

HARBOR-UCLA MEDICAL CENTER

SUBJECT: ANTIHYPERTENSIVE MEDICATION ADJUSTMENT FOR NON-PREGNANT ADULTS

POLICY NO. 325V

**POLICY:**

*Do not use these protocols for medication titration and consult provider if patient:*

- *is having their hypertension (HTN) managed by a cardiologist or nephrologist*
- *has uncontrolled HTN and on at least 4 antihypertensive medications*
- *has an eGFR less than 30 mL/min*
- *has suspected or confirmed aortic stenosis*
- *is pregnant (or becomes pregnant) or breastfeeding*

*If a patient is being actively titrated and is hospitalized for any reason, stop titration and message the provider to re-request nurse titration as appropriate.*

**GENERAL GUIDELINES:**

- Identify the blood pressure (BP) target for the patient. Targets may change over time with advancing age, co-morbidities and life circumstances.
- Poor BP control may be due to a variety of factors including treatment non-adherence, under-treatment, and/or other physiologic, social, or environmental factors impacting BP control.
- Holistic awareness of patient condition and empathy increase patient trust, motivation and adherence to therapy. Inform patient that you will adjust the dose or the frequency of the medication they are taking; only the provider will add or stop medications.
- Consult provider for any patient who is having an invasive procedure, having symptoms of orthostatic hypotension or hypertensive crisis, is at last step and not at goal, or for other concerns.
- Patients titrated remotely will need access to a home BP monitor. Verify use of automated

**EFFECTIVE DATE:** 10/20

**SUPERSEDES:**

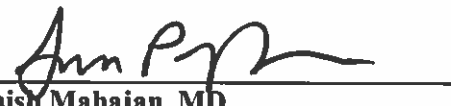
**REVISED:**


**REVIEWED:** 10/20

**REVIEWED COMMITTEE:** Pharmacy and Therapeutics Committee

**APPROVED BY:**

  
 Anish Mahajan, MD  
 Interim Chief Executive Officer

  
 Anish Mahajan, MD  
 Chief Medical Officer

  
 Nancy Blake, PHD, RN, NEA-BC, FAAN  
 Chief Nursing Officer

HARBOR-UCLA MEDICAL CENTER

**SUBJECT: ANTIHYPERTENSIVE MEDICATION ADJUSTMENT  
FOR NON-PREGNANT ADULTS**

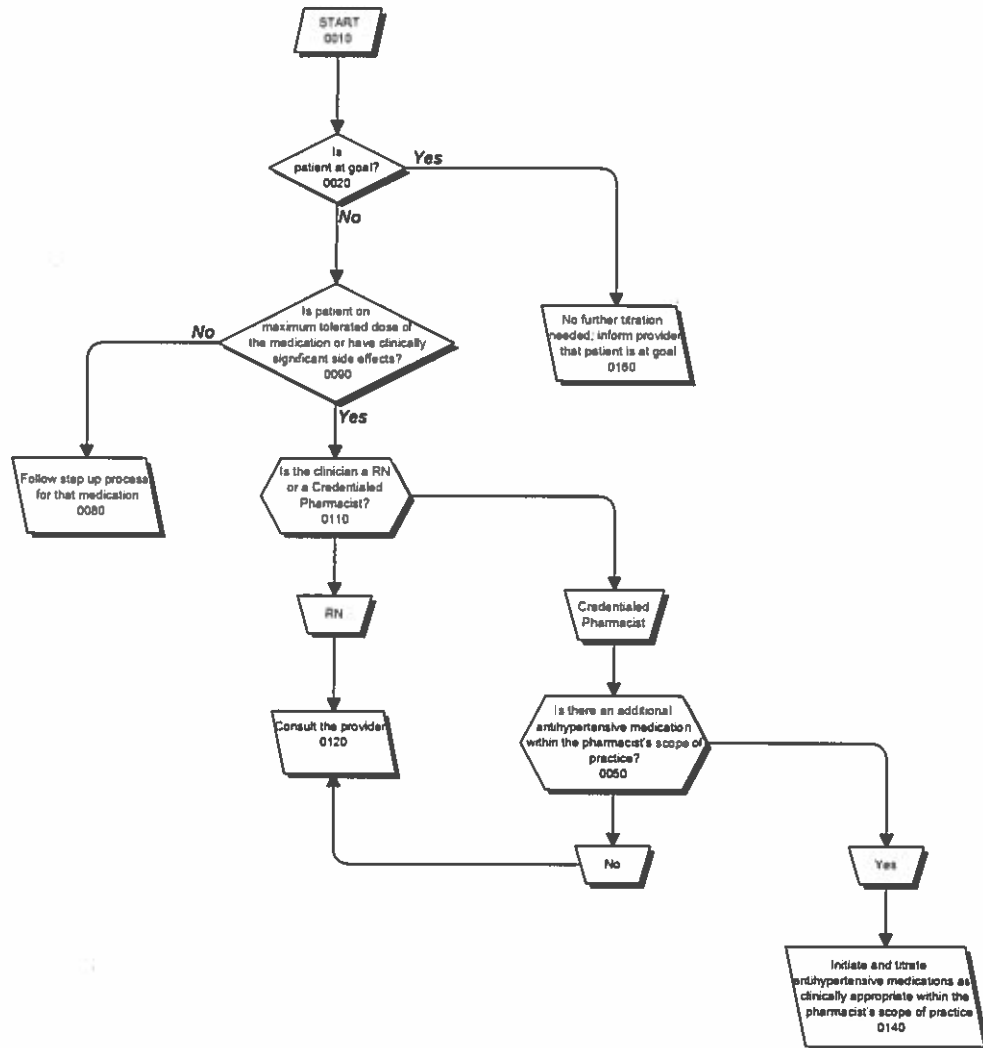
**POLICY NO. 325V**

---

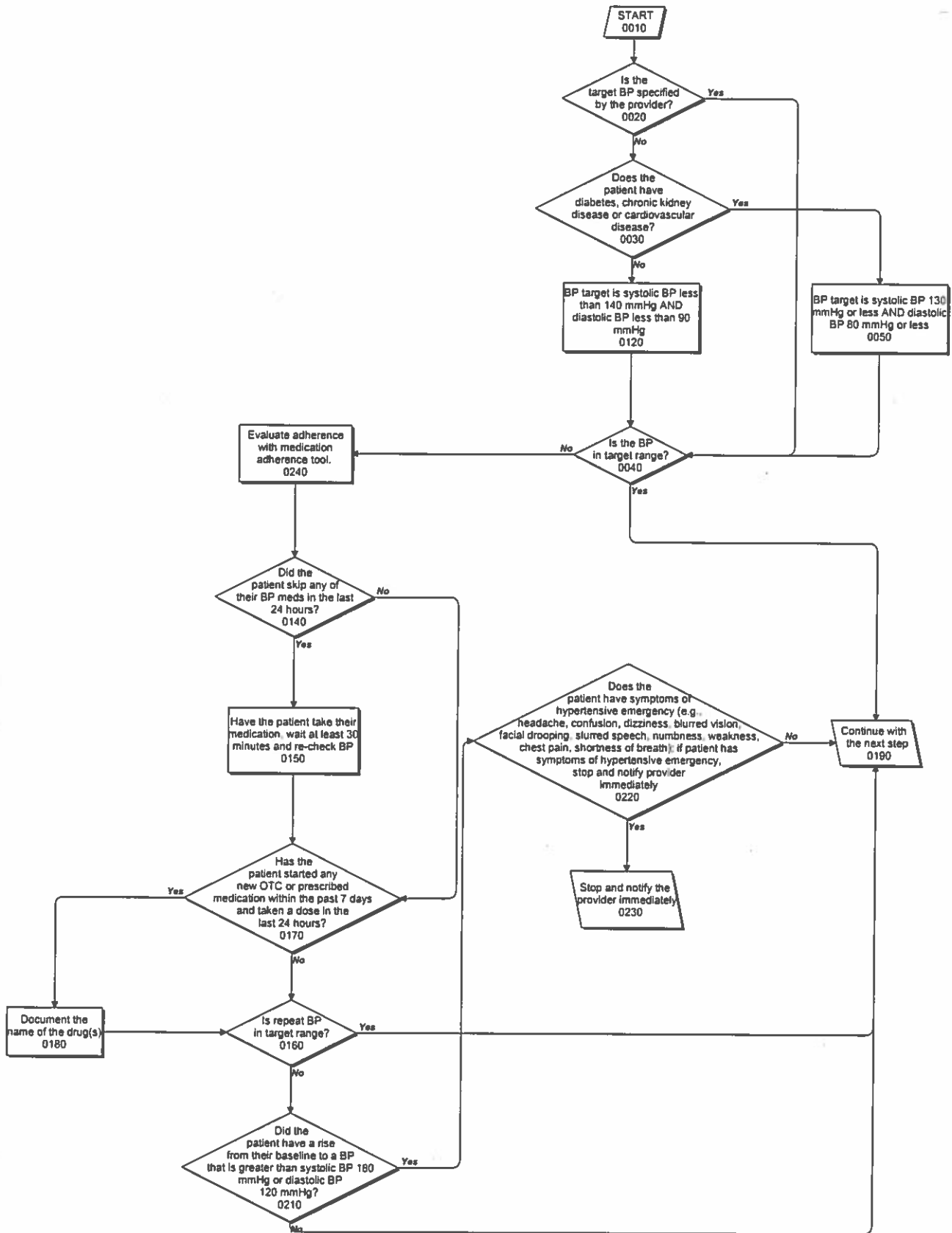
validated devices including storage of BP readings in memory and use of appropriate cuff size to fit the arm. (Auscultatory devices such as mercury, aneroid, or other are generally not recommended).

- Perform annual calibration of home BP machine with in-office machine.
- Assess adherence to hypertension medication regimen at each dose change.
- Have patient measure his/her BP at the same time of day (preferable before breakfast) a minimum of three times a week. Optimally, the patient should measure and record BP daily.
- Do not up-titrate until after 14 days of actual dose change and use the average of any } BP values on 3 different days within the last seven (7) day period (If there are more than 2 readings in a day, use the lower reading). If you do not have a minimum of BP values on 3 different days within the seven (7) day period, do not adjust dose.
- If there is difficulty in maintaining BP control, consult provider.

# Antihypertensive Medication Titration for RN's and Credentialed Pharmacists Master Flow



## Antihypertensive Medication Titration for RN's and Credentialed Pharmacists Detail Flow



### BLOOD PRESSURE CHECK

**STEP 1: EVALUATE BLOOD PRESSURE (Encounter for BP examination); complete A-D as applicable**

- A. Identify target BP – Starting at the top, move down the list and select first category that is appropriate for patient:
- Provider specified: \_\_\_\_\_ / \_\_\_\_\_
  - Patient has diabetes, chronic kidney disease or cardiovascular disease - target is systolic BP 130 mmHg or less AND diastolic BP 80 mmHg or less
  - All other patients – target is systolic BP less than 140 mmHg AND diastolic BP less than 90 mmHg
- B. Is BP in target range?
- Yes, go to Step 2
  - No, and patient is not currently prescribed hypertension medication; wait at least 5 minutes, re-check BP
  - No, and patient currently prescribed hypertension medication; evaluate adherence with medication adherence tool
    - Did the patient skip any of their BP medications in the last 24 hours?
      - Yes; have the patient take their medications, wait 30 minutes and re-check BP
      - No
- C. Has the patient started any new OTC or prescribed medication within the past 7 days and taken a dose in the last 24 hours?
- Yes, Name of drug: \_\_\_\_\_ Name of drug: \_\_\_\_\_  No
- D. Is repeat BP in target range?  Yes  No
- If no, and if the patient has a rise from their baseline to a BP that is greater than systolic BP 180 mmHg or diastolic BP 120 mmHg, ask about symptoms of possible hypertensive emergency (e.g., headache, confusion, dizziness, blurred vision, facial drooping, slurred speech, numbness, weakness, chest pain, shortness of breath); if patient has symptoms of possible hypertensive emergency, stop and notify provider immediately

**STEP 2: BLOOD PRESSURE CHECK STANDARDIZED PROCEDURE AND POST-PROCEDURE DOCUMENTATION (Check all that apply)**

- BP in target range - discharge patient with instructions to continue current medications and treatment plan, and to follow up with provider for regularly scheduled appointment
- BP not in target range – systolic BP is less than or equal to 180 mmHg and diastolic BP is less than or equal to 120 mmHg – titrate medication per standardized procedure or collaborative practice agreement, or message provider for further instructions. If patient has a way to be contacted reliably (verified a working phone number that they can be contacted on), may discharge patient; if not, do not discharge patient until discussed with provider
- BP not in target range - systolic BP is greater than 180 mmHg or diastolic greater than 120 mmHg or patient symptomatic of hypertensive emergency – notify provider immediately and inform of any symptoms of possible hypertensive emergency; do not discharge patient until discussed with provider
- Systolic BP is less than 90 mmHg or diastolic BP less than 60 mmHg with a drop from baseline for either, or patient has new symptoms of orthostasis – notify provider immediately; do not discharge patient until discussed with provider
- PCP messaged via Message Center with BP results and other information gathered
- If patient on antihypertensive medication, reinforced importance of medication adherence and maintaining sufficient medication supply

RN/PharmD Print Name: \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

--	--



## HARBOR-UCLA MEDICAL CENTER

**SUBJECT: ANTIHYPERTENSIVE MEDICATION ADJUSTMENT  
FOR NON-PREGNANT ADULTS**

**POLICY NO. 325V**

---

**Standardized Procedure Number: SP-1028-02-DHS**

**PROCEDURE:**

This Standardized Procedure has been written in a consistent format which is in compliance with the guidelines found in the Board of Registered Nursing, Title 16, California Code of Regulations and Section 1474.

**1. Functions to be performed:**

The specified functions may be performed in all venues where services described by this Standardized Procedure are offered, the target personnel have been trained and certified in this Standardized Procedure and the facility has deemed this Standardized Procedure is appropriate for the venue for implementation by the:

- Registered Nurse(RN)
- Clinical Pharmacist (PharmD)

**2. Specific circumstances:**

Staff will review and implement this Standardized Procedure for RN's and Clinical Pharmacists for patients presenting for a blood pressure check.

**3. Procedure and Requirements:**

1. Confirm patient identity/demographics.

2. Perform initial intake:

a. Start with Step 1: Evaluate Blood Pressure:

i. Identify target blood pressure by moving down the list and selecting the first category check box that is appropriate for the patient.

1. Provider specified target BP; enter parameters.

2. Patient has diabetes, chronic kidney disease or cardiovascular disease; if yes, target is systolic BP 130 mmHg or less AND diastolic BP 80 mmHg or less.

3. All other patients; if yes, target is systolic BP less than 140 mmHg AND diastolic BP less than 90 mmHg.

a. Is BP in target range? Select one:

i. If **Yes**, go to Step 2.

ii. If **No** and patient is not currently prescribed hypertension medication, wait at least 5 minutes and re-check BP.

iii. If **No** and patient is currently prescribed hypertension medication, evaluate adherence with medication adherence tool and proceed through the next set of questions.

1. Did the patient skip any of their BP medications in the last 24 hours?  
Select one:

a. If **Yes**, have the patient take their medications, wait at least 30 minutes and re-check BP (if the patient is in clinic and does not have their medication with them, follow local procedure to order a single dose and have patient take it).

b. If **No**, select box and go to next question.

## HARBOR-UCLA MEDICAL CENTER

**SUBJECT: ANTIHYPERTENSIVE MEDICATION ADJUSTMENT  
FOR NON-PREGNANT ADULTS**

**POLICY NO. 325V**

---

2. Has the patient taken any new OTC or prescribed medication within the past 7 days and taken a dose within the last 24 hours? Select one:
  - a. If **Yes**, then document the name(s) of the drug(s).
  - b. If **No**, select box and go to next question.
3. Is repeat BP in target range? Select one:
  - a. If **Yes**, select box and go to Step 2.
  - b. If **No**, select box and:
    - i. If the patient has a rise from their baseline to a BP that is greater than systolic BP 180 mmHg or diastolic BP 120 mmHg, ask about symptoms of possible hypertensive emergency (e.g., headache, confusion, dizziness, blurred vision, facial drooping, slurred speech, numbness, weakness, chest pain, shortness of breath); if patient has symptoms of possible hypertensive emergency, stop and notify provider immediately.
    - ii. If the patient has not had a rise from their baseline to a BP that is greater than systolic BP 180 mmHg or diastolic BP 120 mmHg, go to Step 2.
3. Step 2: Blood Pressure Check Standardized Procedure and Post-Procedure Documentation (check all that apply). The suggested ORCHID diagnosis search term is underlined in Step 1 and can also be found with the ORCHID orders to be used in the attached Job Aid.
  1. Select applicable box(es) to indicate actions taken or information that you have given to the patient or provider.
    - a. BP in target range - patient discharged with instructions to continue current medications and treatment plan, and to follow up with provider for regularly scheduled appointment.
    - b. BP not in target range - systolic BP is less than or equal to 180 mmHg and diastolic BP is less than or equal to 120 mmHg - titrate medication per standardized procedure or collaborative practice agreement, or message provider for further instructions. If patient has a way to be contacted reliably (verified a working phone number that they can be contacted on), may discharge patient; if not, do not discharge patient until discussed with provider.
    - c. BP not in target range - systolic BP is greater than 180 mmHg or diastolic greater than 120 mmHg or patient symptomatic of hypertensive emergency - notify provider immediately and inform of any symptoms of possible hypertensive emergency; do not discharge patient until discussed with provider.
    - d. Systolic BP is less than 90 mmHg or diastolic BP less than 60 mmHg with a drop from baseline, or patient has new symptoms of orthostasis - notify provider immediately; do not discharge patient until discussed with provider.
    - e. PCP messaged via Message Center with BP results and other information gathered.
    - f. If patient on antihypertensive medication, reinforced importance of medication adherence and maintaining sufficient medication supply.





HARBOR-UCLA MEDICAL CENTER

**SUBJECT: ANTIHYPERTENSIVE MEDICATION ADJUSTMENT  
FOR NON-PREGNANT ADULTS**

**POLICY NO. 325V**

---

**10. Patient Record Keeping Requirements:**

The RN, PharmD authorized to implement the Standardized Procedure for RN's and Clinical Pharmacists will document in the patient's medical record. Documentation will include:

- The description or category that the clinical staff utilized to implement the Standardized Procedure for RN's and Clinical Pharmacists.
- Documentation and/or verification of current medications patients are presently taking
- Documentation of blood pressures taken at time of visit
- Documentation of notification to provider
- Instructions given to the patient including patient understanding of the instructions given as follows:
  - o Verbalized understanding of above education,
  - o Verbalized partial understanding and will need additional follow-up
  - o Did not verbalize understanding and provider informed.
- Any follow-up appointment scheduled

**11. Quality Review:**

Nursing Leadership/Supervisors will be responsible for Quality Review of documentation entered by the identified nursing users of the Standardized Procedure to include patients selected for the Standardized Procedure meets criteria, documentation in ORCHID follows standards of the Standardized Procedure and written evidence of training and competency is present in the nursing user area file.

**12. Method of Periodic Review of the Standardized Procedure for RN's:**

The Standardized Procedure for RN's and Clinical Pharmacists will be reviewed as indicated but not less than every three years.

Revised and Approved by:  
Medical Executive Committee - 10/2020



---

Janine R. E. Vintch, M.D.  
President, Professional Staff Association

HARBOR-UCLA MEDICAL CENTER

SUBJECT: ANTIHYPERTENSIVE MEDICATION ADJUSTMENT  
FOR NON-PREGNANT ADULTS

POLICY NO. 325V

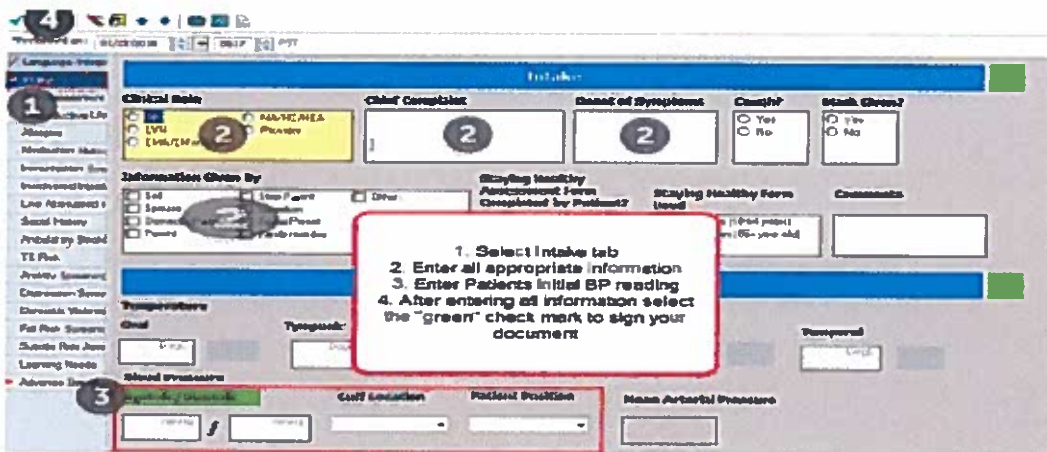
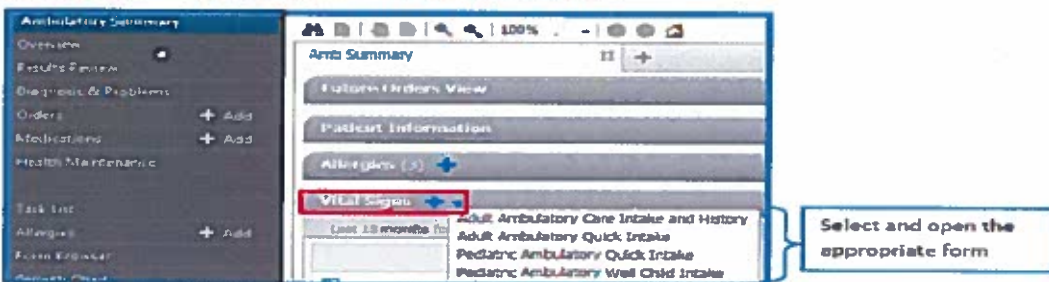
**ORCHID Workflow – Blood Pressure Check Standardized Procedure Job Aid**

**Target Audience:** Registered Nurses (RN) or Clinical Pharmacist (PharmD)

**Workflow Summary:** Registered Nurses or Clinical Pharmacists will review and implement this workflow when encountering a patient for a Blood Pressure Check/examination.

**Step 1**

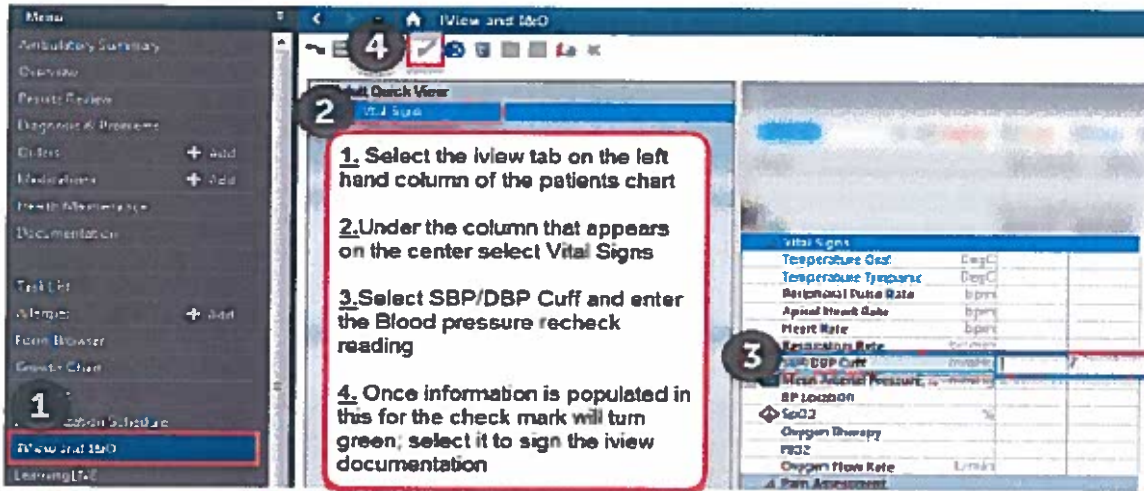
**Documenting Blood Pressure findings within the intake form:**



HARBOR-UCLA MEDICAL CENTER

SUBJECT: ANTIHYPERTENSIVE MEDICATION ADJUSTMENT  
FOR NON-PREGNANT ADULTS

POLICY NO. 325V

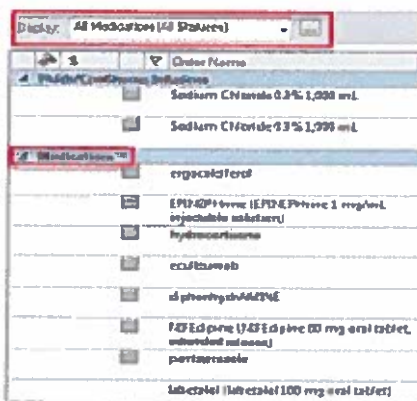


**Step 2**

Verify Patient Medications:



Within the Medications tab make sure the "All medications (All statuses)" is set for the display. Review all medications patient is taking by looking under the medications category and searching for Hypertensive medications.



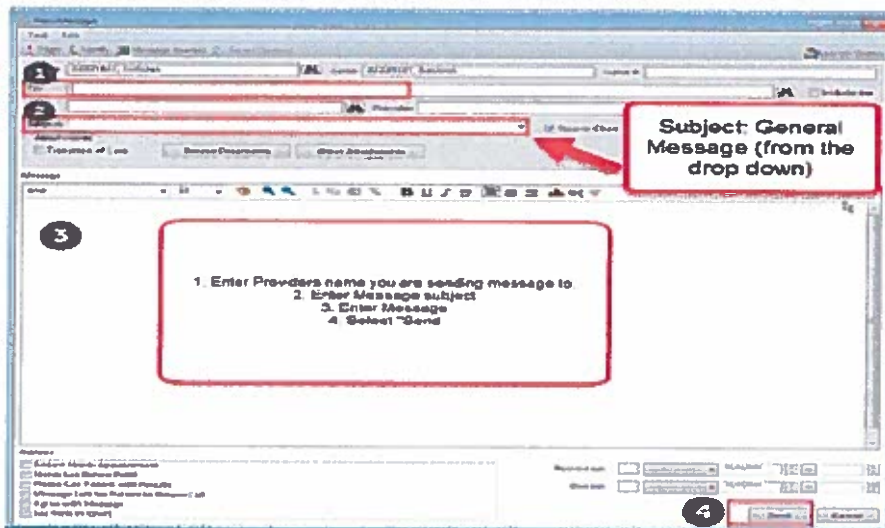
HARBOR-UCLA MEDICAL CENTER

SUBJECT: ANTIHYPERTENSIVE MEDICATION ADJUSTMENT  
FOR NON-PREGNANT ADULTS

POLICY NO. 325V

**Step 3**

Sending messages to the PCP within the message center:



HARBOR-UCLA MEDICAL CENTER

SUBJECT: ANTIHYPERTENSIVE MEDICATION ADJUSTMENT  
FOR NON-PREGNANT ADULTS

POLICY NO. 325V

**Step 4**

Post visit documentation

1. Select the "Notes" tab on left hand column of the patients chart.

2. Select the document picture.

**TYPE:** Nursing Assesment/Treatment

**Subject:** Nurse Visit-Blood Pressure

1. Select the "Type" by searching the drop down  
2. Enter the "Subject" of the note  
3. Enter free text note  
4. Sign the note to make sure it is documented

**MEDICATION ADHERENCE EVALUATION FOR ORAL SOLIDS**

**USE ONE FORM FOR EACH MEDICATION BEING EVALUATED**

**STEP 1: Fill in the information where indicated and follow directions.**

A. What medication is being evaluated? \_\_\_\_\_

B. Has the patient been out of the medication for 24 hours or more?

**Yes – Why?** (Mark all that apply):

Dose taken was more than dose prescribed\*  Shared pills with friend or relative  Didn't refill in time

No appointment available to renew meds  Lost, stolen or misplaced pills  No refills available

Other: \_\_\_\_\_

How long they have been out of medication? \_\_\_\_\_  days  weeks  months

**If titrating medication, do not titrate now; refill medication (or propose renewal if no refills left) - Go to Step 4 below**

**No - Go to Step 2 below**

**STEP 2: Mark all that apply (may be more than 1 answer per question); total score and then go to Step 3**

QUESTION	ANSWER	SCORE
1. Are your pills prepared in a day/dose dispenser?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> 0
2. Thinking about the past three days, starting on (day of week) and not including today, at what time(s) did you take your [medication name] and how many pills of [medication name] did you take each time?	<input type="checkbox"/> Frequency is correct	<input type="checkbox"/> 0
	<input type="checkbox"/> Frequency is incorrect*	<input type="checkbox"/> 1
	<input type="checkbox"/> Quantity is correct	<input type="checkbox"/> 0
	<input type="checkbox"/> Quantity is incorrect*	<input type="checkbox"/> 1
3. Everybody misses a dose sometimes. In the past 3 days, starting on (day of week) and not including today, how many doses of [medication name] did you take? <i>(to calculate percentage, divide total number of pills taken in the last 3 days by the expected number and multiply by 100)</i>	<input type="checkbox"/> Took 80-100% of pills	<input type="checkbox"/> 0
	<input type="checkbox"/> Took 60-79% of pills	<input type="checkbox"/> 1
	<input type="checkbox"/> Took less than 60% of pills	<input type="checkbox"/> 2
<b>Total Score</b>		_____

\*If patient is taking more than prescribed (higher frequency and/or higher quantity), consult provider

**STEP 3: Select total score, take actions as indicated and go to Step 4**

TOTAL SCORE	ADHERENCE LEVEL	ACTIONS
<input type="checkbox"/> 0	High	<input type="checkbox"/> If titrating medication and not at goal, step up medication per protocol; reinforce importance of medication adherence
<input type="checkbox"/> 1	Moderate	
<input type="checkbox"/> 2 or more	Low	<input type="checkbox"/> If titrating medication, do not step up; follow-up per protocol timeline for re-evaluation of titration. If adherence remains low, consult provider

- STEP 4: Educate all patients on the following**
- Taking the medication at the same time(s) each day or trying to link taking their medication with something they do regularly at the same time each day such as brushing their teeth
  - Refilling their prescriptions before they run out by using a calendar reminder note
  - Filling and using their pill box as specified
  - Setting up reminders such as a calendar, chart, alarm, color-coded medication reminders, using a smart phone app, asking friends or family to help remind them to take their medication

RN/PharmD Print Name: \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_



**MEDICATION ADHERENCE EVALUATION FOR ORAL SOLIDS**

**USE ONE FORM FOR EACH MEDICATION BEING EVALUATED**

**STEP 1: Fill in the information where indicated and follow directions.**

A. What medication is being evaluated? \_\_\_\_\_

B. Has the patient been out of the medication for 24 hours or more?

**Yes – Why?** (Mark all that apply):

Dose taken was more than dose prescribed<sup>w</sup>    Shared pills with friend or relative    Didn't refill in time

No appointment available to renew meds    Lost, stolen or misplaced pills    No refills available

Other: \_\_\_\_\_

How long they have been out of medication? \_\_\_\_\_  days    weeks    months

**If titrating medication, do not titrate now; refill medication (or propose renewal if no refills left) - Go to Step 4 below**

**No - Go to Step 2 below**

**STEP 2: Mark all that apply (may be more than 1 answer per question); total score and then go to Step 3**

QUESTION	ANSWER	SCORE
1. ¿Tiene una caja de pastillas preparada con sus dosis diarias?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> 0
2. ¿Pensando sobre los últimos tres días empezando el (día de la semana) sin contar el día de hoy, a qué horas tomó su (nombre del medicamento) y cada vez que tomó sus pastillas de (nombre del medicamento) cuantas se tomó?	<input type="checkbox"/> Frequency is correct	<input type="checkbox"/> 0
	<input type="checkbox"/> Frequency is incorrect <sup>w</sup>	<input type="checkbox"/> 1
	<input type="checkbox"/> Quantity is correct	<input type="checkbox"/> 0
	<input type="checkbox"/> Quantity is incorrect <sup>w</sup>	<input type="checkbox"/> 1
3. A todos se le pasa tomar una dosis de medicamento a veces. ¿En los últimos 3 días, empezando con el (día de la semana) sin contar el día de hoy, cuantas dosis de su (nombre del medicamento) se tomó? <i>(to calculate percentage, divide total number of pills taken in the last 3 days by the expected number and multiply by 100)</i>	<input type="checkbox"/> Took 80-100% of pills	<input type="checkbox"/> 0
	<input type="checkbox"/> Took 60-79% of pills	<input type="checkbox"/> 1
	<input type="checkbox"/> Took less than 60% of pills	<input type="checkbox"/> 2
<b>Total Score</b>		_____

<sup>w</sup>If patient is taking more than prescribed (higher frequency and/or higher quantity), consult provider

**STEP 3: Select total score, take actions as indicated and go to Step 4**

TOTAL SCORE	ADHERENCE LEVEL	ACTIONS
<input type="checkbox"/> 0	High	<input type="checkbox"/> If titrating medication and not at goal, step up medication per protocol; reinforce importance of medication adherence
<input type="checkbox"/> 1	Moderate	
<input type="checkbox"/> 2 or more	Low	<input type="checkbox"/> If titrating medication, do not step up; follow-up per protocol timeline for re-evaluation of titration. If adherence remains low, consult provider

**STEP 4: Educate all patients on the following**

- Taking the medication at the same time(s) each day or trying to link taking their medication with something they do regularly at the same time each day such as brushing their teeth
- Refilling their prescriptions before they run out by using a calendar reminder note
- Filling and using their pill box as specified
- Setting up reminders such as a calendar, chart, alarm, color-coded medication reminders, using a smart phone app, asking friends or family to help remind them to take their medication

RN/PharmD Print Name: \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_



## HARBOR-UCLA MEDICAL CENTER

**SUBJECT: ANTIHYPERTENSIVE MEDICATION ADJUSTMENT  
FOR NON-PREGNANT ADULTS**

**POLICY NO. 325V**

---

**MEDICATION ADHERENCE EVALUATION FOR ORAL SOLIDS STANDARDIZED  
PROCEDURE FOR RN'S AND CLINICAL PHARMACISTS**

**Standardized Procedure Number: SP-1027-02-DHS**

**PROCEDURE:**

This Standardized Procedure has been written in a consistent format which is in compliance with the guidelines found in the Board of Registered Nursing, Title 16, California Code of Regulations and Section 1474.

**1. Functions to be performed:**

The specified functions may be performed in all venues where services described by this Standardized Procedure are offered, the target personnel have been trained and certified in this Standardized Procedure and the facility has deemed this Standardized Procedure is appropriate for the venue for implementation by the:

- Registered Nurse (RN)
- Clinical Pharmacist (PharmD)

**2. Specific circumstances:**

Staff will review and implement this Standardized Procedure for RN's and Clinical Pharmacists upon patient arrival or during telephonic outreach when evaluation of medication adherence is required before medication titration. The associated tool will be utilized for each medication being titrated each time adherence is evaluated.

**3. Procedure and Requirements:**

1. Confirm patient identity/demographics.
2. Confirm diagnosis and problem(s).
  - a. In ORCHID - "Diagnosis and Problems".
3. Ask the patient their preferred language and use either the English or Spanish version to administer.
4. Select the Medication Adherence Evaluation tool.
5. Select one answer per question and follow directions; continue to the next question if the answer is bolded. Fill in required information where indicated.
6. Start with Step 1:
  1. What medication is being evaluated? Fill in the name of the medication.
  2. Has the patient been out of the medication for 24 hours or more?
    - i. If "Yes", select all boxes that apply and complete any information:
      1. Dose taken was more than dose prescribed.
      2. Shared pills with friend or relative.
      3. Didn't refill in time.
      4. No appointment available to renew meds.
      5. Lost, stolen or misplaced pills.
      6. No refills available.
      7. Other: fill in any other information.



## HARBOR-UCLA MEDICAL CENTER

**SUBJECT: ANTIHYPERTENSIVE MEDICATION ADJUSTMENT  
FOR NON-PREGNANT ADULTS**

**POLICY NO. 325V**

---

8. How long they have been out of medication? Document the number and select days, weeks or months.
  9. If titrating medication, do not titrate now; refill medication (or propose renewal if no refills left) and go to Step 4.
  - ii. If "No", go to Step 2.
7. Step 2: Mark all answers as they apply with their corresponding score (there may be more than one answer per question).
1. Question 1: Are your pills prepared in a day/dose dispenser? Select yes or no and score; proceed to the next question in this section. Question 2: Thinking about the past three days, starting on (day of week) and not including today, at what time(s) did you take your [medication name] (the medication being titrated) and how many pills of [medication name] did you take each time? Select one per section:
    - a. Frequency is correct and score it or Frequency is incorrect and score it (*If patient is taking more than prescribed (higher frequency consult provider) AND*
    - b. Quantity is correct and score it or Quantity is incorrect and score it (If patient is taking more than prescribed (higher quantity), consult provider)
    - c. Note: If frequency or quantity of medication is incorrect, ask about reasons it is incorrect. If reasons for non-adherence are conscious patient choice (e.g., due to side effects, medication cost, transportation issues, etc.), do not titrate medication, consult provider; otherwise educate patient. If patient is taking more than prescribed (higher frequency and/or higher quantity), do not titrate medication, consult provider.
  2. Question 3: Everybody misses a dose sometimes. In the past 3 days, starting on (day of week) and not including today, how many doses of [medication name] (the medication being titrated) did you take? (Note: To calculate the percentage, divide the total number of pills taken in the last 3 days by the expected number and multiply by 100). Select one:
    - a. Took 80-100% of pills and score it
    - b. Took 60-79% of pills and score it
    - c. Took less than 60% of pills and score it
  3. Add scores of all boxes checked and enter total score where specified and proceed to Step 3. Step 3: Select total score and take actions as indicated:
  4. If Total Score is 0 (indicating Adherence Level is "High") or Total Score is 1 (indicating Adherence Level is "Moderate"), select "If titrating medication and not at goal, step up medication per protocol; reinforce importance of medication adherence".
  5. If Total Score is 2 or more (indicating Adherence Level is "Low"), select "If titration medication, do not step up; follow-up per protocol timeline for re-evaluation of titration. If adherence remains low, consult provider."
  6. Educate the patient on the importance of:
    - a. Taking the medication at the same time(s) each day or trying to link taking their medication with something they do regularly at the same each day such as brushing their teeth.
    - b. Refilling their prescription before they run out by using a calendar reminder note.
    - c. Filling and using their pill box as specified.

## HARBOR-UCLA MEDICAL CENTER

**SUBJECT: ANTIHYPERTENSIVE MEDICATION ADJUSTMENT  
FOR NON-PREGNANT ADULTS**

**POLICY NO. 325V**

---

- d. Setting up reminders such as a calendar, chart, alarm, color-coded medication reminders using a smart phone app, asking friends or family to help remind them to take their medication.
7. Document your actions: Print your name, sign with title, and date and time.
8. Inform the patient/guardian of any scheduled follow-up visits.
9. Complete or place HIM label in box for patient information.

**4. Experience & Training**

- Current and valid license to practice as a Registered Nurse or Pharmacist.
- Medication Adherence Evaluation for Medication Titration Standardized Procedure for RN's and Clinical Pharmacists training and skills validation.

**5. Initial and Continuing Evaluation of Competence:**

The RN and PharmD will receive training and education by certified proctors. Training will include disease specifics and medication adherence evaluation with the use of the tool. Training consists of lecture, didactic training, practice session followed by validation and successful completion of a written test. Remediation will be provided if needed. Only those staff that successfully pass all skills validation testing with a score of 80% or greater will be authorized to perform the Standardized Procedure for RN's and Clinical Pharmacists. The staff will repeat education, training, and testing as needed for updates and annually thereafter.

**6. Written Record of Authorized Personnel to Perform Standardized Procedure:**

- a. OHS will maintain a master record of all staff authorized to perform this Standardized Procedure for RN's and Clinical Pharmacists.
- b. A list of authorized personnel will also be posted and available on the OHS SharePoint under Protocol Certification.
- c. Each area supervisor will also keep a record at the facility and in the employee area file.

**7. Scope of Supervision:**

Nursing and Pharmacy supervisors are responsible for continued observation/monitoring and validation of their respective staff performance. The RN or PharmD will always consult with the PCMH provider for empaneled patients or the treating provider in any area of question, prior to taking action to initiate the Standardized Procedure for RN's and Clinical Pharmacists.

**8. Immediate Communication with Patient's Physician:**

If the patient presents with any acute complaints, the RN or PharmD will immediately notify the PCMH provider for empaneled patients or the treating provider.

**9. Limitations on Settings:**

This Standardized Procedure for RN's and Clinical Pharmacists is for implementation in all venues where services are offered.

## HARBOR-UCLA MEDICAL CENTER

**SUBJECT: ANTIHYPERTENSIVE MEDICATION ADJUSTMENT  
FOR NON-PREGNANT ADULTS**

**POLICY NO. 325V**

---

**10. Patient Record Keeping Requirements:**

The RN or PharmD authorized to implement the Standardized Procedure for RN's and Clinical Pharmacists will document in the patient's medical record. Documentation will include:

- The description or category that the clinical staff utilized to implement the Standardized Procedure for RN's and Clinical Pharmacists.
- Which orders were placed
- Instructions given to the patient including patient understanding of the instructions given as follows:
  - Verbalized understanding of above education
  - Verbalized partial understanding and will need additional follow-up
  - Did not verbalize understanding and provider informed
- Any follow-up appointment scheduled

**11. Quality Review:**

Nursing or Pharmacy Leadership/Supervisors will be responsible for Quality Review of documentation entered by the identified users of the Standardized Procedure to include: patient selected for the Standardized Procedure meets criteria, documentation in ORCHID follows standards of the Standardized Procedure and written evidence of training and competency is present in the user's area file. Upon completion of the medication titration transaction, the RN or PharmD will copy the patient's PCMH provider via message center. The PCMH provider shall be responsible for review of the medication titration Standardized Procedure transaction for appropriateness. Should the PCMH provider have a concern or question it will be addressed to the Registered Nurse or PharmD and his/her supervisor. In addition, a notification to the co-chairs of the IDPC will be initiated for information. A plan of action shall be implemented to address any quality concerns up to and including removing medication titration authority.

**12. Method of Periodic Review of the Standardized Procedure for RNs:**

The Standardized Procedure for RN's and Clinical Pharmacists will be reviewed as indicated but not less than every three years.

## HYPERTENSION MEDICATION ADJUSTMENT FOR NON-PREGNANT ADULTS: HYDROCHLOROTHIAZIDE [EZIDE, MICROZIDE]

If the patient has a rise from their baseline to a BP that is greater than systolic BP 180 mmHg or diastolic BP 120 mmHg, ask about symptoms of possible hypertensive emergency (e.g., headache, confusion, dizziness, blurred vision, facial drooping, slurred speech, numbness, weakness, chest pain, shortness of breath); if patient has symptoms of possible hypertensive emergency, notify provider immediately.

### USE WITH ANTIHYPERTENSIVE MEDICATION ADJUSTMENT FOR NON-PREGNANT ADULTS - GENERAL GUIDELINES

Select one answer per question and follow directions

**STEP 1:**

- A. What is the target BP? \_\_\_\_\_
- B. Does the patient have symptoms of orthostasis?
  - No       Yes - perform orthostatics (if patient is orthostatic, consult provider)
- C. Are there new Na<sup>+</sup> and K<sup>+</sup> results since the last dose adjustment?
  - Yes       No - If patient in clinic, order stat Na<sup>+</sup> and K<sup>+</sup> labs, reassess patient when results are available. If patient not in clinic, order routine Na<sup>+</sup> and K<sup>+</sup> labs, reschedule assessment and go to Step 3
- 1. Is the latest Na<sup>+</sup> less than 135 mEq/L?
  - No       Yes - consult provider
- 2. Is the latest K<sup>+</sup> less than the lower limit of normal (LLN)?
  - No       Yes - consult provider
- D. If patient is self-monitoring their blood pressure, does the patient have at least 3 values measured on 3 different days in the past week (starting on day 15 after a titration) that can be reviewed at the time of the encounter?
  - Yes, The values are: BP 1: \_\_\_\_/\_\_\_\_ BP 2: \_\_\_\_/\_\_\_\_ BP 3: \_\_\_\_/\_\_\_\_ Avg: \_\_\_\_/\_\_\_\_
  - No, Go to Step 3       Patient is not expected to be self-monitoring their blood pressure

**STEP 2: HYPERTENSION** - If the patient is on more than one medication included in the protocol, maximize the dose of only one medication at a time according to the Master Flow

Is the BP at the target goal?

- No - What is the estimated medication adherence?
  - Low adherence (Do not step up, go to Step 3)
  - Moderate or greater adherence - Find the current dose, order the step up dose and go to Step 3, or if at maximum tolerated dose, notify provider to initiate next medication per the Master Flow (Pharmacists trained on the HTN Standardized Procedures may initiate the next medication per the Master Flow)
- Yes (Do not step up, patient at goal, go to Step 3)

CURRENT ORDER	STEP UP ORDER	ASSESSMENT INTERVAL
12.5 mg PO Daily	<input type="checkbox"/> 25 mg PO Daily <input type="checkbox"/> Na <sup>+</sup> <input type="checkbox"/> K <sup>+</sup> (check labs two weeks after adjustment)	14-28 days (go to Step 3)

**STEP 3:**

- Educate patient on importance of medication adherence and possible side effects of abrupt cessation of therapy (e.g., angina, myocardial infarction, worsening heart failure); confirm that patient has enough medication to last until the next visit
- Educate patient to contact staff for any perceived side effects, especially dizziness or lightheadedness
- Educate patient on symptoms of possible hypertensive emergency (see above) and how to contact staff
- Confirm that patient has an upcoming appointment for titration based on the assessment interval date above, or inform provider that patient is on maximum tolerated dose per protocol or is at BP target

RN/PharmD Print Name: \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

**TITRATION NOT PERFORMED:**

- Titration not performed, provider informed
- Provider consulted for titration decision

RN/PharmD Print Name: \_\_\_\_\_ Signature: \_\_\_\_\_

Date: \_\_\_\_\_ Time: \_\_\_\_\_



## HARBOR-UCLA MEDICAL CENTER

**SUBJECT: ANTIHYPERTENSIVE MEDICATION ADJUSTMENT  
FOR NON-PREGNANT ADULTS**

**POLICY NO. 325V**

**HYPERTENSION MEDICATION ADJUSTMENT FOR NON-PREGNANT ADULTS:  
HYDROCHLOROTHIAZIDE [EZIDE, MICROZIDE] STANDARDIZED PROCEDURE  
FOR RN'S AND CLINICAL PHARMACISTS  
Standardized Procedure Number: SP-1042-01-DHS**

**PROCEDURE:**

This Standardized Procedure has been written in a consistent format which is in compliance with the guidelines found in the Board of Registered Nursing, Title 16, California Code of Regulations and Section 1474.

**1. Functions to be performed:**

The specified functions may be performed in all venues where services described by this Standardized Procedure are offered, the target personnel have been trained and certified in this Standardized Procedure and the facility has deemed this Standardized Procedure is appropriate for the venue for implementation by the:

- Registered Nurse (RN)
- Clinical Pharmacist (PharmD)

**2. Specific circumstances:**

Staff will review and implement this Standardized Procedure if the patient has been started on this medication by their PCMH provider, identified as a candidate for titration of hypertension medication by this Standardized Procedure and has no exclusion criteria as described below in the Antihypertensive Medication Adjustment for Non-Pregnant Adults - General Guidelines:

- is having their HTN managed by a cardiologist or nephrologist
- has uncontrolled HTN and on at least 4 antihypertensive medications
- has an eGFR less than 30 mL/min
- has suspected or confirmed aortic stenosis
- is pregnant (or becomes pregnant) or breastfeeding

Staff will use this Standardized Procedure in conjunction with the following as appropriate:

- Blood Pressure Check Standardized Procedure for RN's and Clinical Pharmacists
- Medication Adherence Evaluation for Oral Solids Standardized Procedure for RN's and Clinical Pharmacists
- Antihypertensive Medication Titration for RN's and Clinical Pharmacists Master Flow
- Antihypertensive Medication Titration for RN's and Clinical Pharmacists Detail Flow
- Antihypertensive Medication Adjustment for Non-Pregnant Adults – General Guidelines

**3. Procedure and Requirements:**

1. Confirm patient identity/demographics.
2. Confirm diagnosis and problem(s) on ORCHID.
3. Confirm in ORCHID and with the patient that the patient is taking the medication to be titrated and is not at their maximum tolerated dose.

## HARBOR-UCLA MEDICAL CENTER

**SUBJECT: ANTIHYPERTENSIVE MEDICATION ADJUSTMENT  
FOR NON-PREGNANT ADULTS**

**POLICY NO. 325V**

---

4. Perform initial intake:
  - a. If the patient has a rise from their baseline to a BP that is greater than a systolic BP 180 mmHg or a diastolic BP of 120 mmHg, ask about symptoms of possible hypertensive emergency (e.g., headache, confusion, dizziness, blurred vision, facial drooping, slurred speech, numbness weakness, chest pain, shortness of breath); If patient has symptoms of possible hypertensive emergency, notify the PCMH provider immediately.
  - b. Review the Antihypertensive Medication Titration for RN's and Clinical Pharmacists Master Flow, the Antihypertensive Medication Titration for RN's and Clinical Pharmacists Detail Flow and the Antihypertensive Medication Adjustment for Non-Pregnant Adults - General Guidelines and confirm eligibility for evaluation for medication titration. If patient ineligible, perform actions as directed. If there are any questions or concerns/consult PCMH provider.
  
5. Start with Step 1. Select one answer per question and follow directions:
  1. What is the target BP? (*Fill in the patient's target BP as determined by the Blood Pressure Check Standardized Procedure for RN's and Clinical Pharmacists*). Go to B.
  2. Does the patient have symptoms of orthostasis?
    - a. If "No", go to D.
    - b. If "Yes", perform orthostatic blood pressure measurements if the patient is in the clinic or have patient come into clinic for evaluation - if patient is orthostatic, consult provider.
  3. Are there new NA<sup>+</sup> and K<sup>+</sup> results since the last dose adjustment?
    - a. If "Yes", go to C1.
      - i. Is the latest Na<sup>+</sup> less than 135 mEq/L?
        1. If "No" go to C2.
        2. If "Yes", consult provider.
      - ii. Is the latest K<sup>+</sup> less than the lower limit of normal (LLN)?
        1. If "No" go to D.
        2. If "Yes", consult provider.
    - b. If "No", and patient in clinic, order stat Na<sup>+</sup> and K<sup>+</sup> labs and reassess patient when results are available. If patient not in clinic, order routine Na<sup>+</sup> and K<sup>+</sup> labs, reschedule assessment and go to Step 3.
  4. If the patient is self-monitoring their blood pressure, does the patient have at least values measured on 3 different days in the past week (starting on day 15) after a titration) that can be reviewed at the time of the encounter?
    - a. If "Yes", fill in the three BP values and the average of those values where indicated, then go to Step 2. (If the patient presents to clinic with two self-monitored blood pressure (SMBP) measurements within the past week, the RN or Clinical Pharmacist can count the BP measured in clinic that day as the third BP measurement. If the patient presents to the clinic with less than two SMBP measurements in the past week, assess whether the patient is unable or unwilling to perform SMBP. If the patient can and wants to perform SMBP, set up a phone follow-up appointment to address titration at a time that the patient will have completed the 3 required SMBP measurements and go to Step 3; if not, refer the patient back to the PCMH provider for consultation and disposition.)



## HARBOR-UCLA MEDICAL CENTER

**SUBJECT: ANTIHYPERTENSIVE MEDICATION ADJUSTMENT  
FOR NON-PREGNANT ADULTS**

**POLICY NO. 325V**

---

**4. Experience and Training:**

- Current and valid license to practice as a Registered Nurse or Pharmacist.
- Hypertension Medication Adjustment for Non-Pregnant Adults: Hydrochlorothiazide [EZIDE, MICROZIDE] Standardized Procedure for RN's and Clinical Pharmacists training and skills validation.
- Antihypertensive Medication Titration for RN's and Clinical Pharmacists Master Flow training and skills validation.
- Antihypertensive Medication Titration for RN's and Clinical Pharmacists Detail Flow training and skills validation.
- Blood Pressure Check Standardized Procedure for RN's and Clinical Pharmacists training and skills validation.
- Medication Adherence Evaluation for Oral Solids Standardized Procedure for RN's and Clinical Pharmacists training and skills validation.
- ORCHID Medication Ordering training and skills validation for Hypertension Medications.
- Successful completion of the Annual OHS Core Competency regarding Medication Administration and Safety.
- Successful completion of the Orthostatic Blood Pressure Measurement competency.

**5. Initial and Continuing Evaluation of Competence:**

The RN and Clinical Pharmacist will receive training and education by certified proctors. Training will include disease specifics as well as information on the pharmaceutical-related issues of the medication being titrated. Training consists of lecture, didactic training, practice session followed by validation and successful completion of a written test. Remediation will be provided if needed. Only those staff that successfully pass all skills validation testing with a score of 80% or greater will be authorized to perform this Standardized Procedure. The staff will repeat education, training, and testing as needed for updates and annually thereafter.

**6. Written Record of Authorized Personnel to Perform Standardized Procedure:**

1. OHS will maintain a master record of all staff authorized to perform this Standardized Procedure for RN's and Clinical Pharmacists.
2. A list of authorized personnel will also be posted and available on the OHS SharePoint under Protocol Certification.
3. Each area supervisor will also keep a record at the facility and in the employee area file.

**7. Scope of Supervision:**

Nursing and Pharmacy supervisors are responsible for continued observation/monitoring and validation of their respective staff performance. The RN or PharmD will always consult with the PCMH Provider in any area of question, prior to taking action to initiate the Standardized Procedure for RN's and Clinical Pharmacists.

**8. Immediate Communication with Patient's Physician:**

If the patient presents with any acute complaints, the RN or PharmD will immediately notify the PCMH Provider.



## HARBOR-UCLA MEDICAL CENTER

**SUBJECT: ANTIHYPERTENSIVE MEDICATION ADJUSTMENT  
FOR NON-PREGNANT ADULTS**

**POLICY NO. 325V**

---

**9. Limitations on Settings:**

This Standardized Procedure for RN's and Clinical Pharmacists is for use in outpatient settings only.

**10. Patient Record Keeping Requirements:**

The RN or PharmD authorized to implement the Standardized Procedure for RN's and Clinical Pharmacists will document in the patient's medical record. Documentation will include:

- The description or category that the clinical staff utilized to implement the Standardized Procedure for RN's and Clinical Pharmacists.
- Which orders were placed.
- Instructions given to the patient including patient understanding of the instructions given as follows:
  - Verbalized understanding of above education
  - Verbalized partial understanding and will need additional follow-up
  - Did not verbalize understanding and provider informed
- Any follow-up appointment scheduled.

**11. Quality Review:**

Nursing or Pharmacy Leadership/Supervisors will be responsible for Quality Review of documentation entered by the identified users of the Standardized Procedure to include: patient selected for the Standardized Procedure meets criteria, documentation in ORCHID follows standards of the Standardized Procedure and written evidence of training and competency is present in the user's area file. Upon completion of the medication titration transaction, the RN or PharmD will copy the patient's PCMH provider via message center. The PCMH provider shall be responsible for review of the medication titration Standardized Procedure transaction for appropriateness. Should the PCMH provider have a concern or question it will be addressed to the Registered Nurse or PharmD and his/her supervisor. In addition, a notification to the co-chairs of the IDPC will be initiated for information. A plan of action shall be implemented to address any quality concerns up to and including removing medication titration authority.

**12. Method of Periodic Review of the Standardized Procedure for RN's and Clinical Pharmacists:**

The Standardized Procedure for RN's and Clinical Pharmacists will be reviewed as indicated but not less than every three years.

HARBOR-UCLA MEDICAL CENTER

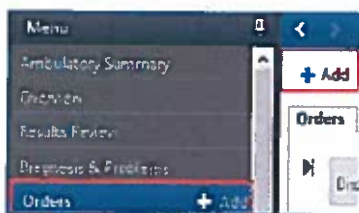
SUBJECT: ANTIHYPERTENSIVE MEDICATION ADJUSTMENT  
FOR NON-PREGNANT ADULTS

POLICY NO. 325V

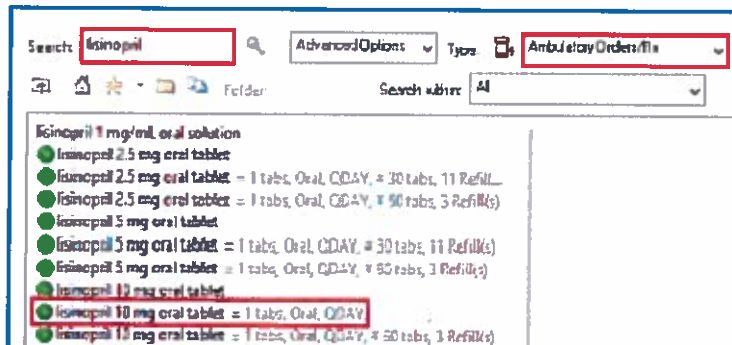
NURSE VISIT TITRATION – PRESCRIPTION ORDERS & CREATING FAVORITES  
JOB AID

This Job Aid will demonstrate how to enter a prescription orders and create favorites in the Nurse Directed Clinic for Nurse Visit Titration.

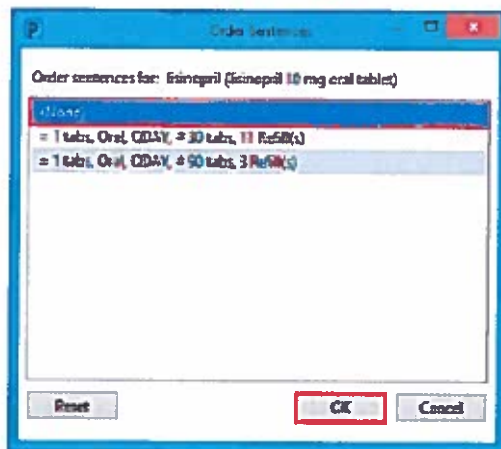
1. Select Orders under the Menu and click +ADD



2. Search for Medication, Dose and Frequency then click DONE



3. The Order Sentences window will display. Select None and OK



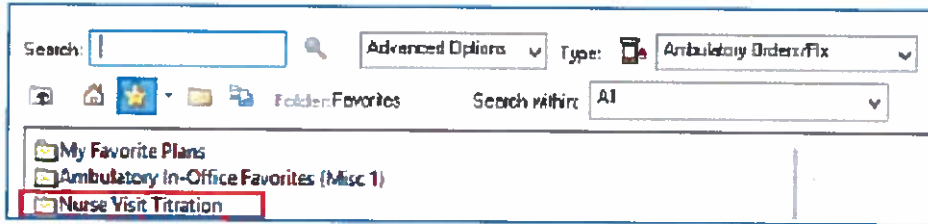


HARBOR-UCLA MEDICAL CENTER

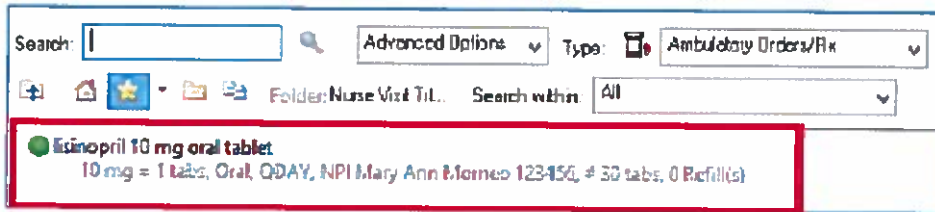
**SUBJECT: ANTIHYPERTENSIVE MEDICATION ADJUSTMENT  
FOR NON-PREGNANT ADULTS**

**POLICY NO. 325V**

8. Nurse Visit Titration Folder will now display when entering new Orders. Select folder



9. Medications saved as Favorites will display for easy ordering



**REFERENCES:**

**DHS Antihypertensive Med. Adjustment for Non-Pregnant Adults, #SP-1028-02-DHS**

**DHS Medication Adherence Evaluation for Oral Solids Standardized Procedure for RNs and Clinical Pharmacists, #SP-1027-02-DHS**

**DHS Hypertension Medication Adjustment for Non-Pregnant Adults: Hydrochlorothiazide [Ezide, Microzide] Standardized Procedure for RN's and Clinical Pharmacists, #SP-1042-01 DHS**