REDUCING UNDIAGNOSED DIABETES IN PORTER COUNTY

In 2021, 14.7% of the US adult population had diabetes. Of these 38 million adults with diabetes, 22.8% were not aware or did not report having diabetes*. In addition, it is estimated (based on data from 2017-2020) that 38% of all US adults have prediabetes*. (*CDC website- www.cdc.gov - National Diabetes Statistics Report).*

If we apply this national data to Porter County's population of 174,000 residents; 25,578 are living with diabetes and 5,832 of those residents don't even know they have diabetes. In addition, given these trends and data, we can reason that nearly 66,000 Porter County residents have prediabetes and are unaware of this reversible health state and the steps needed to take back their health.

Identifying diabetes early can help prevent serious, often irreversible complications including:

- Heart disease
- Kidney damage
- Peripheral neuropathy (nerve pain)
- Vision loss
- Retinopathy
- Nephropathy (diabetic kidney disease)
- Hyperlipidemia (high levels of fat)

In efforts to increase community detection of prediabetes, the Health and Wellness Coordinators are proposing the purchase and use of an A1C analyzer and supplies. For years, CDC and ADA supported questionnaires for early detection have been used to determine risk. However, participation of the test was low. Although risk, controllable versus uncontrollable factors and importance of seeking follow up regarding their risk was reviewed with participants, value and follow up with a healthcare professional lacked.

The United States Preventative Task Force, or USPTF, listed screening for diabetes and prediabetes for any non-pregnant adult over the age of 35 that is overweight or obese as a Grade B Recommendation. To perform the screening, a fasting blood glucose, A1c or a glucose tolerance test needs to be performed.

By making a lab quality A1C result available to participants, an early, definitive diagnosis will make early identification of prediabetes or diabetes possible. Easy transportation of the machine will make reaching difficult to reach populations possible. A small finger prick will be more receptive to participants that may have otherwise declined a venipuncture and may lack routine medical care. Most importantly, identification of prediabetes or diabetes will help protect the public from possible long term complications. Treatments for prediabetes may be lower cost than advanced diabetes.

PROCESS PLAN FOR SCREENING

1. Participant signs screening consent
    a. Must be 18 years or older
    b. Under 18 with parental consent (NEED REVIEW)
    c. No prior diagnosis of diabetes
        i. OR no medical follow up of existing prediabetes or diabetes in 3+ years (NEED REVIEW)
2. Diabetes questionnaire preformed LINK
    a. Patient will get an actual weight using Tanita Scale if available
    b. If high risk is identified (5 or higher), review results with patient - Proceed to Step 3
    c. If not high risk (4 or lower), results are reviewed with patient
        i. Controllable versus uncontrollable factors reviewed
        ii. Provide educational materials
        iii. Identify presence of PCP
            1. No, refer to PCP
            2. Yes, ensure patient is visiting yearly and review guidelines for future A1C screenings according to age
        iv. Conclude screening
3. High Risk individuals are offered A1C test
    a. Cost (if applicable) reviewed and collected
    b. Process of test reviewed
    c. Test reporting reviewed
        i. EPIC entry (if applicable) is reviewed
            1. Verify patient in EPIC (create new if needed)
        ii. Non-EPIC entry (if applicable) reporting reviewed
            1. Patient will be provided with written result only
4. A1c Test is preformed
    a. Reporting
        i. If written, patient is provided American Diabetes Association (ADA) Guidelines and result
        ii. If EPIC is used, result is entered
            1. Patient has option to route to any physician
    b. Result reviewed with patient by comparing to ADA Guidelines – copy provided
    c. Results under 5.7
        i. Patient is reviewed current guidelines of next screening timeframe
        ii. Review importance of watching trends over time
    d. Results of 5.7-6.4
        i. Patient is guided to review the ADA guidelines
        ii. Patient is offered a referral to PCP as needed for possible prediabetes confirmation
        iii. Prediabetes Class referral
    e. Results of 6.5 to XX (MD REVIEW NEEDED)
        i. Patient is guided to review ADA guidelines
        ii. Patient is offered referral to PCP as needed for possible diabetes confirmation
        iii. Diabetes Class referral
    f. Results over XX (MD REVIEW NEEDED)
        i. Patient is directed to go to closest Emergency Room

COST PROJECTION

Total estimated cost for June 2024 - December 2024
= 5,935.00 + Nursing and Mileage Rates

Annualized Costs Based upon below table:

Diabetes Prevention Program Porter County		
Item	**Cost ($)**	**June-Dec 2024 Cost ($)**
Afinion2 Blood Analyzer	4209	4209
Test Strips (cost per strip) (estimated 25/patients/mo.)	7.5	1500*
Control (1 year supply)	117	68
Carry Case	100	100
Misc. Supplies: Band-Aids, alcohol wipes, gauze, lancets, paperwork, etc. (1 year)	100	58*
Staffing		
RN Hourly Rate 2024**	60	60
Current IN Mileage Rate**	.49/mile	.49/mile

*As this is an estimate of the number of patients and therefore supplies needed, this cost may be variable and should not exceed $3000 for the remainder of 2024.

**Staffing rates to be paid when CHS (Powers Health) employee is invited to work upon request of Porter County Health Department.

KEY PERFORMANCE INDICATORS

- Number of people screened with a hemoglobin A1c through local health department or partners
- Number of people identified with elevated hemoglobin A1c
- Number of people screened for diabetes risk factors through local health department or partners
- Number of people referred to or enrolled in a diabetes prevention program
- Number of people referred to or enrolled in a diabetes self-management education support program
- Number of people screened for BMI
- Number of people referred to a weight treatment or obesity prevention program
- Number of people identified as having a BMI over 30

Additional Tools:

- Referral to Diabetes Self-Management Education
    - Available at no cost at Valparaiso Health Center and St. Mary Medical Center
    - Other local classes if available
- Referral to Beat Prediabetes Class
    - Available at no cost at Valparaiso Health Center and St. Mary Medical Center
    - Local DPP classes if available
- Referral to Healthy 4 Life for obesity management
- Referral to health coaching at Valparaiso Family YMCA
- Referral to nutritional education with local dietitians

Three Month Follow up Plan:

- Capture patient contact preference and information
- Schedule follow up phone consultation
- Capture all interventions achieved and record
- Capture new A1c and weight if possible