SUMMARY
Goals
✓ Decrease morbidity and mortality of atherosclerotic cardiovascular disease (ASCVD)
✓ Appropriately identify and treat patients at risk for ASCVD
✓ High-intensity statin therapy for ALL ASCVD patients

ALERTS
- Muscle pain or weakness
- No more total cholesterol or LDL treatment targets
- Minimize statin adverse effects & potential drug interactions

HYPERCHOLESTEROLEMIA DIAGNOSTIC CRITERIA/EVALUATION
For treatment of total cholesterol or LDL: Goal is no longer “treat to target” or to consider “lower is better.” Manage according to patient’s ASCVD risk.

EVALUATION:
- Assess each patient for personal ASCVD risk factors and family history ASCVD
- Obtain lipid panel (non-fasting is acceptable for screening) in:
  - males > 35 years or 20-35 years at increased risk for ASCVD
  - females > 45 years or 35-45 years at increased risk for ASCVD
- Estimate patient’s 10-year ASCVD risk group based on sex, age, race, total cholesterol, HDL, BP, history of DM, and smoking history using the newly developed Pooled Cohort Equation: http://clincalc.com/Cardiology/ASCVD/PooledCohort.aspx

4 DEFINED STATIN BENEFIT GROUPS
Secondary Prevention Group 1: Individuals with clinical ASCVD (ACS, MI, stable angina or other arterial revascularization, stroke, TIA, or PAD of atherosclerotic origin)
Primary Prevention Group 2: Individuals with LDL-C of ≥190 (age ≥ 21 years and a candidate for statin therapy)
Primary Prevention Group 3: Individuals with diabetes, LDL-C of 70 to 189, age 40 to 75 years, and without clinical ASCVD (For DM patients age <40 or >75 years, or LDL-C <70 mg/dl; treatment is individualized)
Primary Prevention Group 4: Non-diabetic individuals with a 10-year ASCVD risk ≥7.5%, age 40 to 75 years, with LDL of 70 to 189, and with a 10-year ASCVD risk of >7.5% (Consider treatment for primary prevention in individuals with a 10-year ASCVD risk of 5 to 7.5%)

TREATMENT
- Healthy lifestyle changes: a 3 month trial of lifestyle changes such as diet, exercise, weight loss, smoking cessation, and control of HTN and/or DM may be appropriate in groups 2, 3, 4.
- Prior to statin initiation: TSH, ALT, CK, A1C if diabetic status is unknown.
- Statin therapy: Strongly recommended as first line therapy for all dyslipidemias when medication is indicated.
- Non-statin therapies: (e.g., ezetimibe, fibrates, fish oil, niacin) alone or in combination with statins DO NOT provide acceptable risk reduction benefits compared to adverse effects. With a few exceptions, these agents should be avoided.
- Statin intensity: Initiate or continue the appropriate intensity of statin therapy for all four of the defined statin benefit groups (see algorithm page 2).
- Statin intolerance: If patient cannot tolerate statin due to muscle weakness, muscle pain, or tenderness: re-address lifestyle issues, decrease statin dose, try another statin, check vitamin D levels and replace (low levels associated with statin myopathy), if low evaluate for other conditions that may cause muscle weakness.
- There are limited recommendations for treatment of individuals who are not in the 4 statin benefit treatment groups described above. In these individuals whose 10-year risk is < 7.5%, or when the decision is unclear, other factors (family history of premature CAD, LDL > 160 mg/dl, increased C-reactive protein [CRP])
greater than 2.0, coronary calcium greater than 300, ABI < 0.9) should be considered.

- There is insufficient data to make specific recommendations regarding statin therapy in the following groups: NYHA class 2-4 CHF, dialysis, HIV patients, and solid organ transplant patients.

**Monitoring**

- Prior to statin therapy: assess response to trial of lifestyle changes
- During statin therapy:
  - If symptomatic in the first 3 months of rx:
    - check ALT, CK
    - search for drug-drug interactions
    - decrease statin dose, try another statin
    - check vitamin D levels and replace if low
    - check TSH
  - If asymptomatic: follow up in 6-12 months as appropriate
  - Routine CK/ALT testing not indicated
  - Annual: lipid panel for stable long term statin therapy patients (more frequent if indicated to monitor patient adherence).