**Topic**: Effects of Access to Healthcare on the Health Status of DC residents.

**Background**

Access to healthcare is one of the major factors that measure the quality of a healthcare system. Access is determined by three distinct factors: insurance coverage, geographic availability and developing a trusting relationship with a healthcare provider (N/A, 2020). While the effects of access to healthcare on the overall health of a population is hard to measure, studies have shown that having better access to healthcare improves health status trends in the long run (Blumenthal & Collins, 2013). In this study, the effect of access to healthcare on the health status of DC residents is examined. The major measure of access used for this purpose is health care insurance coverage indicated by the Health Plan variable. To compliment this variable, two other variables, Checkup and Medical Cost have been utilized. These three variables will show the percentage of the population that has insurance coverage, does routine checkups and, the portion of the population that forgoes medical treatment because of cost. The health of the population, on the other hand, will be measured by the number of days participants had poor physical and/or mental health in the past 30 days. In addition, the number of days participants could not do their usual activities due to poor physical and/or mental health in the past 30 days is examined to determine the health status of participants. One final variable used to measure health status is the General Health variable which shows how participants describe their current health status on a scale of excellent to poor.

**Variables** (Blue – Continuous; Red – Nominal/Categorical)

* **Poor Health (POORHLTH)**
* **Physical Health (PHYSHLTH)**
* **Mental Health (MENTHLTH)**
* **State (STATE)**
* **Checkup (CHECKUP1)**
* **Medical Cost (MEDCOST)**
* **Health Plan (HLTHPLN1)**
* **General Health (GENHLTH)**

**Descriptive Analysis**

The descriptive analysis of the continuous variables reveals that a majority of the participants reported 0 days of poor physical, mental or poor health in the past 30 days. This is shown by the median, which is 0. The means of physical and mental health are close together with 3.87 and 3.66 respectively; while the mean for poor health is 4.47 indicating more spread in the distribution. The relatively high standard deviations of all three variables also indicate a high spread in the distribution.

The descriptive analysis of the nominal variables reveals that about 94% of the participants have some kind of insurance coverage. Also, the majority of the participants have had a checkup in the past 12 months; have not foregone medical treatment due to cost and rate their general health as good or above.

**Physical Health**

Histogram

Description automatically generated

|  |  |  |
| --- | --- | --- |
| 100.0% | maximum | 30 |
| 50.0% | median | 0 |
| 0.0% | minimum | 0 |

|  |  |
| --- | --- |
| Mean | 3.87 |
| Std Dev | 8.05 |
| N | 2534 |

**Quantiles**

**Summary Statistics**

**Mental Health**

Histogram

Description automatically generated with low confidence

**Quantiles**

|  |  |  |
| --- | --- | --- |
| 100.0% | maximum | 30 |
| 50.0% | median | 0 |
| 0.0% | minimum | 0 |

|  |  |
| --- | --- |
| Mean | 3.66 |
| Std Dev | 7.59 |
| N | 2552 |

**Summary Statistics**

**POOR HEALTH**

A picture containing histogram

Description automatically generated **Quantiles**

|  |  |  |
| --- | --- | --- |
| 100.0% | maximum | 30 |
| 50.0% | median | 0 |
| 0.0% | minimum | 0 |

|  |  |
| --- | --- |
| Mean | 4.47 |
| Std Dev | 8.32 |
| N | 1509 |

**Summary Statistics**

| **GENERAL HEALTH** | **N** | **% of Total** |
| --- | --- | --- |
| . | 4 | 0.15% |
| Excellent | 546 | 20.81% |
| Very Good | 904 | 34.45% |
| Good | 739 | 28.16% |
| Fair | 321 | 12.23% |
| Poor | 107 | 4.08% |
| Not Sure | 2 | 0.08% |
| Refused | 1 | 0.04% |

| **HEALTH PLAN** | **N** | **% of Total** |
| --- | --- | --- |
| Yes | 2461 | 93.93% |
| No | 143 | 5.46% |
| Not Sure | 10 | 0.38% |
| Refused | 6 | 0.23% |

| **CHECKUP** | **N** | **% of Total** |
| --- | --- | --- |
| . | 4 | 0.15% |
| <12 MOS | 2198 | 83.77% |
| 1YR but < 2YRS | 258 | 9.83% |
| 2YRS but < 5YRS | 86 | 3.28% |
| 5YRS or More | 43 | 1.64% |
| Never | 11 | 0.42% |
| Not Sure | 22 | 0.84% |
| Refused | 2 | 0.08% |

| **MEDICAL COST** |  | **% of Total** |
| --- | --- | --- |
| Yes | 222 | 8.47% |
| No | 2389 | 91.18% |
| Not Sure | 9 | 0.34% |

**Insights**

* The number of people who have had a routine checkup in the past 2 years is less than the number of insured people. This indicates that not everyone with health insurance coverage gets their annual routine checkup done which is covered almost 100% by most insurances.
* The percentage of people who have forgone medical care due to cost is more than the percentage of uninsured people which indicates that even people with insurance could face access problems associated with cost.

**References**

Access to Health Services. (2020, October 08). Retrieved January 15, 2021, from <https://www.healthypeople.gov/2020/topics-objectives/topic/Access-to-Health-Services>

Blumenthal, D., & Collins, S. (2013). The Effects of Health Insurance on Health: What We Can Expect from the Affordable Care Act. *The Commonwealth Fund*. Retrieved January 15, 2021, from <https://www.commonwealthfund.org/blog/2013/effects-health-insurance-health-what-we-can-expect-affordable-care-act>