**Diabetes prevention and treatment**

### Optimal health
- Healthy community environments: Access to healthy food and places to be physically active
- Healthy behaviors: Physical activity, healthy eating, no tobacco use
- Healthy weight

### Prediabetes
Blood glucose or A1C levels higher than normal but not high enough to be classified as diabetes. 15-30% of people with prediabetes develop diabetes within five years.1

- Risk factors include: overweight or obesity, lack of physical activity, tobacco use, high blood pressure, toxic stress and family history.

Ohioans who are African-American, age 45 years or older, low-income or have lower educational attainment are at increased risk.2

### Diabetes
No cure, but disease management can help to control blood glucose levels and mitigate further complications.

### Downstream impacts
- Heart disease
- Stroke
- Blindness
- Loss of toes, feet or legs
- Kidney failure3
- Poor birth outcomes

### Metric examples
- **Population-level metrics for community conditions:**
  - Healthy food access (USDA)
  - Food insecurity (Census)
  - Access to exercise opportunities (Census)
- **Population-level metrics for behaviors:**
  - Adult insufficient physical activity (BRFSS)
  - Adult fruit and vegetable consumption (BRFSS)
  - Adult smoking prevalence (BRFSS)
- **Population-level metrics for weight status:**
  - Youth obesity prevalence (YRBS)
  - Adult obesity prevalence (BRFSS)
- **Primary prevention strategies**
  - Diabetes Prevention Program (education and follow-up support from a trained lifestyle coach for healthy eating, physical activity and other behavior changes)
  - P-STAT (Screen Test Act Today) toolkit for healthcare professionals to identify and refer patients with prediabetes to diabetes prevention programs
- **Secondary prevention strategies to stop or delay transition to type 2 diabetes,** such as:
  - Diabetes Prevention Program (education and follow-up support from a trained lifestyle coach for healthy eating, physical activity and other behavior changes)
  - P-STAT (Screen Test Act Today) toolkit for healthcare professionals to identify and refer patients with prediabetes to diabetes prevention programs
- **Disease management strategies,** such as:
  - Patient Centered Medical Homes, case management and chronic care model (proactive, team-based care)
  - Chronic disease self-management programs, such as Ohio’s HealthyU Diabetes Self-Management
- **Population-level metrics for prediabetes:**
  - Prevalence of adults diagnosed with prediabetes (BRFSS)
- **Clinical metrics for prediabetes**
  - Prediabetes screening (hemoglobin A1C, fasting plasma glucose or oral glucose tolerance test)
- **Population-level metrics for diabetes:**
  - Prevalence of adult diabetes (BRFSS)
- **Clinical metrics for diabetes**
  - Hemoglobin A1c poor control >9% (NQF 0059, PQRS 001, CPCi)

### Sources
5. Medical expenditures for people diagnosed with diabetes average about $13,000 per year, of which about $7,900 is attributed to diabetes. Medical expenditures for people with diabetes are approximately 2.3 times higher than for those without diabetes. Diabetes Care. “Economic costs of diabetes in the U.S. in 2012.” 2013.
6. Per person per year Medicare ESRD costs were $87,561 for hemodialysis and $66,751 for peritoneal dialysis in 2010. U.S. Renal Data System 2014 Annual Data Report, Chapter 11: Costs of End State Renal Disease.