monthly for first 6 months and then bi-annually</li> </ul> |
|   | <b><i>Nurse-level</i></b><br>American Heart Association guidelines for best practices in remote BP monitoring   | <b>AHA Guidelines</b>  | RNs & NCMs     | 15 min<br><br><b>Timeline:</b> Assign 3 weeks before the go-live date and allow 1 week to complete module | <ul style="list-style-type: none"> <li>Review benefits of implementing remote blood pressure monitoring programs</li> <li>Review protocol for remote blood pressure monitoring</li> <li>Review competency tool and nurse manager will observe staff with 3 patients and complete competency monthly for first 6 months and then bi-annually</li> </ul>   |
|   | <b><i>Nurse-level</i></b><br>Team-based communication   | <b>Team-based Care to Enhance Hypertension Care (FOCUS training)</b>   | MAs, RNs, NCMs | 15 min<br><br><b>Timeline:</b> Assign 2 weeks after the go-live date and                                  | <ul style="list-style-type: none"> <li>Review the essentials of team-based care</li> </ul>   |

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|  |  |  |  | allow 1 week to complete module  | <ul style="list-style-type: none"> <li>Discuss how team-based care will be used during the PACE implementation</li> </ul>  |
| <b>Intensive Nurse Case Management (NCM):</b><br>NCMs conduct behavioral counseling and medical regimen recommendations, based on patient RBP readings, with patients enrolled in the intervention | <p><i>Nurse-level</i><br/> <b>PFs provide nurse trainings on the intervention:</b></p> <p>Health coaching and self-management support for HTN</p> <p><i>Patient-level</i><br/> <b>Through individual phone and 1-on-1 interactions:</b></p> <ol style="list-style-type: none"> <li>Behavioral counseling sessions (address barriers to medication adherence and adoption of recommended lifestyle behaviors)</li> <li>Medical regimen recommendations in partnership with Nurse Practitioner (adapt patient medication regimen per RBPM readings and counseling sessions)</li> </ol> | <ol style="list-style-type: none"> <li><b>Health Coaching (FOCUS training)</b></li> <li><b>The PACE Adherence Health Counseling Model</b></li> </ol> | <ol style="list-style-type: none"> <li>RNs &amp; NCMs</li> <li>RNs &amp; NCMs</li> <li>RNs &amp; NCMs</li> </ol> | <ol style="list-style-type: none"> <li>Site dependent: 30 min to 4 hours</li> <li>15 min</li> <li>20 min</li> </ol> <p><b>Timeline:</b> Assign 1 week after the go-live date and allow 1 week to complete module</p> | <ol style="list-style-type: none"> <li><b>Health Coaching:</b> <ol style="list-style-type: none"> <li>Provide an overview of Health Coaching in the context of medication adherence</li> <li>Provide an overview of Health Coaching strategies for supportive behavior change</li> </ol> </li> <li><b>Adherence Health Counseling:</b> <ol style="list-style-type: none"> <li>Review the components of the PACE Medication Adherence Counseling Model</li> <li>Discuss the steps involved in implementing the PACE Adherence Counseling Model in your practice</li> <li>Practice using the PACE Structure Tool in the EMR</li> </ol> </li> </ol> |
|  | <p><i>Nurse-level</i><br/> Motivational interviewing</p>   | Health Coaching/MI Training Materials  | RNs & NCMs   | Site dependent: 30 min to 4 hours  | <p><b>Health Coaching:</b></p> <ol style="list-style-type: none"> <li>Provide an overview of Health Coaching in the context of medication adherence</li> <li>Provide an overview of Health Coaching strategies (i.e. motivational interviewing) for</li> </ol>   |

|  |   |              |      |  |   |
|--|---|--------------|------|--|---|
|  |   |              |      |  | supportive behavior change  |
| <b>Social determinants of health [SDOH]</b><br><b>support:</b> Patient will receive culturally/contextually tailored, patient-centered health information, technology support, and community referrals to address SDOH-related barriers to hypertension management | <i>Nurse-level</i><br><b>PFs provide nurse trainings on the intervention:</b><br><br>Screening for SDOH using the EHR Tool<br><br><i>Patient-level</i><br><br>1. <u>Addressing Technology Barriers:</u> Troubleshooting technology-related barriers to remote BP monitoring, including providing technical assistance activating patient portal and with RBPM set up<br><br>2. <u>Screen for SDOH and provide culturally and contextually tailored health information:</u> NCM-led goal-setting is reinforced with the provision of culturally and contextually tailored health education materials/information based on screening results<br><br>3. <u>Community Referral:</u> CHWs will assist NCMs by following up with patients after sessions to support activities that address | SDOH Toolkit | NCMs |  | <ul style="list-style-type: none"><li>Review SDOH needs</li></ul> |

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|--|---|----------------|------|--|---|
|  | patients' social needs and provide community referral. Specifically, during phone calls and 1v1 visits CHWs will facilitate linkages between the clinics and the community using EHR-embedded tools |                |      |  |   |
|  | Best practices for patient communication about SDOH   | SDOH Toolkit   | NCMs |  | <ul style="list-style-type: none"><li>• Review SDOH toolkits and training guide</li></ul> |
|  | Best practices for community referrals and review of the resource guide   | Resource Guide | NCMs |  | <ul style="list-style-type: none"><li>• Review resource guide</li></ul>                   |

# Appendix

## Appendix 1

### Nurse Case Manager (NCM)/Pharmacist Workflow Tip-Sheet

(June 6, 2025) This information is proprietary and should not be reproduced or redistributed.

#### Need to Know!

**The FGP Hypertension Initiative is not a free program:** Although all patients receive a **free BP monitor**, the clinical visits at enrollment and subsequent clinical visits with care coordination team **are billable**.

**NCM Secure Chat Group:** NCM Chat Group  
**NCM In-Basket Staff Message:** Care Coordination Team (12865)

| Team                            | Secure Chat Group                  | In-Basket Staff Message Group                      |
|---------------------------------|------------------------------------|--|
| Nurse Case Managers (NCMs)      | NCM Chat Group                     | Care Coordination Team (12865)                     |
| Pharmacists                     | AMB Clinical Pharmacist Chat Group | NYU Care Coord Pharmacy Referrals- Pharmacist Pool |
| Community Health Workers (CHWs) | CHW Epic Manager Chat Group        | CHW Epic Manager                                   |

#### NCM Workflows (Data Reviews & Communications)

- Review secure chat messages from pharmacists, CHWs, and clinical staff (i.e. providers, nurses, etc)
  - if there is a need for in-basket messaging, this can be utilized as well
- Routing patient charts to pharmacists for patients not meeting goal and/or requiring further consultation
  - if there is a need for in-basket messaging, this can be utilized as well
- Reach out to patients via phone and MyChart messaging



- Standard workflow: Reach out to patients once a month (1<sup>st</sup> week of the month) for behavioral health counseling (SDOH screener completed once a year).
- If you are unable to reach the patient:
  - Standard workflow: Attempt to reach the patient 3 times (once a week), and send a MyChart message each time you are unable to reach the patient. If you are unable to reach the patient after these attempts, send a secure chat to the CHW team to assist. Note: CHW contact does NOT meet requirement for one call per month.
- **Note:** If at any point patient has symptoms of heart attack refer to the ER.

| Reasons Pharmacist/CHW Team may reach out                        | Scenarios  | Action   |
|--|--|--|
| Closing the loop on patients that were NOT submitting data       | Patient enrolled in the program but NEVER uploaded readings  | CHW will send a secure chat to the NCM to close the loop if they reach the patient and/or do not reach the patient |
|  | Patient enrolled in the program, started uploading readings, but at some point stopped uploading readings                      |  |
| Patient wants to disenroll from the program                      | Patients that agree to the program, but for some reason no longer wants to participate.  | Pharmacist/CHW will send a secure chat to the NCM to disenroll the patient   |
| Closing the loop on patients with SDOH needs/technology barriers | Patients with SDOH needs or technology barriers that were referred to the CHW for assistance                                   | CHW will send a secure chat to the NCM to close the loop   |
| Closing the loop on patients not meeting goals                   | Patients with persistently uncontrolled BP and no recent medication change that were referred to the pharmacist for assistance | Pharmacist will send a secure chat or in-basket message to close the loop  |

**STEP 1: Run the *RPM- MyChart Home Monitoring- FGP Hypertension Initiative- Data Reviews* report**  
 [NOTE: Listed on the CIN Health Plan dashboard]

E

Hyperspace - NYU CARE COORDINATION - POC Environment - CHRISTINE T.

Epic

Remind Me

In Basket

Pt Station

Outreach Encounter

Registration

Care Team

📄

☰

💬

CIN Health Plan ▾

Post Discharge Call List

NYU LH Post-Discharge IP

NYU LH Post-Discharge OP

CJR OP Patients

Today Discharges

COVID Post Infusion Outreach

CIN COVID Infusion Follow-Up Report

CIN COVID Infusion Summary Report

FGP Hypertension Initiative

RPM - MyChart Home Monitoring - FGP Hypertension Initiative - Data Reviews

RPM - MyChart Home Monitoring - FGP Hypertension Initiative - Operational Project Team Analytics

RPM - MyChart Home Monitoring - FGP Hypertension Initiative - CHWs

Hyperpace - MYC CARE COORDINATION - POC Environment - CHRISTINE.T.

My Open Visits 2 Home Care Pending Set Up 8 My Incomplete Notes 52

Reports

RPM - MyChart Home Monitoring - FGP Hypertension Initiative - Data Reviews [892972] as of Mon 12/18/2023 12:15 PM

MYC Home Monitoring Enc Chart Care Teams Patient-Entered Floowheet Manager

Detail List Explore Episodes by Status

Filter

RPM - FGP Hypertension Care Team

| RPM - FGP Hypertension Care Team | Patient Name                              | MRN      | Episode ID | Episode Date | Episode Creator         | Creation Dept. for FGP Hypertension Initiative Episode | SDOH Completed Date | Last MYC Home Monitoring Enc | User for Last MYC Home Monitoring Enc | Last Date Phone Call Marked as Yes | RPM Minutes This Month | Latest Reading Instant | Last MyChart BP Systolic Entered | Last MyChart BP Diastolic Entered | Last Home HR | Patient BP Systolic Change Trend | Patient BP Systolic Change Value | Pt BP Diastolic Change Trend | Patient BP Diastolic Change Value | PEP Total Readings Counter |
|----------------------------------|---|----------|------------|--------------|-------------------------|--|---------------------|------------------------------|---------------------------------------|------------------------------------|------------------------|------------------------|----------------------------------|-----------------------------------|--------------|----------------------------------|----------------------------------|------------------------------|-----------------------------------|----------------------------|
| Christine Trulano                | TelemedicineTestingTwelve, Amy Twelve     | 52076481 | 53775      | 09/23/2023   | Amy Stein               | INTERNAL MEDICINE 41ST                                 | 9/28/2023           | 10/26/2023                   | Amy Stein                             | 10/26/2023                         | 0                      | 10/26/2023 02:55:00 PM | 300                              | 200                               | 75           | ↑                                | 200                              | ↑                            | 145                               | 6                          |
| Amy Stein                        | TelemedicineTestingThree, Amy Three       | 52071152 | 53961      | 09/27/2023   | Amy Stein               | INTERNAL MEDICINE 41ST                                 |                     | 11/10/2023                   | Amy Stein                             | 11/10/2023                         | 0                      |                        | 180                              | 100                               | 75           | ↑                                | 5                                | ↑                            | 10                                |                            |
|                                  | TelemedicineTestingFive, Amy Five         | 52071154 | 53994      | 09/28/2023   | Provider06 EpicCare, MD | FGP ACWIS INT MED                                      |                     | 10/02/2023                   | Amy Stein                             | 0                                  | 09/28/2023 11:24:00 AM | 264                    | 99                               | 76                                | ↓            | -6                               | ↑                                | 14                           | 2                                 |                            |
|                                  | TelemedicineTestingFour, Amy Four         | 52071153 | 54016      | 09/28/2023   | Paulette Y Sadtler, MD  | FGP ACWIS INT MED                                      |                     | 09/28/2023                   | Lisa Anzoli                           | 0                                  | 40                     | 40                     |                                  |                                   |              | ↓                                | -110                             | ↓                            | -110                              |                            |
|                                  | test, Chris                               | 52077733 | 54213      | 10/03/2023   | Christina Wong          | FGP ACWIS INT MED                                      |                     |                              |                                       | 0                                  |                        |                        |                                  |                                   |              |                                  |                                  |                              |                                   |                            |
|                                  |   |          |            |              |                         | FGP ACWIS INT MED                                      |                     |                              |                                       |                                    |                        |                        |                                  |                                   |              |                                  |                                  |                              |                                   |                            |
|                                  |   |          |            |              |                         | FGP ACWIS INT MED                                      |                     |                              |                                       |                                    |                        |                        |                                  |                                   |              |                                  |                                  |                              |                                   |                            |
| Lisa Anzoli, Christine Trulano   | TelemedicineTestingfourteen, Amy Fourteen | 52076787 | 56173      | 11/10/2023   | Amy Stein               | FGP LAURELTON - IM                                     |                     | 12/12/2023                   | Amy Stein                             | 0                                  |                        |                        | 199                              | 19                                | 77           | ↑                                | 80                               | ↓                            | -57                               |                            |
| Christine Trulano                | Abdulganyone, Abdulganyone                | 52078956 | 56422      | 11/15/2023   | Paulette Y Sadtler, MD  |  | 11/16/2023          | 11/16/2023                   | Christine Trulano                     | 11/16/2023                         | 0                      | 11/15/2023 04:17:00 PM | 210                              | 85                                | 77           | ↑                                | 93                               | ↑                            | 9                                 | 2                          |

Health Trends

Last 6 months

Patient-Entered Blood Pressure

180 / 100 mmHg - Latest (7/10) - 4 data days

Heart Rate (Patient-Entered)

75 Latest (7/10) - 4 data days

Recent Vitals (NOT Patient-Entered)

|       | 11/7/2023 | 12/16/2023 |
|-------|-----------|------------|
| BP    | 08/4      | 13/19      |
| Pulse | 120/80    | 180/60 ↑   |
|       |           | 75         |

Remote Patient Monitoring

|                                | 3/29/2023 | 7/1/2023 | 7/5/2023 | 7/6/2023 | 7/10/2023 | 11/7/2023 |
|--------------------------------|-----------|----------|----------|----------|-----------|-----------|
|                                | 12:00     | 12:00    | 12:00    | 12:07    | 12:07     | 08:24     |
| RPM Patient-Entered Values     |           |          |          |          |           |           |
| Systolic BP (Patient-Entered)  | 170 ↑     | 180      | 179      | 175      | 180       |           |
| Diastolic BP (Patient-Entered) | 100       | 99       | 95       | 90       | 100       |           |
| Heart Rate (Patient-Entered)   | 100       | 100      | 85       | 90       | 75        |           |
| Vitals                         |           |          |          |          |           |           |
| BP                             |           |          |          |          |           | 120/80    |
| Systolic BP (Patient-Entered)  | 170 ↑     | 180      | 179      | 175      | 180       |           |

MyChart Home Monitoring and Telephone Encounters for Past 60 Days

Last Update: 1 month ago

Reason: Stein, Amy

Specialty: Internal Medicine Closed

Outpatient Medications

lisinopril (PRINIVIL/ZESTRIL) 10 mg tablet

Take 1 tablet by mouth daily.

Last Edited: 1 month ago

Recent Outpatient Visits

None

7 results

## STEP 2. Data Review for patients submitting BP Values

- Filter the report to only show patients with:
  - Latest reading instant = From W-1 to T (recorded a reading this week)
- Click on the 'Last MYC Home Monitoring Enc' column to sort by the above

RPM - MyChart Home Monitoring - FGP Hypertension Initiative - Data Reviews [892972] as of Mon 12/18/2023 12:15 PM

MYC Home Monitoring Enc Chart Care Teams Patient-Entered Floowheet Manager

Detail List Explore Episodes by Status

Filter

Clear All Filters

Choose a column to filter

Latest Reading Instant

From: 12/11/2023 12:00 AM (W-1)

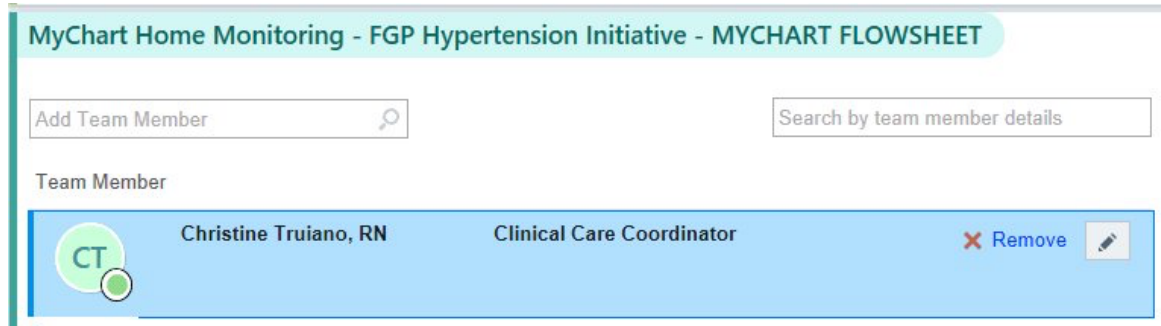
To: 12/18/2023 11:59 PM (T)

Add Another Filter

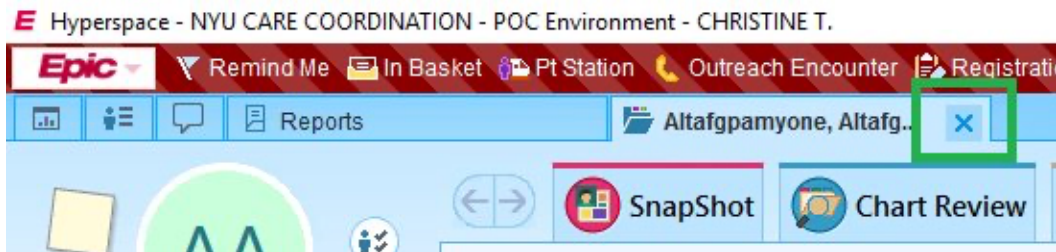
| RPM - FGP Hypertension Care Team | Patient Name                          | MRN      | Episode ID | Episode Date | Episode Creator | Creation Dept. for FGP Hypertension Initiative Episode | SDOH Completed Date | Last MYC Home Monitoring Enc | User for Last MYC Home Monitoring Enc | Last Date Phone Call Marked as Yes | RPM Minutes This Month | Latest Reading Instant | Last MyChart BP Systolic Entered | Last MyChart BP Diastolic Entered | Last Home HR | Patient BP Systolic Change Trend | Patient BP Systolic Change Value | Pt BP Diastolic Change Trend | Patient BP Diastolic Change Value | PEP Total Readings Counter |
|----------------------------------|---------------------------------------|----------|------------|--------------|-----------------|--|---------------------|------------------------------|---------------------------------------|------------------------------------|------------------------|------------------------|----------------------------------|-----------------------------------|--------------|----------------------------------|----------------------------------|------------------------------|-----------------------------------|----------------------------|
|                                  | TelemedicineTestingTwelve, Amy Twelve | 52076481 | 53775      | 09/23/2023   | Amy Stein       | INTERNAL MEDICINE 41ST                                 | 9/28/2023           | 10/26/2023                   | Amy Stein                             | 10/26/2023                         | 0                      | 12/16/2023 12:17:00 PM | 170                              | 99                                | 75           | ↓                                | -130                             | ↓                            | -101                              | 7                          |

- Find patients that have the 'Last MYC Home Monitoring Enc' that are blank or more than a week ago

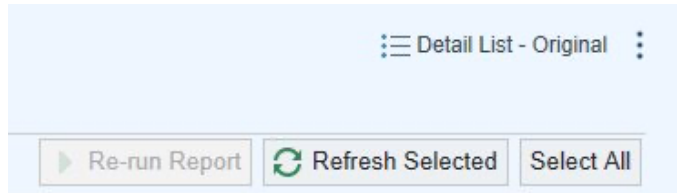
4. Select a patient with the 'RPM-FGP Hypertension Care Team' column blank or assigned to you
5. Click the Care Teams button from the toolbar
6. Add yourself as the Clinical Care Coordinator WITHIN the MyChart Home Monitoring- FGP Hypertension Initiative section to indicate that this is your patient to manage within this program



7. Return to the report by closing the patient's tab



8. With that patient still selected, click 'Refresh Selected.' You will see yourself in the RPM- FGP Hypertension Care Team column going forward

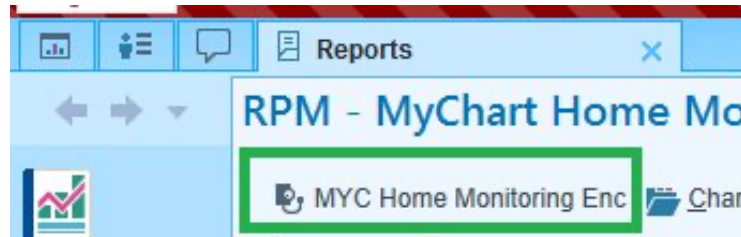


|                                     |   |
|-------------------------------------|---|
| RPM - FGP<br>Hypertension Care Team |   |
| Patient Name                        |   |
| Christine Truiano                   | TelemedicineTestingTwelve,<br>AmyTwelve |

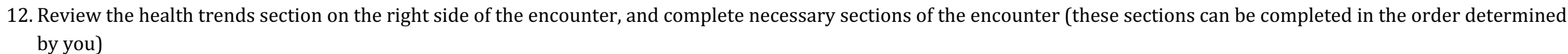
9. Look at the 'Last Date Phone Call Marked as Yes' column and the 'SDOH Completed Date' columns. These help indicate whether you should attempt to complete these today. A phone call is needed at least once per calendar month. SDOH should be completed every 12 months.

|   |                           |
|---|---------------------------|
| Last Date<br>Phone Call<br>Marked as<br>Yes | SDOH<br>Completed<br>Date |
|   | 5/5/2022                  |

10. With that patient still selected, click the MYC Home Monitoring Enc button from the toolbar to create an encounter to document in.



11. An encounter will open. All of your sections for documentation are on the left, all of your sections for review are on the right.



12. Review the health trends section on the right side of the encounter, and complete necessary sections of the encounter (these sections can be completed in the order determined by you)

## Health Trends

### Health Trends

Last 6 months

 **Patient-Entered Blood Pressure**  
210/85  
mmHg · Latest (11/15) · 1 data day

 **Heart Rate (Patient-Entered)**  
77  
Latest (11/15) · 1 data day

## Patient-Entered Flowsheets

### Remote Patient Monitoring

11/15/2023

#### RPM Patient Entered Values

Systolic BP (Patient-Entered)

210 !  
Larger than maximum ...

Diastolic BP (Patient-Entered)

85

Heart Rate (Patient-Entered)

77

#### Vitals

BP

150/95

Systolic BP (Patient-Entered)

210 !  
Larger than maximum ...

Diastolic BP (Patient-Entered)

85

Heart Rate (Patient-Entered)

77

#### Details



[Open Synopsis \(more data may exist\)](#)

## Episodes

Episodes of Care

[+ New Episode](#)

Show: ☐ Resolved ☐ Deleted

| Linked                   | Name  | Type              | Noted      | Resolved                                    |   |
|--------------------------|---|-------------------|------------|---|---|
| <input type="checkbox"/> | MyChart Home Monitoring - FGP Hypertension Initiative | MYCHART FLOWSHEET | 11/15/2023 | <input checked="" type="checkbox"/> Resolve |   |

## RPM Time This Month

## Past Contacts

## MyChart Message Review

[MyChart Message Review](#)

a. Document a visit diagnosis

The 'Visit Diagnoses' window features a pink header with a circular icon and the title 'Visit Diagnoses'. Below the header is a search bar with the placeholder text 'Search for new diagnosis', followed by a green '+ Add' button and a 'Common' dropdown menu. To the right is a button labeled 'View Drug-Disease Interactions' with a key icon. The main area contains a table with columns for a priority indicator (P), a description, ICD-10-CM code, ICD-9-CM code, and actions. The first row shows '1.' with a blue diamond icon, 'Primary hypertension' in pink text, ICD-10-CM code 'I10', ICD-9-CM code '401.9', a 'Change Dx' link with a triangle icon, and a trash icon. At the bottom left is a green 'Close' button with a checkmark icon. At the bottom right are 'Previous' and 'Next' buttons with up and down arrow icons respectively.

| P  |                        | ICD-10-CM | ICD-9-CM |             |   |
|----|------------------------|-----------|----------|-------------|---|
| 1. | ◆ Primary hypertension | I10       | 401.9    | △ Change Dx | 🗑 |

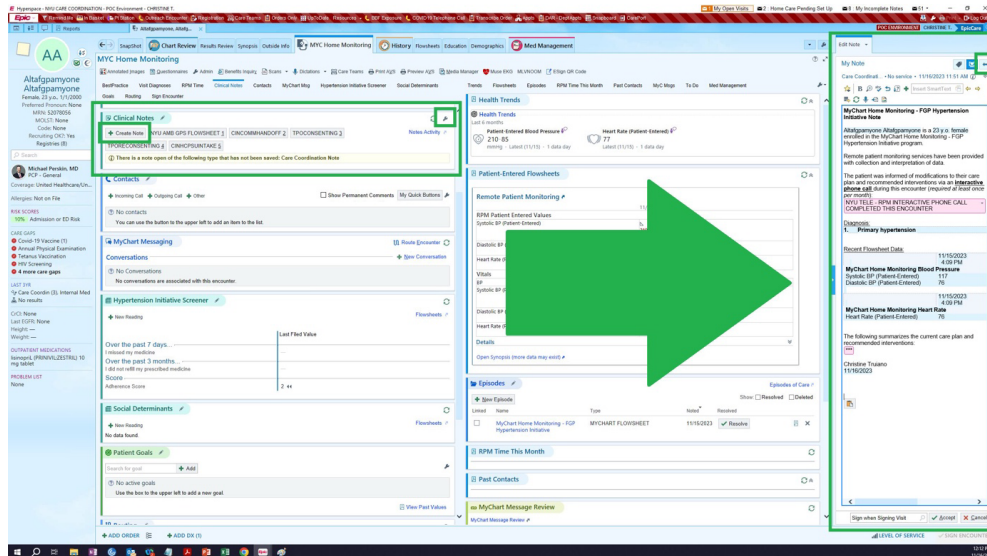
b. Document home monitoring minutes

- i. TIP: The RPM Time is what the system uses to automatically trigger the 99467 and 99458 charges at the end of each month. The minimum minutes for the total month must be 20 or more to qualify for a charge. You can see the number of minutes documented so far this month on the right-hand pane.

The 'RPM Time' window has a teal header with a document icon and the title 'RPM Time'. It contains three input fields: 'Home Monitoring Start Date:' with a calendar icon, 'Home Monitoring End Date (estimated):' with a calendar icon, and 'Home Monitoring Minutes (this encounter):' with a text input field containing the number '5'. At the bottom left are 'Close' (green button with checkmark) and 'Cancel' (red button with X) buttons. At the bottom right are 'Previous' and 'Next' buttons with up and down arrow icons respectively.

13. Start a note in the Clinical Notes Section (the notes will appear in the 3<sup>rd</sup> pane on the right)





#### 14. Use the .RPMFGPHTNNOTE Smartphrase

##### a. Tips:

- Use the Wrench to create your own custom speed button that pre-fills this Smartphrase
- Use the arrow button on the top-right inside the note itself to swap it between the right 3<sup>rd</sup> pane and inside the Clinical Notes section

#### 15. If a phone call still needs to be completed for this patient this month, and you want to call them now, use the Contacts section:

- Click Outgoing Call
- Select the patient's name
- See their phone numbers on file and actually place the call from a phone
- Document the outcome (no answer, left message, contact reached, etc.)
- Document a comment (optional)

**Contacts**

☒ Incoming Call ☒ **Outgoing Call** ☒ Other

☐ Show Permanent Comments **My Quick Buttons**

| Date/Time   | Type                         | Contact   | Phone/Fax |
|---|------------------------------|---|-----------|
| <b>Communication</b>  |                              |   |           |
| Type:   | Phone (Outgoing)             |   |           |
| Date/Time:  | 11/16/2023 12:16:46 PM EST   |   |           |
| <b>Contact Info</b>   |                              |   |           |
| Altafgpamyone, Altafgpamyone (Self)   |                              | Pharmacy  |           |
| Contact name:   | Altafgpamyone, Altafgpamyone | Add phone comment   |           |
| Relationship:   | Self                         |   |           |
| Phone number:   | 332-215-9258                 | 1: Home: 332-215-9258 3: Mobile: 332-215-9258                       |           |
| <b>Follow-Up</b>  |                              |   |           |
| Outcome:  | Contact Reached              | No Answer/Busy Left Message Not Available Missing or Invalid Number |           |
| Comments:   |                              |   |           |
| <input checked="" type="button"/> Accept <input checked="" type="button"/> Cancel |                              |   |           |

16. Note: If you had a successful call with the patient, be sure to document “Yes” in your note in the pink drop-down menu. (This is what populates the report column)

POC ENVIRONMENT CHRISTINE T. EpicCare

Edit Note

My Note

Care Coordinati... • No service • 11/16/2023 11:51 AM

Insert SmartText

**MyChart Home Monitoring - FGP Hypertension Initiative Note**

Altafgpamyone Altafgpamyone is a 23 y.o. female enrolled in the MyChart Home Monitoring - FGP Hypertension Initiative program.

Remote patient monitoring services have been provided with collection and interpretation of data.

The patient was informed of modifications to their care plan and recommended interventions via an **interactive phone call** during this encounter (*required at least once per month*):

NYU TELE - RPM INTERACTIVE PHONE CALL COMPLETED THIS ENCOUNTER

Diagnosis:

1. Primary hypertension

17. If the patient is due for a Social Determinants of Health (SDoH) screener, use this section to create a New Reading and complete with the patient over the phone
- Note: Time doing an SDOH questionnaire should not be included in the overall "RPM time"

Social Determinants

+ New Reading

No data found.

Flowsheets

## Social Determinants

+ Add Group + Add Row + Add LDA More ▾

☐ Show Row Info ☐ Show Last Filed Value ☐ Show Details ☐ Show All Choices

### Physical Activity

On average, how many days per week do you engage in moderate to strenuous exercise (like a brisk walk)?

0 days 1 day 2 days 3 days 4 days 5 days 6 days 7 days Patient unable to answer Patient declined ▾ 📄

On average, how many minutes do you engage in exercise at this level?

0 min 10 min 20 min 30 min 40 min 50 min 60 min 70 min 80 min 90 min 100 min 110 min 120 min  
130 min 140 min 150+ min Patient unable to answer Patient declined ▾ 📄

### Financial Resource Strain

How hard is it for you to pay for the very basics like food, housing, medical care, and heating?

Very hard Hard Somewhat hard Not very hard Not hard at all Patient unable to answer Patient declined ▾ 📄

### Housing Stability

In the last 12 months, was there a time when you were not able to pay the mortgage or rent on time?

Yes No Patient unable to answer Patient declined ▾ 📄

In the last 12 months, how many places have you lived?

▾ 📄

In the last 12 months, was there a time when you did not have a steady place to sleep or slept in a shelter (including now)?

Yes No Patient unable to answer Patient declined ▾ 📄

### Transportation Needs

In the past 12 months, has lack of transportation kept you from medical appointments or from getting medications?

Yes No Patient unable to answer Patient declined ▾ 📄

In the past 12 months, has lack of transportation kept you from meetings, work, or from getting things needed for daily living?

Yes No Patient unable to answer Patient declined ▾ 📄

### Food Insecurity

Within the past 12 months, you worried that your food would run out before you got the money to buy more.

Never true Sometimes true Often true Patient unable to answer Patient declined ▾ 📄

Within the past 12 months, the food you bought just didn't last and you didn't have money to get more.

Never true Sometimes true Often true Patient unable to answer Patient declined ▾ 📄

### Intimate Partner Violence

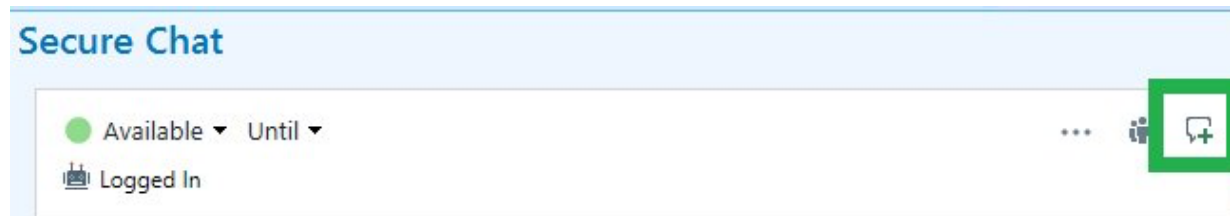
|  |    |                          |                   |          |        |
|--|----|--------------------------|-------------------|----------|--------|
| Yes  | No | Patient unable to answer | Patient declined  | ▼        | 📄      |
| Within the last year, have you been raped or forced to have any kind of sexual activity by your partner or ex-partner? |    |                          |                   |          |        |
| Yes  | No | Patient unable to answer | Patient declined  | ▼        | 📄      |
| Are you currently being emotionally or physically abused by your partner?  |    |                          |                   |          |        |
| Yes  | No | N/A                      | Refused to answer | ▼        | 📄      |
| Caregiver Education and Work   |    |                          |                   |          |        |
| Do you have a high school degree?  |    |                          |                   |          |        |
| Yes  | No | Patient refused          | Not asked         | ▼        | 📄      |
| ⏮ Restore  |    | ✅ Close                  |                   | ❌ Cancel |        |
|  |    |                          | ⬆ Previous        |          | ⬇ Next |

18. If the patient screens positive for any of the domains, send a Secure Chat message to the CHW EPIC MANAGER chat group

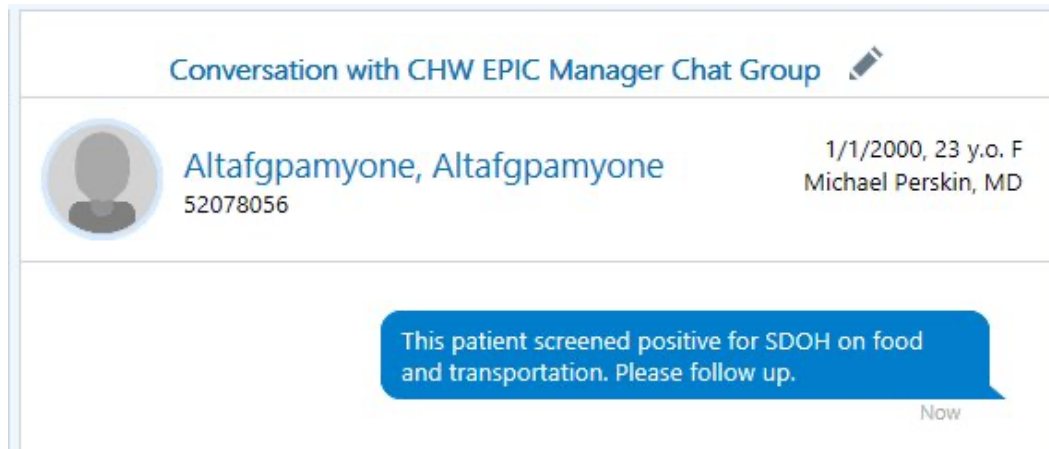
a. Open Secure Chat



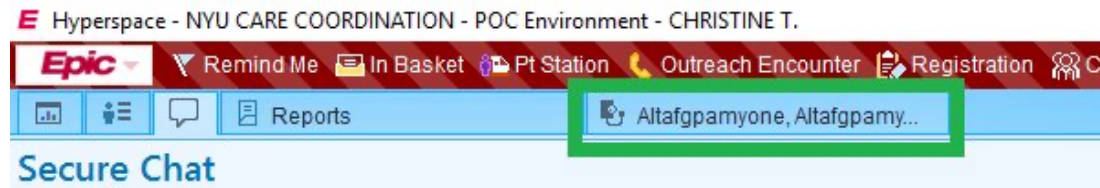
b. Create a new chat



c. Attach the patient, compose and send the message

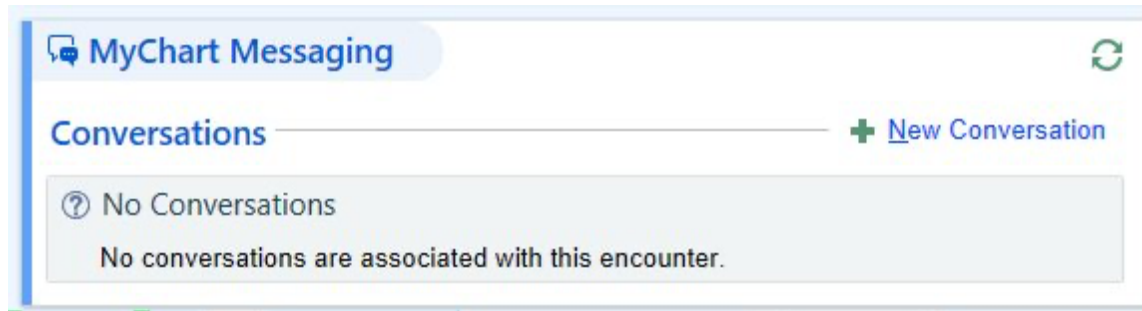


d. Return to your active workspace



19. Additional Optional Sections in the encounter:


a. Send a MyChart message to the patient




b. Routing patient encounters



- i. Route encounters to pharmacists when a patient has persistently uncontrolled BP (i.e.: average BP trend greater than or equal to 130/80 and less than or equal to 180/110), and no recent change in BP medication
- ii. **Note:** allow patient to average out at least two weeks before referring back to the pharmacist for further titration
- iii. The pharmacist team will look at the routed encounter and note. The only thing that the NCM should include in the routed chart comments is anything they want the pharmacist to be aware of that isn't already in the chart.



 Patient Goals

+ Add

 No active goals


Use the box to the upper left to add a new goal.


✓ Close


 Routing 


Route as: **Patient Calls**

+ My List + PCP + Other Remove All

 Pool for Responses:



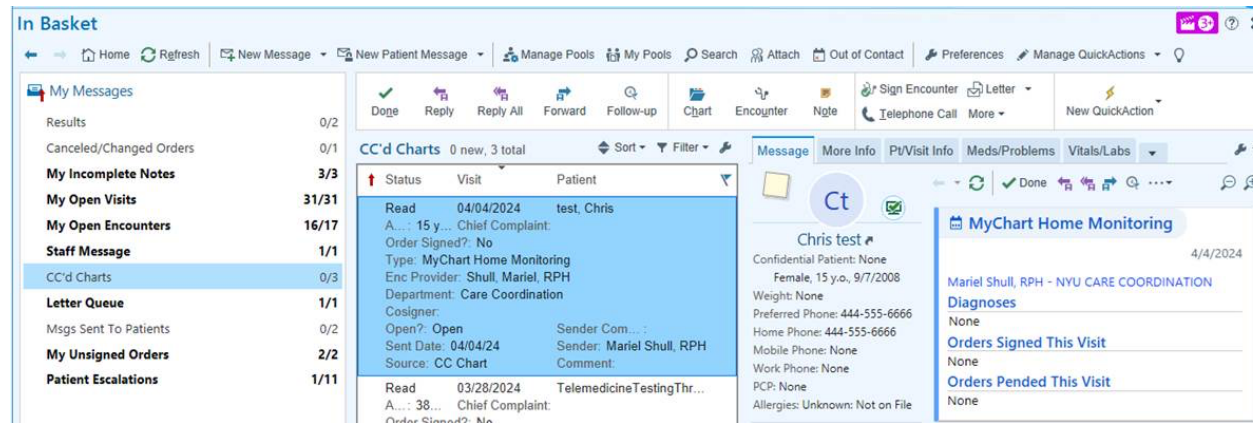
 Routing Comments

 [Edit Fax Recipients](#)

[View Routing History](#)

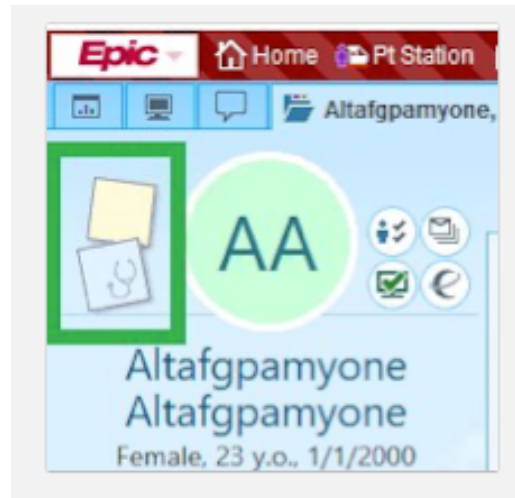






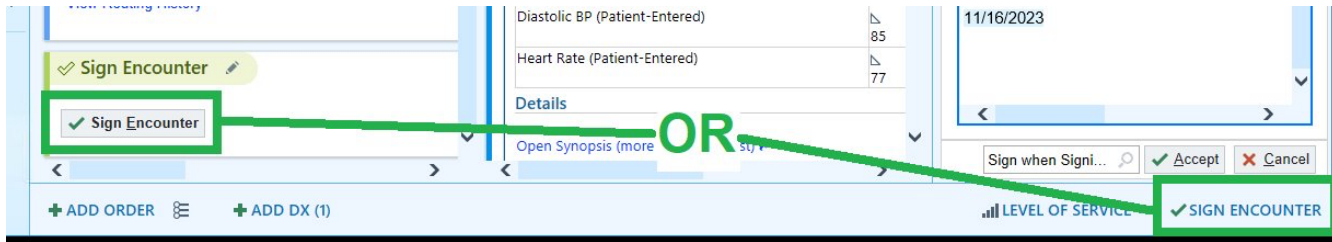
c. Sticky Notes

- i. If you need to document small notes that stick between encounters (i.e. The patient's PCP says their BP runs low, in the XYZ range, alert them if the BP drops below ABC- Mariel S.), you can use the Sticky Notes activity in Storyboard



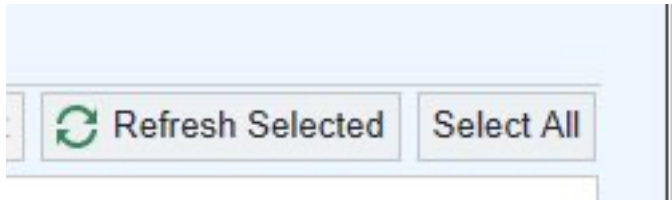
20. Finish your clinical note

21. Sign the encounter



22. After this step, you are returned to the report. Continue to the next patient.

- Tip: If there are more than one staff person working patients from this report, it is good to 'Select All' and then 'Refresh selected' after you work a patient to ensure all the newest data is pulled into the columns



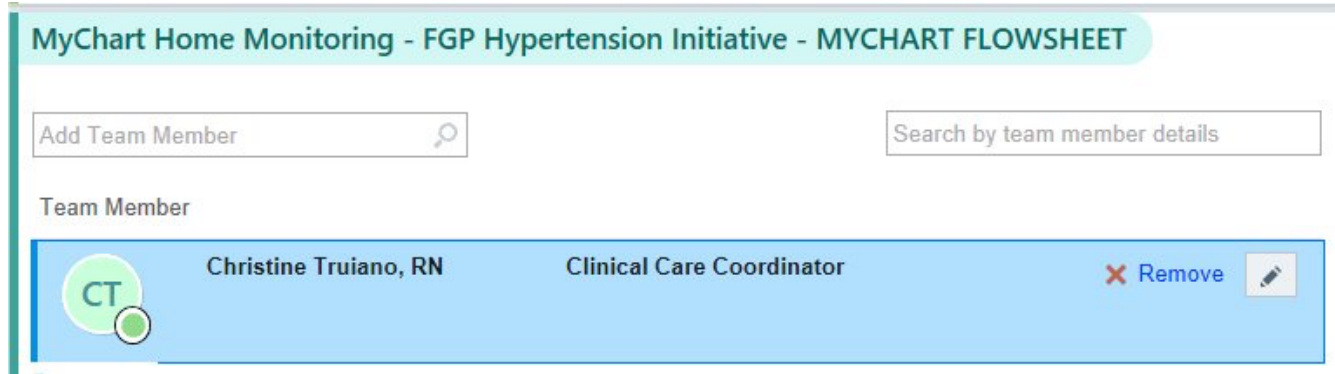
### STEP 3. Data Review for patients NOT submitting BP Values

- Filter the report to only show patients with:
  - Episode Status = Active (patients actively enrolled in the program)
  - Episode Creation Date = From [blank] to W-1 (enrolled more than 1 week ago)
  - Latest Reading Instant = From [blank] to W-1 (most recent reading was more than 1 week ago)

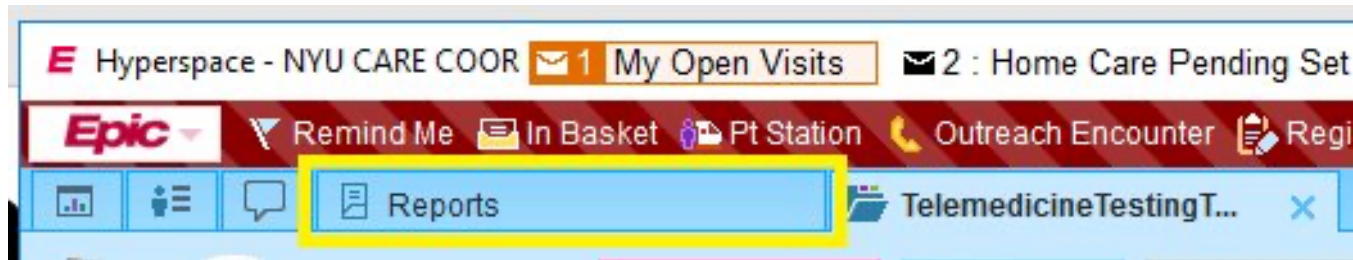
| Episode Status | RPM - FGP Hypertension Care Team      | Patient Name | MRN   | Episode ID | Episode Status | Episode Creation Date | Episode End Date | Episode Creator         | Creation Dept for FGP Hypertension Initiative | RPM Minutes | Latest Reading Instant | PEF Total Readings Counter | Last MYC Home Monitoring Enc | User for Last MYC Home Monitoring Enc | Last Date Phone Call Marked as Yes | Last MYC BP Systolic Entered | Last MYC BP Diastolic Entered | Last Home HR | Patient BP Systolic Change Trend | Patient BP Systolic Change Value | Patient BP Diastolic Change Trend | Patient BP Diastolic Change Value |
|----------------|---------------------------------------|--------------|-------|------------|----------------|-----------------------|------------------|-------------------------|---|-------------|------------------------|----------------------------|------------------------------|---------------------------------------|------------------------------------|------------------------------|-------------------------------|--------------|----------------------------------|----------------------------------|-----------------------------------|-----------------------------------|
| Active         | TelemedicineTestingTwelve, Amy Twelve | 52076481     | 53775 | Active     | 09/23/2023     |                       |                  | Amy Stein               | INTERNAL MEDICINE 41ST                        | 0           | 10/26/2023 6:52:55 PM  | 6                          | 10/26/2023                   | Amy Stein                             | 10/26/2023                         | 300                          | 200                           | 75           | ↑                                | 200                              | ↑                                 | 200                               |
| Active         | TelemedicineTestingFive, Amy Five     | 52071154     | 53994 | Active     | 09/28/2023     |                       |                  | Provider06 EpicCare, MD | FGP ACWIS INT MED                             | 0           | 09/28/2023 11:24 AM    | 2                          | 10/02/2023                   | Amy Stein                             |                                    | 204                          | 99                            | 76           | ↓                                | -6                               | ↑                                 |                                   |

- Select a patient with the RPM- FGP Hypertension Care Team field blank or assigned to you

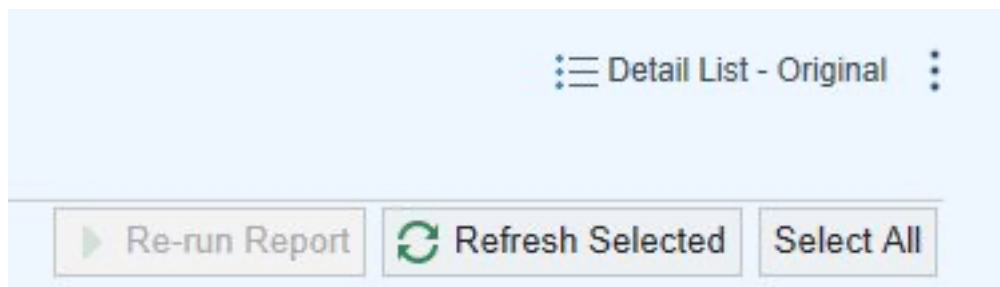
- Click the Care Teams button from the toolbar
- Add yourself as the Clinical Care Coordinator WITHIN the MyChart Home Monitoring- FGP Hypertension Initiative section to indicate that this is your patient to manage within this program



- Return to the Reports tab by selecting it or closing the open patient tab.

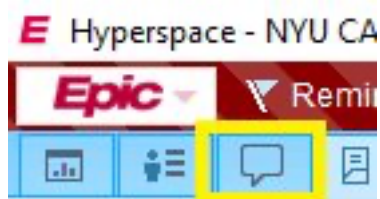


- With that patient still selected, Click 'Refresh Selected.' You will see yourself in the RPM- FGP Hypertension Care Team column going forward

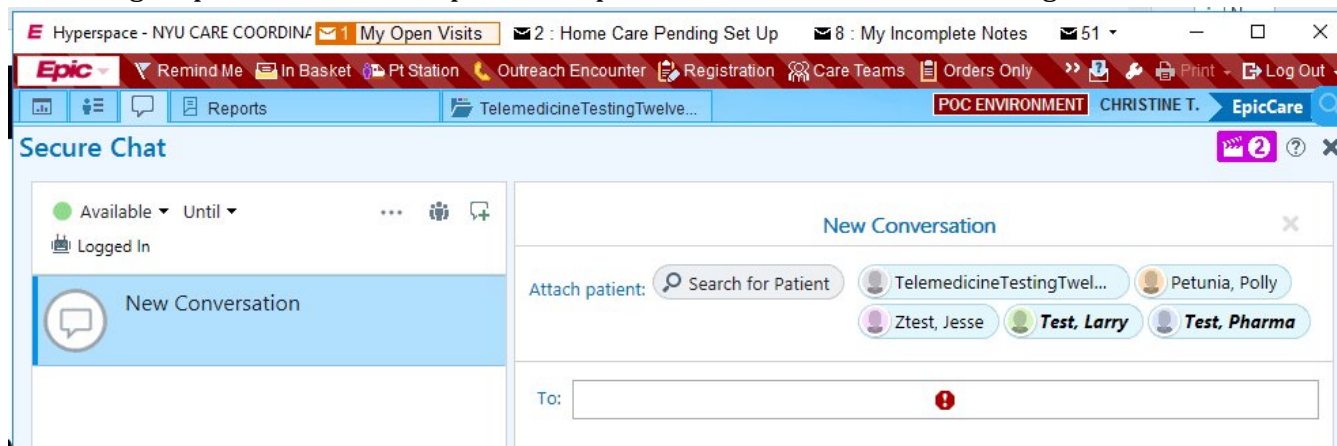


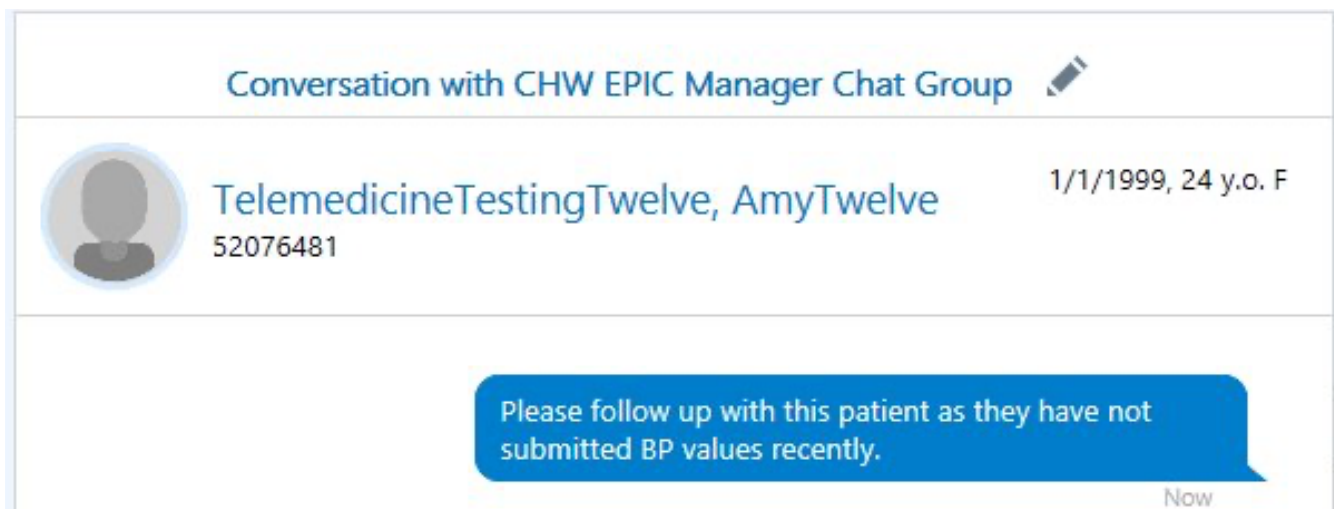
|  |   |          |
|--|---|----------|
| RPM - FGP<br>Hypertension Care<br>Team | Patient Name                            | MRN      |
| Christine Truiano                      | TelemedicineTestingTwelve,<br>AmyTwelve | 52076481 |

7. Open Secure Chat



8. Select the patient you just assigned yourself to from the recent patient buttons; and then plug in the CHW EPIC MANAGER CHAT group in the field To: field. Enter a message to let the CHW group know to follow-up with the patient for lack of BP values being submitted.





9. Return to the report and complete the rest

#### STEP 4. Disenrollment/Offboarding (Graduation Period)

1. In a MyChart Home Monitoring Encounter, click 'Resolve' next to the MyChart Home Monitoring FGP Hypertension Initiative episode (OR open the Patient-Entered Flowsheet Manager activity and click Resolve).
  - a. Patient meets offboarding criteria if they have a stable BP control for at least two months, with no medication changes at next monthly visit. Consult with PCP via in-basket messaging and graduate the patient from the program
2. **Disenrollment/Offboarding Steps:**
  - a. **If the patient declines to participate with a CHW or pharmacist:** CHW or pharmacist will send a secure chat message to NCM regarding disenrolling the patient. NCM will follow the steps below.
  - b. **If the patient notes during a counseling session with NCM that they want to disenroll and/or patient is ready to offboarded:** NCM will follow the steps below:
    - i. On the RPM- MyChart Home Monitoring- FGP Hypertension Initiative- Data Reviews report, select the patients name, then click the 'Patient-Entered Flowsheet Manager' button from the toolbar.

RPM - MyChart Home Monitoring - FGP Hypertension Initiative -

Char Patient-Entered Flowsheet Manager Pt Outreach

Detail List Explore Episodes by Status

Filter

| Episode Creation Date | Episode Creator         | Creation Dept. for FGP Hypertension Initiative Episode | Patient Name   |
|-----------------------|-------------------------|--|----------------|
| 09/23/2023            | Amy Stein               | INTERNAL MEDICINE 41ST                                 | TelemedicineTe |
| 09/27/2023            | Amy Stein               | INTERNAL MEDICINE 41ST                                 | TelemedicineTe |
| 09/28/2023            | Provider06 EpicCare, MD | FGP ACWS INT MED                                       | TelemedicineTe |
| 09/28/2023            | Paulette Y Saddler, MD  | FGP ACWS INT MED                                       | TelemedicineTe |

- ii. On the MyChart Home Monitoring- FGP Hypertension Initiative Tab, click the 'Resolve and Stop Collecting this Flowsheet' button.
- Note:** This will prevent the patient from entering any new data through their device, and will remove any outstanding tasks in the Patient To Do Activity. No more documentation can occur so make sure to document in the encounter and include the RPM time before disenrollment.

Patient-Entered Flowsheet Manager

MyChart Home Monitoring - FGP Hyp... Home Temperature Monitoring ☐ Show Resolved

MyChart Home Monitoring - FGP Hypertension Initiative  
Started: 9/28/2023

✕ Resolve and Stop Collecting this Flowsheet

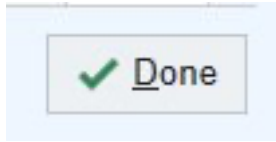
- iii. Click 'Resolve and Stop Collecting' and then 'Done' to return to the report

Resolve and Stop Collecting Flowsheet

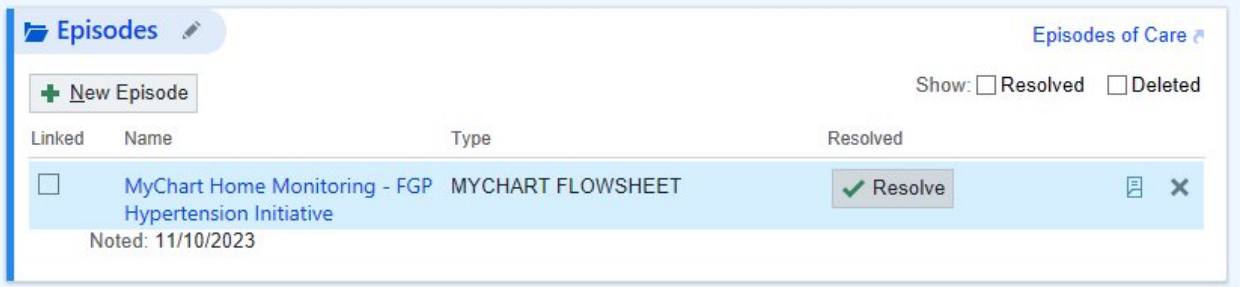
⚠ Are you sure you want to resolve and stop collecting this flowsheet?

Resolve and Stop Collecting Continue Collecting





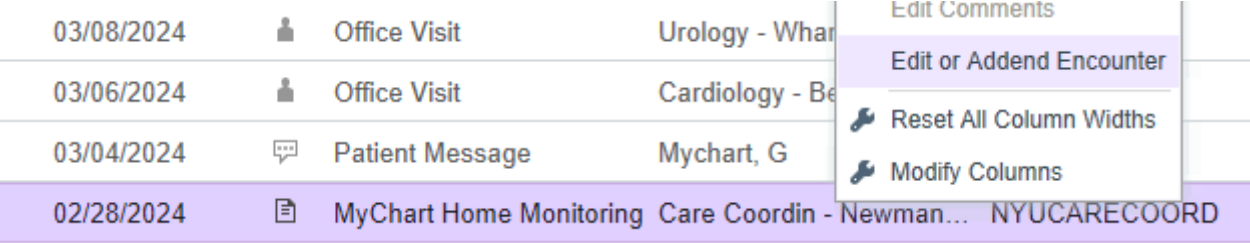
[Additional Option]: In a MyChart Home Monitoring Encounter, click 'Resolve' next to the MyChart Home Monitoring FGP Hypertension Initiative episode



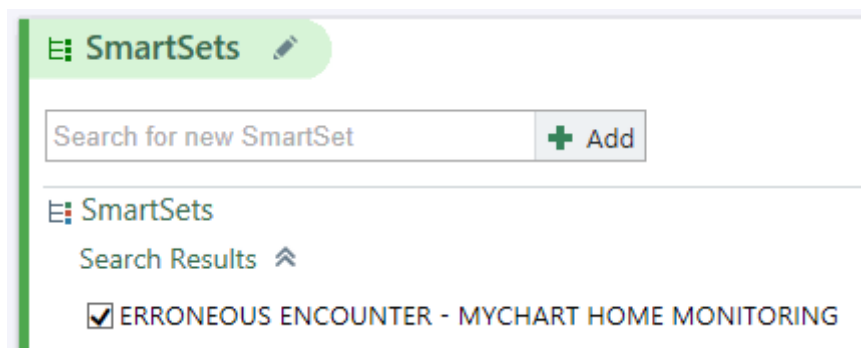
**Erroneous Encounters**

If a MyChart Home Monitoring encounter has been created in error, complete the following steps to change the encounter to an erroneous encounter:

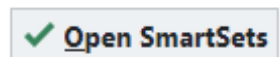
- 1. **Open the encounter** created in error:
  - a. Staff can do this by finding the encounter in Chart Review, right-clicking, and selecting Edit or Addend Encounter



- 2. In the new **SmartSets** section in the top left, search for “Error Myc” and select the **Erroneous Encounter – MyChart Home Monitoring** SmartSet



3. Select **Open SmartSets**



4. **Sign the SmartSet**



SmartSets

Search for new SmartSet

+

Add

SmartSets

Associate

Edit Multiple

Patient Estimate

Providers

Rx

Tinton pharmacy 799 E 150th St., Bronx, NY 10455 347-271-5275 347-271-5275

347-271-5275

Remove

Pend

Sign

ERRONEOUS ENCOUNTER - MYCHART HOME MONITORING

Manage User Versions

Use this SmartSet to mark MyChart Home Monitoring encounters as erroneous.

Documentation

Progress Note

MODEL ERRONEOUS ENCOUNTER PROGRESS NOTE

Diagnosis

Diagnosis

ERRONEOUS ENCOUNTER--DISREGARD

Additional SmartSet Orders

Search for additional SmartSet orders

You can search for an order by typing in the header of this section.

Associate

Edit Multiple

Patient Estimate

Providers

Rx

Tinton pharmacy 799 E 150th St., Bronx, NY 10455 347-271-5275 347-271-5275

347-271-5275

Remove

Pend

Sign

Previous

Next

## 5. Sign the Encounter



- The result is that the encounter will now show in Chart Review as an erroneous encounter (hidden by a filter usually), and will not count as a MyChart Home Monitoring encounter.

| Chart Review  |            |                     |                          |              |   |
|---|------------|---------------------|--------------------------|--------------|---|
| <div> <div>Encounters</div> <div>Notes</div> <div>HP/Consult</div> <div>Labs</div> <div>Microbiology</div> <div>Imaging</div> <div>Procedures</div> <div>Dental Procedures</div> <div>Cardiac</div> <div>EKG</div> <div>Medications</div> <div>Episodes</div> <div>Letters</div> <div>Cons</div> </div> |            |                     |                          |              |   |
| <div> <div>Preview</div> <div>Refresh (3:44 PM)</div> <div>Review Selected</div> <div>Flowsheet</div> <div>Route</div> <div>Encounter</div> <div>Rarely Used</div> </div>   |            |                     |                          |              |   |
| <div> <div>Filters</div> <div>Default Filter</div> <div>Me</div> <div>Registered Nurse</div> <div>NYU CARE COORDINATION</div> <div>Admissions</div> <div>LFH</div> <div>Transitions</div> </div>  |            |                     |                          |              |   |
| Research  | When       | Type                | With                     | Department   | Description                                 |
|   | 02/28/2024 | Erroneous Encounter | Care Coordin - Newman... | NYUCARECOORD | ERRONEOUS ENCOUNTER--DISREGARD (Primary Dx) |

Helpful Smartphrases:

1. **Smartphrase: .RPMFGPHTNCOACHING**

*Adapted from: (.FHCALTA FOLLOWUP)*

Provided feedback regarding blood pressure readings since the last coaching session and discussed current hypertension blood pressure goal < 130/80.

Reviewed current medication regimen and healthy habits with the patient.

Discussed patient barriers/reasons for non-adherence: Choose an Item (multi-select)

Discussed patient motivations, and perceived benefits of taking medications as prescribed: Choose an item. (multi-select)

Summarized the health coaching session with the patient, using teach back technique for self-management plan.

2. **Smartphrase: .RPMFGPHTNNOTE** (Note: Each month attempt to reach patient via telephone, until the patient is reached. After phone call is completed for the month, then you can MyChart message for the rest of that month)

**MyChart Home Monitoring - FGP Hypertension Initiative Note**

@NAME@ is a @AGE@ @SEX@ enrolled in the MyChart Home Monitoring - FGP Hypertension Initiative program.

Remote patient monitoring services have been provided with collection and interpretation of data.

The patient was informed of modifications to their care plan and recommended interventions via an interactive phone call during this encounter (*required at least once per month*): {NYU TELE - RPM INTERACTIVE PHONE CALL COMPLETED THIS ENCOUNTER:63551}

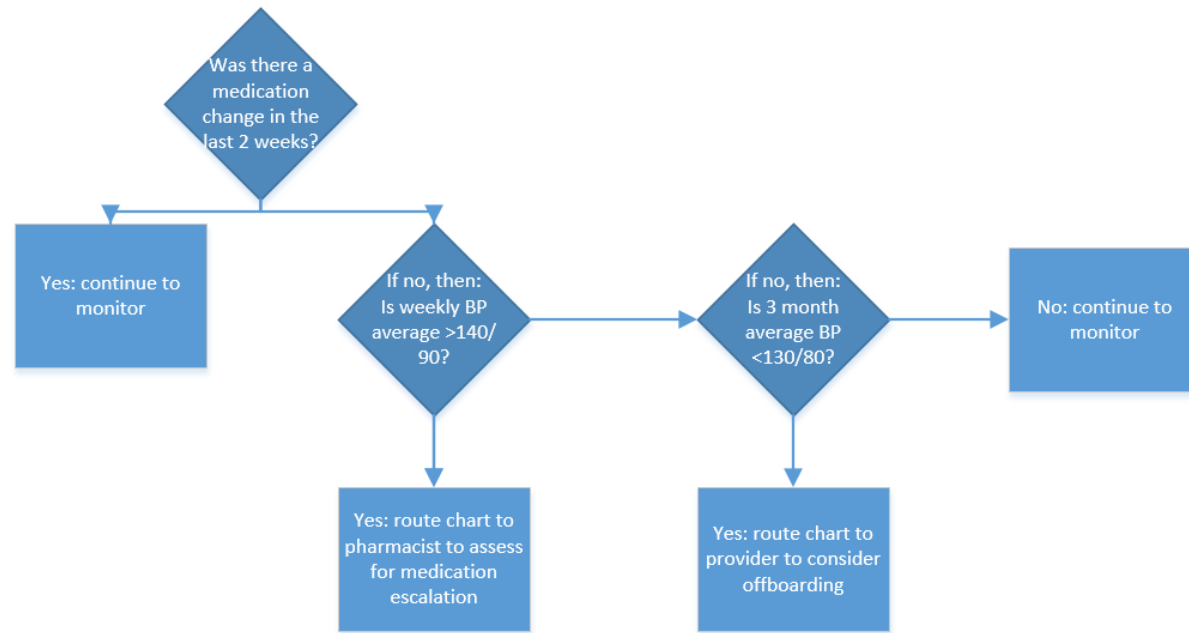
Diagnosis:  
@DIAGX@

Recent Flowsheet Data:  
@REVFS[707,709@

The following summarizes the current care plan and recommended interventions:  
\*\*\* (Include pertinent clinical information here. Ex: patient reported low salt diet)

Was there a medication change in the last 2 weeks?  
Yes- continue to monitor  
No- is weekly average BP >140/90?  
Yes- route chart to pharmacist to assess for medication escalation  
No- is 3 month average BP <130/80?  
Yes- route chart to PCP to consider offboarding  
No- continue to monitor

@ME@  
@TD@



### 3. Smartphrase: .RPMFGPHTNMYCHRTGOODBP

Subject: Home Blood Pressure Monitoring

Thank you for uploading your remote blood pressure readings. Your weekly average was: \*\*\*. Your goal blood pressure is less than 130/80. Your numbers look good!  
{rpmptmsg:55056}

Continue to monitor and upload. Let us know if you have any questions.

Sincerely,  
@me@  
@td@  
Clinical Care Coordinator

Phone: 212-404-4415

## Pharmacist Workflow

**Need to Know!**

**The FGP Hypertension Initiative is not a free program:** Although all patients receive a **free BP monitor**, the clinical visits at enrollment and subsequent clinical visits with care coordination team **are billable**.

**Pharmacist Secure Chat Group:** AMB Clinical Pharmacist Chat Group

**Pharmacist In-Basket Staff Message:** NYU Care Coord Pharmacy Referrals- Pharmacist Pool

| Team                            | Secure Chat Group                  | In-Basket Staff Message Group                      |
|---------------------------------|------------------------------------|--|
| Nurse Case Managers (NCMs)      | NCM Chat Group                     | Care Coordination Team (12865)                     |
| Pharmacists                     | AMB Clinical Pharmacist Chat Group | NYU Care Coord Pharmacy Referrals- Pharmacist Pool |
| Community Health Workers (CHWs) | CHW Epic Manager Chat Group        | CHW Epic Manager                                   |

**Pharmacist Workflows (Data Reviews & Communications)**

- Review in-basket messages (charts routed) from NCMs
- Review secure chat messages from NCMs and CHWs
- Reach out to patients via phone if they require an escalation or not meeting goals
  - Standard workflow: Reach out to patients if they appear in escalation folder (BP readings greater than or equal to 180/110 or less than or equal to 90/60) or they aren't meeting their goal and have persistently uncontrolled BP.
- Pend prescriptions to providers
  - Standard workflow: Reach out to providers for patients that might require a rx change.

- **Note:** If at any point patient has symptoms of heart attack refer to the ER.

| Reasons NCM/CHW Team may reach out   | Scenarios   | Action   |
|--|---|--|
| Patient is persistently uncontrolled and not meeting goals.                      | Patient average BP trend is greater than or equal to 130/80 and less than or equal to 180/110 AND NO recent medication change | NCM will route patient encounter to pharmacist; will allow for a 2-week time frame between each medication change before routing encounters a subsequent time. This will allow the patient to average out before they are referred to the pharmacist for further titration.      |
|  | Patient is asymptomatic and less than 110/70  | NCM will route patients encounter to the pharmacist; will allow for a 2-week time frame between each medication change before routing encounters a subsequent time. This will allow the patient to average out before they are referred to the pharmacist for further titration. |
| If they have questions or believe a patient would benefit from pharmacist review | Patient has a lot of questions about medications, side effects, etc   | Secure chat  |

#### STEP 1: Review Patient Escalation Values from the In Basket

1. If patients submit values outside of the set range for the FGP Hypertension Initiative Program (greater than 180/110 or less than 90/60), an In Basket message will be immediately sent to the **Patient Escalations** folder
  - a. If user has Haiku/Canto push notifications enabled on their mobile device, they will also receive a push (drop-down message and in Notification center on iOS, plus red # on Haiku app from iOS home screen)
  - b. Users can create MyChart Home Monitoring encounters from inside this folder

HyperSpace - FGP ACWS RIT MED - POC Environment - AMY S.

Home | Patient Clinical Update | 707 | Canceled/Changed Orders

Atafgamyone, Atafgamyone

In Basket

Home | Refresh | New Message | New Patient Message | Manage Pools | My Pools | Search | Attach | Out of Contact | Preferences | Manage QuickActions

My Messages

Results 0/2

Canceled/Changed Orders 0/1

My Incomplete Notes 1/1

My Open Visits 30/30

My Open Encounters 15/16

CC'd Charts 0/1

Letter Queue 1/1

Migs Sent To Patients 0/2

My Unsigned Orders 2/2

Patient Clinical Update 43/74

Patient Escalations 1/10

PT Advice Request 0/11

PT Questionnaire 5/5

VUC Level 1 Follow up 12/20

VUC Outstanding Orders 0/2

Attached & Cover...749/1058

Follow-up

Search

Sent Messages

Completed Work

Open Patients

Patient Escalations 1 new, 10 total

| Status | Subject                                     | Mig Date   | Mig Time |
|--------|---|------------|----------|
| Read   | Abnormal BP Entered by Patient - Escalation | 11/15/2023 | 4:17 PM  |
| Read   | Abnormal BP Entered by Patient - Escalation | 10/26/2023 | 2:55 PM  |
| Pend   | Abnormal BP Entered by Patient - Escalation | 09/23/2023 | 11:56 AM |
| Read   | Abnormal BP Entered by Patient - Escalation | 09/23/2023 | 11:58 AM |
| Pend   | Abnormal BP Entered by Patient - Escalation | 09/23/2023 | 11:59 AM |
| Pend   | Abnormal BP Entered by Patient - Escalation | 09/23/2023 | 12:00 PM |
| Read   | Abnormal Systolic BP Entered by Patient     | 07/06/2023 | 10:27 AM |
| Read   | Abnormal Systolic BP Entered by Patient     | 06/23/2023 | 4:02 PM  |
| New    | Abnormal Systolic BP Entered by Patient     | 06/23/2023 | 4:21 PM  |
| Read   | Abnormal Systolic BP Entered by Patient     | 06/23/2023 | 4:24 PM  |

Message Help

Atafgamyone Atafgamyone

Female, 23 y.o., 1/1/2000

MRN: 52078056

Phone: 332-215-9258 (M)

PCP: Michael Perskin, MD

Coverage: United healthcare/U...

Abnormal BP Entered by Patient - Escalation

Received: Today

Mychart, User Background → P Rpm Fgp Hypertension Initiative

Abnormal BP Entered by Patient - Escalation

Inactive

Date 11/15/23 1617 User Mychart, User Background [MYCHARTGBQ] Comment None

Patient To Do List Advisories

Record Your Blood Pressure: Done

Task instances (1)

• 11/15/23 1400

Possible task criteria

Health Trends

Last month

Systolic BP (Patient-Entered)

210

mmHg - Latest (11/15) - 1 data day

Diastolic BP (Patient-Entered)

85

mmHg - Latest (11/15) - 1 data day

Manage Pools for a User

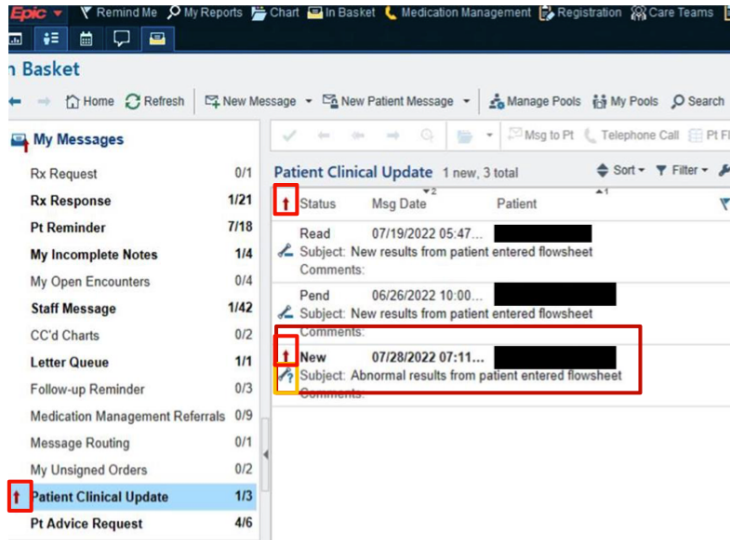
Sign In: Select All Upsselect All

| Signed In                           | Pools                           | Last signed in |
|-------------------------------------|---------------------------------|----------------|
| <input checked="" type="checkbox"/> | FGP VIRTUAL URGENT CARE ON CALL |                |
| <input checked="" type="checkbox"/> | RPM CARDIOLOGY 9U               |                |
| <input checked="" type="checkbox"/> | RPM FGP HYPERTENSION INITIATIVE |                |

Type here to search

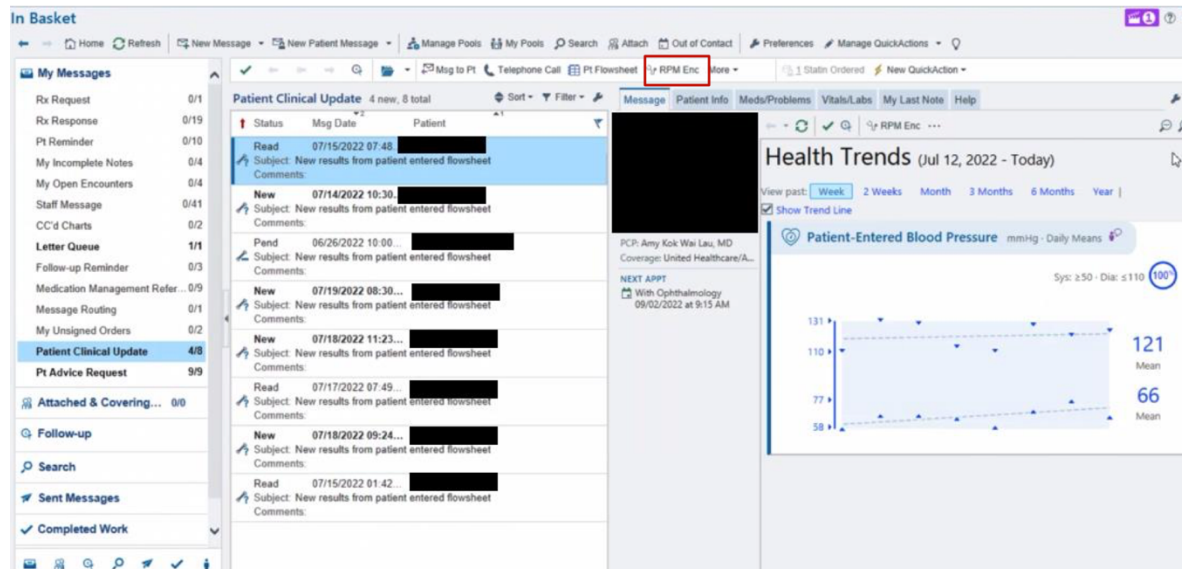
85°F Mostly cloudy 4:23 PM 11/15/2023

2. These escalations will appear with a Red arrow indicating beyond acceptable threshold for a patient's order. Review these daily



Ensure to "pick up baton" and take responsibility within a pool – right click on baton icon.

### 3. Start RPM encounter from In-Basket Message to Manage the Patient



a. See page 5 (beginning at step 10 for detailed instructions)



STEP 2. Pending Medication Orders to Providers

1. Enter the medication order, pend

Mark long term: ☐ ACETAMINOPHEN

⚠ Patient Sig: Take 2 tablets by mouth every 4 hours as needed for Mild pain (1-3). Maximum 4000mg of acetaminophen from all sources in 24hrs

[Edit the additional information appended to the patient sig](#)

ⓘ The sig contains both discrete and free text elements. Review the final sig above.

Renewal Provider: ☐ Do not send renewal requests to the authorizing provider (Amy Stein)

Patient Privacy: ☐ Hide from proxies ☒ Do not hide from proxies ⓘ

Class: ☐ Normal ☐ Phone in ☐ No Print ☐ Print

⚠ This medication will not be E-prescribed. Please click Details for more information. Invalid form: Provider Details...

Additional Order Details

Text Required Accept Cancel

LEVEL OF SERVICE PEND SIGN ORDERS

2. In the Routing Section, route it as an Rx Request

Routing

Route as: Patient Calls Rx Request

+ My List + PCP + Other + Leslie Bre

Enter recipients

- 3. Be sure to document a note and a diagnosis so the provider doesn't have to
- 4. The message will populate the Rx Request folder in In Basket for the provider to sign (existing workflow)

|   |   |                    |                           |
|---|---|--------------------|---------------------------|
| vcc Outstanding Orders 0/2  |   | Comments:          |                           |
| Attached & Coverin...<br>Adam C Szerencsy, DO<br>Results 41/69<br>Result Notes 0/1<br>Rx Request 2/7<br>Canceled/Cha... 14/14<br>Internal ED Arri... 3/4<br>My Incomplete ... 3/3<br>My Open Visits 63/64<br>My Open Enc... 27/27 | New   | 10/4/2023 5:45 PM  | Lemon, Lucy X             |
|   | Enc Prov... : Szerencsy, Adam C... Last Accessed: SZERENCZY, ADAM Pool:         |                    |                           |
|   | Sent By: Adam C Szerencsy, DO Open?: Open Next A... : None Rx Source: Telephone |                    |                           |
|   | Comments:   |                    |                           |
|   | New   | 10/4/2023 5:44 PM  | Mychart, Abbey "Daisy..." |
|   | Enc Prov... : Szerencsy, Adam C... Last Accessed: PASADINO, FRANCINE Pool:      |                    |                           |
|   | Sent By: Adam C Szerencsy, DO Open?: Open Next A... : None Rx Source: Telephone |                    |                           |
|   | Comments:   |                    |                           |
|   | Read  | 11/3/2023 10:43 AM | TelemedicineTestingSix... |
|   | Enc Provider: Stein, Amy Last Accessed: ANZISI, LISA Pool:                      |                    |                           |
|   | Sent By: Lisa Anzisi, PharmD Open?: Open Next A... : None Rx Source: Telephone  |                    |                           |
|   | Comments:   |                    |                           |

In Basket

My Messages

Rx Request 0/1

Attached & Covering Users 0/0

Follow-up

Search

Sent Messages

Completed Work

Open provider schedule

total

| Status                          | Date/Time           | Patient                      |
|---------------------------------|---------------------|------------------------------|
| Read                            | 11/16/2023 10:52 AM | Add'l Orders?                |
| Controlled?                     |                     |                              |
| Medication:                     |                     |                              |
| Enc Provider: Shull, Mariel RPH |                     | Last Accessed: SHULL, MARIEL |
| Pool:                           |                     | Sent By: Mariel Shull, RPH   |
| Open?: Open                     |                     | Next Appt: None              |
| Rx Source: Telephone            |                     | Comments:                    |

CA

Confidential Patient: None

Weight: 61.2 kg (135 lb)

Preferred Phone: None

Home Phone:

Mobile Phone:

Work Phone: None

PCP: Jim Urgent, MD

Allergies: No Known Allergies

Active Fills: None

Admitting Provider: None

MyChart: Active

PCP: Jim Urgent, MD

Coverage: None

Next Appt: None

Last Visit With Me: None

Message

More Info

Pt/Visit Info

Meds/Problems

Vitals/Labs

My Last Note

Help

Requested Renewals

Rx atorvastatin (LIPITOR) 40 mg tablet

Sig: Take 1 tablet by mouth daily.

Disp: 90 tablet Refills: 1

Start: 11/16/2023 - 11/15/2024

Class: Normal

Refill Protocol: HMG CoA Reductase Inhibitors (Statins)

Active on medication list

Visit with authorizing provider in last 12 months or appointment in the next inth

Lipid panel in last 12 months

LDL-C, HDL, and TG On File and Most Recent Result Not Abnormal

No evidence of pregnancy on record

To be filled at: CVS 17750 IN TARGET 512 Second Ave. New York, NY 10016 917-421-8313 315-876-9917

11/16/2023 - Rx Request: You

(Newest Message First)

View All Conversations on this Encounter

November 16, 2023

Me to Me

PRESCRIPTION CHANGE REQUEST: New statin

11/16/23 10:52 AM

rx for high risk patient with CAD & DM. Patient agreed to start statin.

LDL 104. 31% ASCVD risk score.

MS



The Chart Routing section (Send Chart Upon Closing Section) will send an In-Basket message to the CC'd Charts folder

In Basket

Home

Rgfrsh

New Message

New Patient Message

Manage Pools

My Pools

Search

Attach

Out of Contact

Preferences

Manage QuickActions

My Messages

Results0/2

Canceled/Changed Orders0/1

My Incomplete Notes3/3

My Open Visits31/31

My Open Encounters16/17

Staff Message1/1

CC'd Charts0/3

Letter Queue1/1

Msgs Sent To Patients0/2

My Unsigned Orders2/2

Patient Escalations1/11

Done

Reply

Reply All

Forward

Follow-up

Chart

Encounter

Ngte

Sign Encounter

Letter

Telephone Call

More

New QuickAction

CC'd Charts

0 new, 3 total

Sort

Filter

Message

More Info

Pt/Visit Info

Meds/Problems

Vitals/Labs

| Status                           | Visit                     | Patient                   |
|----------------------------------|---------------------------|---------------------------|
| Read                             | 04/04/2024                | test, Chris               |
| A...: 15 y... Chief Complaint:   |                           |                           |
| Order Signed?: No                |                           |                           |
| Type: MyChart Home Monitoring    |                           |                           |
| Enc Provider: Shull, Mariel, RPH |                           |                           |
| Department: Care Coordination    |                           |                           |
| Cosigner:                        |                           |                           |
| Open?: Open                      | Sender Com...:            |                           |
| Sent Date: 04/04/24              | Sender: Mariel Shull, RPH |                           |
| Source: CC Chart                 | Comment:                  |                           |
| Read                             | 03/28/2024                | TelemedicineTestingThr... |
| A...: 38... Chief Complaint:     |                           |                           |
| Order Signed?: No                |                           |                           |

Chris test

Confidential Patient: None

Female, 15 y.o., 9/7/2008

Weight: None

Preferred Phone: 444-555-6666

Home Phone: 444-555-6666

Mobile Phone: None

Work Phone: None

PCP: None

Allergies: Unknown: Not on File

MyChart Home Monitoring

4/4/2024

Mariel Shull, RPH - NYU CARE COORDINATION

Diagnoses

None

Orders Signed This Visit

None

Orders Pended This Visit

None

Utilize the ‘Prior to Visit Meds’ section to mark the medication as taking/not taking when reviewing with patients. **Note:** this will help to document adherence or variation so all providers can easily see without opening a progress note



Appendix 2

1. Accurate Blood Pressure Measurement

1.1 Accurate Blood Pressure Measurement



Welcome to Accurate Blood Pressure Measurement. Click Start to begin.

1.2 Training Objectives

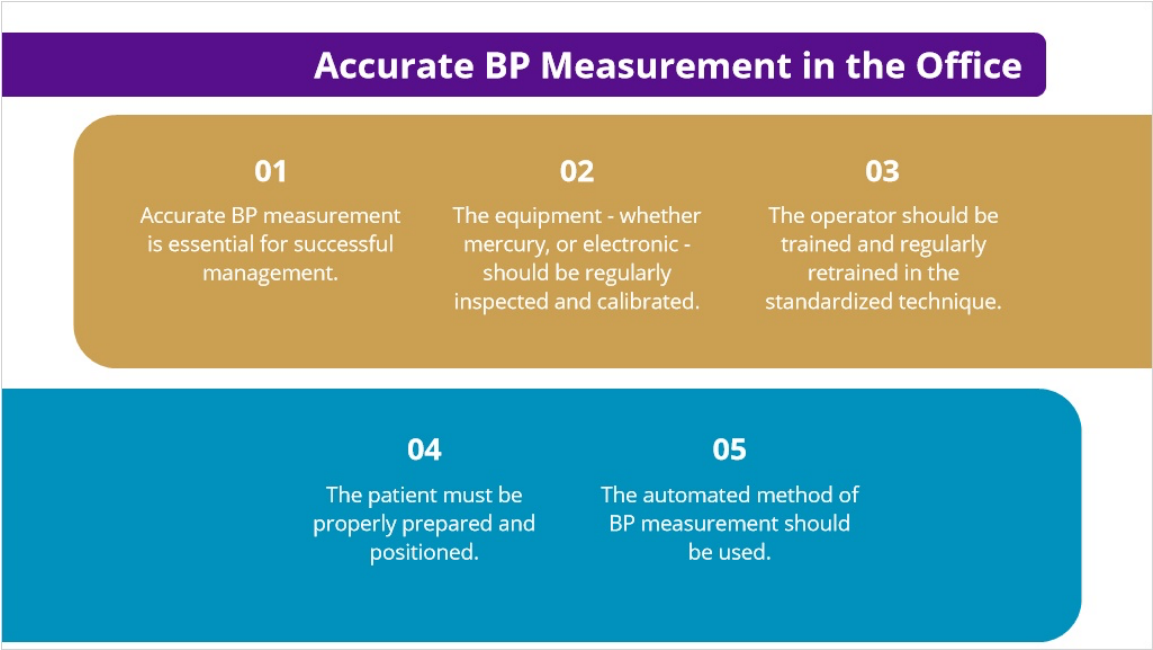
Training Objectives



- Discuss the factors that influence blood pressure (BP) measurements
- Review the 3 key steps to office blood pressure measurement

During this training we will Discuss the factors that influence Blood Pressure measurement, and review the 3 key steps to office Blood Pressure measurement.

1.3 Accurate BP Measurement in the Office

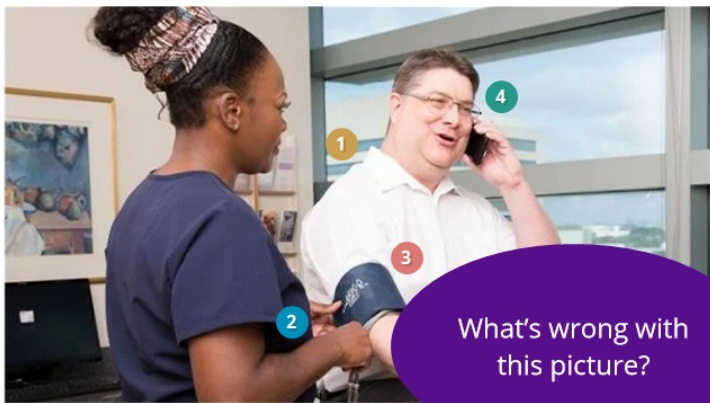


Accurate Blood Pressure measurement is essential for successful Blood Pressure management. The equipment should be regularly inspected and calibrated by staff and patients should be properly prepared and positioned when measurements are taken. The following slides will show how to accurately measure Blood Pressure in the office.



1.4 Exercise

Exercise



Let's start by talking about what is wrong with this picture. What do you notice about this patient? Hover the mouse over the numbers in the picture as they appear to learn more.

1. The patient is seated poorly. The patient should be seated upright and comfortably.
2. Miscuffing. Staff should ensure the cuff fits properly. If an upper arm cuff does not fit because the arm is too large, try a high cuff for an accurate reading.
3. Arm not at heart level. The patient's arm should be at heart level and supported.
4. The patient is talking during the reading. The patient should be sitting quietly and remain still to get an accurate Blood Pressure reading.

1.5 BP Readings Can Depend On Many Factors

| BP Readings Can Depend On Many Factors |   |
|--|---|
| Factor                                 | Increase in blood pressure  |
| Full urinary bladder                   | 10-15 mmHg  |
| Recent caffeine intake                 | Systolic: 10 mmHg; Diastolic: 5 mmHg                                  |
| Recent smoking                         | Systolic: 6 mmHg; Diastolic: 5 mmHg                                   |
| Talking                                | 7-10 mmHg   |
| Cross legs                             | 2-8 mmHg  |
| No back support                        | 6-10 mmHg   |
| Arms unsupported                       | Systolic: 1-7 mmHg; Diastolic: 5-11 mmHg                              |
| Arm positioned above heart level       | Each inch above heart level blood pressure <i>decreases</i> by 2 mmHg |
| Wrist device                           | Systolic: 10 mmHg; Diastolic: 5 mmHg                                  |
| Cuff over clothing                     | Systolic: 5-50 mmHg   |
| Cuff too small                         | Systolic: 10 mmHg; Diastolic: 2-8 mmHg                                |

These are the many factors that can affect Blood Pressure readings. Factors such as a full bladder, talking during the reading or sitting with their legs crossed can negatively affect the patient’s reading. It is important to check for each of these factors before taking a reading.

1.6 How to Accurately Measure Blood Pressure in the Office

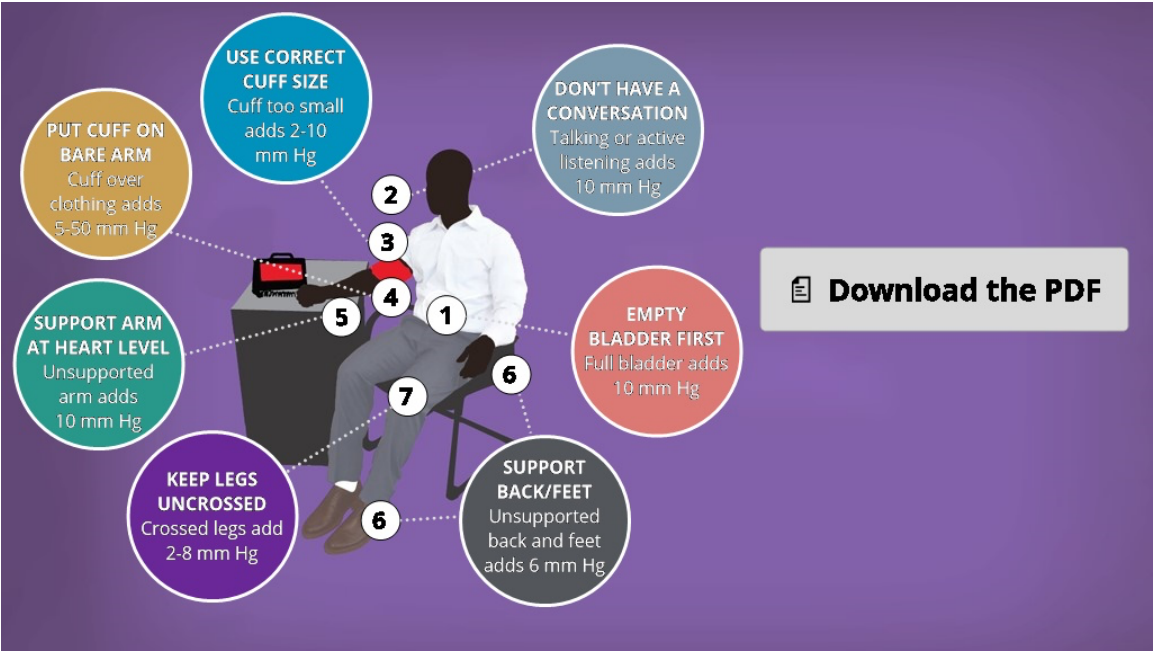
How to Accurately Measure Blood Pressure in the Office

Learning best practices for BP measurement will help ensure you obtain a correct reading and patients are treated properly.

Not following each of these steps could add additional mmHg to the patient's reading.

Learning best practices for Blood Pressure measurement will help ensure you obtain a correct reading and patients are treated properly. Next, we are going to see some simple steps to follow to ensure an accurate reading. Please, keep in mind that not following each of these steps could add additional mmHg to the patient's reading.

Steps to Follow (Slide Layer)



Click on the numbers as they appear to learn about each step.

===

Patient should have an empty bladder.

There shouldn't be any talking between the operator and patient.

Use the correct cuff size.

Put the cuff on the patient's bare arm. The cuff should not be applied over clothing.

The patient's arm should be supported at heart level.

The patient's feet should be flat on the floor.

The patient's legs should not be crossed. You can download this infographic for your own reference.

1.7 Key Steps to Proper in Office BP

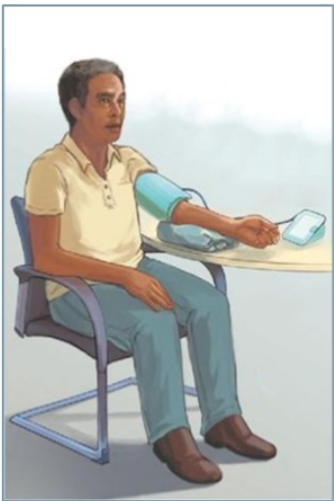


The three key steps to proper BP measurement are Preparation, Applying the cuff, and Taking the measurement with a digital device. We will take a closer look at these steps.

## 1.8 Step 1: Preparation

### Step 1: Preparation

1. The patient should avoid smoking, caffeine, and exercise for at least 30 minutes before the blood pressure measurement.
2. Have the patient sitting comfortably with their back supported, their feet uncrossed and flat on the floor.
3. Support the patient's arm so their elbow is at about heart level and relax the hand and wrist.
4. Check that the cuff is the correct size for the individual.



Before taking the measurement, be sure the patient has not smoked, consumed caffeine, and exercised for at least 30 minutes prior to the visit. Have the patient sitting comfortably with their back supported, their feet uncrossed and flat on the floor. Be sure the cuff fits properly, support the patient's arm so their elbow is at about heart level, and have the patient relax their hand and wrist. If this is the first time that the patient has had their Blood Pressure measured in your health facility, measure Blood Pressure on both arms and always use the arm with the highest blood pressure from then on.

1.9 Choosing the Right Cuff Size

Choosing the Right Cuff Size

Here are the things to consider when choosing the right cuff size.  
(Click on the bars on the right, or the Next button)

Measure the Arm

Measuring Tape

Recommended Cuff Sizes

Here are the things to consider when choosing the right cuff size. Click on the bars on the right, or the Next button.


Measure the Arm (Slide Layer)

Measure the Arm

Choosing the Right Cuff Size

Measure the Arm

It is best to measure the arm to ensure the proper cuff size is being used.



Measure the mid-arm circumference with measuring tape

Measuring Tape

Recommended Cuff Sizes

Measure the patient's arm to determine the correct cuff size.



Measuring Tape (Slide Layer)


Measure the Arm

Measuring Tape

Measuring Tape

Choosing the Right Cuff Size

Measuring Tape



If a measuring tape is not available, you can choose a cuff with a width that encircles almost half of the mid arm.

Recommended Cuff Sizes

If measuring tape isn't available, choose a cuff with a width that encircles almost half of the mid arm.

Recommended Cuff Sizes (Slide Layer)

Measure the Arm

Measuring Tape

Recommended Cuff Sizes

Choosing the Right Cuff Size

Recommended Cuff Sizes

To ensure proper fit, two fingers should fit comfortably under cuff.

Recommended cuff sizes:

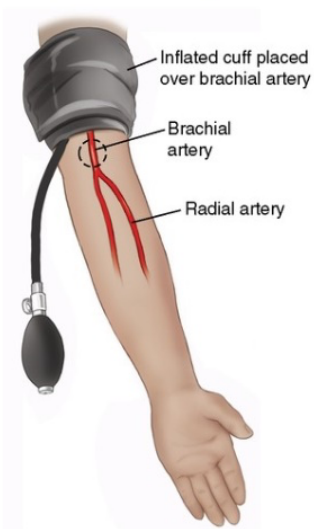
| Arm Circumference | Adult Cuff Size        |
|-------------------|------------------------|
| 22 to 26 cm       | Small adult (12x22 cm) |
| 27 to 34 cm       | Adult (16x30 cm)       |
| 35 to 44 cm       | Large adult (16x36 cm) |
| 45 to 52 cm       | Adult thigh (16x42 cm) |

Two fingers should fit comfortably under the cuff.

## 1.10 Step 2: Applying the Cuff

### Step 2: Applying the Cuff

1. Ask the patient to uncover their arm or roll up the sleeve to completely uncover where the cuff will be placed.
2. Measure the patient's arm to identify the appropriate cuff size.
3. Check for the brachial pulse by placing your index and middle fingers of one hand in the crease of a relaxed elbow.
4. Make sure the cuff is properly deflated before placing it around the patient's arm.
5. Wrap the cuff snugly two finger widths above the elbow, allowing for two fingers to slide easily underneath the cuff when secured.
6. Ensure the center of the cuff bladder is positioned over the brachial pulse.



Here are the steps to follow to ensure a proper fit. Please take some time to read them. If the sleeve of clothing is constrictive, and the situation allows, consider having the patient change into a gown. Begin the measurement to inflate the cuff. Reassure the patient that the discomfort is temporary.

1.11 Step 3: Taking BP Measurements with a Digital Device

Step 3: Taking BP Measurements with a Digital Device

1. Ask the patient to stay still, breathing normally without talking or using a mobile phone.
2. If the machine does not record the reading, re-position the cuff and try again after 1–2 minutes.
3. Take the patient blood pressure. If the first office blood pressure measurement is not at goal (patient with stage 2 hypertension: BP  $\geq$ 140/90), repeat the blood pressure measurement after the patient rests in a comfortable chair for at least 1-5 minutes before the next measurement.
4. Additional readings should be taken if the difference between the first two readings is greater than 5 mmHg. Document the lowest systolic blood pressure and diastolic blood pressure of all readings.



Here are the steps to follow when measuring Blood Pressure with a digital device. Please take some time to read them. It is important to remember that a single high reading does not necessarily mean that the person has high Blood Pressure. The measurement must be repeated. Record both readings in the patient’s chart for the physician’s review.

1.12 Use Best Practices for Communicating with your Patient

Use Best Practices for Communicating with your Patient

Best practices for communicating with your patients.

Click on the numbers to learn more.

1

2

3

4

5

6

Let's now take a look at a few best practices for communicating with your patients about taking blood pressure measurements. Click on the numbers to learn more.

Use Best Practices for Communicating with your Patient



Explain in simple terms the steps for proper BP measurement and emphasize key messages:

*"If it is okay with you, I'd like to walk you through the steps for taking your blood pressure today."*

1

2

3

4

5

6

Explain in simple terms the steps for proper Blood Pressure measurement and emphasize key messages.  
[VO 2] If it is okay with you, I'd like to walk you through the steps for taking your blood pressure today.

Use Best Practices for Communicating with your Patient



Check for understanding:

*“Do you have any questions for me?”*

1

2

3

4

5

6

Check for understanding.  
[VO 2] Do you have any questions for me?

Use Best Practices for Communicating with your Patient



Ask permission before performing the steps:

*“Now, with your permission, I’d like to ask you to please...?”*

1

2

3

4

5

6

Ask permission before performing the steps.  
[VO 2] Now, with your permission, I’d like to ask you to please...?



Use Best Practices for Communicating with your Patient



Listen actively and acknowledge the patient’s emotions:

*“I can see how this may feel...”*

1

2

3

4

5

6

Listen actively and acknowledge the patient’s emotions.  
[VO 2] I can see how this may feel...

Use Best Practices for Communicating with your Patient



Express empathy and reassurance:

*“I can understand why you may feel uncomfortable when the cuff inflates. I will be using the correct cuff size to minimize any discomfort you may feel.”*

1

2

3

4

5

6

Express empathy and reassurance.  
[VO 2] I can understand why you may feel uncomfortable when the cuff inflates. I will also be using the correct cuff size to minimize any discomfort you may feel.

Use Best Practices for Communicating with your Patient



Thank the patient:

*“Thank you for your cooperation today. It helps us ensure we are getting a proper blood pressure reading.”*

1

2

3

4

5

6

Thank the patient.  
[VO 2] Thank you for your cooperation today. It helps us ensure we are getting a proper blood pressure reading.

1.13 When a Patient Refuses to Comply with the Key Steps for Proper Blood Pressure Measurement

**When a Patient Refuses to Comply with the Key Steps for Proper Blood Pressure Measurement**




Patient-centered strategies for how to address difficult situations such as this.

- Avoid becoming defensive
- Acknowledge the situation
- Look through the patient's perspective
- Validate their feelings
- Use reflective listening

→ See responses

What to do when a patient refuses to comply with the key steps for proper Blood Pressure measurement? For example, a patient may tell you that he or she does not want to roll up the sleeve to uncover where the cuff will be placed. What do you do? Below are some patient-centered strategies for how to address difficult situations such as this. Click the button to see examples of empathetic and collaborative responses.

**When a Patient Refuses to Comply with the Key Steps for Proper Blood Pressure Measurement**



Examples of empathetic and collaborative responses:

*“Thank you for letting me know. I can see how this may be uncomfortable to anyone. Please let me know what I can do to help make this process more comfortable for you.”*

*“I appreciate you letting me know. I can see how this is important to you. If it is okay, I’d like to explain why this step is essential when taking BP readings. When having your blood pressure measured, the cuff should always be placed directly on your arm. Studies have shown that clothing can impact BP readings from 10 to 50 units. What do you think of this?”*

Here are two examples of collaborative responses:

[VO 2] Thank you for letting me know. I can see how this may be uncomfortable to anyone. Please let me know what I can do to help make this process more comfortable for you.

Another response can be:

[VO 2] I appreciate you letting me know. I can see how this is important to you. If it is okay, I’d like to explain why this step is essential when taking Blood Pressure readings. When having your blood pressure measured, the cuff should always be placed directly on your arm. Studies have shown that clothing can impact Blood Pressure readings from 10 to 50 units. What do you think of this?

1.14 Test Your Knowledge

Test Your Knowledge

Let's review what you just learned. You must have at least an 80% score to pass.

Click the Start button to begin. Good luck!

→ Start

Let's review what you just learned. Please answer the following quiz questions. You must achieve at least an 80% score to complete this course. Good luck!

1.15 Question 1

QUESTION 1

Which of the following is false?

- ☐ A. The patient should not talk during the measurement.
- ☐ B. The patient should relax seated for two to five minutes before the first measurement.
- ☒ C. In the absence of a hard surface to rest their arm, the patient can hold up their arm during blood pressure measurement.
- ☐ D. A full bladder can cause a significant error in blood pressure measurement

[no audio in this slide]

1.16 Question 2

QUESTION 2

Which of the following measurement techniques can cause an error of a higher blood pressure reading?

- ☒ A. Taking the measurement over clothes
- ☐ B. Arm at heart level
- ☐ C. Forearm supported with palm up
- ☐ D. Patient's back against chair with feet flat on floor

[no audio in this slide]



1.17 Question 3

QUESTION 3

How many blood pressure readings are recommended each time you measure blood pressure?

- ☐ A. one
- ☒ B. at least two
- ☐ C. as many as there is time for
- ☐ D. the same number as taken at the last patient visit

[no audio in this slide]

1.18 Question 4

QUESTION 4

What is the correct time to wait in between two consecutive blood pressure readings on the same individual?

- ☐ A. not more than 30 seconds
- ☒ B. at least 1 minute
- ☐ C. more than 5 minutes
- ☐ D. no specific time between readings is required

[no audio in this slide]

**YOUR RESULTS**

Your Score:    %Results1.ScorePercent%%

Passing Score: %Results1.PassPercent%%

Review Quiz

Retry Quiz

1.21 Thank You

Thank You

Congratulations! You have completed this course, **Accurate Blood Pressure Measurement**.

Click the Exit button to finish.

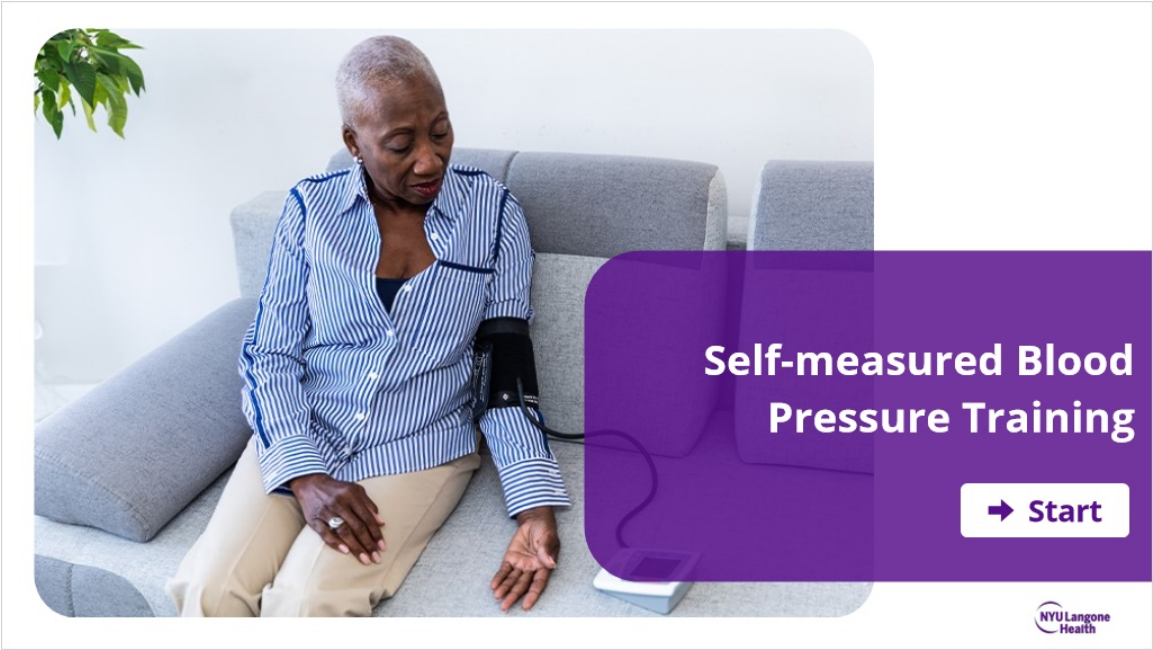
Exit

Congratulations! You have completed this course. Click the Exit button to finish.

**Appendix 3**

**01a - Self-measured Blood Pressure Training**

1.1 Self-measured Blood Pressure Training



Welcome to the Self-measured Blood Pressure training. Click Start to begin.



1.2 Training Objectives

Training Objectives



- Review the benefits of implementing self-measured blood pressure programs
- Review protocol for self-measured blood pressure (SMBP)

During this training, we will review the benefits of implementing self-measured blood pressure programs and review the protocol for self-measured blood pressure.

1.3 Benefits of Home Blood Pressure Monitoring (HBPM)

Benefits of Self-Measured Blood Pressure Monitoring (SMBP)



International and national guidelines recommend SMBP as an essential method for evaluating patients with suspected or treated hypertension.



Provides multiple measurements in patients' 'usual environment'.



Allows for the detection of white coat and masked hypertension.

1


2

Source: <https://www.acc.org/latest-in-cardiology/articles/2017/12/11/18/31/new-2017-acc-aha-guideline-for-high-blood-pressure-in-adults>


The recommendations for self-measured blood pressure are similar to those of in-office measurements. Self-measured blood pressure is beneficial because it provides multiple measurements in the patients' usual environment and allows for the detection of white coat and masked hypertension. Click on the numbers to learn more about white coat and masked hypertension.




## Benefits of Self-Measured Blood Pressure Monitoring (SMBP)



International and national guidelines recommend SMBP as an essential method for evaluating patients with suspected or confirmed hypertension.



Provides multiple measurements in the home setting.



Allows for the detection of white coat hypertension and masked hypertension.


White coat hypertension is based on readings in the office, when the clinic blood pressure is in the hypertensive range, and the home readings are normal.

1


2

White coat hypertension is based on readings in the office when the clinic blood pressure is in the hypertensive range, and the home readings are normal. Over time, experiencing white coat hypertension could be associated with a higher risk of cardiovascular problems compared to people who have normal blood pressure readings in both the clinic and home settings.


### Benefits of Self-Measured Blood Pressure Monitoring (SMBP)



International and national guidelines recommend SMBP as an essential method for evaluating patients with suspected or treated hypertension.



Provides multiple measurements in




Allows for the detection of white

Masked hypertension is based on elevated home readings, and when the clinic blood pressure is not elevated in the 120-129 mmHg SBP or 75-79 for DBP range.


2

Masked hypertension is based on having normal readings in the clinic and elevated readings at home. Like white coat hypertension, experiencing masked hypertension can lead to cardiovascular problems like stroke.


### Benefits of Self-Measured Blood Pressure Monitoring (SMBP)



International and national guidelines recommend SMBP as an essential method for evaluating patients with suspected or treated hypertension.




Provides multiple measurements in patients' 'usual environment'.




Allows for the detection of white coat and masked hypertension.

1


2



SMBP is better at predicting cardiovascular events and mortality than office blood pressure measurements.



Improves blood pressure control rates and adherence to treatment.



Acceptable by patients, widely available and cost-effective.

Source: <https://www.acc.org/latest-in-cardiology/articles/2017/12/11/18/31/new-2017-acc-aha-guideline-for-high-blood-pressure-in-adults>

Self-measured blood pressure also offers greater value in predicting cardiovascular events and mortality compared to office blood pressure measurements. Digital blood pressure machines are also widely available and acceptable by patients. Self-measured blood pressure has been shown to improve blood pressure control rates and adherence to treatment.

1.4 Training Patients on How to Measure Blood Pressure at Home

Implementing SMBP - Identify Patients for SMBP

Self-measured blood pressure monitoring can improve a patient's health. By discussing the benefits of self-measured blood pressure and explaining how it's done, you can help patients understand the importance of regular home monitoring.

☐ Identify Patients for SMBP

☐ Educate Patients on SMBP


Self-measured blood pressure monitoring can improve a patient’s health. By discussing the benefits of self-measured blood pressure and explaining how it’s done, you can help patients understand the importance of regular blood pressure monitoring. Click on the Next button to learn more.


Educate Patients on SMBP (Slide Layer)

Implementing SMBP - Identify Patients for SMBP

Identify Patients for SMBP

SMBP is appropriate to assess BP control in patients with an existing diagnosis of hypertension as well as for adults with untreated office BP to screen for masked hypertension and white coat hypertension.






The first step is to identify patients. Self-measured Blood Pressure is appropriate to assess blood pressure control in patients with an existing diagnosis of hypertension. It is also helpful to screen patients for masked hypertension or white coat hypertension.

Patient Education (Slide Layer)

Implementing SMBP - Identify Patients for SMBP

Educate Patients on SMBP



Each patient identified for SMBP will need 5 to 6 minutes of education and training by a Medical Assistant or Registered Nurse.

- ✓ Identify Patients for SMBP
- ✓ Educate Patients on SMBP

Each patient identified for self-measured blood pressure will need 5 to 6 minutes of education and training by a Medical Assistant or Registered Nurse.

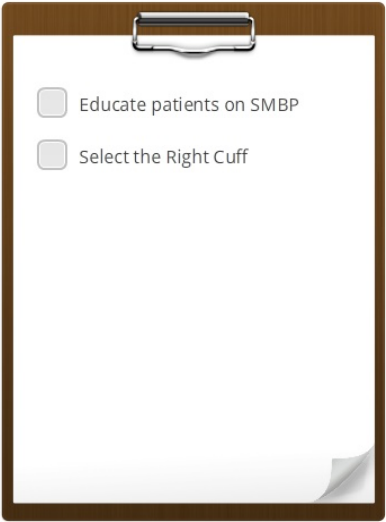
## 1.5 Implementing SMBP - Teaching Patients

### Implementing SMBP - Educate Patients on SMBP

#### Use the Teach-Back Method



The teach-back method is a way of checking understanding by asking patients to state in their own words what they need to know or do about their health. It is a way to confirm that you have explained things in a manner that patients understand.




When educating patients, use the teach-back method to ensure that patients can follow the steps for proper blood pressure self-measurement at home. The teach-back method is a way of checking understanding by asking patients to state in their own words what they need to know or do about their health. It is a way to confirm that you have explained things in a manner that patients understand.

Educate Patients on SMBP (Slide Layer)

Implementing SMBP - Educate Patients on SMBP

Educate patients on SMBP



Over the next slides, we'll review the recommended protocol for educating patients on performing self-measured blood pressure using their own validated device or a loaner device from your practice.

- ☒ Educate patients on SMBP
- ☐ Select the Right Cuff


Over the next slides, we'll review the recommended protocol for educating patients on performing self-measured blood pressure using their own validated device or a loaner device from your practice.



Use the Teach-back Method (Slide Layer)

Implementing SMBP - Educate Patients on SMBP

Select the Right Cuff



Teach patients how to select the right cuff size by measuring the patient's arm and selecting the cuff size based on their arm circumference.

☒

Educate patients on SMBP

☒

Select the Right Cuff

Teach patients how to select the right cuff size by measuring the patient's arm and selecting the cuff size based on their arm circumference.

1.6 Training Patients on How to Measure Blood Pressure at Home

Follow these steps for an accurate blood pressure reading:

**1 PREPARE**



Patients should be instructed to follow the steps to take their own blood pressure accurately, including proper preparation, positioning, and measurement. Click on the numbers as they appear to learn about each step. You must see all steps as they appear to continue.

Step 1 (Slide Layer)

Follow these steps for an accurate blood pressure reading:

1 PREPARE

2 POSITION


Avoid caffeine, cigarettes and other stimulants 30 minutes before you measure your blood pressure.

Wait at least 30 minutes after a meal.

If you're on blood pressure medication, measure your blood pressure before you take your medication.

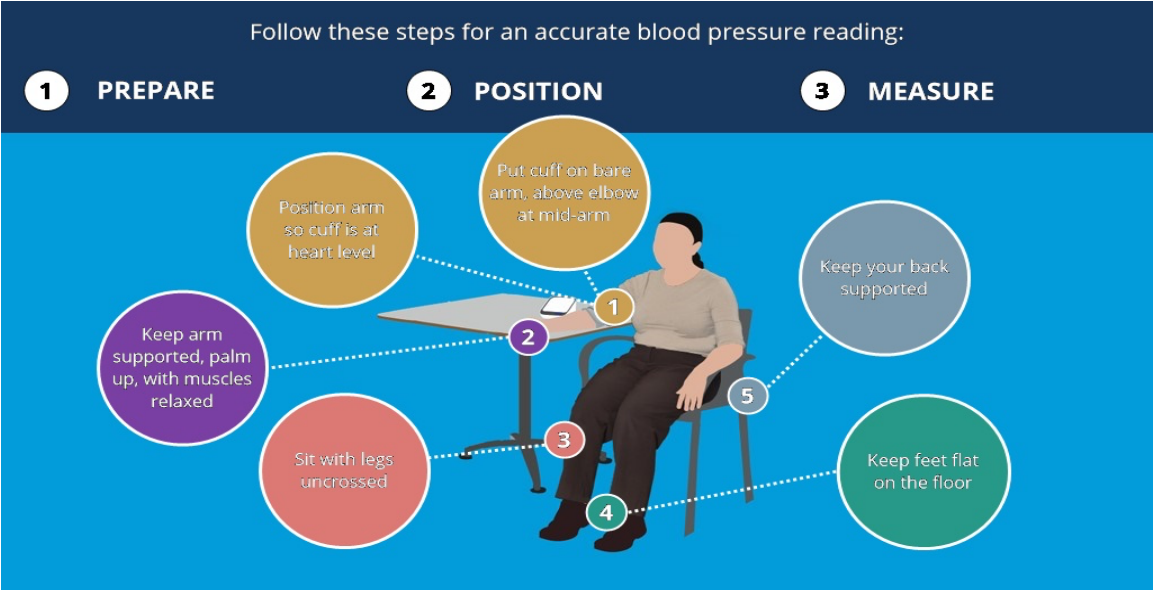
Empty your bladder beforehand.

Find a quiet space where you can sit comfortably without distraction.



Step 1 - Prepare. Instruct patients to avoid caffeine, cigarettes, and other stimulants 30 minutes before they self-measure their blood pressure. Please, take some time to read the recommendations listed here.

Step 2 (Slide Layer)



Step 2 - Position. There are several recommendations for proper positioning that patients should follow when measuring their blood pressure at home. Click on the numbers below, as they appear, to learn more.

===

[1] Put the cuff on the bare arm, above the elbow, and at mid-arm. Position the arm, so the cuff is at heart level.

===

[2] Keep the arm supported, palm up, with muscles relaxed.

===

[3] Sit with their legs uncrossed.

===

[4] Keep the feet flat on the floor.

===

[5] Keep the back supported.


Step 3 (Slide Layer)

Follow these steps for an accurate blood pressure reading:

1 PREPARE

2 POSITION

3 MEASURE




Rest for five minutes while in position before starting.

Take two or three measurements, one minute apart.

Keep your body relaxed and in position during measurements.

Sit quietly with no distractions during measurements—avoid conversations, TV, phones and other devices.

Record your measurements when finished.

 [Download PDF](#)

Step 3 - Measure. Instruct patients to rest for five minutes before starting and to stay quiet with no distractions during the measurements. Please, take the time to read the recommendations listed here. You can also download these steps for future reference.

1.7 Implementing SMBP - Instruct Patients on Collecting SMBP Data

Implementing SMBP - Instruct Patients on Collecting SMBP Data

Minimum pressure readings



Instruct patients on how to collect and electronically transfer their self-measure blood pressure measurements. At a minimum, patients should be asked to take at least two blood pressure readings, 1 minute apart, in the morning before taking any medications and in the evening before supper, for seven consecutive days before their clinic appointment.

☒ Minimum pressure readings

☐ Follow-up visits

☐ Measuring blood pressure as ...

☐ Bringing their home monitor


Instruct patients on how to collect and electronically transfer their self-measure blood pressure measurements. At a minimum, patients should be asked to take at least two blood pressure readings, 1 minute apart, in the morning before taking any medications and in the evening before supper, for seven consecutive days before their clinic appointment.

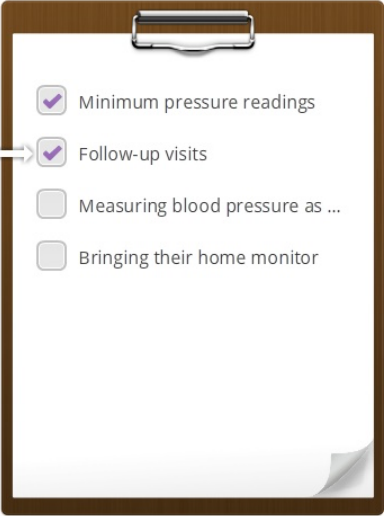
Follow-up Visits (Slide Layer)

Implementing SMBP - Instruct Patients on Collecting SMBP Data

Follow-up visits

For patients scheduled for a follow-up visit, self-measured blood pressure should be done for at least seven days prior to the clinic visit to supply the most current and clinically meaningful data.






For patients scheduled for a follow-up visit, self-measured blood pressure should be done for at least seven days prior to the clinic visit to supply the most current and clinically meaningful data.

Measuring Blood Pressure as a Habit (Slide Layer)

Implementing SMBP - Instruct Patients on Collecting SMBP Data

Measuring blood pressure as a habit



Encourage patients to form a habit of taking their blood pressures regularly, morning and evening, and sharing the pattern of readings taken in the week prior to an appointment with their clinical team. By making self-measured blood pressure a daily habit, patients and providers can work together to improve the patient's blood pressure.

- ☒ Minimum pressure readings
- ☒ Follow-up visits
- ☒ Measuring blood pressure as ...
- ☐ Bringing their home monitor

Encourage patients to form a habit of taking their blood pressures regularly, morning and evening, and sharing the pattern of readings taken in the week prior to an appointment with their clinical team. By making self-measured blood pressure a daily habit, patients and providers can work together to improve the patient's blood pressure.




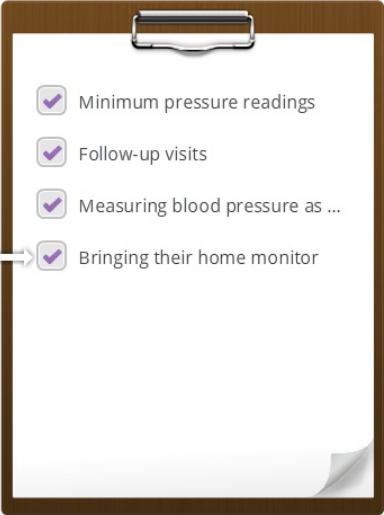
Bringing their Home Monitor (Slide Layer)

Implementing SMBP - Instruct Patients on Collecting SMBP Data

Bringing their home monitor

Remind patients to always bring their home blood pressure monitor to their clinic appointments to confirm the self-measured blood pressure readings stored in the device memory, troubleshoot any problems with the device, and other activities such as demonstrating how to use the device.





- ☒ Minimum pressure readings
- ☒ Follow-up visits
- ☒ Measuring blood pressure as ...
- ☒ Bringing their home monitor

Remind patients to always bring their home blood pressure monitor to their clinic appointments to confirm the self-measured blood pressure readings stored in the device memory, troubleshoot any problems with the device, and other activities such as demonstrating how to use the device.

1.8 Implementing SMBP - Receive Patient Data

Implementing SMBP - Receive Patient Data

Click on the buttons below to learn more.

Data Transmit

Average BP Readings

SMBP Measurement

Here is the protocol for patients receiving patient data. Click on the buttons below to learn more.

Implementing SMBP - Receive Patient Data



Data should be transmitted electronically via Bluetooth to clinical practices and into the electronic medical record, or via entry by staff while reviewing the memory of the patient’s self-measured blood pressure or the completed SMBP log.

Data Transmit

Average BP Readings

SMBP Measurement

Data should be transmitted electronically via Bluetooth to clinical practices and directly uploaded into the electronic medical record. Staff can also enter data while reviewing the memory of the patient's blood pressure monitor or the patients’ completed self-measured blood pressure log.

2 - Average BP Readings (Slide Layer)

Implementing SMBP - Receive Patient Data

Average systolic and diastolic blood pressure readings into one SMBP average measurement using readings from the week prior to the patient visit. Use readings from days 2-7 (discard day 1 data).

In this example, the patient measured the BP 7 days. Excluding Day 1, add the systolic values together and divide by 10 and add the diastolic values together and divide by 10 and combine to get the SMBP average reading (systolic/diastolic).

|         |           | Day 1 | Day 2 | Day 3 | Day 4 | Day 5 | Day 6 | Day 7 | Total | Average                        |
|---------|-----------|-------|-------|-------|-------|-------|-------|-------|-------|--------------------------------|
| Morning | Systolic  | 173   | 164   | X     | 152   | 161   | 149   | 139   | 765   | Systolic: 153<br>Diastolic: 81 |
|         | Diastolic | 85    | 78    | X     | 70    | 99    | 90    | 69    | 406   |                                |
| Night   | Systolic  | 161   | 152   | X     | 173   | 149   | 139   | 164   | 765   |                                |
|         | Diastolic | 99    | 70    | X     | 85    | 90    | 69    | 78    | 406   |                                |

There are tools that may help with averaging data, such as the [Blood Pressure Average Calculator](#).

Data Transmit

Average BP Readings


SMBP Measurement

Take the average of the systolic and diastolic blood pressure readings into one self-measured blood pressure average measurement using readings from the week prior to the patient visit. Use readings from days 2 to 7. Discard day 1 data.

In the example shown here, the patient measured the blood pressure seven days. Not including the first day's value, add the systolic values together and divide by the total number of systolic values provided by the patient for that period (in this case, the patient provided 10 systolic values, 5 in AM and 5 in PM). Then, add the diastolic values together and divide by the total number of diastolic values provided by the patient for that period (in this case, the patient provided 10 diastolic values, 5 in AM and 5 in PM). Combine them to get the systolic and diastolic self-measure blood pressure average reading.

There are tools that may help with averaging data, such as the Blood Pressure Average Calculator from the America Heart Association. You can access that tool by clicking on the link or from the Resources section of the course player.

Implementing SMBP - Receive Patient Data



Enter the SMBP average measurement number into the patient's electronic medical record.

Data Transmit

Average BP Readings

SMBP Measurement

Enter the self-measured blood pressure average measurement number into the patient's electronic medical record.

1.9 Interpreting SMBP Results

Interpreting SMBP Results

Review Blood Pressure Results. Interpret the results and manage patients.

| In-office BP                       | SMBP                               | Classification                           | Management   |
|------------------------------------|------------------------------------|--|--|
| Less than 120/80                   | Less than 120/80                   | Normal blood pressure                    | Recheck BP in office in one year   |
| 120-129/<br>less than 80           | 120-129/<br>less than 80           | Elevated BP                              | Healthy lifestyle changes and recheck SMBP every 3-6 months                              |
| Less than 130/80                   | Greater than or<br>equal to 130/80 | Masked hypertension                      | Manage as sustained hypertension<br>due to increased CV risk or consider<br>24-hour ABPM |
| Greater than or<br>equal to 130/80 | Less than 130/80                   | White coat hypertension                  | Recheck SMBP every six months  |
| Greater than or<br>equal to 130/80 | 120-129/<br>less than 80           | White coat hypertension +<br>elevated BP | Healthy lifestyle changes and recheck<br>SMBP every 3-6 months                           |
| Greater than or<br>equal to 130/80 | Greater than or<br>equal to 130/80 | Sustained hypertension                   | Manage per current hypertension<br>guideline recommendations                             |

Source: <https://targetbp.org/patient-measured-bp/implementing/smbp-data-collection-review>

The table shown here can help you interpret self-measured blood pressure results and determine whether there are any readings that need closer attention, such as white coat hypertension or masked hypertension. If a patient with office blood pressure in the elevated BP range (systolic blood pressure level 120 to 129 and diastolic blood pressure less than 80) has a self-measured blood pressure average of less than 120 over 80, they should be considered to have normal blood pressure in most situations. If a patient with a known diagnosis of hypertension has a self-measured blood pressure average of greater than or equal to 130 over 80, then their blood pressure is above goal.

1.10 Thank You

Test Your Knowledge

Let's review what you just learned about,  
**Self-measured Blood Pressure Training.**

You must pass the following test with at least 80% to complete this course.  
Click the Start button to begin. Good luck!

→ Start Quiz

Let's review what you just learned. You must pass the following test with at least 80% to complete this course.  
Click the Start button to begin. Good luck!

## 1.11 Question 1

**Self-measured blood pressure monitoring is an important part of hypertension management and important for evaluating and treating high blood pressure.**

☒ True

☐ False



1.12 Question 2

**Self-measured blood pressure monitoring can be used to:**

- ☒ A. Identify White-coat effect
- ☐ B. Identify Masked hypertension
- ☐ C. Confirm the diagnosis of hypertension
- ☐ D. All of the above

1.13 Question 3

**The steps for proper self-measured blood pressure measurement are:  
(select all that apply)**

- ☒ Measurement
- ☐ Preparation
- ☐ Positioning
- ☐ Monitoring

1.14 Question 4

**Upper arm self-measured blood pressure monitoring should be used with:**

- ☒ A. Non-validated devices
- ☐ B. The appropriate size cuffs
- ☐ C. Long sleeve clothing

1.15 Question 5

**Blood pressure readings should be transferred electronically to healthcare providers.**

☒ True

☐ False

1.16 Question 6

**What is the recommendation for self-measured blood pressure monitoring?**

- ☒ A. Take two measurements taken at least 1 minute apart in the morning and evening ideally for 7 days
- ☐ B. Take one measurement weekly
- ☐ C. To use devices that don't store readings

1.17 Results Slide

Results

Your Score:

%Results.ScorePercent%% (%Results.ScorePoints% points)

Passing Score:

%Results.PassPercent%% (%Results.PassPoints% points)

Result:

Review Quiz

Retry Quiz

1.19 Thank You

Thank You

Congratulations! You have completed this course,  
**Self-measured Blood Pressure Training.**

Click the Exit button to finish.

⏮ Exit

Congratulations! You have completed this course. Click the Exit button to finish.

APPENDIX 4

BP Medication Titration Guidelines



# Appendix – Table of Contents

| Section                    | Contents                               |
|----------------------------|--|
| <a href="#">Appendix A</a> | Standard Titration Guide - Medications |
| <a href="#">Appendix B</a> | Non-Guideline Anti-Hypertensive Meds   |
| <a href="#">Appendix C</a> | ARBs                                   |
| <a href="#">Appendix D</a> | ACE Inhibitors                         |
| <a href="#">Appendix E</a> | Thiazides                              |
| <a href="#">Appendix F</a> | CCBs                                   |
| <a href="#">Appendix G</a> | Combo Meds                             |
| <a href="#">Appendix H</a> | Nephrotoxic Meds                       |
| <a href="#">Appendix I</a> | Valid Readings for Titration           |
| <a href="#">Appendix J</a> | Exclusion Criteria                     |
| <a href="#">Appendix K</a> | Lab Monitoring                         |

## APPENDIX A – Standard Med Titration Guide - Medications

# Appendix A – Standard Titration Guide – Medications

| ARBs               |             | ACE Inhibitors      |              | Thiazides          |                | CCBs               |            |
|--------------------|-------------|---------------------|--------------|--------------------|----------------|--------------------|------------|
| <a href="#">C1</a> | Losartan    | <a href="#">D1</a>  | Lisinopril   | <a href="#">E1</a> | HCTZ           | <a href="#">F1</a> | Amlodipine |
| <a href="#">C2</a> | Valsartan   | <a href="#">D2</a>  | Benazepril   | <a href="#">E2</a> | Chlorthalidone | <a href="#">F2</a> | Felodipine |
| <a href="#">C3</a> | Irbesartan  | <a href="#">D3</a>  | Captopril    |                    |                |                    |            |
| <a href="#">C4</a> | Olmesartan  | <a href="#">D4</a>  | Enalapril    |                    |                |                    |            |
| <a href="#">C5</a> | Telmisartan | <a href="#">D5</a>  | Ramipril     |                    |                |                    |            |
| <a href="#">C</a>  | Candesartan | <a href="#">D6</a>  | Quinapril    |                    |                |                    |            |
|                    |             | <a href="#">D7</a>  | Fosinopril   |                    |                |                    |            |
|                    |             | <a href="#">D8</a>  | Perindopril  |                    |                |                    |            |
|                    |             | <a href="#">D9</a>  | Moexipril    |                    |                |                    |            |
|                    |             | <a href="#">D10</a> | Trandolapril |                    |                |                    |            |

*Note: If on 2+ of the med categories above (C1 – F2), then titrate each independently starting from left to right.*

| Combo Meds         |  |                     |                                       |                     |                                    |                     |                                  |                      |   |
|--------------------|--|---------------------|---------------------------------------|---------------------|------------------------------------|---------------------|----------------------------------|----------------------|---|
| ACE + Thiazide     |  | ARB + Thiazide      |                                       | ACE + CCB           |                                    | ARB + CCB           |                                  | ARB + CCB + Diuretic |   |
| <a href="#">G1</a> | Lisinopril/HCTZ (Zestoretic, Prinzide) | <a href="#">G7</a>  | Losartan/HCTZ (Hyzaar)                | <a href="#">G13</a> | Perindopril/Amlodipine (Prestalia) | <a href="#">G15</a> | Olmesartan/Amlodipine (Azor)     | <a href="#">G18</a>  | Olmesartan/Amlodipine/HCTZ (Tribenzor)  |
| <a href="#">G2</a> | Benazepril/HCTZ (Lotensin HCT)         | <a href="#">G8</a>  | Valsartan/HCTZ (Diovan HCT)           | <a href="#">G14</a> | Benazepril/Amlodipine (Lotrel)     | <a href="#">G16</a> | Telmisartan/Amlodipine (Twynsta) | <a href="#">G19</a>  | Valsartan/Amlodipine/HCTZ (Exforge HCT) |
| <a href="#">G3</a> | Enalapril/HCTZ (Vaseretic)             | <a href="#">G9</a>  | Olmesartan/HCTZ (Benicar HCT)         |                     |                                    | <a href="#">G17</a> | Valsartan/Amlodipine (Exforge)   |                      |   |
| <a href="#">G4</a> | Quinapril/HCTZ (Accuretic)             | <a href="#">G10</a> | Telmisartan/HCTZ (Micardis HCT)       |                     |                                    |                     |                                  |                      |   |
| <a href="#">G5</a> | Moexipril/HCTZ (Uniretic)              | <a href="#">G11</a> | Irbesartan/HCTZ (Avalide)             |                     |                                    |                     |                                  |                      |   |
| <a href="#">G6</a> | Captopril/HCTZ (Capozide)              | <a href="#">G12</a> | Candesartan/HCTZ (Atacand HCT)        |                     |                                    |                     |                                  |                      |   |
|                    |  | <a href="#">G20</a> | Azilsartan/Chorthalidone (Edarbyclor) |                     |                                    |                     |                                  |                      |   |

TITRATE MEDICATIONS PATIENT  
ALREADY ON  
FIRST, IN THIS ORDER

**ACE-I/ARB**

HCTZ or Chlorthalidone

Amlodipine or  
Felodipine ER

ADD GUIDELINE MEDICATION  
FROM CLASS PATIENT IS  
NOT ALREADY ON,  
STARTING WITH LOSARTAN

**LOSARTAN**  
(ARB)

**HCTZ**  
(THIAZIDE)

**AMLODIPINE**  
(CCB)

follow guideline flowchart and med titration appendix

# Guideline Anti-Hypertensive Meds

# Appendix B – Non-Guideline Anti-Hypertensive Meds

| Drug Class                                  | Agents  |
|---|---|
| Alpha-blockers                              | Doxazosin, Terazosin, Prazosin  |
| Central $\alpha$ -agonists                  | Clonidine, Methyldopa, Guanfacine   |
| Direct vasodilators                         | Hydralazine, Minoxidil  |
| Loop diuretics                              | Furosemide, Bumetanide, Torsemide   |
| Potassium-sparing diuretics                 | Amiloride, Triamterene  |
| Aldosterone antagonists                     | Spironolactone, Eplerenone  |
| Beta-blockers / $\alpha$ - $\beta$ blockers | Metoprolol, Atenolol, Bisoprolol, Nebivolol, Carvedilol, Labetalol  |
| Non-DHP calcium-channel blockers            | Verapamil, Diltiazem  |
| Other long-acting DHP CCBs                  | Nifedipine ER, Nicardipine SR, Isradipine, Nisoldipine  |
| Short-acting DHP CCB                        | Nifedipine IR (not recommended)   |
| Direct renin inhibitor                      | Aliskiren   |
| Adrenergic neuron blockers                  | Reserpine, Guanethidine, Guanadrel  |
| Other combination meds                      | Aliskiren/Amlodipine (Tekamlo), Aliskiren/Amlodipine/HCTZ (Amturnide), Aliskiren/HCTZ (Tekturna HCT), Atenolol/Chlorthalidone (Tenoretic), Bisoprolol/HCTZ (Ziac), Clonidine/Chlorthalidone (Clorpres), Hydralazine/HCTZ (Apresazide), Methyldopa/HCTZ (Aldoril), Metoprolol/HCTZ (Lopressor HCT), Nadolol/Bendroflumethiazide (Corzide), Propranolol/HCTZ (Inderide), Reserpine/HCTZ (Hydropres) |

## APPENDIX C - ARBs

# Appendix C1 – ARBs - Losartan

|                   |  |
|-------------------|--|
| Contraindications | Pregnancy, bilateral renal artery stenosis, angioedema history r/t ARB/ACE-I, CKD eGFR < 60, hyperkalemia risk (K>5.0), age ≥ 80 or frail, on daily NSAIDs or nephrotoxic drugs, already taking ACE-I or aliskiren or other direct renin inhibitor |
| Monitoring        | K, Cr, baseline and at 14 days after initiation or dose change<br>Creatinine increase ≥ 30% (see Appendix K – Lab Monitoring)  |

| Specific Medication Titration Guidance |  |
|--|--|
| Currently taking                       | Titrate To   |
| 25mg once daily Losartan               | 50mg once daily Losartan                                     |
| 50mg once daily Losartan               | 100mg once daily Losartan                                    |
| 100mg once daily Losartan              | 100mg once daily Losartan + additional agent (see flowchart) |
|  |  |
|  |  |



# Appendix C2 – ARBs - Valsartan

|                   |  |
|-------------------|--|
| Contraindications | Pregnancy, bilateral renal artery stenosis, angioedema history r/t ARB/ACE-I, CKD eGFR < 60, hyperkalemia risk (K>5.0), age ≥ 80 or frail, on daily NSAIDs or nephrotoxic drugs, already taking ACE-I or aliskiren or other direct renin inhibitor |
| Monitoring        | K, Cr, baseline and at 14 days after dose change<br>Creatinine increase ≥ 30% (see Appendix K – Lab Monitoring)  |

| Specific Medication Titration Guidance |  |
|--|--|
| Currently taking                       | Titrate To   |
| 40mg daily Valsartan                   | 80mg once daily Valsartan                                      |
| 80mg once daily Valsartan              | 160 mg once daily Valsartan                                    |
| 160 mg once daily Valsartan            | 320 mg once daily Valsartan                                    |
| 320 mg once daily Valsartan            | 320 mg once daily Valsartan + additional agent (see flowchart) |

# Appendix C3 – ARBs - Irbesartan

|                   |  |
|-------------------|--|
| Contraindications | Pregnancy, bilateral renal artery stenosis, angioedema history r/t ARB/ACE-I, CKD eGFR < 60, hyperkalemia risk (K>5.0), age ≥ 80 or frail, on daily NSAIDs or nephrotoxic drugs, already taking ACE-I or aliskiren or other direct renin inhibitor |
| Monitoring        | K, Cr, baseline and at 14 days after dose change<br>Creatinine increase >= 30% (see Appendix K – Lab Monitoring)   |

| Specific Medication Titration Guidance |   |
|--|---|
| Currently taking                       | Titrate To  |
| 75 mg once daily Irbesartan            | 150 mg once daily Irbesartan                                    |
| 150 mg once daily Irbesartan           | 300 mg once daily Irbesartan                                    |
| 300 mg once daily Irbesartan           | 300 mg once daily Irbesartan + additional agent (see flowchart) |
|  |   |

# Appendix C4 – ARBs - Olmesartan

|  |  |
|--|--|
| Contraindications  | Pregnancy, bilateral renal artery stenosis, angioedema history r/t ARB/ACE-I, CKD eGFR < 60, hyperkalemia risk (K>5.0), age ≥ 80 or frail, on daily NSAIDs or nephrotoxic drugs, already taking ACE-I or aliskiren or other direct renin inhibitor |
| Monitoring   | K, Cr, baseline and at 14 days after dose change<br>Creatinine increase >= 30% (see Appendix K – Lab Monitoring)   |
| Specific Medication Titration Guidance   |  |
| Currently taking   | Titrate To   |
| 5 mg once daily Olmesartan   | 10 mg* once daily Olmesartan   |
| 10 mg once daily Olmesartan  | 20 mg once daily Olmesartan  |
| 20 mg once daily Olmesartan  | 40 mg once daily Olmesartan  |
| 40 mg once daily Olmesartan  | 40 mg once daily Olmesartan + additional agent (see flowchart)   |
| *if 10mg dose is needed, it is patient preference whether they take two 5mg tablets or split a 20mg tablet |  |

# Appendix C5 – ARBs - Telmisartan

|                   |  |
|-------------------|--|
| Contraindications | Pregnancy, bilateral renal artery stenosis, angioedema history r/t ARB/ACE-I, CKD eGFR < 60, hyperkalemia risk (K>5.0), age ≥ 80 or frail, on daily NSAIDs or nephrotoxic drugs, already taking ACE-I or aliskiren or other direct renin inhibitor |
| Monitoring        | K, Cr, baseline and at 14 days after dose change<br>Creatinine increase ≥ 30% (see Appendix K – Lab Monitoring)  |

| Specific Medication Titration Guidance |   |
|--|---|
| Currently taking                       | Titrate To  |
| 20 mg once daily Telmisartan           | 40 mg once daily Telmisartan                                    |
| 40 mg once daily Telmisartan           | 80 mg once daily Telmisartan                                    |
| 80 mg once daily Telmisartan           | 80 mg once daily Telmisartan + additional agent (see flowchart) |
|  |   |

# Appendix C6 – ARBs - Candesartan

|                   |  |
|-------------------|--|
| Contraindications | Pregnancy, bilateral renal artery stenosis, angioedema history r/t ARB/ACE-I, CKD eGFR < 60, hyperkalemia risk (K>5.0), age ≥ 80 or frail, on daily NSAIDs or nephrotoxic drugs, already taking ACE-I or aliskiren or other direct renin inhibitor |
| Monitoring        | K, Cr, baseline and at 14 days after dose change<br>Creatinine increase ≥ 30% (see Appendix K – Lab Monitoring)  |

| Specific Medication Titration Guidance |   |
|--|---|
| Currently taking                       | Titrate To  |
| 4 mg once daily Candesartan            | 8 mg once daily Candesartan                                     |
| 8 mg once daily Candesartan            | 16 mg once daily Candesartan                                    |
| 16 mg once daily Candesartan           | 32 mg once daily Candesartan                                    |
| 32 mg once daily Candesartan           | 32 mg once daily Candesartan + additional agent (see flowchart) |

# Appendix C7 – ARBs - Eprosartan

|   |  |
|---|--|
| Contraindications   | Pregnancy, bilateral renal artery stenosis, angioedema history r/t ARB/ACE-I, CKD eGFR < 60, hyperkalemia risk (K>5.0), age ≥ 80 or frail, on daily NSAIDs or nephrotoxic drugs, already taking ACE-I or aliskiren or other direct renin inhibitor |
| Monitoring  | K, Cr, baseline and at 14 days after dose change<br>Creatinine increase >= 30% (see Appendix K – Lab Monitoring)   |
| Specific Medication Titration Guidance  |  |
| Currently taking  | Suggest change to  |
| RN to pend (losartan) and message the MD; recommend change from Eprosartan to other medication, due to it being an older med which requires more frequent dosing. If no contraindications, RN may pend Losartan (switching from non-guideline ARB to guideline ARB) | Pend order to switch to Losartan 50mg once daily (unless contraindicated, if so, use flowchart)  |
| .RPMBPLABMEDORDER: Program recommends switching to daily e.g. ARB - please sign off if interested   |  |
|   |  |
|   |  |

# Appendix C8 – ARBs – Azilsartan Medoxomil

|                   |  |
|-------------------|--|
| Contraindications | Pregnancy, bilateral renal artery stenosis, angioedema history r/t ARB/ACE-I, CKD eGFR < 60, hyperkalemia risk (K>5.0), age ≥ 80 or frail, on daily NSAIDs or nephrotoxic drugs, already taking ACE-I or aliskiren or other direct renin inhibitor |
| Monitoring        | K, Cr, baseline and at 14 days after dose change<br>Creatinine increase ≥ 30% (see Appendix K – Lab Monitoring)  |

| Specific Medication Titration Guidance |  |
|--|--|
| Currently taking                       | Titrate To   |
| 40 mg once daily Azilsartan Medoxomil  | 80 mg once daily Azilsartan Medoxomil                                    |
| 80 mg once daily Azilsartan Medoxomil  | 80 mg once daily Azilsartan Medoxomil + additional agent (see flowchart) |
|  |  |
|  |  |

APPENDIX D - ACE

# Inhibitors



# Appendix D1 – ACE Inhibitors - Lisinopril

|                   |   |
|-------------------|---|
| Contraindications | Cough, pregnancy, bilateral renal artery stenosis, angioedema history r/t ARB/ACE-I, CKD eGFR <60, hyperkalemia risk (K>5.0), age ≥ 80 or frail, on daily NSAIDS or nephrotoxic drugs, already taking ARB |
| Monitoring        | K, Cr, baseline and at 14 days after dose change<br>Creatinine increase >= 30% (see Appendix K – Lab Monitoring)  |

| Specific Medication Titration Guidance |  |
|--|--|
| Currently taking                       | Titrate To   |
| 2.5mg daily Lisinopril                 | 5mg daily Lisinopril                                     |
| 5mg daily Lisinopril                   | 10mg daily Lisinopril                                    |
| 10mg daily Lisinopril                  | 20mg daily Lisinopril                                    |
| 20mg daily Lisinopril                  | 30mg daily Lisinopril                                    |
| 30mg daily Lisinopril                  | 40mg daily Lisinopril                                    |
| 40mg daily Lisinopril                  | 40mg daily Lisinopril + additional agent (see flowchart) |

# Appendix D2 – ACE Inhibitors - Benazepril

|                   |   |
|-------------------|---|
| Contraindications | Cough, pregnancy, bilateral renal artery stenosis, angioedema history r/t ARB/ACE-I, CKD eGFR <60, hyperkalemia risk (K>5.0), age ≥ 80 or frail, on daily NSAIDS or nephrotoxic drugs, already taking ARB |
| Monitoring        | K, Cr, baseline and at 14 days after dose change<br>Creatinine increase >= 30% (see Appendix K – Lab Monitoring)  |

| Specific Medication Titration Guidance |   |
|--|---|
| Currently taking                       | Titrate To  |
| 5 mg daily Benazepril                  | 10 mg daily Benazepril                                    |
| 10 mg daily Benazepril                 | 20 mg daily Benazepril                                    |
| 20 mg daily Benazepril                 | 40 mg daily Benazepril                                    |
| 40 mg daily Benazepril                 | 40 mg daily Benazepril + additional agent (see flowchart) |

# Appendix D3 – ACE Inhibitors - Captopril

|                   |   |
|-------------------|---|
| Contraindications | Cough, pregnancy, bilateral renal artery stenosis, angioedema history r/t ARB/ACE-I, CKD eGFR <60, hyperkalemia risk (K>5.0), age ≥ 80 or frail, on daily NSAIDS or nephrotoxic drugs, already taking ARB |
| Monitoring        | K, Cr, baseline and at 14 days after dose change<br>Creatinine increase >= 30% (see Appendix K – Lab Monitoring)  |

| Specific Medication Titration Guidance   |   |
|--|---|
| Currently taking   | Suggest change to   |
| RN to pend (losartan) and message the MD; recommend change from Captopril to other medication, due to it being an older med which requires more frequent dosing. If no contraindications, RN may pend Losartan (switching from ACE-I to guideline ARB) | Pend order to switch to Losartan 50mg once daily (unless contraindicated, if so, use flowchart) |
| .RPMBPLABMEDORDER: Program recommends switching to daily<br>e.g. ARB - please sign off if interested   |   |
|  |   |
|  |   |

# Appendix D4 – ACE Inhibitors - Enalapril

|                   |   |
|-------------------|---|
| Contraindications | Cough, pregnancy, bilateral renal artery stenosis, angioedema history r/t ARB/ACE-I, CKD eGFR <60, hyperkalemia risk (K>5.0), age ≥ 80 or frail, on daily NSAIDS or nephrotoxic drugs, already taking ARB |
| Monitoring        | K, Cr, baseline and at 14 days after dose change<br>Creatinine increase >= 30% (see Appendix K – Lab Monitoring)  |

| Specific Medication Titration Guidance |  |
|--|--|
| Currently Taking                       | Titrate To   |
| 5 mg daily Enalapril                   | 10 mg daily Enalapril                                    |
| 10 mg daily Enalapril                  | 20 mg daily Enalapril                                    |
| 20 mg daily Enalapril                  | 40 mg daily Enalapril                                    |
| 40 mg daily Enalapril                  | 40 mg daily Enalapril + additional agent (see flowchart) |

# Appendix D5 – ACE Inhibitors - Ramipril

|                   |   |
|-------------------|---|
| Contraindications | Cough, pregnancy, bilateral renal artery stenosis, angioedema history r/t ARB/ACE-I, CKD eGFR <60, hyperkalemia risk (K>5.0), age ≥ 80 or frail, on daily NSAIDS or nephrotoxic drugs, already taking ARB |
| Monitoring        | K, Cr, baseline and at 14 days after dose change<br>Creatinine increase >= 30% (see Appendix K – Lab Monitoring)  |

| Specific Medication Titration Guidance |  |
|--|--|
| Currently Taking                       | Titrate To   |
| 2.5 mg once daily Ramipril             | 5 mg once daily Ramipril                                     |
| 5 mg once daily Ramipril               | 10 mg once daily Ramipril                                    |
| 10 mg once daily Ramipril              | 10 mg once daily Ramipril + additional agent (see flowchart) |
|  |  |

# Appendix D6 – ACE Inhibitors - Quinapril

|                   |   |
|-------------------|---|
| Contraindications | Cough, pregnancy, bilateral renal artery stenosis, angioedema history r/t ARB/ACE-I, CKD eGFR <60, hyperkalemia risk (K>5.0), age ≥ 80 or frail, on daily NSAIDS or nephrotoxic drugs, already taking ARB |
| Monitoring        | K, Cr, baseline and at 14 days after dose change<br>Creatinine increase >= 30% (see Appendix K – Lab Monitoring)  |

| Specific Medication Titration Guidance |   |
|--|---|
| Currently Taking                       | Titrate To  |
| 10 mg once daily Quinapril             | 20 mg once daily Quinapril                                    |
| 20 mg once daily Quinapril             | 40 mg once daily Quinapril                                    |
| 40 mg once daily Quinapril             | 40 mg once daily Quinapril + additional agent (see flowchart) |
|  |   |

# Appendix D7 – ACE Inhibitors - Fosinopril

|                   |   |
|-------------------|---|
| Contraindications | Cough, pregnancy, bilateral renal artery stenosis, angioedema history r/t ARB/ACE-I, CKD eGFR <60, hyperkalemia risk (K>5.0), age ≥ 80 or frail, on daily NSAIDS or nephrotoxic drugs, already taking ARB |
| Monitoring        | K, Cr, baseline and at 14 days after dose change<br>Creatinine increase >= 30% (see Appendix K – Lab Monitoring)  |

| Specific Medication Titration Guidance |  |
|--|--|
| Currently Taking                       | Titrate To   |
| 5 mg once daily Fosinopril             | 10 mg once daily Fosinopril                                    |
| 10 mg once daily Fosinopril            | 20 mg once daily Fosinopril                                    |
| 20 mg once daily Fosinopril            | 40 mg once daily Fosinopril                                    |
| 40 mg once daily Fosinopril            | 40 mg once daily Fosinopril + additional agent (see flowchart) |

# Appendix D8 – ACE Inhibitors - Perindopril

|                   |   |
|-------------------|---|
| Contraindications | Cough, pregnancy, bilateral renal artery stenosis, angioedema history r/t ARB/ACE-I, CKD eGFR <60, hyperkalemia risk (K>5.0), age ≥ 80 or frail, on daily NSAIDS or nephrotoxic drugs, already taking ARB |
| Monitoring        | K, Cr, baseline and at 14 days after dose change<br>Creatinine increase >= 30% (see Appendix K – Lab Monitoring)  |

| Specific Medication Titration Guidance |  |
|--|--|
| Currently Taking                       | Titrate To   |
| 2 mg once daily Perindopril            | 4 mg once daily Perindopril                                    |
| 4 mg once daily Perindopril            | 8 mg once daily Perindopril                                    |
| 8 mg once daily Perindopril            | 8 mg once daily Perindopril + additional agent (see flowchart) |
|  |  |



# Appendix D9 – ACE Inhibitors - Moexipril

|                   |   |
|-------------------|---|
| Contraindications | Cough, pregnancy, bilateral renal artery stenosis, angioedema history r/t ARB/ACE-I, CKD eGFR <60, hyperkalemia risk (K>5.0), age ≥ 80 or frail, on daily NSAIDS or nephrotoxic drugs, already taking ARB |
| Monitoring        | K, Cr, baseline and at 14 days after dose change<br>Creatinine increase >= 30% (see Appendix K – Lab Monitoring)  |

| Specific Medication Titration Guidance |   |
|--|---|
| Currently Taking                       | Titrate To  |
| 3.75 mg once daily Moexipril           | 7.5 mg once daily Moexipril                                   |
| 7.5 mg once daily Moexipril            | 15 mg once daily Moexipril                                    |
| 15 mg once daily Moexipril             | 30 mg once daily Moexipril                                    |
| 30 mg once daily Moexipril             | 30 mg once daily Moexipril + additional agent (see flowchart) |

# Appendix D10 – ACE Inhibitors - Trandolapril

|                   |   |
|-------------------|---|
| Contraindications | Cough, pregnancy, bilateral renal artery stenosis, angioedema history r/t ARB/ACE-I, CKD eGFR <60, hyperkalemia risk (K>5.0), age ≥ 80 or frail, on daily NSAIDS or nephrotoxic drugs, already taking ARB |
| Monitoring        | K, Cr, baseline and at 14 days after dose change<br>Creatinine increase >= 30% (see Appendix K – Lab Monitoring)  |

| Specific Medication Titration Guidance |  |
|--|--|
| Currently Taking                       | Titrate To   |
| 0.5 mg once daily Trandolapril         | 1 mg once daily Trandolapril                                   |
| 1 mg once daily Trandolapril           | 2 mg once daily Trandolapril                                   |
| 2 mg once daily Trandolapril           | 4 mg once daily Trandolapril                                   |
| 4 mg once daily Trandolapril           | 4 mg once daily Trandolapril+ additional agent (see flowchart) |

## APPENDIX E – Thiazides

# Appendix E1 – Thiazides – Hydrochlorothiazide (HCTZ)

|                   |  |
|-------------------|--|
| Contraindications | Sulfa allergy, gout, CKD eGFR <60, angioedema r/t thiazides, hyponatremia (Na<132), hypokalemia risk (K<3.5), hypercalcemia (Ca>10.2), age ≥ 80 or frail, on daily NSAIDS or nephrotoxic drugs |
| Monitoring        | Na, K, Cr, baseline and at 14 days after initiation or dose change<br>Creatinine increase >= 30% (see Appendix K – Lab Monitoring)   |

| Specific Medication Titration Guidance |  |
|--|--|
| Currently taking                       | Titrate To   |
| 12.5 mg once daily HCTZ                | 25 mg once daily HCTZ                                    |
| 25 mg once daily HCTZ                  | 25 mg once daily HCTZ + additional agent (see flowchart) |
|  |  |
|  |  |

# Appendix E2 – Thiazides – Chlorthalidone

|                   |  |
|-------------------|--|
| Contraindications | Sulfa allergy, gout, CKD eGFR <60, angioedema r/t thiazides, hyponatremia (Na<132), hypokalemia risk (K<3.5), hypercalcemia (Ca>10.2), age ≥ 80 or frail, on daily NSAIDS or nephrotoxic drugs |
| Monitoring        | Na, K, Cr, baseline and at 14 days after dose change<br>Creatinine increase >= 30% (see Appendix K – Lab Monitoring)   |

| Specific Medication Titration Guidance |  |
|--|--|
| Currently taking                       | Titrate To   |
| 12.5 mg once daily Chlorthalidone      | 25 mg once daily Chlorthalidone                                    |
| 25 mg once daily Chlorthalidone        | 25 mg once daily Chlorthalidone + additional agent (see flowchart) |
|  |  |
|  |  |

APPENDIX F – CCBs

# Appendix F1 – CCBs – Amlodipine

|                   |  |
|-------------------|--|
| Contraindications | Patient on more than 20 mg Simvastatin (Physician may need to change lipid-lowering medication), angioedema r/t CCBs |
| Monitoring        | Remote edema check   |

| Specific Medication Titration Guidance |  |
|--|--|
| Currently taking                       | Titrate To   |
| 2.5 mg once daily Amlodipine           | 5 mg once daily Amlodipine                                     |
| 5 mg once daily Amlodipine             | 10 mg once daily Amlodipine                                    |
| 10 mg once daily Amlodipine            | 10 mg once daily Amlodipine + additional agent (see flowchart) |
|  |  |

# Appendix F2 – CCBs – Felodipine ER

|                   |                     |
|-------------------|---------------------|
| Contraindications | Angioedema r/t CCBs |
| Monitoring        | Remote edema check  |

| Specific Medication Titration Guidance |   |
|--|---|
| Currently taking                       | Titrate To  |
| 2.5 mg once daily Felodipine ER        | 5 mg once daily Felodipine ER                                     |
| 5 mg once daily Felodipine ER          | 10 mg once daily Felodipine ER                                    |
| 10 mg once daily Felodipine ER         | 10 mg once daily Felodipine ER + additional agent (see flowchart) |
|  |   |



APPENDIXG-Combo

# Meds

# Appendix G1 – Combos - Lisinopril/HCTZ (Zestoretic)

|                   |   |
|-------------------|---|
| Contraindications | Cough, pregnancy, bilateral renal artery stenosis, angioedema history r/t ARB/ACE-I or thiazides, CKD eGFR <60, hyperkalemia risk (K>5.0), hypokalemia risk (K<3.5), hyponatremia (Na<132), hypercalcemia (Ca>10.2), sulfa allergy, gout, age ≥ 80 or frail, on daily NSAIDs or nephrotoxic drugs |
| Monitoring        | Na, K, Cr, baseline and at 14 days after dose change<br>Creatinine increase >= 30% (see Appendix K – Lab Monitoring)  |

| Specific Medication Titration Guidance   |   |
|--|---|
| Currently taking                         | Titrate To  |
| 10 mg/12.5 mg once daily Lisinopril/HCTZ | 20 mg/12.5 mg once daily Lisinopril/HCTZ  |
| 20 mg/12.5 mg once daily Lisinopril/HCTZ | 20 mg/25 mg once daily Lisinopril/HCTZ  |
| 20 mg/25 mg once daily Lisinopril/HCTZ   | 20 mg/25 mg once daily Lisinopril/HCTZ + additional agent if applicable (see flowchart) |

# Appendix G2 – Combos - Benazepril/HCTZ (Lotensin HCT)

|                   |   |
|-------------------|---|
| Contraindications | Cough, pregnancy, bilateral renal artery stenosis, angioedema history r/t ARB/ACE-I or thiazides, CKD eGFR <60, hyperkalemia risk (K>5.0), hypokalemia risk (K<3.5), hyponatremia (Na<132), hypercalcemia (Ca>10.2), sulfa allergy, gout, age ≥ 80 or frail, on daily NSAIDs or nephrotoxic drugs |
| Monitoring        | Na, K, Cr, baseline and at 14 days after dose change<br>Creatinine increase >= 30% (see Appendix K – Lab Monitoring)  |

| Specific Medication Titration Guidance   |   |
|--|---|
| Currently taking                         | Titrate To  |
| 5 mg/6.25 mg once daily Benazepril/HCTZ  | 10 mg/12.5 mg once daily Benazepril/HCTZ  |
| 10 mg/12.5 mg once daily Benazepril/HCTZ | 20 mg/12.5 mg once daily Benazepril/HCTZ  |
| 20 mg/12.5 mg once daily Benazepril/HCTZ | 20 mg/25 mg once daily Benazepril/HCTZ  |
| 20 mg/25 mg once daily Benazepril/HCTZ   | 20 mg/25 mg once daily Benazepril/HCTZ + additional agent if applicable (see flowchart) |

# Appendix G3 – Combos - Enalapril/HCTZ (Vaseretic)

|                   |   |
|-------------------|---|
| Contraindications | Cough, pregnancy, bilateral renal artery stenosis, angioedema history r/t ARB/ACE-I or thiazides, CKD eGFR <60, hyperkalemia risk (K>5.0), hypokalemia risk (K<3.5), hyponatremia (Na<132), hypercalcemia (Ca>10.2), sulfa allergy, gout, age ≥ 80 or frail, on daily NSAIDs or nephrotoxic drugs |
| Monitoring        | Na, K, Cr, baseline and at 14 days after dose change<br>Creatinine increase >= 30% (see Appendix K – Lab Monitoring)  |

| Specific Medication Titration Guidance  |  |
|---|--|
| Currently taking                        | Titrate To   |
| 5 mg/12.5 mg once daily Enalapril/HCTZ  | 10 mg/12.5 mg once daily Enalapril/HCTZ  |
| 10 mg/12.5 mg once daily Enalapril/HCTZ | 20 mg/12.5 mg once daily Enalapril/HCTZ  |
| 20 mg/12.5 mg once daily Enalapril/HCTZ | 20 mg/12.5 mg once daily Enalapril/HCTZ + additional agent if applicable (see flowchart) |

# Appendix G4 – Combos - Quinapril/HCTZ (Accuretic)

|                   |   |
|-------------------|---|
| Contraindications | Cough, pregnancy, bilateral renal artery stenosis, angioedema history r/t ARB/ACE-I or thiazides, CKD eGFR <60, hyperkalemia risk (K>5.0), hypokalemia risk (K<3.5), hyponatremia (Na<132), hypercalcemia (Ca>10.2), sulfa allergy, gout, age ≥ 80 or frail, on daily NSAIDs or nephrotoxic drugs |
| Monitoring        | Na, K, Cr, baseline and at 14 days after dose change<br>Creatinine increase >= 30% (see Appendix K – Lab Monitoring)  |

| Specific Medication Titration Guidance  |  |
|---|--|
| Currently taking                        | Titrate To   |
| 10 mg/12.5 mg once daily Quinapril/HCTZ | 20 mg/12.5 mg once daily Quinapril/HCTZ  |
| 20 mg/12.5 mg once daily Quinapril/HCTZ | 20 mg/25 mg once daily Quinapril/HCTZ  |
| 20 mg/25 mg once daily Quinapril/HCTZ   | 20 mg/25 mg once daily Quinapril/HCTZ + additional agent if applicable (see flowchart) |

# Appendix G5 – Combos - Moexipril/HCTZ (Uniretic)

|                   |   |
|-------------------|---|
| Contraindications | Cough, pregnancy, bilateral renal artery stenosis, angioedema history r/t ARB/ACE-I or thiazides, CKD eGFR <60, hyperkalemia risk (K>5.0), hypokalemia risk (K<3.5), hyponatremia (Na<132), hypercalcemia (Ca>10.2), sulfa allergy, gout, age ≥ 80 or frail, on daily NSAIDs or nephrotoxic drugs |
| Monitoring        | Na, K, Cr, baseline and at 14 days after dose change<br>Creatinine increase >= 30% (see Appendix K – Lab Monitoring)  |

| Specific Medication Titration Guidance  |  |
|---|--|
| Currently taking                        | Titrate To   |
| 10 mg/12.5 mg once daily Quinapril/HCTZ | 20 mg/12.5 mg once daily Quinapril/HCTZ  |
| 20 mg/12.5 mg once daily Quinapril/HCTZ | 20 mg/25 mg once daily Quinapril/HCTZ  |
| 20 mg/25 mg once daily Quinapril/HCTZ   | 20 mg/25 mg once daily Quinapril/HCTZ + additional agent if applicable (see flowchart) |

# Appendix G6 – Combos - Captopril/HCTZ (Capozide)

|                   |   |
|-------------------|---|
| Contraindications | Cough, pregnancy, bilateral renal artery stenosis, angioedema history r/t ARB/ACE-I or thiazides, CKD eGFR <60, hyperkalemia risk (K>5.0), hypokalemia risk (K<3.5), hyponatremia (Na<132), hypercalcemia (Ca>10.2), sulfa allergy, gout, age ≥ 80 or frail, on daily NSAIDs or nephrotoxic drugs |
| Monitoring        | Na, K, Cr, baseline and at 14 days after dose change<br>Creatinine increase >= 30% (see Appendix K – Lab Monitoring)  |

| Specific Medication Titration Guidance  |                             |
|---|-----------------------------|
| Currently taking  | Suggest change to           |
| RN to message the MD; recommend change from Captopril to other medication, due to it being an older med which requires more frequent dosing. If no contraindications, RN may recommend Losartan (switching from ACE-I to guideline ARB) | ** ? Losartan/HCTZ (Hyzaar) |
|   |                             |

# Appendix G7 – Combos - Losartan/HCTZ (Hyzaar)

|                   |   |
|-------------------|---|
| Contraindications | Pregnancy, bilateral renal artery stenosis, angioedema history r/t ARB/ACE-I or thiazides, CKD eGFR < 60, hyperkalemia risk (K>5.0), hypokalemia risk (K<3.5), hyponatremia (Na<132), hypercalcemia (Ca>10.2), sulfa allergy, gout, age ≥ 80 or frail, on daily NSAIDs or nephrotoxic drugs |
| Monitoring        | Na, K, Cr, baseline and at 14 days after dose change<br>Creatinine increase >= 30% (see Appendix K – Lab Monitoring)  |

| Specific Medication Titration Guidance  |  |
|---|--|
| Currently taking                        | Titrate To   |
| 50 mg/12.5 mg once daily Losartan/HCTZ  | 100 mg/12.5 mg once daily Losartan/HCTZ  |
| 100 mg/12.5 mg once daily Losartan/HCTZ | 100 mg/25 mg once daily Losartan/HCTZ  |
| 100 mg/25 mg once daily Losartan/HCTZ   | 100 mg/25 mg once daily Losartan/HCTZ + additional agent if applicable (see flowchart) |



# Appendix G8 – Combos - Valsartan/HCTZ (Diovan HCT)

|                   |   |
|-------------------|---|
| Contraindications | Pregnancy, bilateral renal artery stenosis, angioedema history r/t ARB/ACE-I or thiazides, CKD eGFR < 60, hyperkalemia risk (K>5.0), hypokalemia risk (K<3.5), hyponatremia (Na<132), hypercalcemia (Ca>10.2), sulfa allergy, gout, age ≥ 80 or frail, on daily NSAIDs or nephrotoxic drugs |
| Monitoring        | Na, K, Cr, baseline and at 14 days after dose change<br>Creatinine increase >= 30% (see Appendix K – Lab Monitoring)  |

| Specific Medication Titration Guidance   |   |
|--|---|
| Currently taking                         | Titrate To  |
| 160 mg/12.5 mg once daily Valsartan/HCTZ | 160 mg/25 mg once daily Valsartan/HCTZ  |
| 160 mg/25 mg once daily Valsartan/HCTZ   | 320 mg/12.5 mg once daily Valsartan/HCTZ  |
| 320 mg/12.5 mg once daily Valsartan/HCTZ | 320 mg/25 mg once daily Valsartan/HCTZ  |
| 320 mg/25 mg once daily Valsartan/HCTZ   | 320 mg/25 mg once daily Valsartan/HCTZ + additional agent if applicable (see flowchart) |

# Appendix G9 – Combos - Olmesartan/HCTZ (Benicar HCT)

|                   |   |
|-------------------|---|
| Contraindications | Pregnancy, bilateral renal artery stenosis, angioedema history r/t ARB/ACE-I or thiazides, CKD eGFR < 60, hyperkalemia risk (K>5.0), hypokalemia risk (K<3.5), hyponatremia (Na<132), hypercalcemia (Ca>10.2), sulfa allergy, gout, age ≥ 80 or frail, on daily NSAIDs or nephrotoxic drugs |
| Monitoring        | Na, K, Cr, baseline and at 14 days after dose change<br>Creatinine increase >= 30% (see Appendix K – Lab Monitoring)  |

| Specific Medication Titration Guidance   |   |
|--|---|
| Currently taking                         | Titrate To  |
| 20 mg/12.5 mg once daily Olmesartan/HCTZ | 40 mg/12.5 mg once daily Olmesartan/HCTZ  |
| 40 mg/12.5 mg once daily Olmesartan/HCTZ | 40 mg/25 mg once daily Olmesartan/HCTZ  |
| 40 mg/25 mg once daily Olmesartan/HCTZ   | 40 mg/25 mg once daily Olmesartan/HCTZ + additional agent if applicable (see flowchart) |

# Appendix G10 – Combos - Telmisartan/HCTZ (Micardis HCT)

|                   |   |
|-------------------|---|
| Contraindications | Pregnancy, bilateral renal artery stenosis, angioedema history r/t ARB/ACE-I or thiazides, CKD eGFR < 60, hyperkalemia risk (K>5.0), hypokalemia risk (K<3.5), hyponatremia (Na<132), hypercalcemia (Ca>10.2), sulfa allergy, gout, age ≥ 80 or frail, on daily NSAIDs or nephrotoxic drugs |
| Monitoring        | Na, K, Cr, baseline and at 14 days after dose change<br>Creatinine increase >= 30% (see Appendix K – Lab Monitoring)  |

| Specific Medication Titration Guidance    |  |
|---|--|
| Currently taking                          | Titrate To   |
| 40 mg/12.5 mg once daily Telmisartan/HCTZ | 80 mg/12.5 mg once daily Telmisartan/HCTZ  |
| 80 mg/12.5 mg once daily Telmisartan/HCTZ | 80 mg/25 mg once daily Telmisartan/HCTZ  |
| 80 mg/25 mg once daily Telmisartan/HCTZ   | 80 mg/25 mg once daily Telmisartan/HCTZ + additional agent if applicable (see flowchart) |

# Appendix G11 – Combos - Irbesartan/HCTZ (Avalide)

|                   |   |
|-------------------|---|
| Contraindications | Pregnancy, bilateral renal artery stenosis, angioedema history r/t ARB/ACE-I or thiazides, CKD eGFR < 60, hyperkalemia risk (K>5.0), hypokalemia risk (K<3.5), hyponatremia (Na<132), hypercalcemia (Ca>10.2), sulfa allergy, gout, age ≥ 80 or frail, on daily NSAIDs or nephrotoxic drugs |
| Monitoring        | Na, K, Cr, baseline and at 14 days after dose change<br>Creatinine increase >= 30% (see Appendix K – Lab Monitoring)  |

| Specific Medication Titration Guidance    |  |
|---|--|
| Currently taking                          | Titrate To   |
| 150 mg/12.5 mg once daily Irbesartan/HCTZ | 300 mg/12.5 mg once daily Irbesartan/HCTZ  |
| 300 mg/12.5 mg once daily Irbesartan/HCTZ | 300 mg/25 mg once daily Irbesartan/HCTZ  |
| 300 mg/25 mg once daily Irbesartan/HCTZ   | 300 mg/25 mg once daily Irbesartan/HCTZ + additional agent if applicable (see flowchart) |

# Appendix G12 – Combos - Candesartan/HCTZ (Atacand HCT)

|                   |   |
|-------------------|---|
| Contraindications | Pregnancy, bilateral renal artery stenosis, angioedema history r/t ARB/ACE-I or thiazides, CKD eGFR < 60, hyperkalemia risk (K>5.0), hypokalemia risk (K<3.5), hyponatremia (Na<132), hypercalcemia (Ca>10.2), sulfa allergy, gout, age ≥ 80 or frail, on daily NSAIDs or nephrotoxic drugs |
| Monitoring        | Na, K, Cr, baseline and at 14 days after dose change<br>Creatinine increase >= 30% (see Appendix K – Lab Monitoring)  |

| Specific Medication Titration Guidance    |  |
|---|--|
| Currently taking                          | Titrate To   |
| 16 mg/12.5 mg once daily Candesartan/HCTZ | 32 mg/12.5 mg once daily Candesartan/HCTZ  |
| 32 mg/12.5 mg once daily Candesartan/HCTZ | 32 mg/25 mg once daily Candesartan/HCTZ  |
| 32 mg/25 mg once daily Candesartan/HCTZ   | 32 mg/25 mg once daily Candesartan/HCTZ + additional agent if applicable (see flowchart) |

# Appendix G13 – Combos - Perindopril/Amlodipine (Prestalia)

|  |   |
|--|---|
| Contraindications  | Cough, pregnancy, bilateral renal artery stenosis, angioedema history r/t ARB/ACE-I or CCB, CKD eGFR <60, hyperkalemia risk (K>5.0), age ≥ 80 or frail, on daily NSAIDs or nephrotoxic drugs, patient on more than 20 mg Simvastatin (physician may need to change lipid-lowering medication) |
| Monitoring   | K, Cr, baseline and at 14 days after dose change, Remote edema check<br>Creatinine increase >= 30% (see Appendix K – Lab Monitoring)  |
| Specific Medication Titration Guidance                       |   |
| Currently taking   | Titrate To  |
| 3.5 mg/2.5 mg once daily Perindopril/Amlodipine              | 7 mg/5 mg once daily Perindopril/Amlodipine   |
| 7 mg/5 mg once daily Perindopril/Amlodipine                  | 14 mg/5 mg once daily Perindopril/Amlodipine  |
| 14 mg/5 mg once daily Perindopril/Amlodipine                 | 14 mg/10 mg once daily Perindopril/Amlodipine   |
| 14 mg/10 mg once daily Perindopril/Amlodipine (maximum dose) | 14 mg/10 mg once daily Perindopril/Amlodipine + additional agent if applicable (see flowchart)  |

# Appendix G14 – Combos - Benazepril/Amlodipine (Lotrel)

|                   |  |
|-------------------|--|
| Contraindications | Cough, pregnancy, bilateral renal artery stenosis, angioedema history r/t ARB/ACE-I, CKD eGFR <60, hyperkalemia risk (K>5.0), age ≥ 80 or frail, on daily NSAIDs or nephrotoxic drugs, patient on more than 20 mg Simvastatin (physician may need to change lipid-lowering medication) |
| Monitoring        | K, Cr, baseline and at 14 days after dose change, Remote edema check<br>Creatinine increase ≥ 30% (see Appendix K – Lab Monitoring)  |

| Specific Medication Titration Guidance        |   |
|---|---|
| Currently taking                              | Titrate To  |
| 2.5 mg/10 mg once daily Benazepril/Amlodipine | 5 mg/10 mg once daily Benazepril/Amlodipine   |
| 5 mg/10 mg once daily Benazepril/Amlodipine   | 10 mg/10 mg once daily Benazepril/Amlodipine  |
| 10 mg/10 mg once daily Benazepril/Amlodipine  | 10 mg/10 mg once daily Benazepril/Amlodipine + additional agent if applicable (see flowchart) |

# Appendix G15 – Combos - Olmesartan/Amlodipine (Azor)

|  |  |
|--|--|
| Contraindications                            | Cough, pregnancy, bilateral renal artery stenosis, angioedema history r/t ARB/ACE-I, CKD eGFR <60, hyperkalemia risk (K>5.0), age ≥ 80 or frail, on daily NSAIDs or nephrotoxic drugs, patient on more than 20 mg Simvastatin (physician may need to change lipid-lowering medication) |
| Monitoring                                   | K, Cr, baseline and at 14 days after dose change, Remote edema check<br>Creatinine increase ≥ 30% (see Appendix K – Lab Monitoring)  |
| Specific Medication Titration Guidance       |  |
| Currently taking                             | Titrate To   |
| 20 mg/5 mg once daily Olmesartan/Amlodipine  | 40 mg/5 mg once daily Olmesartan/Amlodipine  |
| 40 mg/5 mg once daily Olmesartan/Amlodipine  | 40 mg/10 mg once daily Olmesartan/Amlodipine   |
| 40 mg/10 mg once daily Olmesartan/Amlodipine | 40 mg/10 mg once daily Olmesartan/Amlodipine + additional agent if applicable (see flowchart)  |



# Appendix G16 – Combos - Telmisartan/Amlodipine (Twynsta)

|   |  |
|---|--|
| Contraindications                             | Cough, pregnancy, bilateral renal artery stenosis, angioedema history r/t ARB/ACE-I, CKD eGFR <60, hyperkalemia risk (K>5.0), age ≥ 80 or frail, on daily NSAIDs or nephrotoxic drugs, patient on more than 20 mg Simvastatin (physician may need to change lipid-lowering medication) |
| Monitoring                                    | K, Cr, baseline and at 14 days after dose change, Remote edema check<br>Creatinine increase ≥ 30% (see Appendix K – Lab Monitoring)  |
| Specific Medication Titration Guidance        |  |
| Currently taking                              | Titrate To   |
| 40 mg/5 mg once daily Telmisartan/Amlodipine  | 80 mg/5 mg once daily Telmisartan/Amlodipine   |
| 80 mg/5 mg once daily Telmisartan/Amlodipine  | 80 mg/10 mg once daily Telmisartan/Amlodipine  |
| 80 mg/10 mg once daily Telmisartan/Amlodipine | 80 mg/10 mg once daily Telmisartan/Amlodipine + additional agent if applicable (see flowchart)   |

# Appendix G17 – Combos - Valsartan/Amlodipine (Exforge)

|  |  |
|--|--|
| Contraindications                            | Cough, pregnancy, bilateral renal artery stenosis, angioedema history r/t ARB/ACE-I, CKD eGFR <60, hyperkalemia risk (K>5.0), age ≥ 80 or frail, on daily NSAIDs or nephrotoxic drugs, patient on more than 20 mg Simvastatin (physician may need to change lipid-lowering medication) |
| Monitoring                                   | K, Cr, baseline and at 14 days after dose change, Remote edema check<br>Creatinine increase >= 30% (see Appendix K – Lab Monitoring)   |
| Specific Medication Titration Guidance       |  |
| Currently taking                             | Titrate To   |
| 160 mg/5 mg once daily Valsartan/Amlodipine  | 160 mg/10 mg once daily Valsartan/Amlodipine   |
| 160 mg/10 mg once daily Valsartan/Amlodipine | 320 mg/5 mg once daily Valsartan/Amlodipine  |
| 320 mg/5 mg once daily Valsartan/Amlodipine  | 320 mg/10 mg once daily Valsartan/Amlodipine   |
| 320 mg/10 mg once daily Valsartan/Amlodipine | 320 mg/10 mg once daily Valsartan/Amlodipine + additional agent if applicable (see flowchart)  |

# Appendix G18 – Combos - Olmesartan/Amlodipine/HCTZ (Tribenzor)

|                   |  |
|-------------------|--|
| Contraindications | Pregnancy, bilateral renal artery stenosis, angioedema history r/t ARB/ACE-I, CKD eGFR < 60, hyperkalemia risk (K>5.0), hypokalemia risk (K<3.5), hyponatremia (Na<132), hypercalcemia (Ca>10.2), sulfa allergy, gout, age ≥ 80 or frail, on daily NSAIDs or nephrotoxic drugs |
| Monitoring        | Na, K, Cr, baseline and at 14 days after initiation or dose change, remote edema check<br>Creatinine increase ≥ 30% (see Appendix K – Lab Monitoring)  |

| Specific Medication Titration Guidance                       |  |
|--|--|
| Currently taking   | Titrate To   |
| 20 mg/5 mg/12.5 mg once daily<br>Olmesartan/Amlodipine/HCTZ  | 40 mg/5 mg/12.5 mg once daily<br>Olmesartan/Amlodipine/HCTZ                              |
| 40 mg/5 mg/12.5 mg once daily<br>Olmesartan/Amlodipine/HCTZ  | 40 mg/10 mg/12.5 mg once daily<br>Olmesartan/Amlodipine/HCTZ                             |
| 40 mg/10 mg/12.5 mg once daily<br>Olmesartan/Amlodipine/HCTZ | 40 mg/10 mg/25 mg once daily<br>Olmesartan/Amlodipine/HCTZ                               |
| 40 mg/10 mg/25 mg once daily<br>Olmesartan/Amlodipine/HCTZ   | 40 mg/10 mg/25 mg once daily<br>Olmesartan/Amlodipine/HCTZ (maximum dose, see flowchart) |

# Appendix G19 – Combos - Valsartan/Amlodipine/HCTZ (Exforge HCT)

|                   |   |
|-------------------|---|
| Contraindications | Pregnancy, bilateral renal artery stenosis, angioedema history r/t ARB/ACE-I, CKD eGFR < 60, hyperkalemia risk (K>5.0), hypokalemia risk (K<3.5), hyponatremia (Na<132), hypercalcemia (Ca>10.2), sulfa allergy, gout, age ≥ 80 or frail, on daily NSAIDs or nephrotoxic drugs, patient on more than 20 mg Simvastatin (physician may need to change lipid-lowering medication) |
| Monitoring        | Na, K, Cr, baseline and at 14 days after initiation or dose change, remote edema check<br>Creatinine increase >= 30% (see Appendix K – Lab Monitoring)  |

| Specific Medication Titration Guidance                       |   |
|--|---|
| Currently taking   | Titrate To  |
| 160 mg/5 mg/12.5 mg once daily<br>Valsartan/Amlodipine/HCTZ  | 160 mg/10 mg/12.5 mg once daily<br>Valsartan/Amlodipine/HCTZ  |
| 160 mg/10 mg/12.5 mg once daily<br>Valsartan/Amlodipine/HCTZ | 320 mg/10 mg/12.5 mg once daily<br>Valsartan/Amlodipine/HCTZ  |
| 320 mg/10 mg/12.5 mg once daily<br>Valsartan/Amlodipine/HCTZ | 320 mg/10 mg/25 mg once daily<br>Valsartan/Amlodipine/HCTZ (maximum dose, refer to PCP for individualized treatment plan) |

# Appendix G20 – Combos - Azilsartan/Chorthalidone (Edarbyclor)

|   |  |
|---|--|
| Contraindications                                   | Pregnancy, bilateral renal artery stenosis, angioedema history r/t ARB/ACE-I or thiazides, CKD eGFR <60, hyperkalemia risk (K>5.0), hypokalemia risk (K<3.5), hyponatremia (Na<132), hypercalcemia (Ca>10.2), sulfa allergy, gout, age ≥ 80 or frail, on daily NSAIDs or nephrotoxic drugs |
| Monitoring  | Na, K, Cr, baseline and at 14 days after dose change<br>Creatinine increase >= 30% (see Appendix K – Lab Monitoring)   |
| Specific Medication Titration Guidance              |  |
| Currently taking                                    | Titrate To   |
| 40 mg / 12.5 mg once daily Azilsartan/Chorthalidone | 40 mg / 25 mg once daily Azilsartan/Chorthalidone  |
| 40 mg / 25 mg once daily Azilsartan/Chorthalidone   | 40 mg / 25 mg once daily Azilsartan/Chorthalidone + additional agent if applicable (see flowchart)   |
|   |  |

APPENDIX H -

# Nephrotoxic Meds

# Appendix H - Nephrotoxic Medications

- Daily NSAIDs (Non-Steroidal Anti-Inflammatory Drugs)
- Antibiotics: gentamicin, tobramycin, amikacin, vancomycin, amphotericin B, trimethoprim-sulfamethoxazole (TMP-SMX; AKA "Bactrim")
- Antivirals: acyclovir, tenofovir, cidofovir, foscarnet
- Chemotherapy agents: cisplatin, carboplatin, methotrexate, ifosfamide
- Immunosuppressants: cyclosporine, tacrolimus
- Bisphosphonates (IV): zoledronic acid, pamidronate

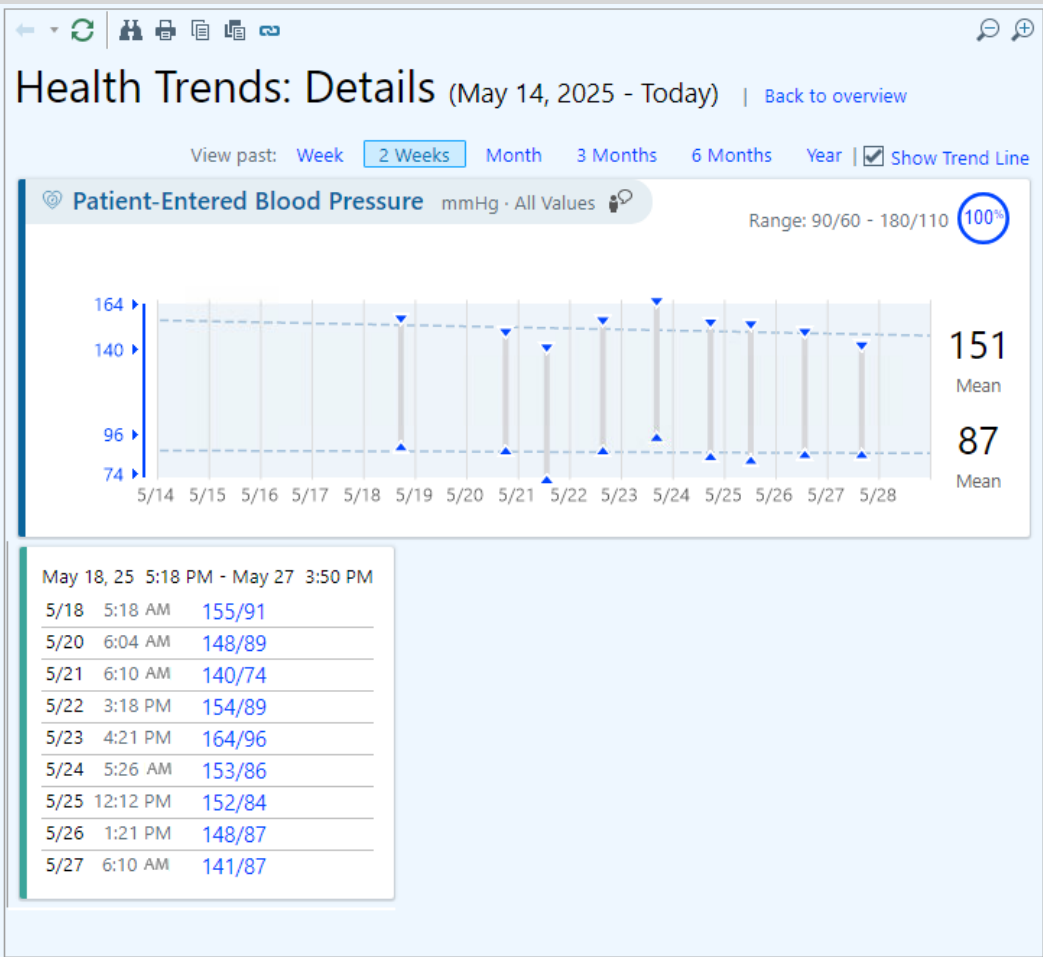
APPENDIX I - Valid

# Readings for Titration



# Appendix I – Valid Data for Med Titration

## Review data for the past 2 Weeks in Health Trends



## Requirements to be Considered Valid Data

**8+ blood pressure readings**  
in total over the past 14 days

**AND**

**3+ days** with both  
*morning AND eve  
ning* readings



**Morning**  
5am - 10am



**Evening**  
5pm - 10pm

**OR**

**4+ days** with  
*morning* readings



**Morning**  
5am - 10am

## APPENDIX J - Exclusion Criteria

# Appendix J - Program-Level Exclusion Criteria for Any Med Orders or Titrations

- Heart failure
- CKD stage  $\geq 4$  (GFR  $< 30$ )
- Coronary artery disease
- Creatinine above reference range
- Patients  $> 80$  years of age
- Pregnancy

APPENDIX K - Lab

# Monitoring

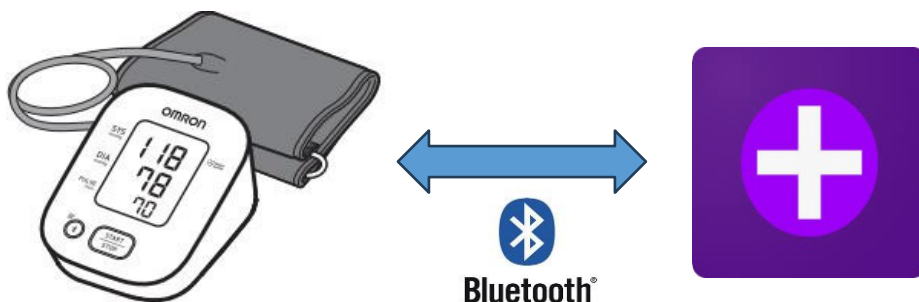
# Appendix K - Lab Monitoring

| Lab                         | Level                         | RN Action                                   | Hold Titration Of  | Patient Instruction        |
|-----------------------------|-------------------------------|---|--|----------------------------|
| Creatinine (Cr)             | <30% increase from baseline   | ✅ Proceed with titration                    | —  | Continue you the new pres  |
|                             | 30–50% increase from baseline | ⚠️ Flag for review, hold titration          | ARB, ACE-I, and combo meds with ARB/ACE-I                            | Continue you further instr |
|                             | >50% increase from baseline   | 🛑 Hold and notify provider via secure chat  | ARB, ACE-I, and combo meds with ARB/ACE-I                            | Hold RAAS m                |
| Sodium (Na <sup>+</sup> )   | ≥ 132 mEq/L                   | ✅ Proceed with titration                    | —  | Continue you the new pres  |
|                             | 130–131 mEq/L                 | ⚠️ Flag for review, hold titration          | Thiazides (and combination meds with thiazide)                       | Continue you further instr |
|                             | < 130 mEq/L                   | 🛑 Hold and notify provider via secure chat  | Thiazides (and combo meds with thiazide)                             | Hold thiazide              |
| Potassium (K <sup>+</sup> ) | 3.5–5.0 mEq/L                 | ✅ Proceed with titration                    | —  | Continue you the new pres  |
|                             | 3.3–3.4 or 5.1–5.3 mEq/L      | ⚠️ Flag for review, hold titration          | <3.5 → Thiazides<br>>5.0 → ARB/ACE-I (and combo meds with ARB/ACE-I) | Continue you further instr |
|                             | < 3.3 or > 5.3 mEq/L          | 🛑 Hold and notify provider via secure chat  | <3.3 → Thiazides<br>>5.3 → ARB/ACE-I (and combo meds with ARB/ACE-I) | Hold affected              |
| Calcium (Ca <sup>2+</sup> ) | ≤ 10.2 mg/dL                  | ✅ Proceed with titration                    | —  | Continue you the new pres  |
|                             | 10.3–10.5 mg/dL               | ⚠️ Flag for review, hold titration          | Thiazides (and combo meds with thiazide)                             | Continue you further instr |
|                             | > 10.5 mg/dL                  | 🛑 Hold and notify provider via secure chat  | Thiazides (and combo meds with thiazide)                             | Hold thiazide              |
|                             | < 8.5 mg/dL                   | Flag and hold if symptomatic or unexplained | Any, based on provider guidance                                      | Continue you otherwise     |

# [Appendix 5] Connecting your Blood Pressure Cuff to the NYU Langone Health App

## Setup instructions for Omron Devices

Please complete the instructions in this handout to connect your Omron Blood Pressure device to the NYU Langone Health App.



Once your device is synced, your readings will be available in MyChart and your care team will see them in your medical record.

*The Omron Instruction Manual that comes in the box with your device can be useful for general device troubleshooting, but please **IGNORE** the section for "Using Your Monitor with a Smart Device". You **DO NOT** need the Omron Connect app. You only need the NYU Langone Health App.*



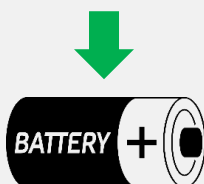
# Connecting your Blood Pressure Cuff to the NYU Langone Health App

## *Setup instructions for Omron Devices*

Use the Track My Blood Pressure activity in the NYU Langone Health app to sync a blood pressure cuff via Bluetooth and send your readings to your care team.

### Step 1 – Get your Blood Pressure Device Ready

- Install AA batteries
- Connect tube to the device
- Place cuff on your arm



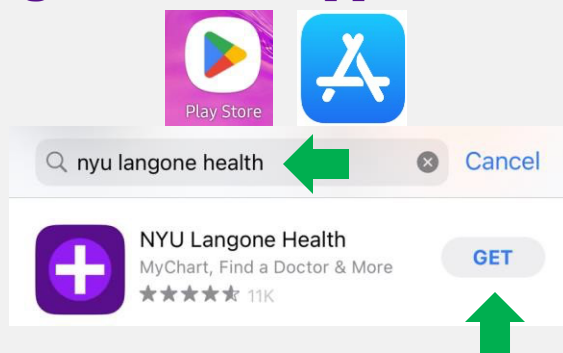
### Step 2 – Ensure Bluetooth is On

- Open the **Settings** app on your Phone
- Tap **Bluetooth or Connections**
- **Toggle on** Bluetooth (if it is off)



### Step 3 – Get or Update the NYU Langone Health app

- Open the **Store** app on your Phone
- Search for **NYU Langone Health**
- Tap **Get, Install, or Update**
- Once installed, **open the app**



# Connecting your Blood Pressure Cuff to the NYU Langone Health App

## Setup instructions for Omron Devices

### Step 4 – Log in or Create an Account

- Log in using your username and password
- *If you do not have an account yet with NYU, tap Create a MyChart Account and follow the prompts*
- *If you need help with a password reset call 866-262-6458*

NYU Langone Health

MyChart Login Continue as Guest

Username

Password

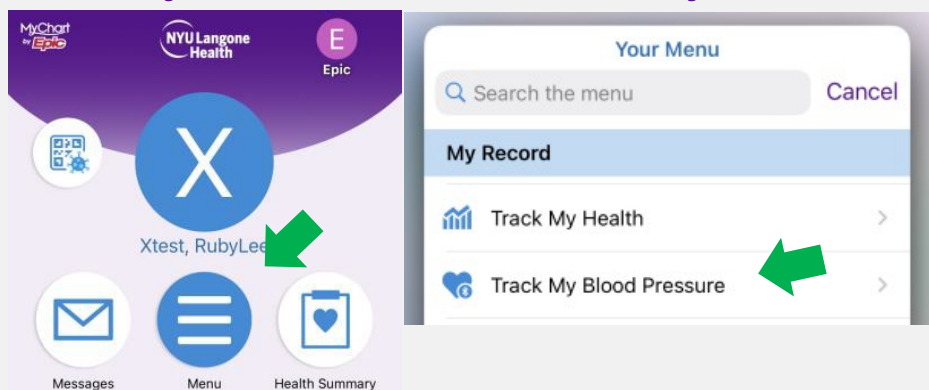
Log In

Forgot Username or Password

Create a MyChart Account

### Step 5 – Open the Track My Blood Pressure Activity

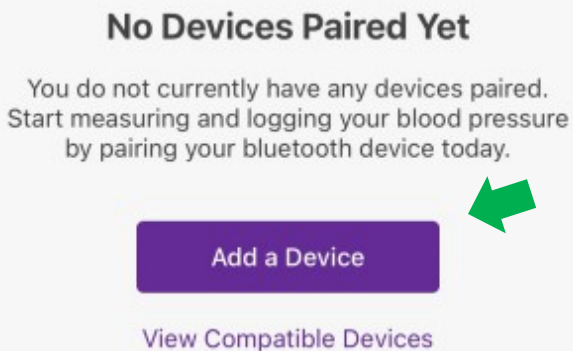
- Tap **Menu**
- Scroll down
- Tap **Track My Blood Pressure**



### Step 6 – Sync your Blood Pressure Device

- Tap **Add a Device**

**The following steps are for the Omron blood pressure devices. If you have a different model the steps may be slightly different, so follow the prompts.**





# Connecting your Blood Pressure Cuff to the NYU Langone Health App

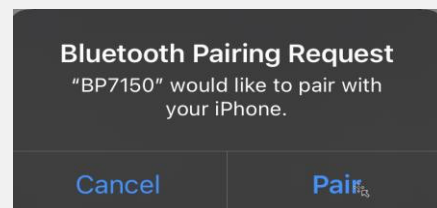
## Setup instructions for Omron Devices

### Step 6 – Sync your Blood Pressure Device (continued)

- Tap the picture of **your SPECIFIC** device model (model # is on bottom of device and box)
- Tap **OK, Agree, and/or Allow** to allow the app to use Bluetooth



- Press and **hold the Bluetooth button** on the blood pressure device until you see a “P”
- Tap **Pair** in the app



• Wait until you see four squares on the device, then press **Start/Stop** to turn it off.

- Click **Next** after it's Successfully Paired
- Click **Next** again after reading the instructions



**Success!**

You've successfully paired your device. To complete the pairing process, press START/STOP to turn off your monitor.

You're now set up to take blood pressure readings.

Next

#### Prepare for a Reading

- Wait 30 minutes after eating, drinking, and/or taking any medications.
- Rest quietly for 3-5 minutes.
- Sit in a comfortable chair with both feet flat on the floor.
- Position your arm with the cuff at chest height.
- Place the cuff on your bare upper arm just above your elbow.

Next

## Step 7 – Take Your First Reading

- Press the **Start/Stop** button on the monitor

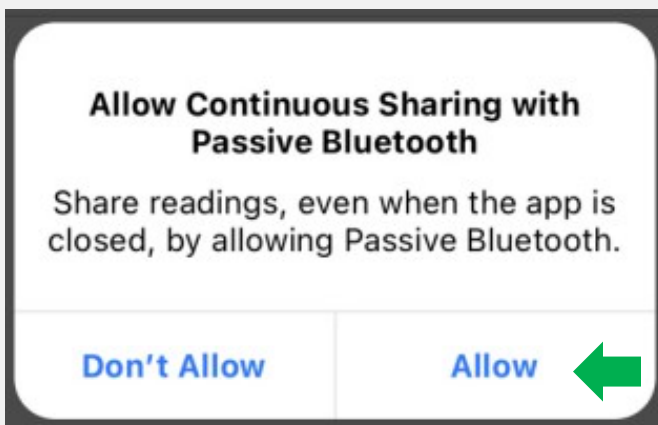


- You will **feel the cuff inflate** and see the numbers changing on the blood pressure monitor
- Remain **quiet and still**



- Once your reading is complete, tap **Confirm Reading** in the app

- When prompted, **Allow** Continuous Sharing with Passive Bluetooth



No SIM 11:55 AM 85%

121/80 mmHg  
59 BPM

