

1. Introduction

Having Access to health insurance is a fundamental factor of healthcare usage and long-term health outcomes in the U.S. Despite the developments in coverage through the Affordable Care Act, millions of adults continue to be uninsured or underinsured, resulting in reduced access to delayed treatment, preventative care, and increased financial distress. Comprehending the predictors of being uninsured, and how these access barriers turn into imbalances in healthcare utilization, is necessary for designing efficient healthcare policies.

This paper uses nationally representative data from a National Health Interview Survey to analyze:

- The key reason(s) why adults don't have health insurance
- How common is underinsurance
- The magnitude to which cost barriers yield quantifiable disparities in healthcare utilization

Using a survey weighted analysis, the paper illustrates the differences in cost related delays in care by insurance status and fleshes out the primary mechanisms underlying uninsurance among U.S. adults.

2. Background/Literature Review

Economic research regularly indicates that health insurance improves availability to care, increases usage of primary and preventive services, and reduces financial risk (Cutler and Zeck Hauser, 2000; Gruber, 2008). People without insurance are significantly more likely to postpone or abstain from medical treatment due to price (Kaiser Family Foundation, 2023). Even amongst insured individuals, rising premiums and deductibles have raised the levels of underinsurance, where households have coverage but cannot afford necessary care (Collins et al., 2022).

Behavioral economics accentuates how affordability, informational friction, and administrative complexities influence insurance enrollment. High costing premiums discourage enrollment, while missed deadlines and premium increases can cause insurance churn, where individuals periodically gain and lose insurance (Sommers et al. 2014). The cost and administrative obstacles exacerbate uneven health outcomes across socioeconomic groups.

This paper contributes to the discussion by offering descriptive and regression-based conclusions on:

1. the financial and administrative predictors of uninsurance
2. The commonality of underinsurance
3. Disparities in care usage are caused by affordability issues

3. Methods

The analysis used survey-weighted statistical regression models to approximate disparities in healthcare utilization across insurance groups. Uninsurance is coded as the binary measure based on whether the reports lack any health insurance coverage. Underinsurance is characterized behaviorally as having coverage but deferring medical care due to cost.

I also conducted a survey-weighted regression using the `svyglm()` function with a quasi-binomial link (accounts for overdispersion). The dependent variable is an indicator for delaying medical care due to cost, while the independent variable was an indicator for the uninsured.

The primary outcome is delay of needed care due to cost, an established measure of access and utilization. Predictors include insurance status and a set of reasons for uninsurance variables identifying cost barriers, unemployment, administrative deadlines, and coverage loss due to premium increases.

All analyses integrate NHIS survey weights, strata, and primary sampling to produce nationally representative estimates.

4. Data

The data is from an IPUMS extract from the National Health Interview Survey, limited just for adults. Variables:

- Insurance status (HINOTCOVE)
- Private coverage (HIPPRIVATE)
- Cost related delays in care (DELAYCOST)
- Unemployment (HINOUNEMPR)
- Cost barriers (HINOCOSTR)
- Missed enrollment deadlines (HINOMISS)
- Lost coverage due to premium increases (HISTOP23)
- Missed payments or deadlines (HISTOP24)

After filtering the sample to adults only, the data includes ages 18 and up. I used Survey weights (SAMPWEIGHT) and design variables (PSU, STRATA) to ensure estimates are population-representative.

5. Results

Uninsurance and Underinsurance

Approximately 8.8% of U.S. adults were uninsured (SE = 0.0022). Amongst insured adults, 6.2% (SE = 0.0014) were considered underinsured, being defined as having coverage but delaying medical care due to cost.

Disparities in Healthcare Utilization

There is a substantial discrepancy in access to care. Only 6.2% of insured adults reported to delay care due to cost, compared with the 25.8% of uninsured adults (SE = 0.0084). This would indicate that uninsured adults are over four times more likely to postpone needed medical care, demonstrating a significant utilization disparity driven by cost and financial barriers.

The regression results substantiate a massive statistically significant discrepancy in healthcare access. The survey-weighted regression showed that being uninsured is strongly linked to delaying needed care due to cost. The coefficient for uninsured individuals is 1.666 (SE= .049), indicating that there are substantially higher barriers for medical care for the uninsured. To put the data in layman's terms uninsured adults, have an approximately 5.3 times more likely to delay care due to cost compared with the insured.

Reasons for Uninsurance

For uninsured adults, financial worries were the most common reason for not having coverage:

- Cost was the leading variable 55.3%, SE=.0141
- Premiums increased 18.5%, SE=.0114
- Missed payments or administrative deadlines 14.1%
- due to unemployment 6.2%, SE=.0032
- Missing enrollment deadlines 1.6% SE=.0032

6. Conclusion

The results showed that cost and administrative barriers are the main predictors of uninsurance and underinsurance in the U.S. Affordability remains the most dominant

factor, with half of the uninsured adults reporting that cost is their primary obstacle. Increasing premiums and payment issues foster insurance instability, leading to coverage churn and more vulnerability.

The barriers discussed illustrate the disparities in healthcare utilization. Uninsured adults are a little more than four times more likely to delay care due to cost. Underinsurance among the insured demonstrates limitations of coverage quality not just coverage status.

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