St. Rose Quality Care Network
A Dignity Health Member

Clinical Integration Steering Committee
Clinical Integration Chronic Disease Management Work Group

Adult Type 2 Diabetes Mellitus Guidelines

Approved by	Date
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Rationale

"The prevalence of pre-diabetes was 37% to 38% in the overall population, and consequently 49% to 52% of the population was estimated to have either diabetes or pre-diabetes."

Prevalence of and Trends in Diabetes Among Adults in the United States, 1988-2012. *JAMA.* 2015;314(10):1021-1029.

The chronic care model guides our team-based approach to diabetes management

Numerous interventions to improve adherence to the recommended standards have been implemented. However, a major barrier to optimal care is a delivery system that is often fragmented, lacks clinical information capabilities, duplicates services, and is poorly designed for the coordinated delivery of chronic care. The chronic care model (CCM) has been shown to be an effective framework for improving the quality of diabetes care (3,5).

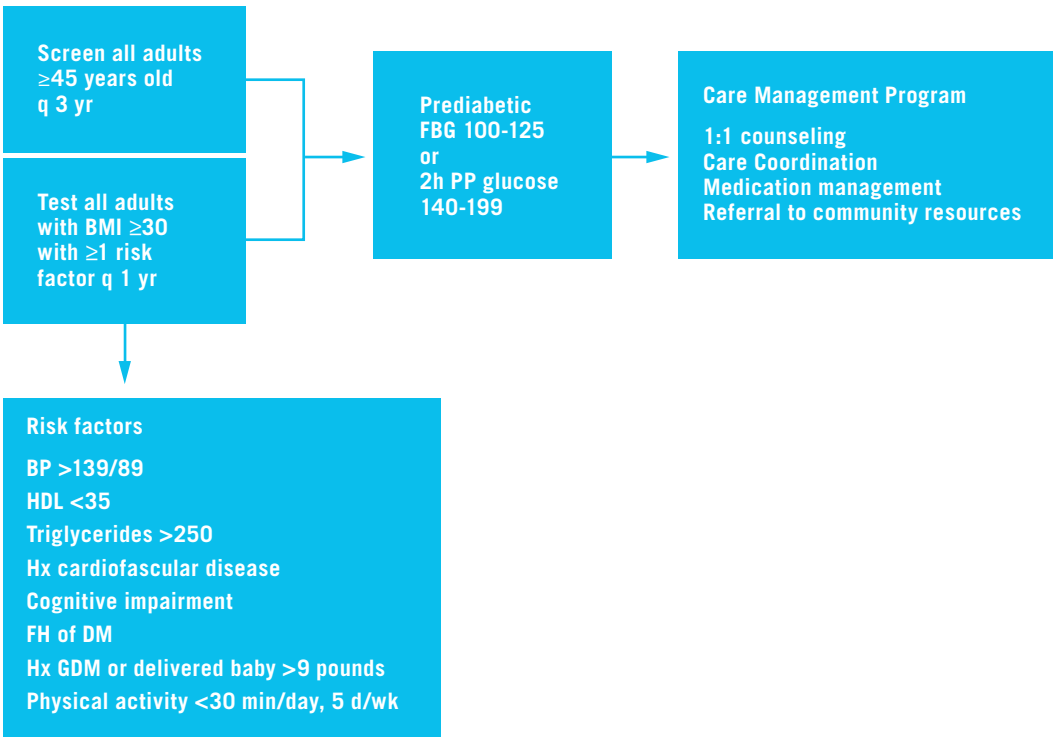
Six core elements

The CCM includes six core elements for the provision of optimal care of patients with chronic disease:

1. Delivery system design (moving from a **reactive** to a **proactive** care delivery system where planned visits are coordinated through a team-based approach)
2. Self-management support
3. Decision support (basing care on evidence-based, effective care guidelines)
4. Clinical information systems (using registries that can provide patient-specific and population-based support to the care team)
5. Community resources and policies (identifying or developing resources to support healthy lifestyles)
6. Health systems (to create a quality-oriented culture)

Pre-diabetes

Pre-diabetes screening pathway



Diagnosis of pre-diabetes

1. FPG 100-125 g/dL
2. Hemoglobin A1c 5.7 – 6.4%

Treatment of pre-diabetes

1. Diet/lifestyle modifications or metformin
2. Obesity management

Diabetes

Screening for type 2 diabetes

1. All adults age 45 and above

2. Adults with two or more risk factors (one risk factor obesity)
   a. Overweight or obesity
   b. Sedentary lifestyle
   c. First degree relative with diabetes
   d. Native American, African American, Latino, Pacific Islander
   e. Hypertension
   f. ASCVD
   g. Gave birth to infant > 4kg (8.8 lbs.)
   h. History of gestational diabetes
   i. HDL < 35 or triglycerides >250
   j. PCOS or acanthosis nigricans

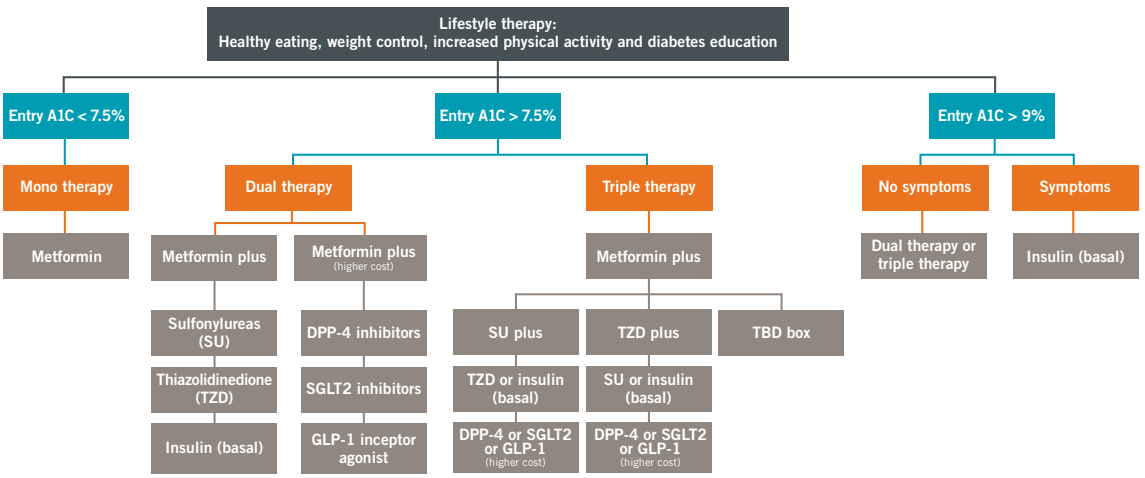
Diagnosis

1. FPG > 126 g/dL
2. 2 hr oral GTT glucose > 200 g/dL
3. Random glucose > 200 g/dL
4 Hemoglobin A1c = or > 6.5%

Treatment goal

1. Hemoglobin A1c < 8% for 85% of adult population
2. Patient goals should be included in care plan

Treatment algorithm for clinicians



Source: 2016 AACE/2016 ADA

Hemoglobin A1c testing frequency

1. Every six months if at goal
2. Every three months if not at goal

Cardiovascular risk factor management

1. All patients with diabetes should have cardiovascular risk assessment annually
2. Hypertension control < 140/90
3. Statin for all diabetic patients > 40 years and under 40 if other CV risk factors
4. Baby aspirin recommended for patients with increased CV risk (>10% over 10 years)
5. Tobacco cessation counseling and treatment

Other screening and prevention

1. Screen for nephropathy annually and treat with ACE Inhibitor when GFR <60 **and** microalbuminuria
2. Retinal screen annually
3. Foot exam annually
4. Tobacco cessation screen annually

Referral

1. Consultation with nephrologist for all patients with GFR < 45 (stage 3b) and sooner if rapid progression
2. Ophthalmology referral for all patients with retinopathy

Patient education materials shall be given for all newly diagnosed patients and as needed

Referral to diabetes program/education class

1. Hemoglobin A1c > 8%
2. Patient request to achieve goals

Care coordination enrollment/assessment

1. Diabetes and acute hospitalization/emergency department visit
2. Uncontrolled diabetes and/or 3 chronic conditions and diabetes
3. Recurrent hypoglycemia

References

1. Diagnosis and Management of Diabetes: Synopsis of the 2016 American Diabetes Association Standards of Medical Care in Diabetes. James J. Chamberlain, MD; Andrew S. Rhinehart, MD; Charles F. Shaefer Jr., MD; and Annie Neuman, PA. *Ann Intern Med*. 2016;164:542-552
2. American Association of Clinical Endocrinologists and American College of Endocrinology clinical practice guidelines for developing a diabetes mellitus comprehensive care plan – 2015
3. ADA 2016 guidelines. Diabetes Care 2016 Jan; 39 (Supplement 1): S1-S2
4. CDC.gov/diabetes
5. Stellefson M, Dipnarine K, Stopka C. The Chronic Care Model and diabetes management in U.S. primary care settings: a systematic review. *Prev Chronic Dis*. 2013;10:E2

Care Team Guidelines