Clinical support staff check Blood Pressure at each visit per Blood Pressure Measurement Standard

**Provider Identifies Patient Goal**
- Diabetes: 140/90 (any age)
- Chronic Kidney Disease: 140/90 (any age)
- Vascular Disease: 140/90 (any age)
- Age ≥ 60: 150/90
- All others: 140/90

**Provider enters goal into Goals Section of One Chart, indicating patient specific target**

**Is blood pressure running above goal?**
- NO → **DONE**
- YES → **Provider confirms elevation of blood pressure over time to make diagnosis of hypertension**

**Provider or Health Coach RN educate on:**
- Hypertension
- Exercise
- Low Sodium Diet
- Other Therapeutic Lifestyle Choices
- Home Blood Pressure Monitoring

**Recheck within the next 3 months**

**Provider decides if treatment will be started today?**
- NO
- YES → **Is the patient Black?**

**Patients that may NOT be appropriate for RN managed protocol:**
- Those who may need lower doses or more time between titration do to other factors [extremely elderly &/or those with fluid dynamic issues (eg. CHF)]
- Those with initial BP>160/100 where provider would like to start two medications initially
- Those with allergies to the protocol medications
- Pregnant Patients

**HANDOUTS**
- What is High Blood Pressure?
- Exercise for Healthier Heart
- Tips for Using Less Salt
- Checking Your Own Blood Pressure

**Initiate “Female (non-Diabetic) or Black” Provider Treatment Protocol (page 2)**

**Initiate “Male (non-Black) or Diabetic” Provider Treatment Protocol (page 3)**

**Initiate provider treatment protocol by Gender (page 2 or 3)**
Used for all Blacks (even if Diabetic or mixed race) & Female without Diabetes

- Visit every two weeks until controlled
- Dose/medication adjustment at every visit until controlled
- Controlled defined as BP to goal on all readings, including in clinic value
- Assess for non-adherence/medication understanding at each visit
- If home blood pressures are controlled, but clinic blood pressures are not, consider ambulatory blood pressure monitoring

Visit & Treatment Schedule

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
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</table>
| 1   | o Start HCTZ 12.5mg daily in morning  
    • Give HCTZ handout |
| 2   | o BMP Today  
    o If not to goal, increase HCTZ to 25mg daily in morning |
| 3   | o BMP today  
    o If not to goal, add amlodipine 5mg daily in evening  
    • Give amlodipine handout |
| 4   | o If not to goal, increase amlodipine to 10mg daily in evening |
| 5   | o If not to goal, add lisinopril 10mg daily  
    • Give lisinopril handout |
| 6   | o BMP Today  
    o If not to goal, increase lisinopril to 10mg twice daily  
    o If cough has developed, discontinue lisinopril, switch to losartan 25mg daily  
    • Give losartan handout |
| 7   | o BMP Today  
    o If not to goal, increase lisinopril to 20mg twice daily  
    o If using losartan and not controlled, increase to 50mg daily |
| 8   | o BMP Today  
    o If not to goal, consider further evaluation for underlying cause of resistant hypertension  
    • SEE SIDEBAR |
| 9   | o If not to goal, start Metoprolol XL 50mg daily  
    o Do not initiate Metoprolol XL if:  
      - Patient has short gut or feeding tube (use non-XL formulation of beta blocker)  
      - Patient has heart rate of <60  
    • Give Metoprolol handout |
| 10  | o If not to goal, increase Metoprolol XL to 100mg daily  
    o Do not increase if heart rate is <60 |
| 11  | o If not to goal, increase Metoprolol XL to 200mg daily  
    o Do not increase if heart rate is <60 |
| 12  | o If not to goal, referral to hypertension specialty clinic or nephrology depending on local resources |
This protocol is used when the **provider** is managing the patient

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**Used for all Diabetics (except Blacks) and all Men (except Blacks)**
- Visit every two weeks until controlled
- Dose/medication adjustment at every visit until controlled
- Controlled defined as BP to goal on all readings, including in clinic value
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### Visit & Treatment Schedule

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### Further evaluation of resistant hypertension
- If PCP is an APP, then APP will touch base with a doctor regarding the patient and the direction to proceed with evaluation/treatment.

**Provider(s) should consider:**

1. Further evaluation for secondary causes:
   - **Laboratory Studies including**  
     - TSH  
     - PTH (if baselineCa [prior to starting HCTZ] > 10.7)  
     - Renin (done in AM)  
     - Aldosterone
   - Imaging with Renal Ultrasound with doppler
   - Sleep Apnea evaluation

2. **Other Contributing Factors**
   - Consider non-adherence or medication confusion  
     - Obtain dispensing history from Pharmacy  
     - Ask patient to bring in pill bottles & explain what they are taking & when
   - Considering interfering agents (NSAIDs, allergy medications)
   - Review alcohol, nicotine, recreational drug usage
   - Evaluate for depression
   - Evaluation for patient activation or engagement
   - Diet/exercise patterns

3. **Medication adjustment**
   - Consider change of HCTZ to Chlorthalidone if HCTZ does not seem to be achieving 24 hour coverage

4. **Referral to**
   - Behavioral health regarding activation
   - Designated hypertension specialist (HTN clinic, nephology, etc., depending on local resources)
   - Dietician

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**Other HANDOUTS as Needed**
- Controlling High Blood Pressure
- Manage Stress with a Healthy Lifestyle
- Walking for Fitness
- Low-Salt Choices
- Tips for Quitting Smoking
- Coping with Smoking Withdrawal

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**Evaluation and Treatment**
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