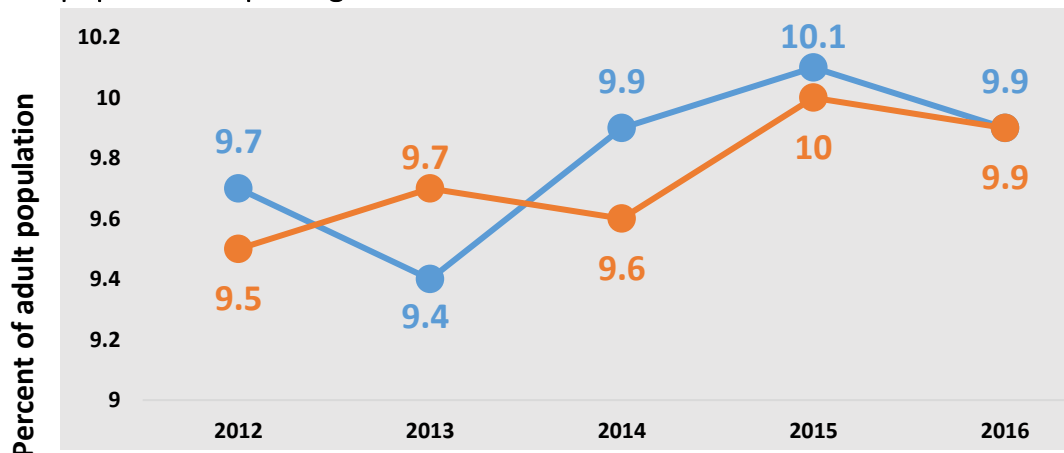


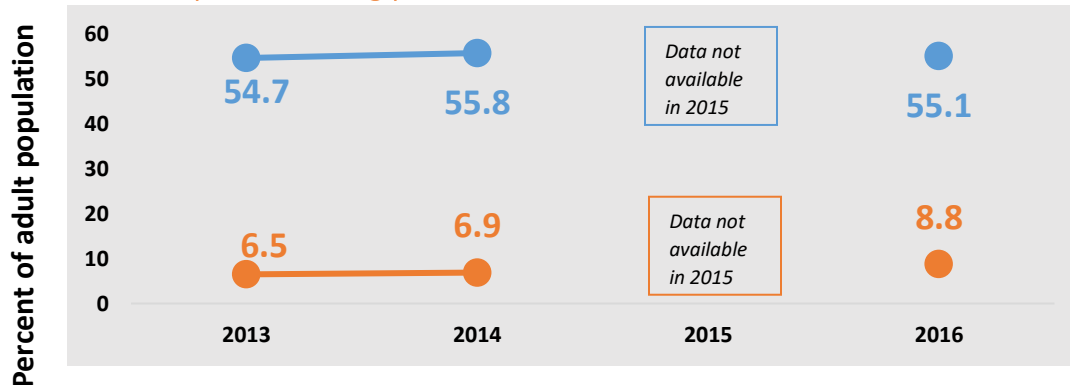
Diabetes is a chronic disease that cannot be cured, but can be controlled with proper education, medication, and lifestyle management. Prediabetes is when blood glucose levels are higher than normal, but not yet high enough to be diagnosed as diabetes. Prediabetes is also a serious health condition that increases a person’s risk of type 2 diabetes and other chronic diseases.

The Illinois Department of Public Health (IDPH) focuses its diabetes prevention and support efforts on populations that are most affected by diabetes to make sure they get the best education and treatment. IDPH works with community, state, and federal partners to track disease trends with a focus on prevention, identifying effective team-based care models, and improving quality of care. Illinois remains ranked as the 24<sup>th</sup> state in the U.S. for prevalence of diabetes and has remained in line with the national average (-0.3% to +0.3% variance) for the last five years.

Adults in **Illinois** and the **United States** have seen a steady increase in the population reporting diabetes between 2012 – 2016.<sup>1</sup>



Half of adults in Illinois **report being screened for prediabetes** and less than 1 in 10 **reported having prediabetes**.<sup>2</sup>



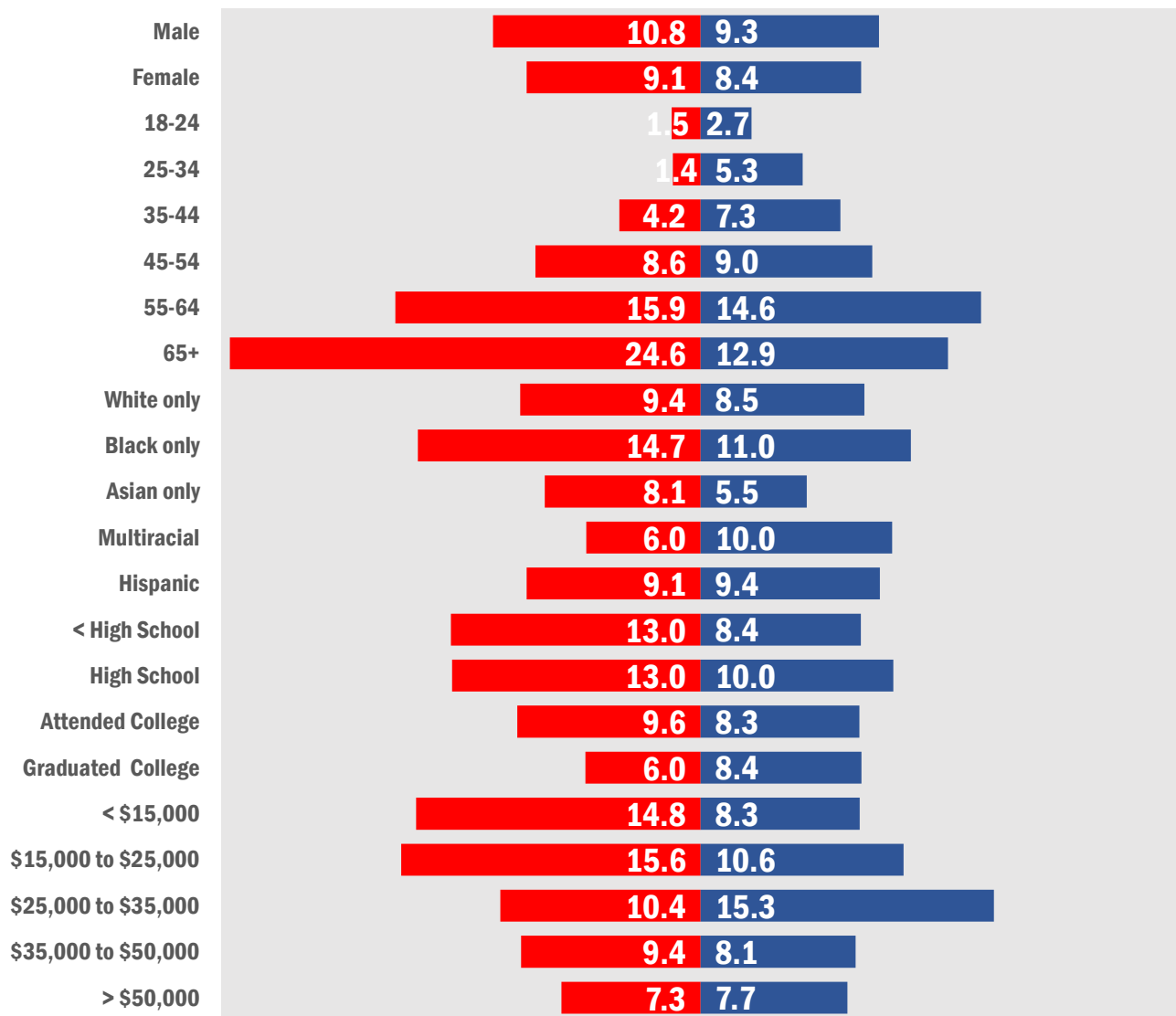
<sup>1</sup> America’s Health Rankings, 2016. <https://www.americashealthrankings.org/explore/2016-annual-report/measure/Diabetes/state/IL>, Accessed 9/15/17.

<sup>2</sup> Illinois BRFSS Data, 2016 (<http://www.idph.state.il.us/brfss/>). Accessed 09/15/2017.

## Who has **Diabetes** and Prediabetes?

Nationally, the prevalence of both diabetes and prediabetes is higher among males, older adults (65+ age group), non-Hispanic blacks and Hispanics, as well individuals with lower education and income. The following are groups with higher diabetes prevalence: males, older adults, and the black / African American population, individuals who did not graduate high school, and those who are in a lower income bracket. Furthermore, individuals who are overweight, are 45 years of age or older, have a parent or sibling who has type 2 diabetes, are physically active fewer than 3 times per week, or have ever had diabetes while pregnant maybe be at higher risk than others for prediabetes and type 2 diabetes.<sup>3</sup>

Percent of adults in Illinois who reported being told by their physician that they have **diabetes** or prediabetes<sup>4</sup>



<sup>3</sup>Centers for Disease Control and Prevention (CDC), About Prediabetes & Type 2 Diabetes. <https://www.cdc.gov/diabetes/prevention/prediabetes-type2/index.html>. Accessed 10/10/2017.

<sup>4</sup> Illinois BRFSS Data, 2016 (<http://www.idph.state.il.us/brfss/>). Accessed 09/15/2017.

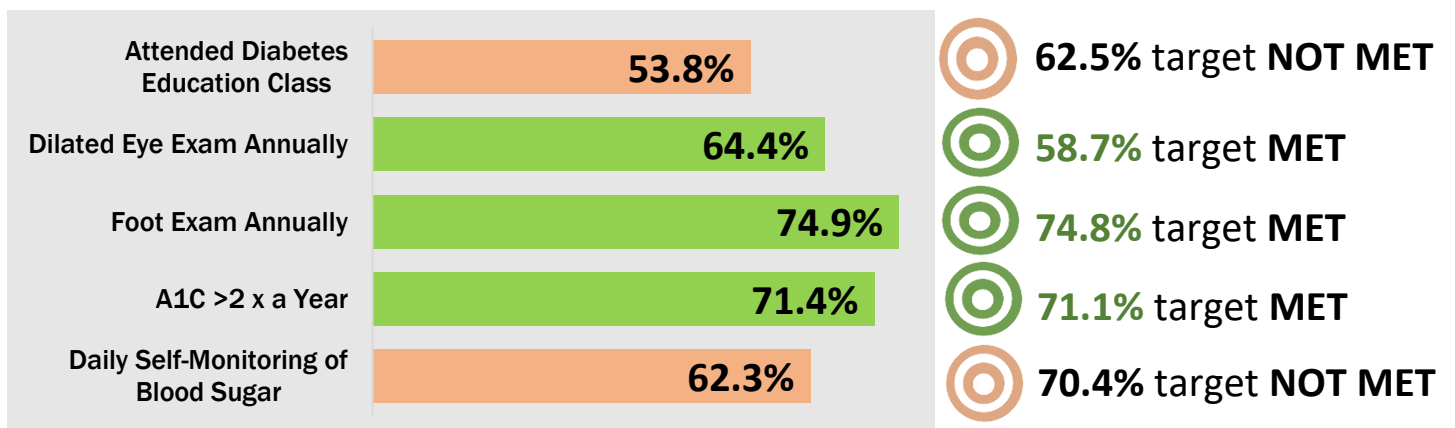
## How does quality “Measure up” in Illinois?

Nationally, quality of care has improved measurably for management of diabetes. Over the past 20 years, poor glycemic control, measured as a hemoglobin A1C > 9% which has served as the primary measure for monitoring glucose control, has decreased from 23.3% to 15.6% for patients with diabetes. However, significant variation still exists between race/ethnic groups (Hispanic, 25.5%) and among different age groups (20-44 years, 26.2%).<sup>5</sup>

Healthy People 2020 (HP2020) serves as the guidepost for health care organizations to achieve high standards of care for their patients with diabetes.<sup>6</sup> In Illinois, three of the five HP2020 objectives specific to diabetes were met in 2012 based on self-reported data.<sup>7</sup> More work is needed to get patients with diabetes to Diabetes Self-Management Programs (clinical care teams can find a [list](#) of diabetes education programs in their area for which patients with diabetes can be referred).

Percentage of Illinois adults aged 18 or older with diagnosed diabetes meeting HP2020 diabetes quality of care indicators<sup>8</sup>

### Healthy People 2020 Target



Individuals at risk for or who have prediabetes can make lifestyle changes to prevent or delay type 2 diabetes and other serious health problems (see recommendations below). More work is needed around patient awareness of the risk and implications of developing diabetes. The CDC National Diabetes Prevention Programs are a great resource to prevent and/or delay these risk factors (click [here](#) for a list of lifestyle change programs, by state).

### Those who have or are at risk for developing diabetes are recommended to:<sup>8</sup>

- ◆ Stop smoking (if a current smoker).
- ◆ Spend 150 minutes a week performing moderate-intensity exercise (60 minutes a day if an adolescent).
- ◆ Lose 5-7% of bodyweight, if overweight or obese.
- ◆ Follow a balanced diet of mostly legumes, whole grains, vegetables, fruits and dairy products.
- ◆ Limit or avoid sugar-sweetened beverages in order to help control weight.
- ◆ Limit alcohol to, at most, one drink per day.

<sup>5</sup> CDC/NCHS, National Health and Nutrition Examination Survey. Diabetes prevalence and glycemic control among adults aged 20 and over, by sex, age, and race and Hispanic origin: United States, selected years 1988-1994 through 2011-2014.

<sup>6</sup> Healthy People 2020, Diabetes. <https://www.healthypeople.gov/2020/topics-objectives/topic/diabetes>. Accessed 09/15/2017.

<sup>7</sup> Percentages are age-adjusted to the 2000 US standard population. National Diabetes Surveillance System, Behavioral Risk Factor Surveillance System (BRFSS) data.

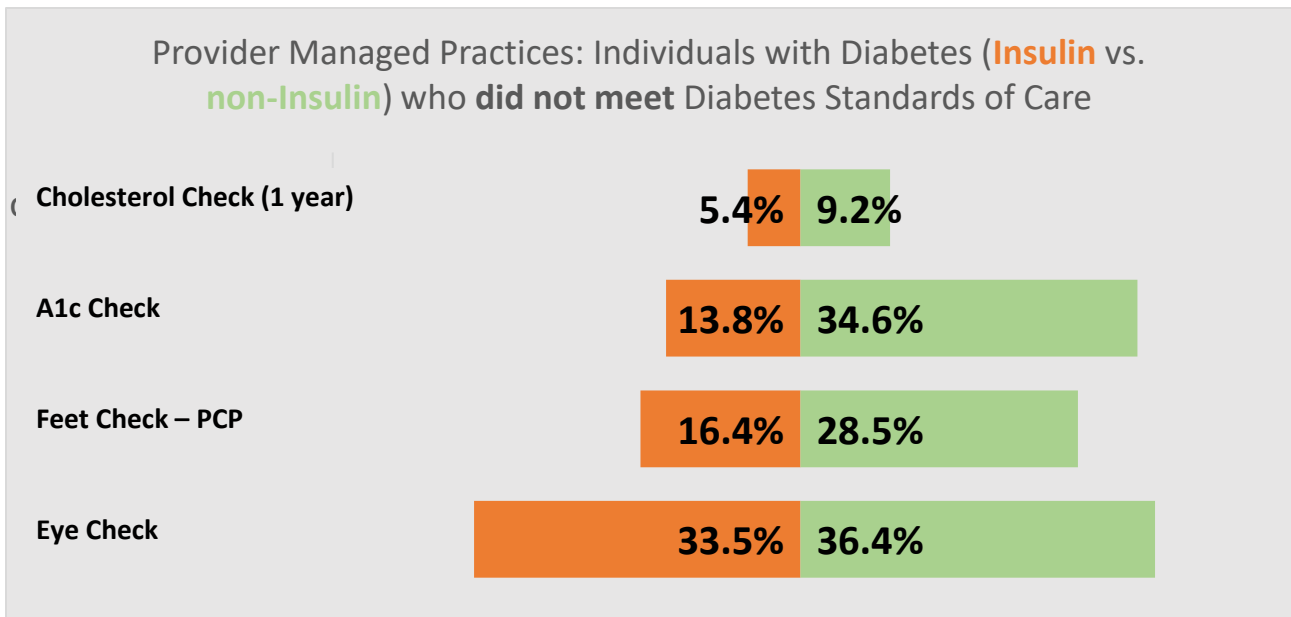
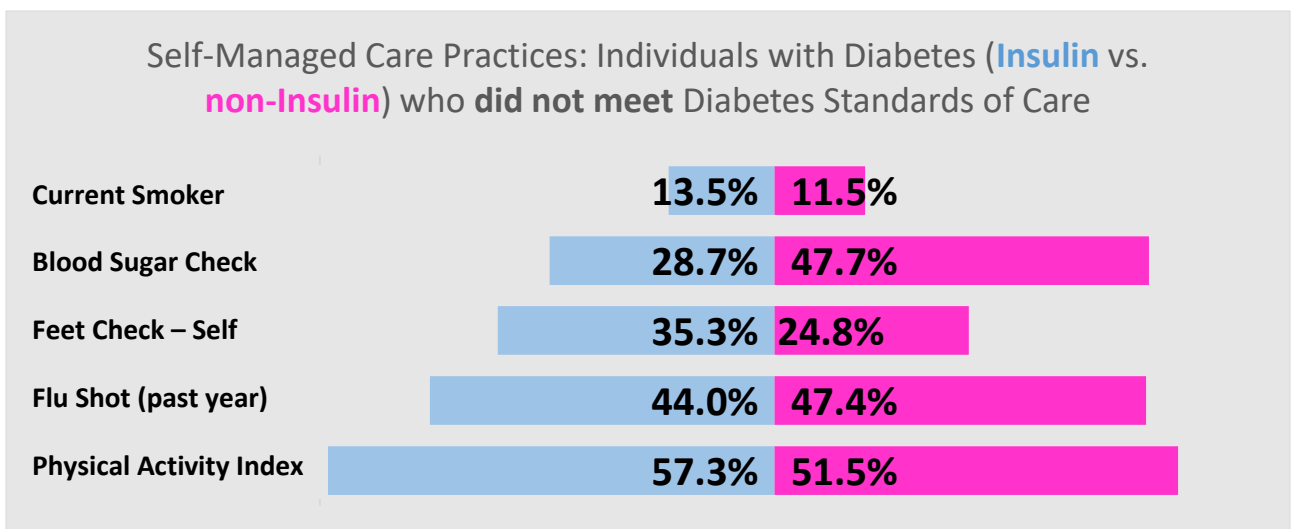
<sup>8</sup> Illinois BRFSS Data, 2013/2015, <http://www.idph.state.il.us/brfss/>. Accessed 09/15/2017.

<sup>9</sup> American Diabetes Association. Standards of Medical Care in Diabetes – 2016. Chp 3. Foundations of Care and Comprehensive Medical Evaluation, pp. 34. [http://care.diabetesjournals.org/content/suppl/2015/12/21/39.Supplement\\_1.DC2/2016-Standards-of-Care.pdf](http://care.diabetesjournals.org/content/suppl/2015/12/21/39.Supplement_1.DC2/2016-Standards-of-Care.pdf) Accessed 9/29/2017.

## Alignment with Diabetes Standards of Care (SoC) – Insulin (type 1) vs. Non-Insulin (type 2)

Diabetes is a complex, chronic illness requiring continuous medical and self-care. Treatment and prevention of complications from diabetes must be a shared responsibility between the patient, the provider, and the social/community environment. As such, self-managed care practices are an important part of a patient’s diabetes management plan. In Illinois, twice as many persons with type 2 diabetes did not meet SoC for blood sugar check, compared to persons with type 1 diabetes.<sup>10</sup> Additionally, about half of both groups (insulin and non-insulin) are not meeting physical activity standards nor are they getting their annual flu shot. When looking at provider-managed care practices, non-insulin patients did not meet SoC in all four categories. More research is needed to fully understand the variances between these groups for both self-managed and provider-managed diabetes care.

*An individual is considered to have met SoC if they are not a current smoker, check their blood sugar regularly (at least twice a day (insulin) or once a day (non-insulin)), check their feet at least once a day (professional check at least once a year), engage in 150 minutes of physical activity per week (Physical Activity Index), receive an annual flu shot, as well as annual checks for cholesterol, hemoglobin A1C, and retinopathy (eye exam).*



<sup>10</sup> Illinois BRFSS Data, 2013/2015, <http://www.idph.state.il.us/brfss/>. Accessed 09/15/2017.