

Analysis of Health Insurance Coverage
in the United States by State
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Psychology 230

November 24, 1999

Introduction

The lack of health care coverage in the US is “a major social and economic concern” (Rocha and Kabalka, 1999). The number of individuals without health insurance continues to climb, even though the United States economy has prospered for the last several years (Ferry, 1999). It is estimated that this uninsured portion of the population grows at the rate of 10 million each decade (Grosjean, 1999). Every 1 percent increase in the cost of health insurance results in 200,000 more Americans without coverage according to the U.S. General Accounting Office (GrosJean, 1999).

The consequences of living without insurance have a negative impact both on individuals and society at large. Without access to the preventive care that health insurance provides, patients often wait until their condition is more serious and then seek medical assistance at emergency rooms resulting in serious overcrowding of emergency facilities (West, 1999). Research has correlated the lack of insurance with a sicker-than-average population leading to an overburdening of the public hospitals (Lunday, 1998). Public health has been described as a precondition for economic growth (Thurm, 1999).

The Phoenix Gazette reported in a 1992 article that the number of uninsured adults in Arizona was slightly higher than the national average (Kull, 1992). The purpose of this study is to analyze more recent data to determine how Arizona currently compares with the national average. We hypothesize that there is a significant difference between the percentage of uninsured individuals in Arizona and the percentage of uninsured individuals in other states.

Method

The source of our data is the Online Version of the Statistical Abstract of the United States of America. Z-scores were calculated for the percentage of individuals with insurance for each state. The data was analyzed using Microsoft Excel. Our alpha is .05 with critical values of +/- 1.96.

Results

The mean percent of state populations with health insurance coverage in the United States is 85.79% with a standard deviation of 4.08. Descriptive statistics for health insurance coverage are listed in Figure 1. The percentage of individuals with health insurance coverage listed by State and the Z-scores for each state is shown in Figure 3. The distribution of insurances coverage by state is negatively skewed as shown in Figure 2. Our analysis reveals that Arizona has significantly fewer individuals with health insurance $Z=-2.42$ ($p<.05$) than the national average.

<u>US Health Insurance Coverage</u>	
Mean	85.79
Standard Error	0.58
Median	86.55
Mode	90.50
Standard Deviation	4.08
Sample Variance	16.68
Kurtosis	-0.04
Skewness	-0.77
Range	15.90
Minimum	75.70
Maximum	91.60
Sum	4289.60
Count	50.00

Figure 1.

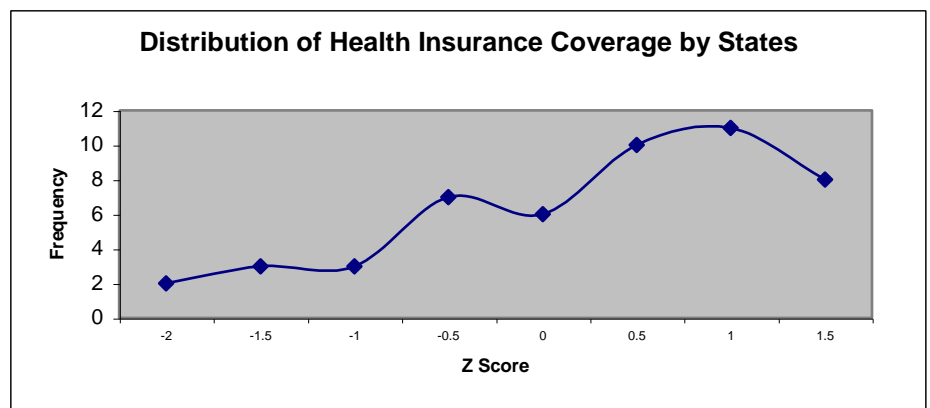


Figure 2.

State	Percent Covered	Z Score	State	Percent Covered	Z Score
Alabama	87.1	0.32	Montana	86.4	0.15
Alaska	86.5	0.17	New England	88.6	0.69
Arizona	75.9	-2.42	Nevada	84.4	-0.34
Arkansas	78.3	-1.83	New Hampshire	90.5	1.15
California	79.9	-1.44	New Jersey	83.3	-0.61
Colorado	83.4	-0.59	New Mexico	77.7	-1.98
Connecticut	89.0	0.79	New York	83.0	-0.68
Delaware	86.6	0.20	North Carolina	84.0	-0.44
Florida	81.1	-1.15	North Dakota	90.2	1.08
Georgia	82.2	-0.88	Ohio	88.5	0.66
Hawaii	91.4	1.37	Oklahoma	83.0	-0.68
Idaho	83.5	-0.56	Oregon	84.7	-0.27
Illinois	88.7	0.71	Pennsylvania	90.5	1.15
Indiana	89.4	0.88	Rhode Island	90.1	1.05
Iowa	88.4	0.64	South Carolina	82.9	-0.71
Kansas	88.6	0.69	South Dakota	90.5	1.15
Kentucky	84.6	-0.29	Tennessee	84.8	-0.24
Louisiana	79.1	-1.64	Texas	75.7	-2.47
Maine	87.6	0.44	Utah	88.0	0.54
Maryland	88.6	0.69	Vermont	88.9	0.76
Massachusetts	87.6	0.44	Virginia	87.5	0.42
Michigan	91.1	1.30	Washington	86.5	0.17
Minnesota	89.8	0.98	West Virginia	85.1	-0.17
Mississippi	81.5	-1.05	Wisconsin	91.6	1.42
Missouri	86.8	0.25	Wyoming	86.5	0.17

Figure 3. Persons with Health Insurance Coverage by State.

Discussion

Our analysis supports the hypothesis that the number of individuals with health insurance is significantly different in Arizona. Arizona shares this dubious honor with Texas and New Mexico, the only other states with significantly lower levels of coverage. The data reveals that while the nation has an increasing population of individuals without health insurance coverage this group is growing at an even faster rate in Arizona. In just a few years it has gone from having a slightly higher number of individuals without insurance to a significantly higher

number of individuals without coverage. Data from other sources paint an even bleaker picture, ranking Arizona worst in the nation with 28 percent without medical insurance (West, 1999).

The reasons underlying this lack of medical insurance coverage are varied and complex. Possible causes include the growth of low paying service-sector jobs and contract work (West, 1999). The groups that are most likely to be unemployed include Hispanic, individuals 25 and older, and the self-employed (GrosJean, 1999). Further research is needed to determine if it is the common thread that connects the three states with the worst health insurance coverage is their proximity to Mexico, a higher percentage of service type jobs, or a combination of these and other factors. Whatever the cause, concern for public health should motivate our lawmakers to take a serious look at this growing problem in Arizona. This growing crisis impacts the health and quality of life both for the individuals without medical coverage and the public at large. It demands a much more prominent position on the public agenda that it now receives.

References

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