JOSLIN DIABETES CENTER AND JOSLIN CLINIC
GUIDELINE FOR SPECIALTY CONSULTATION/REFERRAL 07/29/13

The Joslin Guideline for Specialty Consultation/Referral is designed to assist primary care providers in individualizing the care and goals for adult patients with diabetes, including those who are pregnant. This Guideline is not intended to replace sound medical judgment or clinical decision-making. Clinical judgment determines the need for adaptation in all patient care situations; more or less stringent interventions may be necessary. This Guideline will be modified as changes in clinical practice evolve and as clinical evidence suggests.

The objectives of the Specialty Consultation/Referral Guideline are to support clinical practice and influence clinical behavior so that outcomes are improved and patient expectations are reasonable and informed. This Guideline was developed by a task force and approved through the Clinical Oversight Committee that reports to the Chief Medical Officer (CMO) of the Joslin Clinic, Joslin Diabetes Center, Inc. It was established after careful review of current evidence, medical literature and sound clinical practice.

All patients with diabetes require assessment by appropriately trained educators for evaluation of education requirements, diabetes self-management education (DSME), glucose management training, medical nutrition therapy (MNT), identification and prevention of complications, and activity/exercise guidance.

Diabetes educators are encouraged to seek Certified Diabetes Educator (CDE) or Board Certified-Advanced Diabetes Management (BC-ADM) certification, which is granted by the National Certification Board for Diabetes Educators and helps ensure a broad knowledge base of diabetes care and education principles. CDE's include registered nurses, registered dietitians, physicians, exercise physiologists, physical therapists, pharmacists and social workers. BC-ADM's include nurses, dietitians, pharmacists, physician assistants and physicians.

Pediatric patients: Refer pediatric and adolescent patients with type 1 diabetes to an endocrinologist/diabetes specialist for evaluation and follow-up. Pediatric patients with type 2 diabetes should be referred to an endocrinologist/diabetes specialist for evaluation and consideration of long-term follow-up.

System/Condition	Status/ Circumstance	Educator Referral	Specialist Consultation/Referral
NEWLY DIAGNOSED	At time of diagnosis	Diabetes educator for initial assessment and DSME, including blood glucose monitoring, nutrition and physical activity Registered dietitian for MNT	● Endocrinologist/diabetes specialist to initiate management plan for acute hyperglycemia in selected patients ● Eye care specialist, for patients with type 2 diabetes, comprehensive dilated eye exam or validated retinal imaging to evaluate for presence of retinopathy ● Endocrinologist/diabetes specialist to initiate plan for intensive control ● In select patients, referral to behavioral health specialist for assessment (coping strategies, support)
GLYCEMIC CONTROL **Hemoglobin A1C**	A1C 7.0-7.9%	Consider referral to diabetes educator for general re-evaluation, as well as DSME, physical activity guidance and ongoing consultation. ♦ Consider referral to registered dietitian for MNT	Consider referral to endocrinologist/diabetes specialist if individualized patient goals not met through intensive treatment in office after 6 months.
	A1C ≥ 8.0%	Diabetes educator for evaluation, glucose management training, and ongoing consultation ♦ Registered dietitian for MNT	● Endocrinologist/diabetes specialist if A1C ≥ 8.0% for ≥ 6 months or any A1C 1.4 x the upper limit of normal % ● Referral to behavioral health specialist for psychosocial assessment (non-adherence, motivation)

System/Condition	Status/ Circumstance	Educator Referral	Specialist Consultation/Referral
	Severe* or recurrent hypoglycemia	Diabetes educator for training in hypoglycemic treatment and prevention, use of glucagon, evaluation and education on patient safety issues, and blood glucose awareness training, if available	Endocrinologist/diabetes specialist if recurrent episodes of severe hypoglycemia. Consider behavioral health specialist
	Initiation of insulin pump therapy, or physiologic insulin regimen	Diabetes educator for training in pump use ♦ Registered dietitian for training in carbohydrate counting ♦ Encourage family/friend participation	Endocrinologist/diabetes specialist Eye care specialist for comprehensive dilated eye exam or validated retinal imaging to evaluate for presence of retinopathy
	Continuous glucose monitoring	Diabetes educator for training in continuous glucose monitor (CGM) use ♦ Registered dietitian for training in carbohydrate counting	Endocrinologist/diabetes specialist
*Episodes in which the patient experiences coma, seizure or suspected seizure, or impairment sufficient to require the assistance of another person			
BLOOD PRESSURE	Blood pressure ≥140/80 mmHg on 3 occasions	Consider registered dietitian referral to review sodium intake, weight management issues and lifestyle modification (i.e., DASH eating plan).	Nephrologist or hypertension specialist for difficulties in blood pressure management or inability to reach goals with conventional treatment over a 6-12 month period Endocrinologist or hypertension specialist if a secondary cause is suspected Consider stress reduction/relaxation training.
CARDIOVASCULAR MANAGEMENT	Presence of known CAD, unstable angina, chest pain suggestive of ischemia, CHF, PVD, ECG changes consistent with ischemia, arrhythmias including: · Atrial fibrillation · Atrial flutter · SVT · Ventricular tachycardia · Second and third degree heart blocks	Consider referral to registered dietitian for MNT especially if body mass index (BMI), lipid and/or blood pressure goals are not achieved. Consider referral to exercise physiologist and/or cardiac rehab program on recommendations of cardiologist.	Cardiologist consultation to establish optimal medical treatment Consider cardiac rehab program, if indicated.

System/Condition	Status/ Circumstance	Educator Referral	Specialist Consultation/Referral
	At risk patients: >35 years old with type 1 >10 years or type 2 diabetes and at least one of the following: · Microalbuminuria · Overweight/obesity: BMI >25 kg/m^2 · Dyslipidemia: LDL-C ≥ 100 mg/dl, HDL-C < 40 mg/dl, TG > 200 mg/dl · Known macrovascular disease (PAD) · Family h/o CAD: under 55 y/o · Hypertension: > 140/90 mmHg on 3 occasions · Smoker · Starting physical activity program	Autonomic neuropathy evidenced by one or more of the following ➢ Cardiac autonomic function abnormalities ➢ Orthostatic hypotension ➢ Erectile dysfunction ➢ Gastroparesis Consider referral to registered dietitian for MNT especially if BMI, lipid and/or blood pressure goals are not achieved. Consider referral to exercise physiologist and/or cardiac rehab program based on recommendations of cardiologist. Smoking cessation program	At-risk patients: Consider stress test – consider stress echo or stress thallium – optimal test varies with patient's clinical situation ▪ If positive, consult with cardiologist. See Lipid Management section See Blood Pressure Management section See Neuropathy Management, Management of Sexual Dysfunction sections
LIPID MANAGEMENT	LDL cholesterol ≥ 100 mg/dl with or without cardiovascular disease	Registered dietitian for MNT and physical activity program	Endocrinologist/lipid specialist if LDL goal not met within 6-12 months
	Triglycerides ≥ 200 mg/dl (fasting sample) and non-HDL cholesterol > 130 mg/dl	Registered dietitian for MNT and physical activity program	Endocrinologist/lipid specialist after aggressive lifestyle and medical intervention
	Chylomicronemia (TG ≥ 1000 mg/dl)	Registered dietitian for MNT and physical activity program	Endocrinologist/lipid specialist
	Combined dyslipidemia (LDL-C ≥ 100 mg/dl, and TG ≥ 200 mg/dl, or HDL-C < 40 mg/dl).	Registered dietitian for MNT and physical activity program	Endocrinologist/lipid specialist after aggressive lifestyle and medical intervention
	Intolerance to statins or insufficient therapeutic response	Registered dietitian for MNT and physical activity program	Endocrinologist/lipid specialist
MANAGEMENT OF FEET	At-risk* patients with acute problems	Diabetes educator for foot care and DSME	Podiatrist for routine care and evaluation Consider physical therapist consult for falls prevention and gait training.
	Current ulceration or non-healing ulcer, or infection	Diabetes educator for foot care and DSME	Podiatrist or vascular surgeon for evaluation and follow-up care
	Limb-threatening ulcer or infection	Diabetes educator for foot care and DSME	Podiatrist or vascular surgeon for immediate evaluation and treatment
	Claudication symptoms severe enough to cause disability or decreased quality of life	Diabetes educator for foot care and DSME	Vascular management team (vascular surgeon, interventional radiologist, or cardiologist) for diagnostic evaluation and treatment, if indicated Vascular surgeon for surgical bypass or related procedures, if indicated
*At-risk includes patients who smoke, have vascular insufficiency, neuropathy, retinopathy, nephropathy, history of ulcers/amputations, structural deformities, infections, skin/nail abnormalities, anticoagulation therapy, or who cannot see/feel/or reach feet.			

System/Condition	Status/Circumstance	Educator Referral	Specialist Consultation/Referral
RENAL STATUS	Rapid rise in creatinine level (e.g., 0.8-1.4 mg/dl in 12 months) GFR < 45 ml/min Uncertain etiology of nephropathy Problems with management of ACE inhibitors Anemia due to renal disease Difficulties in management of hyperkalemia Difficulties in management of hyperphosphatemia Persistent proteinuria (> 300 mg/24 hrs) Albuminuria that progressively increases over a six month period Presence of unexplained hematuria	Diabetes educator for evaluation and DSME and management of diabetes and kidney disease Registered dietitian for MNT for GFR <60 ml/min	Nephrologist for consultation Consider referral to nephrologist.
*Cockcroft-Gault Equation: Creatinine clearance = (140 – age) x weight in kg x (0.85 if female) / (72 x serum creatinine)			
EYE CARE MANAGEMENT	All patients		• Annual referral for comprehensive dilated eye exam or annual validated retinal imaging* to determine level of retinopathy ♦ Follow-up and management based on level of retinopathy as determined above, but not less than annually* • Prior to intensifying blood glucose control or initiating intensive exercise (e.g., high impact sports, free weights, exercises involving Valsalva maneuver)
	New loss of vision, blindness, eye pain, red eye/ocular inflammation, floaters, flashes of light, double vision		Immediate evaluation with ophthalmologist specializing or trained in managing eye diseases in patients with diabetes.
	Women with known diabetes who are planning pregnancy or who are pregnant		Comprehensive dilated eye exam: · Prior to planned pregnancy · Early in first trimester, with follow-up as determined by level of eye disease · Six to eight weeks postpartum
	Patients with established visual loss following appropriate evaluation	DSME program specializing in vision impaired and adaptive devices	Vision rehabilitation specialist to maximize vision
* Definitive diagnosis of level of diabetic retinopathy, diabetic macular edema, and other diabetes-related ocular disorder is made by comprehensive dilated eye examination.			

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NEUROPATHY MANAGEMENT	Acute weakness with or without pain including suggestions of diabetic amyotrophy		Immediate evaluation with neurologist Consider physical therapist consult for falls prevention and gait training
	Rapidly progressing neuropathy		Evaluation with neurologist
	Severe painful neuropathy non-responsive to first-line therapy		Evaluation with neurologist
	Severe autonomic neuropathy including: · Cardiovascular, including orthostatic hypotension · Gastrointestinal, including gastroparesis and other bowel motility disorders · Urogenital, including: - bladder motility disturbance - erectile dysfunction · Sudomotor (gustatory hyperhidrosis)	When gastroparesis affects glycemic control, refer to diabetes educator for DSME ♦ Registered dietitian for MNT	Evaluation with neurologist or gastroenterologist Evaluation with urologist See Management of Sexual Dysfunction section
	Sub-acute/chronic weakness indicative of neuropathy		Evaluation with neurologist Consider physical therapist consult for falls prevention and gait training
PREGNANCY	Women with pre-existing diabetes followed preconception to 6 weeks postpartum	Stress importance of glycemic control and use of folic acid pre-conception and during pregnancy, using diabetes educator, as appropriate. Registered dietitian for individualized MNT	High risk OB/GYN and endocrinologist/diabetes specialist, preferably prior to conception for risk assessment and ongoing management ♦ See Eye Care Management section. See Pregnancy Guideline.
	Women with gestational diabetes	Stress importance of glycemic control and use of folic acid during pregnancy, using diabetes educator as appropriate. Registered dietitian for individualized MNT	OB/GYN

System/Condition	Status/Circumstance	Educator Referral	Specialist Consultation/Referral
PSYCHOSOCIAL MANAGEMENT	Newly diagnosed diabetes	Diabetes educator for DSME	For selected patients, refer to behavioral health specialist for assessment of coping strategies, support, etc.
	Need to develop skills for coping with diabetes: · Specific behavior/psychological problems associated with newly diagnosed diabetes · Depression/anxiety/general stressor · Adherence concerns · Diabetes burnout · Complications	Diabetes educator for DSME	Behavioral health specialist, such as a social worker, psychologist/psychiatrist, psychiatric nurse practitioner
	Eating disorders · Binge-eating disorder · Intentional insulin omission or reduction for purposes of caloric purging · Unexplained DKA or repeatedly elevated A1Cs in which psychological cause is suspected	Registered dietitian for appropriate MNT	Behavioral health specialist with specific expertise in eating disorders and in the context of a multidisciplinary team approach
	Hypoglycemia unawareness or prevention of recurrent severe hypoglycemia	If recurrent hypoglycemia, refer to diabetes educator for blood glucose awareness training.	
PERIODONTAL DISEASE MANAGEMENT	• At initial visit and annually, discuss need for dental exams at least every six months. • If evidence of gingivitis/periodontitis, may need dental evaluation/treatment every 3-4 months. • Refer to dentist for oral symptoms such as sore, swollen, or bleeding gums, loose teeth or persistent mouth ulcers. • If edentulous, refer to prosthodontist for restoration of functional dentition.	Diabetes educator for overview of dental care	Refer to dentist for follow up at least every 6 months.
MANAGEMENT OF SEXUAL DYSFUNCTION	Presence of structural/functional abnormality	Diabetes educator for DSME	Urologist for structural/functional abnormality
	Presence of hormonal abnormality or no specific etiology identified		Males: Erectile dysfunction specialist (endocrinologist or urologist), or physician who specializes in men's sexual health, if specific diagnosis in question or failure of trial with oral medication or concern with using oral therapy with specific patient Females: OB/GYN or physician who specializes in women's sexual health for dyspareunia, arousal issues
	Psychological issues suspected		Behavioral health specialist, ideally with experience in sexual dysfunction

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