COASTAL COMMUNITY HEALTH S POLICIES AND PROCEI	
Section: Clinical Title: Management of Diabetes Mellitus	Policy Number: C- 20
Version: 1 Approved By: Medical Director	Approval Date: 05/09/2017 Revision Date:

## **PURPOSE:**

To provide high quality, evidence based treatment for diabetes mellitus types 1 and 2.

## **POLICY:**

It is the policy of CCHS to manage patients diagnosed with diabetes mellitus type 1 or 2 in accordance with evidence based guidelines and clinical research. The American Diabetes Association (ADA) annual guideline update shall serve as the basis for this treatment. These guidelines are available for provider reference under "Clinical Guidelines" on the G drive. Additional guidance may be taken from other important stakeholders, such as the American Academy of Family Physicians, the American College of Physicians, the American Academy of Pediatrics, the American Association of Clinical Endocrinologists, and the American College of Endocrinology. Appropriate late breaking research studies' findings also may be incorporated into treatment protocols according to clinician judgement. Treatment recommendations for our patients will come from standards which are widely recognized as applying to most patients of US origin. To the extent possible, cultural expectations, mores, and treatment preferences will be incorporated into medical decision making for patients whose cultural origins lie outside of the USA. This policy does not apply to gestational diabetes.

## **PROCEDURES:**

- 1. The diagnosis of diabetes mellitus shall be accomplished according to nationally recognized standards published by the ADA. In sum, a random blood sugar of 200 or greater in the setting of appropriate symptoms; a fasting blood sugar of 126 or greater; a hemoglobin A1c of 6.5% or greater; or a 2-hour oral glucose tolerance test of 200 or greater will be sufficient to diagnose diabetes. Confirmatory testing will be according to ADA guidelines as indicated.
- 2. Once confirmed, diabetes type will need to be determined. If confusion exists, insulin autoantibodies or other autoimmune testing may be used to confirm type 1. Most of our patients diagnosed with diabetes will have type 2.
- 3. Type 1 diabetes requires insulin treatment for life; without insulin, the patient may suffer irreparable harm and perhaps death. Managing these patients at CCHS usually will require basal bolus insulin therapy; if provider knowledge and experience allow, insulin pump therapy may be ordered. Disease state monitoring will occur at appropriate intervals in the clinic, according to patient control and provider recommendations. Endocrinology involvement may be necessary in some cases.

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- 4. The cornerstone of management of type 2 diabetes is lifestyle modification, including dietary modification, regular exercise and weight loss if indicated. These principles of patient self-management will be taught and reiterated at every encounter for diabetes monitoring following diagnosis. Medication will be used to achieve blood glucose and A1c goals when (a) the patient is experiencing symptoms of hyperglycemia, and/or (b) the patient's A1c level is above the desired goal as determined by the patient and clinician together. Determining individual patient goals of therapy will be done using a patient-centered, culturally appropriate approach which may include motivational interviewing as one method to reach this decision. Goals of therapy may be fluid and change over time based upon patient preferences and medical comorbidities. In general, younger, healthier patients with fewer comorbidities and shorter interval from diagnosis may aim to achieve A1c level of 7% or less, in accordance with published clinical trials and ADA guidelines, to prevent ophthalmologic and nephrologic complications. Older patients with longer disease duration and multiple comorbidities - especially coronary artery disease - may opt for a higher A1c goal of 8% or less. Documentation of patient goals and medical decision making should be recorded in the patient's medical record.
- 5. When medication is indicated for type 2 diabetes, the foundation of treatment should be metformin. Abundant clinical evidence and ADA guidelines support this recommendation. Moreover, for our uninsured patients, metformin is offered free of charge at a local pharmacy. A reduction of A1c by 1.0 1.5 % may be expected with the use of metformin according to usual dosing guidelines. Metformin also offers the benefit of weight reduction and cardioprotection.
- 6. Second line therapy for type 2 diabetes may be any additional anti-diabetic agent, according to ADA guidelines. The least expensive option would be a sulfonylurea; some are \$4 at various pharmacies.
- 7. For those patients with documented cardiovascular (CV) disease or at high risk of CV disease, the SGLT2 inhibitor Jardiance (empagliflozin) and the GLP1 receptor agonist Victoza (liraglutide) are FDA approved for lowering CV risk in addition to lowering glucose. Additional benefits include weight loss (with both agents) and blood pressure lowering (with SGLT2 inhibitors). Drug costs of these agents are high.
- 8. Add on insulin therapy or changing to basal bolus insulin therapy instead of oral therapy effectively can lower glucose levels to appropriate goal ranges. The long and rapid acting analog insulins, Levemir and Novolog respectively, are available on the 340B discount program for reasonable cost.

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- 9. In general, all drug therapy options used should be titrated to maximally tolerated doses within manufacturers' guidelines. So-called "tight" glucose control using antidiabetic medications inevitably will cause some hypoglycemic episodes; patientcentered decision making with close patient involvement will be required to provide appropriate management of this problem. Adjustment of treatment goal A1c may be necessary if hypoglycemia is frequent or particularly troubling to the patient.
- 10. For high cost anti-diabetic medications, use of the patient assistance program (see Policy C-17 Medication Pharmaceutical Assistance) may be an option. In addition, patients should be encouraged to use the 340B drug discount program (see Policy Pharm 1 - 340B Policy and Procedure Manual) for brand name drug products.
- 11. Self-blood glucose monitoring should be encouraged for all patients with diabetes, although clinical trials have not shown improved patient outcomes with selfmonitoring. For uninsured patients, a glucometer may be given from stock supply; the prescription for strips is included and may be used at several local pharmacies to receive the discounted cost.
- 12. Use of statin therapy and aspirin therapy should be considered and recommended according to ADA guidelines and the guidelines of others, including the American College of Cardiology and the American Heart Association. Use of ACE inhibitors or angiotensin receptor blockers should be considered in the appropriate settings (management of hypertension or microalbuminuria). Diabetic retinopathy screening should be recommended annually, and use of the screening program established with our contracted eye care providers for our uninsured patients should be encouraged. Diabetic foot exam should be performed at least annually and recorded in the EMR. Diabetic nephropathy screening using urine microalbumin to creatinine ratio should be done annually.

Approved:

Medical Director, Board of Directors

5/16/2017 Date

Policy History:

Activity	Date	Comments/Description
Date Issued:	05/09/2017	Initial date of approval by QI Committee and Medical Director.