Disease Management: Type 2 Diabetes

Maintain treatment goals:

- **Nutrition**
  - Initial consult with dietician and routine follow-ups as needed; recommend patient keep a carbohydrate source with them at all times; provide education on consistent eating patterns

- **Exercise**
  - Review home exercises guidelines with patient; exercise within cardiac rehab recommendations (see listed references for more detailed exercise guidelines)
  - Injection site: Inject insulin in abdomen if exercise will begin within 30 minutes to avoid hypoglycemia (glucose is used more rapidly if insulin is injected in active muscles)
  - Follow your facility’s policy or the AACVPR guidelines (below) for initiating exercise and providing CHO:
    - Patients taking oral hypoglycemic agent or insulin should have glucose checked before and after exercise for 6 sessions to establish level of glucose control and exercise response; continue checks if <90 mg/dL or >300 mg/dL are recorded
    - If pre-exercise blood glucose ≥300 mg/dL:
      - Type 1 = no exercise
      - Type 2 and symptomatic = no exercise
      - Type 2 and asymptomatic = exercise
      - Contact physician in all cases
    - If pre-exercise blood glucose 100 mg/dL or less:
      - Provide snack with carbohydrates
      - Exercise if no symptoms
    - If post-exercise blood glucose 90 mg/dL or less:
      - Provide snack with carbohydrates

- **Alcohol and tobacco use**
  - Address need for limitation or cessation

- **Labs**
  - Recommend monitoring A1C every 3 months if newly diagnosed, therapy has changed, or not meeting glycemic goals
  - Recommend monitoring A1C every 3-6 months if meeting treatment goals
  - Recommend A1C goal of 7% (may be more or less stringent depending on history, complications, physician recommendations, etc.)
  - Make sure other labs are current and review with patient: lipids, metabolic panel, etc.
  - Help arrange f/u if needed; make sure labs are current if medication/health status changes

- **Sign/symptoms**
  - Review symptoms of hypo-/hyperglycemia, how to prevent and treat, educate on consequences of chronic hyperglycemia

- **Home glucose monitoring**
  - Review home blood glucose readings at each visit
  - Educate on proper glucometer usage, have patient demonstrate proper technique
  - GOAL: 70-130 mg/dL fasting, <180 peak post-prandial (These are general guidelines. Patients should follow their physician’s recommendations)

- **Blood pressure**
  - Monitor BP each session

- **Medication**
  - Check for Metformin, insulin, or other DM medication prescriptions; provide education on compliance and how to use glucose-lowering medications; refer to pharmacist for medication management consult as necessary; review proper use and disposal of needles and syringes

**Annual assessment of complications:** (Should verify that patient is having these done yearly)

- Targeted annual history and physical exam
- Specialist dilated eye exam
- Renal assessment
- Comprehensive foot exam with risk assessment
- Cardiovascular and cerebrovascular complication assessment
- Special considerations
Treatment and referral for complications: (Contact physician if problems arise that need attention)
- Nephropathy
- Neuropathy
- Retinopathy
- Cardiovascular and cerebrovascular disease
- Peripheral vascular disease

Treatment goals not met:
- Consider referral to diabetes health team or specialists
- Assess patient adherence (biggest problems are understanding and adherence)
- Evaluate for depression

Institute for Clinical Systems Improvement Ongoing Management Algorithm. *Diagnosis and Management of Type 2 Diabetes Mellitus in Adults* (14th ed./July 2010).

doi: 10.2337/dc13-S011 Diabetes Care January 2013 vol. 36 no. Supplement 1 S11-S66
http://care.diabetesjournals.org/content/36/Supplement_1/S11.full