Screening for Prediabetes Model Policy

Effective Date:_____ Review Date:_____

Rationale

According to the Centers for Disease Control and Prevention (Centers for Disease Control and Prevention, 2018), prediabetes is a serious health condition where blood sugar levels are higher than normal, but not high enough to be diagnosed as type 2 diabetes. One out of three adults in the United States have prediabetes and 9 out of 10 with prediabetes do not know they have it (Centers for Disease Control and Prevention, 2018). Approximately 218,000 or 35% of South Dakota adults have prediabetes, with blood glucose levels higher than normal (American Diabetes Association, 2017). Prediabetes puts a person at risk for developing type 2 diabetes, heart disease, and stroke (Centers for Disease Control and Prevention, 2018). Prediabetes risk for the Native American population is elevated and commonly goes undiagnosed in South Dakota.

Risk factors for prediabetes include being overweight/obese, family history, physical inactivity, race and ethnicity, history of gestational diabetes and polycystic ovary syndrome. Prevention of type 2 diabetes centers on addressing these factors by participating in healthy behaviors and a lifestyle change program, such as the National Diabetes Prevention Program (NDPP). Maintaining a healthy weight and participating in regular physical activity can lower the risk for developing type 2 diabetes. Evidence shows a 5-7 % reduction in weight and increase in physical activity to a goal of 150 minutes/week reduces the progression to diabetes by 58% (Centers for Disease Control and Prevention, 2018).

Living with prediabetes and diabetes costs an estimated $751 million in South Dakota in medical expenses and lost productivity each year. (American Diabetes Association, 2017) The cost burden of prediabetes is $510 per patient but if it progresses to diabetes the cost burden increases to $10,970. This represents a 74% increase from 2007-2012. (McCain, 2016)

In 2009, a systematic review of women with gestational diabetes (GDM) were at significantly higher risk of developing subsequent type 2 diabetes than with normal glycemic pregnancies. The incidence of type 2 diabetes in women with previous GDM was 3.7 percent in 9 months postpartum, 4.9 percent in 15 months, 13.1 percent in 5 years and 18.9 percent in 9 years. After 15-25 years the risk is 50-70 percent. (Noctor and Dunne, 2015)

Prediabetes education is an evidence-based approach that can address the growing prevalence of prediabetes, including disease with no clear symptoms.

Rationale for prediabetes education:

- Increased risk of cardiovascular disease
- Increased prediabetes risk with age, ethnicity, family history, overweight/obesity, gestational diabetes, elevated blood pressure and elevated cholesterol
- Cost decrease if no progression to type 2 diabetes
- One of the only diseases that is reversible
- Reversible with 5-7% weight loss and increased physical activity
- GDM high risk for conversion

Policy Guidelines

The first step in creating a healthcare facility that supports pre-diabetes screening is to utilize this model policy in its entirety or adapt this model policy to meet the needs of the healthcare facility. A pre-diabetes screening policy can include a few or all of the major components listed below:

1. [Healthcare facility] is committed to providing opportunities and support to patients to help prevent type 2 diabetes.
2. [Healthcare facility] is committed to providing patients with prediabetes, or at high-risk for type 2 diabetes, the recommended tools they need to be most successful in preventing and or delaying the onset of type 2 diabetes.
3. [Healthcare facility] encourages all healthcare professionals to screen patients with the following risk factors for prediabetes: Body Mass Index (BMI) ≥ 25 AND 40-70 in age; parent or sibling with type 2 diabetes; physically active fewer than three times weekly; women giving birth to a baby weighing more than 9 pounds; and women with a history of gestational diabetes.
4. [Healthcare facility] encourages healthcare professionals to test adults less than 40 years of age or BMI < 25 if risk factors are present.
5. [Healthcare facility] encourages healthcare professionals to test patients every 3 years.
6. [Healthcare facility] encourages either a screening tool and/or the following diagnostic tests for prediabetes: prediabetes screening tool; Hemoglobin A1c; Fasting Plasma Glucose; or two-hour Plasma Glucose.
7. [Healthcare facility] encourages all healthcare professionals who see patients with prediabetes, or at risk for type 2 diabetes, to refer their patients for education.

8. [Healthcare facility] will assure that the education program is a CDC-recognized National Diabetes Prevention Program.
9. [Healthcare facility] is committed to educating healthcare professions, patients with prediabetes, or at high risk for developing type 2 diabetes, and the patient's family about the importance of preventing or delaying the onset of type 2 diabetes and the availability of the NDPP, during points of contact which may include discharge and/or visit summaries.
10. [Healthcare facility] mandates healthcare professions are educated about the NDPP, its eligibility criteria, recommended referral criteria, and positive patient outcomes [insert frequency, e.g. on an annual basis].
11. [Healthcare facility] has information about available NDPP programs within the service area and will provide information to the patient when discussing the program.
12. [Healthcare facility] will register patients for the next available NDPP program before the patient leaves the building. http://www.sddiabetescoalition.org/educator-map.html
13. [Healthcare facility] will follow up with referred patients to assure they are attending NDPP and answer any questions.
14. [Healthcare facility] will incorporate NDPP in the organization's models of care such as Accountable Care Organizations, Patient-Centered Medical Homes, population health programs, and value-based payment models.
15. [Healthcare facility] will employ a self-determined tracking tool to determine the number of patients referred to NDPP within a given timeframe.

Implementation

Implementation of the policy components should be in a timely manner, offered to all in need and guided by established guidelines i.e. American Diabetes Association (ADA), American Association of Diabetes Educators (AADE). The referral process should be systematic, consistent and written to address workflow, patient identification, individual needs, community resources, notification of patient navigators, case managers and others who engage with the patients and family to assure appropriate referrals. Engagement with the provider will occur at the time of identification of need. The guidelines will individualize the patient needs at critical times in the potential disease progression including new diagnosis of prediabetes, ongoing A1c/diagnostic evaluation, transitions of care, and new complicating factors.

Promotion of innovative methods to engage or educate patients are encouraged. Below are best practice suggestions for implementation of this policy.

1. Notify patients of available NDPP opportunities through the patient portal.
2. Keep a registry of who would benefit from NDPP based on core time identified.
3. Support the program with decreased or waived out-of-pocket expenses.
4. Develop a newsletter to distribute to patients with prediabetes.
5. Provide written reminders of classes/cost/location and instructors to patients.
6. Allow staff to become trained lifestyle coaches so they deliver NDPP and provide assistance with cost of education/time off.
7. Advertise classes/location/contact information in the community.
8. Post flyers and posters at primary care clinics with class time, locations, and educators.
9. Utilize electronic health record referral at the time of primary care visit.

Enforcement

A quality improvement committee should ensure this policy remains a priority. The committee should consider such things as encouraging staff education; the risk of patients developing type 2 diabetes if not screened for prediabetes; and whether the healthcare facility is meeting outcome measures related to this diagnosis.

Quality Measures

Quality measures for prediabetes and diabetes prevention should focus on those that help ensure prediabetes screening and referral activities that lead to a decrease in type 2 diabetes prevalence. At this time, quality measures should focus on BMI measures. Payers and providers can focus on BMI-focused measures to help evaluate the success of implementation of the screening policy. In addition, monitoring referral of patients with prediabetes to a NDPP program can help determine whether clinicians are implementing systematic preventive approaches in clinical practice.

Final Statement

By implementing this model policy in its entirety or choosing to tailor this policy to your healthcare facility's needs, you are taking an important step to identifying patients who are at-risk for developing prediabetes or type 2 diabetes.

Definition of terms

Prediabetes: condition where blood sugar levels are higher than normal, but not high enough to be diagnosed as type 2 diabetes.

Gestational diabetes: develops during pregnancy and causes high blood sugar that can affect your pregnancy and the baby's health.

Polycystic ovary syndrome: hormonal disorder causing enlarged ovaries with small cysts.

Hemoglobin A1c: test that indicates the average level of blood sugar over the past 2 to 3 months. People with diabetes need to have this test done regularly to see whether their

blood sugar levels have been staying within a target range.

Plasma Glucose Test: test that can be used to help diagnosis diabetes or pre-diabetes.

References:

1) American Diabetes Association. 2021. The Burden of Diabetes in South Dakota. Retrieved from: https://diabetes.org/sites/default/files/2021-11/ADV_2021_State_Fact_sheets_South%20Dakota_rev.pdf
2) Centers for Disease Control and Prevention. (June 2018). December 2021. About Prediabetes. Retrieved from: https://www.cdc.gov/diabetes/prevention/prediabetes-type2/index.html.
3) Centers for Disease Control and Prevention. December 2021. Prediabetes: Your Chance to Prevent Type 2 Diabetes. Retrieved from: https://www.cdc.gov/diabetes/basics/prediabetes.html.
4) McCain, Jack. (May 25, 2016). Pre-Diabetes: Pre- Does Not Mean Preordained. *Managed Care.* Retrieved from: https://www.managedcaremag.com/archives/2016/5/prediabetes-pre-does-not-mean-preordained.
5) Noctor, E. and Dunne, F. (March 2015). Type 2 diabetes after gestational diabetes: The influence of changing diagnostic criteria. *World Journal of Diabetes, 6(2).* Retrieved from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4360417/
6) South Dakota Prediabetes Awareness Campaign, risk test, and resources: www.undotherisk.com

Policy Contact: Contact [Healthcare Facility staff] with questions or concerns about the policy.

Effective Date: The policy is effective [date].

Policy Monitoring and Review: The [Healthcare Facility] will evaluate and revise this policy on an annual basis.

Review Date: The policy will be reviewed [Year].