Evidence-Based Strategies for Disease Management in High Risk/Affected Populations: Diabetes

Project goal

Immediate: Identification of eligible individuals with diabetes; risk-stratification based on high-risk comorbidities/conditions (e.g. chronic kidney disease, coronary disease, insulin use, polypharmacy, etc.).

Verify medical home/PMD for each enrollee; assign high-risk patients to care coordinator. Interact with SCC clinicians to obtain diabetes-specific clinical data based on the American Diabetes Association (ADA) Standards of Medical Care in Diabetes (e.g. hemoglobin A1c (HbA1c), lipids, urine microalbumin, rates of secondary prevention screening, etc.). Inform SCC clinicians of the most recent ADA standards as well as tools from the National Diabetes Education Program to assist their practices in meeting clinical benchmarks for the disease.

Long-term: Improve utilization of HbA1c testing in patients with diabetes; Increase rates of screening for diabetes-related complications and secondary prevention; Empower patients with diabetes to achieve successful self-management practices; Decrease rates of diabetes-related complications in those with the disease; improve HbA1c and LDL-c measures.

Interventions

• Population identification and stratification: SCC clinicians will be asked to provide diabetes-related data through the HIE; this data will populate the diabetes registry in Cerner’s HealtheIntent platform, providing the Project Management Office (PMO) with vital information about the population of patients with high-risk diabetes in Suffolk County. This data will help to drive resource allocation and educational efforts within the PPS to improve diabetes-related outcomes in the county.

• Care Management: High-risk patients with diabetes will be assigned to care managers (CM).

• Diabetes Education: The Stanford Chronic Disease Self-Management Program is a comprehensive educational program aimed at empowering patients with diabetes to achieve self-management practices and lifestyle change. The Project will increase access to Stanford Diabetes Self-Management Training (DSMT) by working with PPS partners to expand existing DSMT resources in the county and offering the program in areas of highly prevalent high risk disease. Certified Diabetes Educators (CDEs) offer individualized and group education to patients with the disease and are credentialed by the National Certification Board of Diabetes Educators. The Project will work with partners to improve access to the number of CDEs in the county to support primary care practices for individualized patient education. SCC clinicians, with the assistance of CMs, will be asked to identify and refer their high-risk patients with diabetes to DSMT and CDE resources.

• Primary Care Providers: Clinicians will be expected to adhere to the ADA Standards of Medical Care in Diabetes and obtain diabetes specific clinical data and outcomes as noted in the Immediate and Long-term Goals.

Patient Engagement Metric

The number of patients (age 18 and older) who have diabetes or are “at-risk” for diabetes with at least one hemoglobin A1c test within the four most recent quarters.

Clinical Metrics

• Comprehensive Diabetes Care – Hemoglobin HbA1c (HbA1c) Poor Control (>9.0%) – The number of people age 18 to 75 with diabetes whose most recent A1c indicated poor control, was missing or did not have a HbA1c.

• Comprehensive Diabetes Screening – All three Tests (HbA1c, dilated eye exam, nephropathy monitor) – The number of people, age 18 to 75, with diabetes who received at least one of each of the following tests during the measurement year; HbA1c test, diabetes eye exam and nephropathy monitor).

• Flu Shots for Adults Age 18-64 (CAHPS Survey) – The number of respondents, age 18 to 64, who have had a flu shot.

(continued on reverse)
Clinical Metrics (continued)

• Health Literacy (CAHPS Survey – QHL13, 14, and 16) – The number of respondents who answered that they saw their provider for an illness or condition and were given instructions that were “Usually” or “Always” easy to understand, described how the instruction would be followed and were told what to do if the illness/condition got worse or came back.

• Medical Assistance with Smoking and Tobacco Use Cessation (CAHPS Survey) - Advised to Quit – The number of respondents, age 18 and older, who smoke or use tobacco some days or every day and were advised to quit.

• Medical Assistance with Smoking and Tobacco Use Cessation (CAHPS Survey) - Discussed Cessation Medication – The number of respondents, age 18 and older, who smoke or use tobacco and discussed or were recommended cessation medication.

• Medication Assistance with Smoking and Tobacco use Cessation (CAHPS Survey) – Discussed Cessation Strategies - The number of respondents, age 18 and older, who smoke or use tobacco some days or every day and discussed or were provided with cessation methods or strategies.

• Prevention Quality Indicator #1 (Diabetes Short-term complication) – The number of people, age 18 and older, with an admission with a principal diagnosis of diabetes with short-term complications (ketoacidosis, hyperosmolarity, or coma).

Tools to be employed: Stanford Chronic Disease Self-Management Program

References/Guidelines


*Criteria For Testing For Diabetes or Pre Diabetes in Asymptomatic Adults

To be considered at-risk for diabetes the patient would have to demonstrate sufficient risk factors or clear cut symptoms prior to official diagnosis as outlined by the American Diabetes Association.

1. Testing should be considered in all adults who are overweight (BMI ≥25 kg/m2 or ≥23 kg/m2 in Asian Americans and have additional risk factors:
   • Physical inactivity
   • First-degree relative with diabetes
   • High-risk race/ethnicity (e.g., African American, Latino, Native American, Asian American, Pacific Islander)
   • Women who delivered a baby weighing >9 lb or were diagnosed with GDM
   • Hypertension (≥140/90 mmHg or on therapy for hypertension)
   • HDL cholesterol level <35 mg/dL (0.90 mmol/L) and/or a triglyceride level >250 mg/dL (2.82 mmol/L)
   • Women with polycystic ovary syndrome
   • A1C ≥5.7% (39 mmol/mol), IGT, or IFG on previous testing
   • Other clinical conditions associated with insulin resistance (e.g., severe obesity, acanthosis nigricans)
   • History of CVD

2. For all patients, testing should begin at age 45 years.

3. If results are normal, testing should be repeated at a minimum of 3-year intervals, with consideration of more frequent testing depending on initial results (e.g., those with prediabetes should be tested yearly) and risk status.

*IFG, impaired fasting glucose; IGT, impaired glucose tolerance.

Table originally published in American Diabetes Association Position Statement: Standards of Medical Care in Diabetes - 2016. Diabetes Care 2016;39(Suppl. 1): S1–S112. Abridged for Primary Care Providers available at: http://clinical.diabetesjournals.org/content/diaclin/34/1/3.full.pdf and reproduced with permission pursuant to guidelines: ©2016 by the American Diabetes Association. Readers may use this article as long as the work is properly cited, the use is educational and not for profit, and the work is not altered. See http://creativecommons.org/licenses/by-nc-nd/3.0 for details.