Implement lifestyle interventions (continue through management) including:

- Physical activity 30m/d
- DASH; dietary Na 1.8-2.4g/d
- Tobacco cessation
- Weight control; BMI <25

**BP Goals**

<table>
<thead>
<tr>
<th>BP Goals (in mm/Hg)</th>
<th>Conventional (Office)</th>
<th>AOBP or Avg² Home Reading</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Adults</td>
<td>≤ 139 / 89</td>
<td>≤ 134 / 84</td>
</tr>
<tr>
<td>Strong Rec.</td>
<td>Consider</td>
<td>Consider ≤ 129/89</td>
</tr>
</tbody>
</table>

If BP above goal:

- Start ACEI + Diuretic
  - Lisinopril - HCTZ
    20 - 25mg
    ½ → 1 → 2 tablets daily
  - Optional: Replace ACEI w/ ARB if ACEI intolerant
  - Losartan
    25mg daily → 25mg twice daily → 50mg twice daily
    Titrates to BP goal.

- Add Calcium Channel Blocker
  - Amlodipine
    2.5 → 5 → 10mg daily
    Titrates to BP goal.

- Replace HCTZ w/ Chlorthalidone
  - Chlorthalidone
    25mg daily (max rec. dose)

- Add Spironolactone
  - Spironolactone
    12.5 → 25mg daily
    *If on thiazide AND eGFR≥60 AND K<4.5

- If Spironolactone eligibility criteria not met:
  - Bisoprolol
    2.5 → 5 → 10mg daily

  Titrates to BP goal. Maintain pulse of 55 or greater

**Statin Goals**

- Atorvastatin 40-80 mg:
  - Clinical ASCVD⁵ Age < 75 + any LDL
  - DM: Age < 75 + LDL ≥ 190
- Atorvastatin 10-20 mg:
  - Clinical ASCVD Age ≥ 75 + any LDL
  - DM: Age ≥ 40 + LDL 70-189*  

**A1c Goals**

- ≤ 7.9%: ≥ 65 yrs or clinical factors⁵
- ≤ 6.9%: < 65 yrs w/o clinical factors

**Start Metformin**

- 500mg: ½ tablet bid → 1 tablet bid → 2 tablets bid
- Contraindicated: eGFR<30 or HF NY class 3-4 or LFTs >3 x ULN
- If not recommended: If baseline eGFR <45
- Assess risk/benefits: If eGFR falls <45

  If GFR 30-45, 1000mg = max. Titrate every 1-2 weeks aiming for AM SMBG target (6.9: 70–130; ≤ 7.9: 100–160)

**Add Glipizide**

- 5mg: ½ tablet bid → 1 tablet bid → 2 tablets bid
- Contraindicated: severe sulfa allergy
  Titrates every two weeks until at target.

**Add NPH OR Basal Long-Acting Insulin**

**Add NPH OR Basal Long-Acting Insulin or Alternate agent⁹**

**If recommended dose of statin not tolerated, switch to a different statin (such as rosuvastatin). If that doesn’t work, reduce to highest tolerated dose. [update SIG w/dosing changes]**  

³ Beta Blockers, independent of their mild anti-hypertensive effect, are sometimes indicated for secondary cardiovascular protection

⁴ Adapted from KPNC CPG for: CAD, DM, Cholesterol, HTN, HF and Stroke

Complete guidelines, including updated guidelines on the Dx of HTN, can be found in the Clinical Library at http://cl.kp.org

Contact: Jonathan Lee, Sr Consulting Assoc., Regional Health Ed.

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### Cardiovascular Risk Management Medications and Lab Chart Rev. 27 (07/18)

#### PHASE MEDICATIONS & CAUTIONS

**AS**
- **ASA**
  - 81mg daily
  - If ASA intolerant: Clopidogrel
    - **CAUTION/INFO** : CAD, Sx PAD

**AR**
- **ARB**
  - Telmisartan (Micardis® F)
    - Tab 20mg daily
    - 2 weeks
    - K+ and SCr < 6 months (Na+ optional)

**ACEI**
- **Lisinopril**
  - 10mg daily
  - **CAUTION/INFO** : Verify effective contraception in women of childbearing potential: Use Chlorthalidone or HCTZ.
  - Avoid ARB if eGFR <30 or K >5.5

**STATIN**
- **Atorvastatin**
  - 40–80mg daily
  - **CAUTION/INFO** : Clinical ASCVD Age ≥ 75 + any LDL
  - DM: Age ≥ 40 + LDL 70-189

**DM 2 (non-insulin agents)**

**Biguanide**
- **Metformin (Glucophage®) F**
  - Tab 500, 1000mg
  - 2 weeks
  - Scr. (CBC optional)
  - **Contraindicated**: eGFR <30 or HF NY class 3–4 or LFTs >3 x ULN; Not recommended: baseline eGFR <45; Assess R/B: If eGFR falls <45

**Sulfonyleurea**
- **Glipizide (Glucotrol®) F**
  - Tab 2.5, 5, 10mg
  - 20mg BID ac
  - 2 weeks
  - None
  - **Contraindicated**: severe sulfa allergy

**Thiazoladinedione**
- **Pioglitazone (Actos®) F**
  - Tab 15, 30, 45mg
  - 45mg daily
  - 2 months
  - ALT, (AlkP, T bili optional)

**DPP-4 inhibitor**
- **Linagliptin (Tradjenta®) NF**
  - Tab 5 mg
  - 5mg daily
  - N/A
  - None

**SGLT2 inhibitor**
- **Empagliflozin (Jardiance®) NF**
  - Tab 10, 25mg
  - 25mg daily
  - 2 weeks
  - Scr.

**GLP-1 receptor agonist**
- **Exenatide ER inj (Bydureon®) NF**
  - SQ Inj 2 mg
  - 2mg weekly
  - N/A

**Statins**
- **Atorvastatin (Lipitor®) F**
  - Tab 40, 80mg
  - 80mg daily hs
  - N/A

- **Rosuvastatin (Creator®) F**
  - Tab 10, 20mg
  - 20mg daily hs
  - N/A

### PHASE POPULATIONS

**CAD**
- **Symptomatic PAD**

**CVA/TIA**
- Ischemic

**DM**
- **If 10 y CV risk > 10% ages 50–59 ASA recommended; if 10 y CV risk > 10% ages 60–69 consider ASA

**Contraindications**
- **Clinical ASCVD Age <30 or HF NY class 3–4 or LFTs >3 x ULN; Not recommended: baseline eGFR <45; Assess R/B: If eGFR falls <45

**Formulary Alternatives:**
- Alogliptin (Nesina), Bukanagolitin (Jinlat), Liraglutide (Victoza)

**Formulary Controls:**
- *F: Formulary
  - NF: Non-formulary

**Drug site:** [http://pharmacy.kp.org](http://pharmacy.kp.org)

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