Disparities in Diabetes Rate and Care Among Immigrants to the USA

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Disparity in Diabetes Rates Between Immigrants and Non-Immigrants

9.4% of the US population has diabetes while another 28% is prediabetic. Based on projections from the CDC, the national burden of diabetes is set to increase steadily over the next decade.

We posed the question: are immigrants more at risk for developing diabetes?

We used variables coding for diabetes, birthplace, time spent in the USA, and number of hospital visits in the past year. After cleaning these variables for missing and invalid observations we were left with n=10175 observations from the 2015 NHANES. We performed chi square tests to verify the statistical validity of the presented associations. We then used a logistic regression to model the following dose response curve.

Dose Response Relationship Between Time in the US and Diabetes Rate in Immigrants

Controlling for age and income, our model predicts a 9% increase in risk of diabetes for every year increase in age for immigrants to the USA (p value 0.038)

Survey Participants Were Asked If They Had a Regular Healthcare Facility

By stratifying their responses by whether respondents were immigrants and whether they had diabetes, we see that immigrants have lower rates of regular healthcare than nonimmigrants, regardless of whether they had diabetes.

Low healthcare utilization by immigrants is an opportunity to address the disparity in diabetes rates. Relevant public health responses to this information can range from media campaigns to encourage utilizing local healthcare systems, to policy interventions which attempt to reduce barriers to healthcare for immigrants such as cost. For further information, please follow the Milken Group as they continue to develop this project.