

## LifeBridge Physician Network Care Path

### *Diabetes*

June 26, 2015

**LBPN Care Path Aim:** *To develop and implement standard protocols, based on the best evidence, that provide a consistent clinical experience for LifeBridge Health patients and allow us to quantitatively demonstrate to payers the high-value care we provide.*

#### **Key Points:**

- ✓ **Type 2 diabetes is common and should be considered when patients present with suggestive symptoms** (e.g., polyuria or polydipsia), signs (e.g., acanthosis nigricans), or complications of disease (e.g., retinopathy).
- ✓ **Diagnosis can be confirmed by HbA1c levels measuring  $\geq 6.5\%$  or higher or by fasting plasma glucose levels  $> 7.0$  mmol/L (126 mg/dL) on 2 occasions at least 1 day apart.**
- ✓ **Newly diagnosed patients should be examined** for hypertension, as well as neurologic, ophthalmologic, and podiatric complications.
- ✓ **Patients should reach at least moderate levels of control** (HbA1c level  $< 8.0\%$ – $8.5\%$ ) to minimize hyperglycemia and because microvascular risk increases exponentially above this level.
- ✓ **Implement lifestyle interventions**, including diet and exercise, and continue through management.
- ✓ **Pharmacologic management should be started if diet and exercise** do not achieve the HbA1c goal.

#### **WHY? Rationale for Diabetes Focus**

- Diabetes is one of the most common illnesses encountered by internists. An estimated 23.6 million persons have diabetes in the United States, and only 17.9 million of these cases have been diagnosed.<sup>i</sup>
- The incidence of diabetes is increasing because of the aging and changing ethnic mix of the population and because of increasing obesity. Based on current trends, it is expected that the prevalence of diabetes will nearly double by 2050.<sup>ii</sup>
- Persons with diabetes are at increased risk for serious health complications. Preventive care practices have been shown to be effective in reducing both the incidence and progression of diabetes-related complications.
- Approximately 1 in 4 persons with diabetes are unaware of their disease.<sup>iii</sup>
- In 2010, 68.5% of adults in the US with diagnosed diabetes reported having their A1c tested at least twice in the past year; 57.4% reported ever having attended a diabetes self-management class.

## **WHAT? Evidence-Based Recommendations**

### **I. Screening and Prevention<sup>iv</sup>**

- Little direct evidence shows clinical benefit from broad-based screening programs for type 2 diabetes.
- Diabetes can clearly be prevented in persons who have pre-diabetes with programs aimed at modest weight loss, and medication may be indicated for those who cannot achieve lifestyle goals. Because diet and exercise programs tend to be universally beneficial, screening may best be preserved for persons at particularly high risk, to identify those who may benefit from medications to prevent diabetes.
- Guidelines for lifestyle change suggest that loss of about 7% of body weight and 150 minutes of exercise per week are enough to substantially reduce diabetes risk.

### **II. Diagnosis<sup>v</sup>:**

- Type 2 diabetes is common and should be considered when patients present with suggestive symptoms (e.g., polyuria or polydipsia), signs (e.g., acanthosis nigricans), or complications of disease (e.g., retinopathy).
- The diagnosis can be confirmed by HbA1c levels measuring  $\geq 6.5\%$  or higher or by fasting plasma glucose levels  $> 7.0$  mmol/L (126 mg/dL) on 2 occasions at least 1 day apart. Random plasma glucose levels and OGTT can also be used to diagnose type 2 diabetes.
- Newly diagnosed patients should be examined for hypertension, as well as neurologic, ophthalmologic, and podiatric complications. The initial laboratory evaluation should include an assessment of glucose control, a lipid profile, and measurement of the urine microalbumin–creatinine ratio.

### **III. Treatment Strategy<sup>vi</sup>:**

- The goal of treating type 2 diabetes is to achieve glycemic targets on an individual basis according to life expectancy and patient preference.
- Patients should reach at least moderate levels of control (HbA1c level  $< 8.0\%$ – $8.5\%$ ) to minimize hyperglycemia and because microvascular risk increases exponentially above this level.
- More aggressive targets (e.g.,  $< 7.0\%$ ) should be reserved for patients with a long life expectancy because reductions in advanced diabetes complications take 15–20 years to accrue.
- Implement a diet and exercise strategy to help achieve HbA1c goal.
- Pharmacologic management should be started if diet and exercise do not achieve the HbA1c goal. In general, aside from patients with only mild HbA1c elevations, if diet and

exercise do not accomplish the targeted reduction in glycemic values within approximately 6 weeks, pharmacologic therapy should be initiated. Patients with severe hyperglycemia or symptoms may require pharmacologic intervention immediately, sometimes with insulin.

#### **IV. Monitor Diabetic Patient Panel:**

- Periodically assess performance on nationally accepted, validated diabetes measures.
- The National Committee for Quality Assurance (NCQA)'s Diabetes Recognition Program provides a framework and measure set to assess a sample of a provider's diabetic patients.
- Use performance data to identify whether performance, documentation, or workflow improvement opportunities exist.

#### **Measures of Performance** (aligned with CMS' ACO/PQRS/Meaningful Use CQM measures and the NCQA Diabetes Recognition Program)

##### **1. Diabetes: Hemoglobin A1c Poor Control** (ACO #27; NQF #59; PQRS #1)

Percentage of patients 18-75 years of age with diabetes who had hemoglobin A1c > 9.0% during the measurement period. Reported once per year.

**Domain:** Clinical Process/Effectiveness

**Numerator:** Patients whose most recent HbA1c level (performed during the measurement period) is > 9.0%.

**Denominator:** Patients 18 - 75 years of age with diabetes with a visit during the measurement period.

##### **2. Controlling High Blood Pressure** (ACO #28; NQF #18; PQRS #236)

Percentage of patients 18-85 years of age who had a diagnosis of hypertension and whose blood pressure was adequately controlled (<140/90mmHg) during the measurement period. Reported once per year.

**Domain:** Clinical Process/Effectiveness

**Numerator:** Patients whose most recent blood pressure is adequately controlled (systolic blood pressure < 140 mmHg and diastolic blood pressure < 90 mmHg) during the measurement period.

**Denominator:** Patients 18 through 85 years of age who had a diagnosis of essential hypertension within the first six months of the measurement period or any time prior to the measurement period.

##### **3. Diabetes: Eye Exam** (ACO #41; NQF #55; PQRS #117)

Percentage of patients 18-75 years of age with diabetes who had a retinal or dilated eye exam by an eye care professional during the measurement period or a negative retinal exam (no evidence of retinopathy) in the 12 months prior to the measurement period.

**Domain:** Clinical Process/Effectiveness

**Numerator:** Patients with an eye screening for diabetic retinal disease. This includes diabetics who had one of the following: A retinal or dilated eye exam by an eye care professional in the measurement period or a negative retinal exam (no evidence of retinopathy) by an eye care professional in the year prior to the measurement period.

**Denominator:** Patients 18-75 years of age with diabetes with a visit during the measurement period.

4. **Tobacco Use: Screening and Cessation Intervention** (ACO #17; NQF #28; PQRS #226)  
Percentage of patients aged 18 years and older who were screened for tobacco use one or more times within 24 months AND who received cessation counseling intervention if identified as a tobacco user.  
**Domain:** Population/Public Health  
**Numerator:** Patients who were screened for tobacco use at least once within 24 months AND who received tobacco cessation counseling intervention if identified as a tobacco user.  
**Denominator:** All patients aged 18 years and older.
  
5. **Diabetes: Medical Attention for Nephropathy** (NQF #62; PQRS #119)  
The percentage of patients 18-75 years of age with diabetes who had a nephropathy screening test or evidence of nephropathy during the measurement period. Reported once per year.  
**Domain:** Clinical Process/Effectiveness  
**Numerator:** Patients with a screening for nephropathy or evidence of nephropathy during the measurement period.  
**Denominator:** Patients 18-75 years of age with diabetes with a visit during the measurement period.
  
6. **Diabetes: Foot Exam** (NQF #56; PQRS #163)  
Percentage of patients aged 18-75 years of age with diabetes who had a foot exam during the measurement period. Reported once per year.  
**Domain:** Clinical Process/Effectiveness  
**Numerator:** Patients who received a foot exam (i.e., visual inspection, sensory exam with monofilament AND pulse exam) during the measurement period.  
**Denominator:** Patients 18-75 years of age with diabetes with a visit during the measurement period.

## Tools and Resources

- National Committee for Quality Assurance (NCQA) Diabetes Recognition Program  
<http://www.ncqa.org/Programs/Recognition/Clinicians/DiabetesRecognitionProgramDRP.aspx>
  
- In the Clinic: Type 2 Diabetes. Annals of Internal Medicine. 2015.  
<http://annals.org/article.aspx?articleid=745650>
  
- American College of Physicians – Living with Diabetes 2014  
[https://www.acponline.org/cgi-bin/cpph.cgi?CPP3003\\_Living\\_With\\_Diabetes\\_2014.pdf](https://www.acponline.org/cgi-bin/cpph.cgi?CPP3003_Living_With_Diabetes_2014.pdf)
  
- Patient/Family health tips for diabetes - American College of Physicians  
[www.acponline.org/patients\\_families/products/health\\_tips/diab\\_en.pdf](http://www.acponline.org/patients_families/products/health_tips/diab_en.pdf)
  
- American Diabetes Association  
<http://www.diabetes.org/living-with-diabetes/>

## **LBPB Contributing Experts/Team**

- Dr. Asha Thomas
- LBPB Quality Committee

## **Questions?**

If you have questions about this Care Path or would like to connect with a specialist to discuss further, please contact either Dr. Charles Albrecht at 410-601-6340, or David Baker at 410-601-6666.

## **Key References**

Vijan S. In the Clinic. Type 2 Diabetes. *Ann Intern Med.* 2015;162:ITC1.

National Committee for Quality Assurance (NCQA) Diabetes Recognition Program.

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<sup>i</sup> Centers for Disease Control and Prevention. National Diabetes Statistics Report, 2014 [Internet]. Available from: [www.cdc.gov/diabetes/pubs/statsreport14.htm](http://www.cdc.gov/diabetes/pubs/statsreport14.htm)

<sup>ii</sup> Boyle JP, Thompson TJ, Gregg EW, Barker LE, Williamson DF. Projection of the year 2050 burden of diabetes in the US adult population: dynamic modeling of incidence, mortality, and prediabetes prevalence. *Popul Health Metr.* 2010; 8:29.

<sup>iii</sup> Centers for Disease Control and Prevention. National Diabetes Statistics Report, 2014 [Internet]. Available from: [www.cdc.gov/diabetes/pubs/statsreport14.htm](http://www.cdc.gov/diabetes/pubs/statsreport14.htm)

<sup>iv</sup> Vijan S. In the Clinic. Type 2 Diabetes. *Ann Intern Med.* 2015;162:ITC1.

<sup>v</sup> Ibid.

<sup>vi</sup> Ibid.