Demographic and Socioeconomic Characteristics of People with Diabetes who Purchase Over the Counter Insulin

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Research Question

Are there demographic or socioeconomic characteristics among people with diabetes that are associated with a higher likelihood of purchasing over the counter insulin?

Insulin Prices and OTC Insulin Use

As insulin prices rise, there are reports of individuals turning to over the counter insulin instead of prescription insulin, a less expensive, older formula of insulin that can be dangerous because it takes longer for the body to metabolize and users do not have accurate dosing guidance from a doctor (Tribble, Sarah Jane)

14.1% of adults with diagnosed diabetes in 2018 reported relying on insulin alone to manage their diabetes (CDC)

The price of insulin continues to rise, with the price of one vial of Humalog (insulin lispro) increasing by more than 1000% from 1999 to 2019 (Rajkumar, S. Vincent)

Existing research does not distinguish between over the counter and prescription insulin use

From 1996-2017, 20.84 - 59.73% of people with an insulin purchase for diabetes purchased over the counter insulin

Likelihood of Purchasing OTC Insulin

- Those who are Black, non-Hispanic are more likely to purchase OTC insulin than those who are Hispanic (4.1 percentage points) and those who are White, non-Hispanic (5.2 percentage points)
- Those covered by public insurance were more likely to purchase OTC insulin than those who are covered by private insurance (7.7 percentage points) and those who are uninsured (6.4 percentage points)
- Those who had multiple insurance statuses were more likely to purchase OTC insulin than those covered by private insurance (8.7 percentage points) and those who are uninsured (7.4 percentage points)
- Those with less than a high school degree were more likely than those with any other educational attainment to purchase OTC insulin
- Women with diabetes are more likely to purchase OTC insulin than men with diabetes (3.8 percentage points)

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