

There is significant evidence:

Insulin Is NOT A Choice

Increased costs for insulin = decreased adherence.

- In 2018, 39% of insulin users experienced an increase in their insulin costs over the previous year.ⁱ
 - 27% of insulin users said cost impacted their insulin use.
 - Of those whose use was impacted by cost, 26% regularly took less than prescribed.
- Between 2017 and 2018, 7% of adults with diabetes over age 65, and almost 18% of adults with diabetes under age 65 did not take their medication as prescribed due to cost.ⁱⁱ
- An increase in monthly cost-sharing of \$10 or more for people with diabetes is associated with a decrease in medication adherence by 18%.ⁱⁱⁱ

Increased medication adherence = decreased overall medical spending.

- People with diabetes who adhere to their medication regimen lower risk of hospitalization by 29%.^{iv}
- Non-adherence to diabetes medications increases inpatient hospital costs by 41%.^v
- Medication adherence decreases diabetes medical spending by \$4,000 (on average) per year for a person with diabetes.^{vi}

Access to Affordable insulin = decreased costly complications.

- Intensive insulin therapy reduces hemoglobin A1c levels and is associated with a 76% reduced risk of developing retinopathy; and 64% reduced risk of diabetic neuropathy.^{vii, viii, ix}
 - Diabetic retinopathy is the most frequent cause of new cases of blindness among adults aged 20 – 74.^x
 - Diabetic neuropathy causes foot ulcers and amputation. People with diabetic foot ulcers have more hospitalizations, require more home health care and physician office visits than those without foot ulcers.^{xi} Medicare beneficiaries with diabetic foot ulcers have \$11,710 higher health care costs and those with diabetic foot ulcers in private health plans have \$16,883 higher costs.^{xii}
- Hispanic/Latinos, Asian/Pacific Islanders, African Americans, Native Americans and those with low socioeconomic status are significantly at higher risk of diabetes complications.^{xiii}
- Glycemic control delays progression of chronic kidney disease in people with diabetes.^{xiv}
 - Chronic kidney disease is the leading cause of end-stage renal disease in the U.S.^{xv}

- In 2017, Medicare spent over \$120 billion on chronic kidney disease and end-stage renal disease.^{xvi}

ⁱ American Diabetes Association, Insulin Affordability Survey, 2018, available at: https://makeinsulinaffordable.org/wp-content/uploads/2018-insulin-affordability-survey_v2.pdf.

ⁱⁱ Cohen RA, Cha AE, Strategies Used by Adults with Diagnosed Diabetes to Reduce their Prescription Drug Costs, 2017–2018, National Center for Health Statistics Data Brief, no 349, August 2019, available at: <https://www.cdc.gov/nchs/products/databriefs/db349.htm>.

ⁱⁱⁱ Roblin DW, Platt R, Goodman MJ, et al. Effect of increased cost-sharing on oral hypoglycemic use in five managed care organizations. *Med Care*. 2005;43:951–959.

^{iv} Lau DT and Nau DP, Oral Antihyperglycemic Medication Nonadherence and Subsequent Hospitalization Among Individuals with Type 2 Diabetes, *Diabetes Care*, September 2004, available at: <https://care.diabetesjournals.org/content/27/9/2149>.

^v Egede L, et al., Medication Nonadherence in Diabetes: Longitudinal Effects on Costs and Potential Savings from Improvement, *Diabetes Care*, December 2012, available at: <https://care.diabetesjournals.org/content/35/12/2533>.

^{vi} Roebuck CM, et al., Medication Adherence Leads to Lower Health Care Use and Costs Despite Increased Drug Spending, *Health Affairs*, January 2011, available at: <https://www.healthaffairs.org/doi/10.1377/hlthaff.2009.1087>.

^{vii} American Diabetes Association, Standards of Medical Care in Diabetes – 2020, *Diabetes Care*, January 2020, available at: https://care.diabetesjournals.org/content/43/Supplement_1.

^{viii} Diabetes Control and Complications Trial Research Group, The Effect of Intensive Treatment of Diabetes on the Development and Progression of Long-Term Complications in Insulin-Dependent Diabetes Mellitus, *New England Journal of Medicine*, September 1993, available at: https://www.nejm.org/doi/10.1056/NEJM199309303291401?url_ver=Z39.88-2003&rfr_id=ori%3Arid%3Acrossref.org&rfr_dat=cr_pub%3Dwww.ncbi.nlm.nih.gov.

^{ix} Martin CL, et al., Neuropathy and Related Findings in the Diabetes Control and Complications Trial/Epidemiology of Diabetes Interventions and Complications Study, *Diabetes Care*, January 2014, available at: <https://care.diabetesjournals.org/content/37/1/31.long>.

^x American Diabetes Association, Standards of Medical Care

^{xi} Rice JB, et al., Burden of Diabetic Foot Ulcers for Medicare and Private Insurers, *Diabetes Care*, March 2014, available at: <https://care.diabetesjournals.org/content/37/3/651>.

^{xii} Rice et al., Burden of Diabetic Foot Ulcers

^{xiii} Gregg EW, Sattar N and Ali MK, The Changing Face of Diabetes Complications, *The Lancet Diabetes and Endocrinology*, May 2016, available at: [https://www.thelancet.com/journals/landia/article/PIIS2213-8587\(16\)30010-9/fulltext](https://www.thelancet.com/journals/landia/article/PIIS2213-8587(16)30010-9/fulltext).

^{xiv} American Diabetes Association, Standards of Medical Care.

^{xv} American Diabetes Association, Standards of Medical Care.

^{xvi} United States Renal Data System, 2019 Annual Data Report: Epidemiology of Kidney Disease in the United States, available at: <https://www.usrds.org/2019/view/Default.aspx>.