

## Diabetes in Iowa

*Elizabeth Momany*

This brief presents information on diabetes in Iowa, including rates of diabetes, association with obesity, self-care activities, and short- and long-term effects.

### What has gotten better:

- Iowans report less stress related to managing diabetes than they did two years ago
- Number of Iowans hospitalized for diabetes-related care or complications has decreased over the last four years.

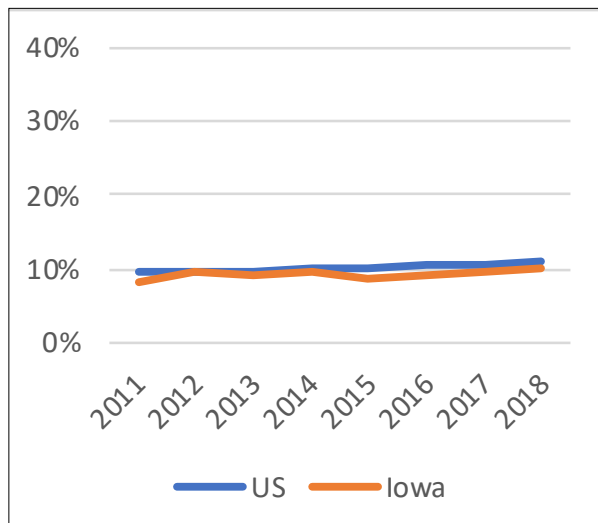
### What has gotten worse:

- Iowans are more likely to have diabetes than they were five years ago
- Number of Iowans with diabetes who are receiving appropriate care has decreased over the last four years

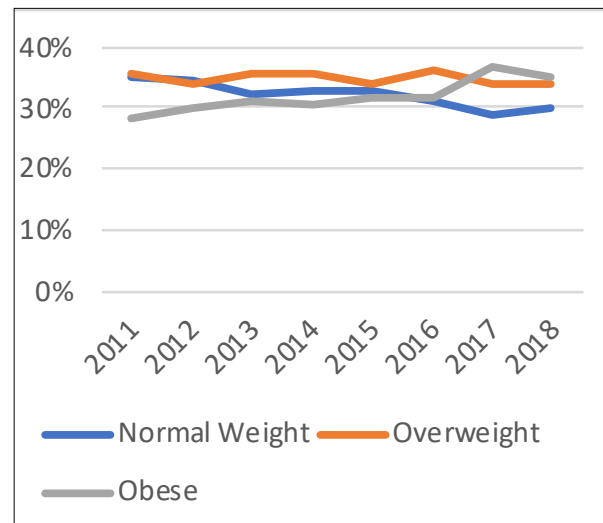
### How do obesity and diabetes in Iowa compare to US rates?

The link between obesity and type 2 diabetes is well established, and most people with type 2 diabetes are also considered obese. Controlling weight is one important mechanism to reducing harmful effects of diabetes such as poor circulation, damaged nerves, and vision loss. According to the CDC's Behavioral Risk Factor Surveillance Survey, Iowa diabetes rates are comparable to those seen nationally (Figure 1). Whereas national rates of obesity have declined since 2011, obesity in Iowa has increased, surpassing other weight categories in 2018 (Figure 2). In 2018, the national rate for obesity was 30%, while the Iowa rate was 35%.

**Figure 1. Diabetes rates for adults in the US and Iowa 2011-2018**



**Figure 2. Obesity rates for adults in Iowa 2011-2018**

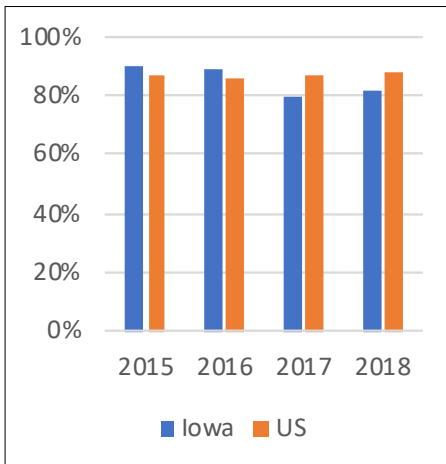


### Do Iowans with diabetes engage in needed self-care?

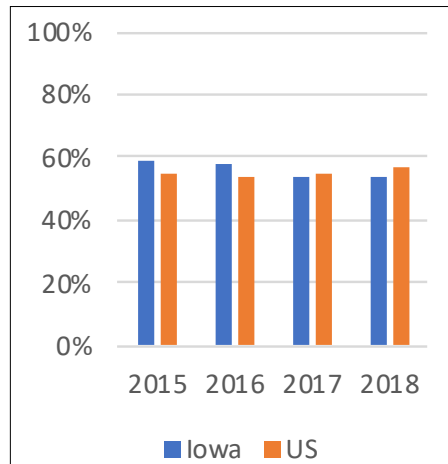
People with diabetes have an increased risk of short- and long-term complications (such as limb amputations and blindness), emergency room visits and hospitalizations. To minimize the toll diabetes can take, people with diabetes are advised to monitor their illness. Key monitoring activities include checking that blood sugar is under control and that kidney function and eyesight are unaffected. Though statewide rates of these monitoring activities are not known, we have calculated the rates of these three monitoring activities for Iowa adults in Medicaid and compared them to the Medicaid rates nationally (Figures 3-5).

In 2015 and 2016, monitoring rates among Iowans in Medicaid with diabetes were higher than among the US general population with diabetes. Since 2017, Iowa monitoring rates have dropped while national rates remain the same.

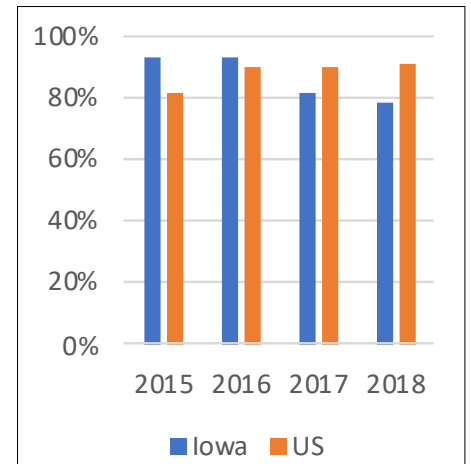
**Figure 3. Hemoglobin A1c rate**



**Figure 4. Eye exam rate**

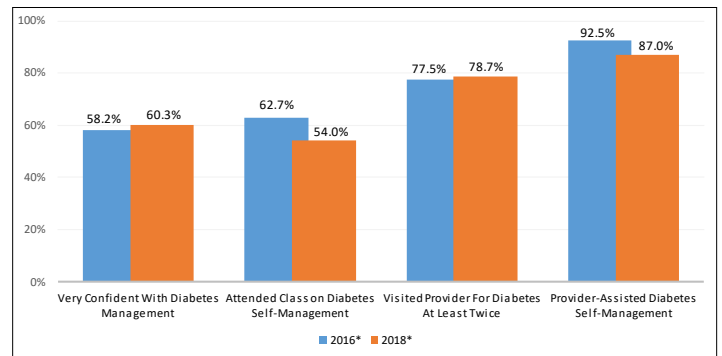


**Figure 5. Care for nephropathy rate**



As part of a statewide survey of Iowans conducted by the University of Iowa Public Policy Center (PPC) in 2016 and 2018, we asked Iowans about their chronic conditions (Figure 6). Iowans who reported having diabetes were asked additional questions about diabetes self-care activities, such as classes and self-management. Among the surveyed population, the most common self-care activity is working with a provider to manage diabetes while the least common is attending classes. Most people with diabetes reported confidence in their diabetes management.

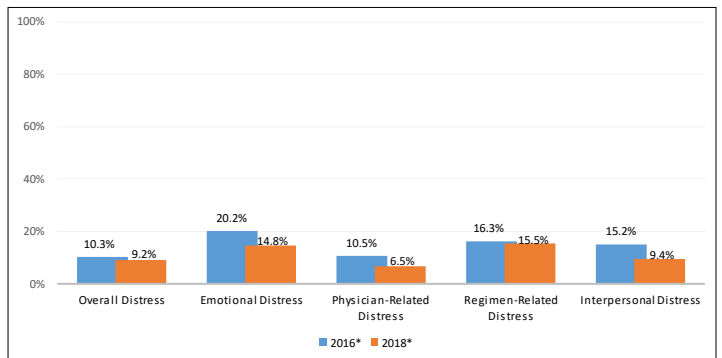
**Figure 6. Diabetes self-care in Iowa, 2016 and 2018**



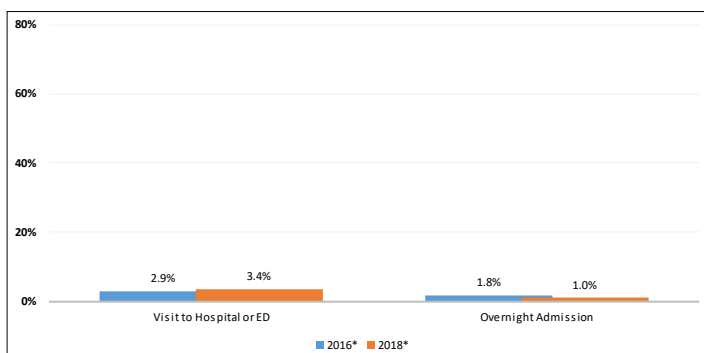
**How does diabetes affect Iowans?**

The PPC's statewide survey also investigated the impact of diabetes management on several areas of life. For each area in question, respondents reported less distress in 2018 than in 2016 (Figure 7).

**Figure 7. Impact of diabetes management, 2016 and 2018**



**Figure 8. Rates of emergency room visits and hospital admissions for diabetes, 2016 and 2018**



Additionally, people with diabetes were asked whether they were admitted to the hospital or visited an emergency room due to their diabetes. About 3% of people with diabetes report an ER visit, while 1-2% report overnight hospitalization (Figure 8). We used Medicaid claims data to determine whether people were admitted for short- or long-term complications of diabetes. Relatively few people with diabetes are admitted for complications; rates of admission vary from year to year (Table 1).

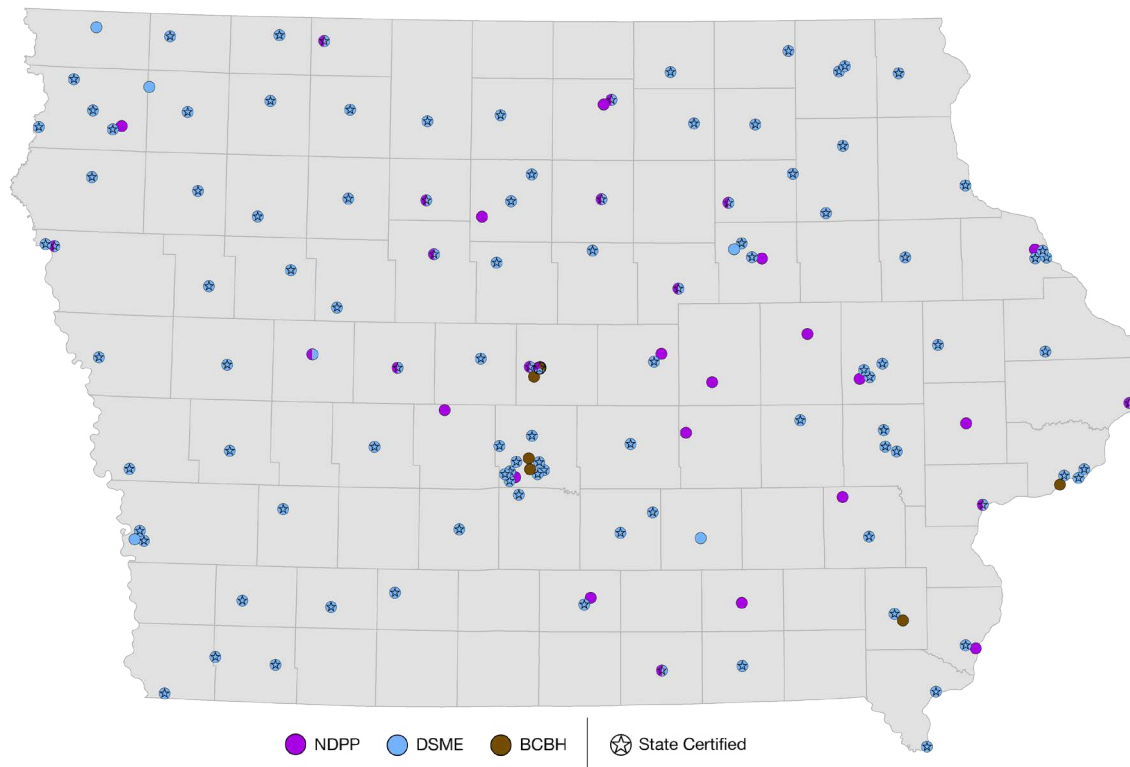
**Table 1. Number of admissions for diabetes complications for 100,000 members, 2015-2018**

Type of admission	2015	2016	2017	2018
Diabetes short-term complications	282.83	262.02	200.02	178.88
Diabetes long-term complications	97.53	72.76	98.44	85.66
Uncontrolled diabetes	28.28	54.01	45.19	29.08
Lower-extremity amputation	13.17	9.37	27.7	42.23

### Resources for people with diabetes

Diabetes education programs are widespread across the state and it is important to note those with state certification. All DSME programs included in this map are American Diabetes Association Recognized Education Programs. This accreditation qualifies Medicare program participants for cost reimbursement. In Iowa, state-certified DSME programs are reimbursed by Medicaid and some private insurers. While the number of DSME sites remains constant, 32 additional DSME sites in the state have received state certification since 2017, with 103 total state-certified sites in Iowa in 2019. Other diabetes programming, specifically National Diabetes Prevention Program (NDPP) sites and Better Choices, Better Health program (also known as CDSMP) sites, have maintained a constant presence in the state since 2017.

**Figure 9. Diabetes programming map**



Note: some program sites may not be visible on the map, due to overlap in dense locations

**DSME:** Diabetes Self-Management Education (DSME) is a ten-hour program for people diagnosed with diabetes which provides education on medical management and self-care behaviors [Source: ADA Recognized Education Programs and American Association of Diabetes Educators accredited programs]

**BCBH:** Better Choices, Better Health (BCBH), also known as Chronic Disease Self-Management Program/Education (CDSMP), is a six-week workshop (15 hours total) for individuals with chronic conditions to improve health outcomes through managing lifestyle behaviors [Source: Iowa Department of Public Health]

**NDPP:** National Diabetes Prevention Program (NDPP) is a yearlong program (16 sessions and 6 follow-up sessions) that can help prevent or delay type 2 diabetes for people with prediabetes [Source: CDC NDPP Registry]

**State Certification:** The Iowa Department of Public Health certifies diabetes outpatient education programs — certification is necessary to obtain reimbursement from Medicaid and some private insurers in the state of Iowa [Source: Iowa Department of Public Health]