Diabetes Health Indicators

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ABOUT THE PROJECT

The CDC is collecting information about diabetes risk factors to support a new public health campaign.

The Problem

> 37 million US adults have diabetes (11.3% of the population)

Diabetes is the **7th leading cause of death** in the US

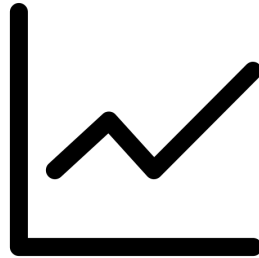In the last 20 years the number of adults diagnosed with diabetes has **doubled** (CDC)

Costs

Costs of diabetes have risen 26% from **245 billion in 2012 to 327 billion in 2017** (American Diabetes Association)

Goal

Collect data about risk factors of diabetes.

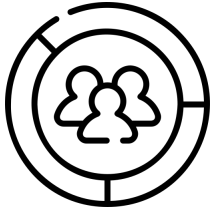Create classification model to predict high-risk features.

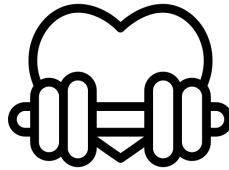Plan public health funding around high-risk factors.

Impact Hypothesis

By understanding patterns in diabetes data, the CDC can address specific factors in diabetes prevention.
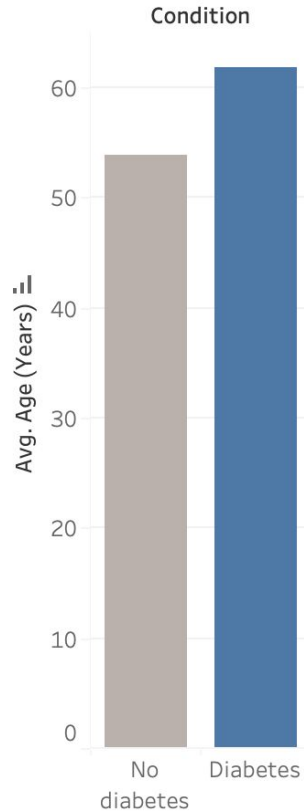
Demographics

Lifestyle

Other health issues

Data

Diabetes health indicators
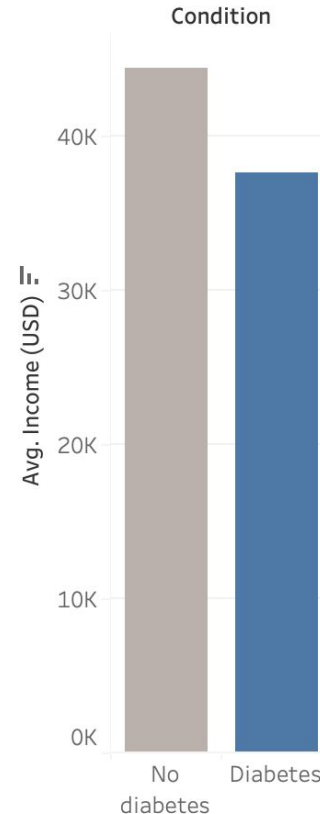
~70,000 survey responses, 21 variables

Half of responses do not have diabetes, half do

Demographics

Average age:
Non-diabetic:
54
Diabetic: 62

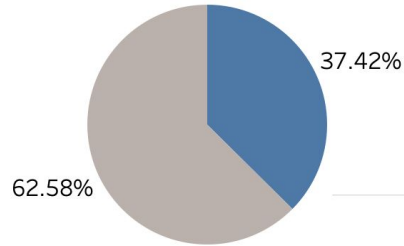**Average income:**
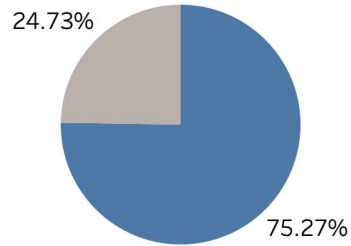Non-diabetic:
$44k
Diabetic: $38k

Other Health Problems

Lifestyle

Condition
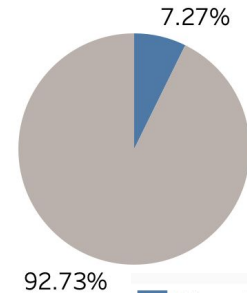
Diabetes   No diabetes

48.18%

51.82%

43.23%

56.77%

Non-smoker
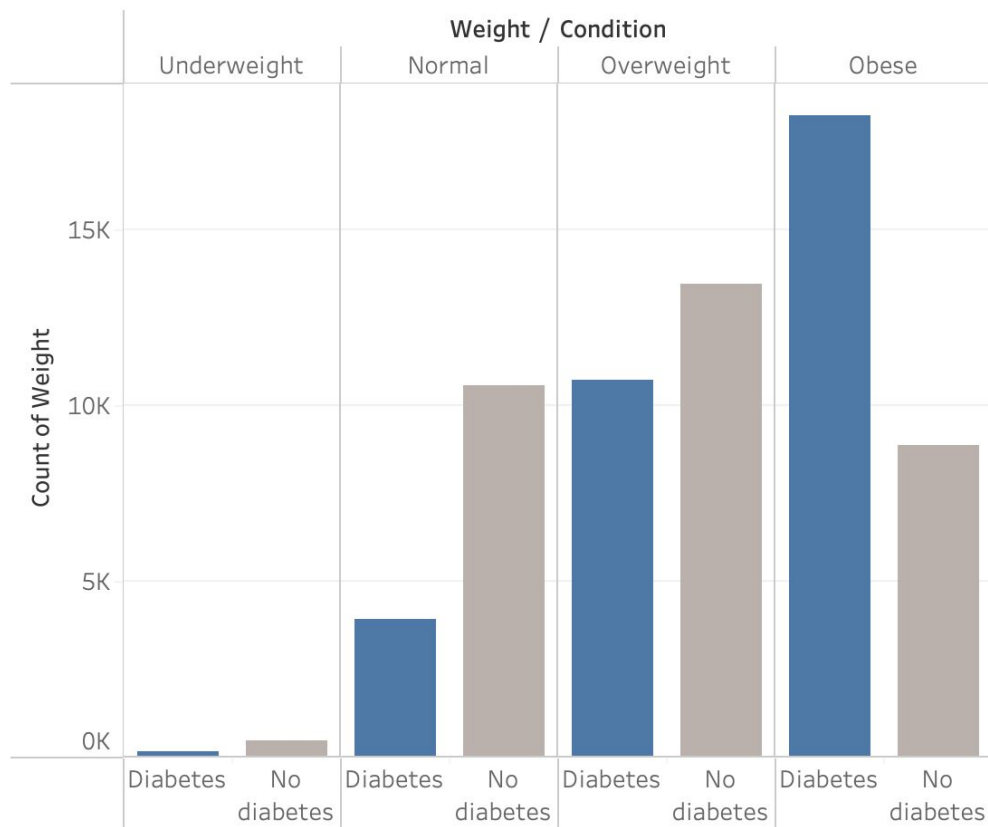Smoker
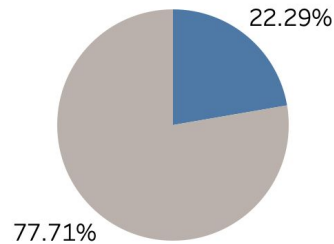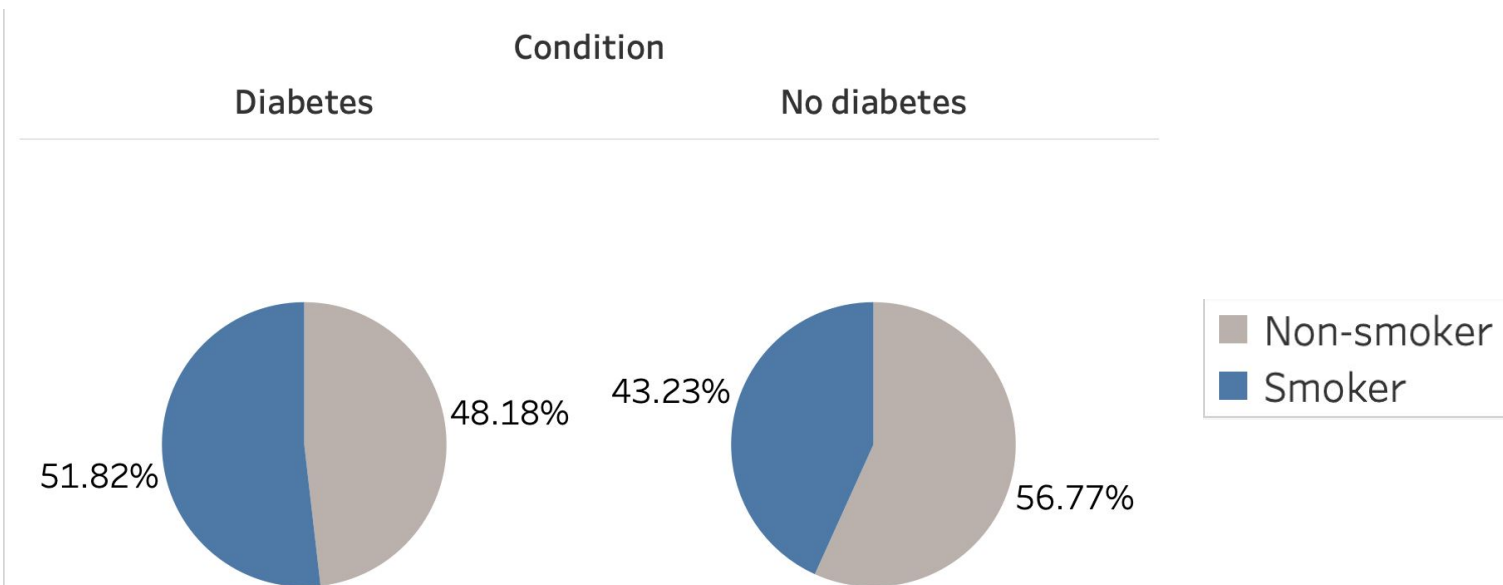
Lifestyle

2x as many diabetics in the **obese** category than non-diabetics.

> 2x as many non-diabetics in the **normal** weight category than diabetics.

Conclusions

- Diabetic individuals tend to be older and lower-income
- Weight is a significant factor influencing prevalence of diabetes

Next Steps

Public health campaigns should target the food industry

Lack of fresh food leads to

Weight
Diabetes
Heart Disease
Cholesterol

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Neighborhood fast food outlets linked with type 2 diabetes risk

DRIVE-THRU

Future Work

Classification model

- Map areas in the US based on features

Business Recommendations

- Increase accessibility of fresh produce
- Decrease density of fast food chains and sugary drinks

THANKS

Do you have any questions?