

Scope and Target Population:

To provide a comprehensive approach to the diagnosis and management of prediabetes and type 2 diabetes mellitus in adults age 18 and older. Management will include nutrition therapy, physical activity, self-management strategies, and pharmacologic therapy recommendations, as well as the prevention and diagnosis of diabetes-associated complications and risk factors.

The diagnosis of gestational diabetes or the management of diabetes in patients who are pregnant is excluded from the scope of this guideline. Oral agents do not have Food and Drug Administration approval for use in pregnancy. The glucose goals are different in pregnancy and require more aggressive treatment.

Please refer to the ICSI Routine Prenatal guideline for information relating to gestational diabetes.

The diagnosis and management of type 1 diabetes is not included in this guideline.

Clinical Highlights and Recommendations:

- Education and self-management support is necessary for people with diabetes to manage their disease.
- Focus on cardiovascular risk reduction (blood pressure control, low-density lipoprotein cholesterol control and statin use, aspirin use and tobacco cessation).
- A1c levels should be individualized to the patient.
- Aggressive blood pressure control is just as important as glycemic control. Systolic blood pressure level should be the major factor for detection, evaluation and treatment of hypertension. The use of two or more blood pressure lowering agents is often required to meet blood pressure goal.
- Prevent microvascular complications through annual or biannual eye exams, foot risk assessments and foot care counseling, and annual screening for proteinuria.
- Initial therapy with lifestyle treatment and metformin is advised unless contraindicated.

Priority Aims:

A multifactorial intervention targeting hyperglycemia and cardiovascular risk factors in individuals with diabetes is most effective. Both individual measures of diabetes care as well as comprehensive measures of performance on broader sets of measures are recommended. A randomized controlled trial has shown a 50% reduction in major cardiovascular events through a multifactorial intervention targeting hyperglycemia, hypertension, dyslipidemia, microalbuminuria, aspirin and ACE inhibitor use in individuals with microalbuminuria.

Goals for A1c, low-density lipoprotein, and other diabetes measures should be personalized, and lower goals for A1c and low-density lipoprotein than those included here in the priority aims and measures may be clinically justified in some adults with type 2 diabetes. However, efforts to achieve lower A1c below 7% may increase risk of mortality, weight gain, hypoglycemia and other adverse effects in

many patients with type 2 diabetes. Therefore, the aims and measures listed here are selected carefully in the interests of patient safety.

1. **Diabetes Specific Optimal Care Measures:** Maximize the percentage of adult patients, ages 18-75 with type 2 diabetes mellitus, who in a defined period of time achieve any of the possible measures of established control.
2. **Diabetes Specific Optimal Care Comprehensive Measure Set:** Maximize the percentage of adult patients ages 18-75 with type 2 diabetes mellitus, who in a one-year period of time achieved the identified measures of care.
3. **Diabetes Process of Care Measure Set:** Maximize the percentage of adult patients ages 18-75 with type 2 diabetes mellitus for whom recommended screening procedures are done.
4. **High-Risk Population Measures:** The purpose of this aim is to identify and focus on a higher risk population by decreasing the percentage of adult patients, ages 18-75 with type 2 diabetes mellitus, with poorly controlled glucose and cardiovascular risk factors (clinical strategies that target high-risk populations may have more clinical input and be a better use of limited resources).

Additional Background:

Type 2 Diabetes accounts for about 90% of the diabetic patients in the United States. The prevalence of diagnosed Type 2 Diabetes Mellitus in the United States is about 7 million people, or roughly 3% of the population.