BASIC GUIDELINES for DIABETES CARE

PHYSICAL AND EMOTIONAL ASSESSMENT

*__Blood Pressure, Weight/BMI - *Every visit*. *For adults:*__ Blood pressure target goal <130/80 mm Hg; Lower or higher systolic pressure may be appropriate based on patient characteristics and response to therapy; BMI (body mass index) target goal < 25 kg/m^2. ***For children:*** Blood pressure target goal <90th percentile adjusted for age, height, and gender; BMI-for-age <85th percentile.

Foot Exam – **Every visit:** thorough visual inspection; **Annually:** comprehensive foot examination - assessment of pedal pulses and 10-g monofilament pressure sensation plus one of following 128-Hz tuning fork, pinprick sensation, ankle reflexes, or vibration perception threshold. Provide general foot self-care education to all patients with diabetes. Consider refer very high risk patients to a foot care specialist.

Comprehensive and Dilated Eye Exam (note: high-quality fundus photographs with interpretation by a trained eye care provider may be incorporated into follow-up plan) - ***Type 1: Five years post diagnosis*****,** then ***annually***. ***Type 2: Shortly after diagnosis***, then ***annually***. May be individualized to more or less often. ***Note****: Women with diabetes who become pregnant should have a retinal exam within the first trimester.*

***Depression** - Evaluate for depression; treat aggressively with counseling, medication, and/or referral.

Dental** – Exam at least ***twice yearly. Assess oral symptoms that require an urgent referral.

LAB EXAM

A1C (HbA1c) - *Quarterly*,** if treatment changes or if not meeting goals; ***Twice a year if stable. Target goal **<7.0%.** (Less stringent A1C goals (such as <8%) may be appropriate for patients with severe hypoglycemia, limited life expectancy, advanced complications, extensive comorbid conditions, or longstanding diabetes in whom goal is difficult to attain despite treatment. More stringent A1C goals (such as <6.5%) may be appropriate for patients with short duration of diabetes, long life expectancy, and no significant CV, if this can be achieved without significant hypoglycemia or other adverse effects of treatment.) ***For Children:*** Consider age when setting glycemic goals.

Albumin-to-creatinine ratio – annually in patients with *Type 1 more than five years and with ***Type 2 beginning at diagnosis***. Normal < 30.

***Serum Creatinine**: annually in all adults. Use serum creatinine to estimate glomerular filtration rate (eGFR). Stage chronic kidney disease if present

Blood Lipids** - On ***initial visit, then ***yearly*** for adults. In adults with low-risk lipid values lipid assessments may be repeated every 2 years. Target goals (mg/dL): cholesterol, LDL<100 (<70 for high CVD risk); triglycerides <150; HDL>40 for men; HDL>50 for women.

SELF-MANAGEMENT TRAINING

Management Principles and Prevention of Complications - *Initially and ongoing*:** Focus on helping the patient achieve the AADE 7 self-care behaviors: healthy eating, being active, monitoring, taking medications, problem solving, healthy coping, and reducing risks. Screen for problems with and barriers to self-care; assist patient to identify achievable self-care goals. ***For children: As appropriate for developmental stage.

Self-Glucose Monitoring –*Non-insulin therapy or Medical Nutrition Therapy alone: As needed* to meet treatment goals. ***Multiple insulin injections or pump***: Typically test ***3-4 times a day***.

Medical Nutrition Therapy (by trained expert) - *Initially*: Assess needs/condition, assist patient in setting nutrition goals. ***Ongoing*:** Assess progress toward goals, identify problem areas.

Physical Activity - *Initially and ongoing*: Assess and prescribe physical activity based on patient's needs/condition (goal of at least 150 min/week of moderate intensity exercise spread over at least 3 days per week and resistance training 2 times per week if no contraindications) *Refer to Physical Activity Recommendations Fact Sheet for more information.*

Weight Management - *Initially and ongoing*: Must be individualized for patient.

INTERVENTIONS

Preconception, Pregnancy, and Postpartum Counseling and Management - *Consult* with high-risk, multidisciplinary perinatal/neonatal programs, and providers where available through the California Diabetes and Pregnancy (CDAPP) Sweet Success (http://cdappsweetsuccess.com) ***For adolescents: Age appropriate counseling advisable, beginning with puberty.***

Aspirin Therapy (for adults) – 75-162 mg/day as a primary prevention strategy for those at increased cardiovascular risk (10 year risk > 10%). This includes most Men >50, women >60 with one additional risk factor (family history of CVD, hypertension, smoker, dyslipidemia, albuminuria).

Smoking Cessation - **Ask** every patient if they use tobacco, **Advise** them to quit, **Refer** them to the California Smokers' Helpline at **1-800-NO-BUTTS** (1-800-662-8887).

Immunizations** – Influenza, Pneumococcal and Hepatitis B ***per CDC recommendations.

* See Explanatory notes

EXPLANATORY NOTES

BASIC GUIDELINES for DIABETES CARE

1. These Guidelines are intended for use by primary care professionals to diagnose mange and educate patients with type 2 diabetes. While providing recommendations the Guidelines are not intended as a substitute for the advice of a physician or other health care professional. These Guidelines are updated every two years or as significant changes or recommendations are identified.

2. One or more of the following criteria were used for inclusion of an item in these Guidelines:
   - Published evidence demonstrated either the efficacy or the effectiveness of the item.
   - Published studies on cost-identification, cost-effectiveness, or cost-benefit analysis of the item demonstrated favorable economic results.
   - A preponderance of expert opinion held that the item is considered to be essential to the care of persons with diabetes.

3. It is assumed that the following are routinely occurring in the medical setting:
   - A history and physical appropriate for a person with diabetes are performed. Visits are sufficiently frequent to meet the patient's needs and treatment goals.
   - Abnormal physical or laboratory findings result in appropriate and individualized interventions.
   - Expert multi-disciplinary health professionals provide self-management training. For children/adolescents and their families, training from a diabetes team or team member with experience in child and adolescent diabetes is strongly recommended to begin at diagnosis.
   - Physicians should consult current references for normal values and for appropriate treatment goal values, both for children and adults.
   - Specialists should be consulted when patients are unable to achieve treatment goals in a reasonable time frame, when complications arise, or whenever the primary care physician deems it appropriate. Under similar circumstances, children/adolescents should be referred to specialists who have expertise in managing children and adolescents with diabetes.

4. Additional comments on specific items included in these Guidelines:
   - **Blood Pressure/BMI** – For children, to determine blood pressure percentile adjusted for age, height, and gender use http://www.cdc.gov/nccdphp/dnpa/growthcharts/training/modules/module3/text/bloodpressure.htm To calculate and determine BMI percentile use http://www.cdc.gov/nccdphp/dnpa/bmi/childrens_BMI/about_childrens_BMI.htm
   - **Dental –** Refer all patients with diabetes for a dental examination, as a component of the comprehensive diabetes evaluation, regardless of oral findings or complaints.
   - **A1C / Self-Glucose Monitoring** – Certification by the National Glycohemoglobin Standardization Program as traceable to the DCCT reference ensures portability of A1C results. Verify that the laboratory is certified in this method. A1C target goals should be achieved gradually over time. Target goals should be less stringent for children, the elderly, and other fragile patients. Clinicians have found that making the patient aware of his/her A1C values and their significance helps motivate the patient toward improved glycemic control. This principle also applies to self-glucose monitoring. Target goals should be individualized for each patient.
   - **Microalbuminuria** – See Screening and Initial Management of Diabetic Microalbuminuria and Nephropathy algorithm.
   - **Glomerular Filtration Rate (GFR)** – See Screening and Initial Management of Diabetic Microalbuminuria and Nephropathy algorithm and explanatory notes for purpose and calculation of GFR.
   - **Blood Lipids** – Abnormal blood lipids are often under-treated. An active, progressive treatment and monitoring plan should be instituted. High risk cardiovascular disease (CVD) patients are defined as patients with overt CVD (i.e. patients with acute coronary syndromes or previous cardiovascular events) or without overt CVD but men > 50 and women >60 years of age and have 1 or more CVD risk factor.
   - **Immunizations** – See CDC schedules at http://www.cdc.gov/vaccines/schedules/index.html
   - **Children / Adolescents** – For specific diabetes care recommendations, see references.
   - **Psychosocial Assessment** – Assess barriers to self-care: common environmental obstacles, cultural issues, beliefs and feelings about diabetes, disorders of eating and mood, life stresses, and substance use. Consider using PHQ9 as a depression monitoring tool (http://www.phqscreeners.com) or the Edinburgh Postnatal Depression Scale for use during pregnancy found @ http://www.cdph.ca.gov/programs/cdapp/Pages/default.aspx

5. A list of general and specific references is included in the Basic Guidelines for Diabetes Care Packet.

