

Disparities in Routine Primary Care Utilization Between Medicaid-insured and Uninsured Adults within Medicaid Expansion States

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ABSTRACT

The objective of this study was to examine whether disparities exist between Medicaid-insured adults and uninsured adults regarding primary care utilization in Medicaid expansion states. Access to primary care is essential to long-term health outcomes; therefore, detecting disparities is crucial. Analysis was done through Excel using the 2024 Behavioral Risk Factor Surveillance System (BRFSS) with a sample size ranging from 534 to 5186 respondents per variable. The cross-sectional analysis done by pivot tables and independent (two-sample) t-tests found that Medicaid-insured recipients were statistically more likely to utilize primary care compared to the uninsured population. Results were analyzed from 15 Medicaid expansion states: Colorado, Illinois, Indiana, Iowa, Kentucky, Maine, Massachusetts, Michigan, Minnesota, Nebraska, New Jersey, New York, Oregon, Utah, and Washington. These findings were further examined for demographic factors: education level, employment status, and gender. Altogether, the findings suggest that while Medicaid expansion improves access to primary care, significant effort is needed to mitigate low primary care utilization amongst the uninsured population.

Keywords: Medicaid; Uninsured; Primary Care; Affordable Care Act; Healthcare disparities; Social determinants

INTRODUCTION

Primary care check-ups play a key role in maintaining human health through early detection of diseases, disease management, and supervision of chronic conditions. In fact, primary care check-ups are linked to earlier detection of cancer, hypertension, and diabetes, and are associated with lower rates of mortality and morbidity. A study by the National Cancer Institute found that regular screening for colorectal cancer reduced the

likelihood of the disease by 40% and mortality by 50% (1). Furthermore, patients who have access to regular primary care checkups are more likely to follow lifestyle changes and effectively manage their conditions and diseases. Primary care is defined as “the provision of integrated, accessible health care services by clinicians who are accountable for addressing a large majority of personal health care needs, developing a sustained partnership with patients, and practicing in the context of family and community,” according to the National Academies of Sciences, Engineering, and Medicine (2). Primary care providers include: internists, family physicians, pediatricians, or non-physician providers (2). While primary care offers positive health benefits, discrepancies in access to primary care exist. In 2023, around 25.3 million people aged 0-64 were uninsured in

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the United States (3). This number, while reduced through policies such as Medicaid, still represents a significant gap in access to healthcare. Medicaid, created in 1965 and signed into law by President Lyndon B. Johnson, is a public insurance program jointly funded by the states and the federal government (4). Medicaid provides insurance to low-income families and individuals. In 2018, Medicaid provided health coverage for 97 million low-income Americans. In 2010, Medicaid was expanded when President Barack Obama signed the Affordable Care Act into law, which sought to expand Medicaid coverage to nearly all non-disabled adults who earn up to 138% of the federal poverty level (5). However, in 2012, the Supreme Court ruled that states could decide whether they wanted to expand Medicaid under the Affordable Care Act. As a result, 41 states have expanded while ten states have not (Alabama, Florida, Georgia, Kansas, Mississippi, South Carolina, Tennessee, Texas, Wisconsin, and Wyoming). This study will examine the extent to which disparities in routine primary care utilization persist between Medicaid-insured and uninsured adults within Medicaid expansion states, arguing that while expansion has significantly increased access to preventive care, disparities remain due to socioeconomic barriers and administrative complexity. This will be done by analyzing the 2024 BRFSS.

METHODS AND MATERIALS

Source

The data obtained for this study came from the 2024 Behavioral Risk Factor Surveillance System (BRFSS). BRFSS is the largest continuously conducted health survey in the world, and was established by the Centers for Disease Control and Prevention (CDC) in 1984. It is a telephone survey conducted across all 50 states, the District of Columbia, Guam, Puerto Rico, and the Virgin Islands. The full 2024 dataset contains 457,670 total records. The dataset was collected in a single survey year from January 1st, 2024 to December 31st, 2024. Since the data was collected in the post-COVID-19 period, primary care utilization patterns may have been influenced by broader healthcare system disruptions. These include reduced in-person visits, cancellations of planned treatment, decreased resources, and shifts in healthcare workers. Therefore, these factors should be considered when interpreting the findings as discrepancies in primary care utilization may reflect lingering effects of post-COVID-19 healthcare system disruptions.

Study Population

Data was selected to analyze from 15 Medicaid expansion states: Colorado, Illinois, Indiana, Iowa, Kentucky, Maine, Massachusetts, Michigan, Minnesota, Nebraska, New Jersey, New York, Oregon, Utah, and Washington. These states were chosen because they expanded Medicaid under the Affordable Care Act, which is relevant to the research question being studied. Furthermore, these states had the largest sample size for the Medicaid-insured and uninsured respondents in the 2024 BRFSS data set. Specifically, the sample sizes for the Medicaid-insured population sample sizes for Colorado, Illinois, Indiana, Iowa, Kentucky, Maine, Massachusetts, Michigan, Minnesota, Nebraska, New Jersey, New York, Oregon, Utah, and Washington were 872, 1,035, 1,048, 569, 827, 1,157, 1,065, 1,004, 339, 911, 535, 5,186, 855, 585, and 961, respectively. The uninsured population sample sizes for Colorado, Illinois, Indiana, Iowa, Kentucky, Maine, Massachusetts, Michigan, Minnesota, Nebraska, New Jersey, New York, Oregon, Utah, and Washington were 883, 1,060, 688, 486, 380, 471, 278, 367, 812, 898, 813, 2,026, 283, 910, and 1,248, respectively. The total sample sizes for Colorado, Illinois, Indiana, Iowa, Kentucky, Maine, Massachusetts, Michigan, Minnesota, Nebraska, New Jersey, New York, Oregon, Utah, and Washington were 1,755, 2,095, 1,736, 1,055, 1,207, 1,628, 1,343, 1,371, 1,151, 1,809, 1,348, 7,212, 1,138, 1,495, and 2,209. Sample sizes varied across states due to BRFSS state-level sampling variation. States with smaller Medicaid-insured or uninsured subsamples (Minnesota, Iowa, Kentucky, Maine, Massachusetts, and Oregon) were retained because their total analytic sample sizes (Medicaid-insured plus uninsured) exceeded 1,000 respondents.

Variables and Statistical Analysis

The 2024 BRFSS dataset was imported into Microsoft Excel to ensure an organized and clean analysis. The data was arranged by variables and separated into different sheets for analysis. The analysis was focused on five key variables. Four of them were related to demographics, while one was related to the utilization of primary care check-ups. Each variable was used to compare the Medicaid-insured population and the uninsured population. Each variable corresponds to a question that a respondent was asked. Each variable also corresponds with a certain response, which is coded by a number. Responses were chosen based on their relevance to the study. In total, 10 different responses were analyzed (Table 1).

Table 1. Questions and Responses Used for Analysis.

Variable	Description	Response Used for Analysis
CHECKUP1	Time since last routine check-up	1 = Within the past year (anytime less than 12 months ago)
SEXVAR	Respondent gender	1 = Male; 2 = Female
_EDUCAG	Education level	1 = Did not graduate High School; 2 = Graduated High School; 3 = Attended College or Technical School
PRIMINS2	Primary insurance type	5 = Medicaid; 88 = No coverage of any type
EMPLOY1	Employment status	1 = Employed for Wages; 2 = Self-employed; 3 = Out of work for 1 year or more

Each variable corresponds with a question and a response. Responses in this table were chosen based on relevance and used for analysis.

Data was analyzed using pivot tables in Excel. In total, four pivot tables were created. The first one organized and grouped the primary care utilization variable (*CHECKUP1*) and insurance type variable (*PRIMINS2*), which showed the number of Medicaid-insured and uninsured adults in each state who reported having a routine check-up within the past year. The second pivot table used the *SEXVAR* variable and the *PRIMINS2* variables to compare gender distributions within Medicaid and the uninsured population per state. The third pivot table grouped the *_EDUCAG* variable and the *PRIMINS2* variable to examine education levels between the Medicaid and uninsured populations in each state. The fourth pivot table used the *EMPLOY1* variable and the *PRIMINS2* variable to analyze employment status between the Medicaid and uninsured populations. Each pivot table noted the total amount of Medicaid-insured population and uninsured population in each, which was used to calculate percentages. All analyses were conducted at the state level, and unweighted BRFSS percentages were used. Percentages in each group were calculated using these two formulas:

$$Percentage_{Medicaid} = \frac{\text{Number of respondents in a category}_{Medicaid}}{\text{Total amount of Medicaid - Insured Population}} \times 100$$

$$Percentage_{Uninsured} = \frac{\text{Number of respondents in a category}_{Uninsured}}{\text{Total amount of Uninsured Population}} \times 100$$

The percentages were then organized into their own pivot tables, which is what is featured in this study. An independent (two-sample) t-test was conducted in Excel to determine whether the differences between the Medicaid Insured Population and the Uninsured population were statistically significant. Each t-test

compared the mean percentage of Medicaid-insured adults to the mean percentage of uninsured adults within the same category. When $p < 0.005$, the difference was significant, and when $p \geq 0.05$, the difference was not considered statistically significant. Additionally, multiple independent t-tests were conducted across demographic strata to examine exploratory differences between groups. The comparisons between the Medicaid-insured and uninsured populations in each state included education levels (did not complete high school, graduated from high school, college or a technical school), employment status categories (employed for wages, self-employed, out of work for more than one year), gender (male vs. female), and primary care utilization (received a routine check-up within the past year).

RESULTS

Primary Care Utilization

Data from the 2024 Behavioral Risk Factor Surveillance System (BRFSS) was analyzed from 15 states: Colorado, Illinois, Indiana, Iowa, Kentucky, Maine, Massachusetts, Michigan, Minnesota, Nebraska, New Jersey, New York, Oregon, Utah, and Washington. This analysis compared the percentage of Medicaid-insured adults per state to uninsured adults who received a routine check-up within the past year, as shown in Table 2. Overall, a higher percentage of Medicaid users reported a routine checkup within the past year than uninsured adults. On average, 78.36% of Medicaid-insured adults reported visiting a doctor within the past year. Whereas, on average, 41.30% of uninsured adults reported visiting a doctor within the past year.

Table 2. Medicaid-Insured Adults vs. Uninsured Adults Who Have Reported a Visit to the Doctor within the Past Year, Per State.

States	Medicaid Recipients who Saw a Doctor in the Past Year (%)	Uninsured who Saw a Doctor in the Past Year (%)	Difference (pp)
Colorado	70.87	38.62	32.25
Illinois	80.29	46.79	33.50
Indiana	81.01	42.30	38.71
Iowa	81.37	43.83	37.54
Kentucky	83.56	42.89	40.66
Maine	81.07	39.50	41.58
Massachusetts	77.09	43.89	33.21
Michigan	80.78	40.33	40.45
Minnesota	78.76	40.40	38.37
Nebraska	79.36	42.21	37.16
New Jersey	82.80	43.79	39.02
New York	81.20	42.99	38.21
Oregon	70.30	32.51	37.78
Utah	70.60	38.57	32.03
Washington	76.38	40.95	35.43

The data follows a color gradient where white indicates the lowest percentages and dark orange represents the highest percentages. The highest percentages are in the Medicaid column, while the lowest percentages are in the Uninsured column.

As shown in Table 2, the percentage point difference between Medicaid and uninsured adults ranges from 32.03 to 40.66. Kentucky (83.56%) has the highest percentage of Medicaid-insured adults who received a primary care check-up within the past year, while Utah (70.60%) has the lowest. Massachusetts (43.86%) has the highest percentage of uninsured adults who received a primary care check-up within the past year, while Oregon (32.51%) has the lowest.

Gender

Across the selected Medicaid expansion states, it was found that females made up a higher percentage of the Medicaid population, while males made up a higher percentage of the uninsured population. On average, 61.95% of Medicaid enrollees were female, while around 38.35% were male. For the uninsured population, around 58.52% were male, while 41.48% were female. A state representing a large gender gap is New Jersey, where 69.72% of Medicaid enrollees are female, while only 30.28% are male. Furthermore, in Iowa, 38.48% of the uninsured population is women, while 61.52% of the uninsured population is male. Additionally, the

percentage point difference between female and male Medicaid users ranged from 8.36 to 39.44 percentage points. The percentage point difference between the male and female uninsured population ranged from 2.09 to 28.52 percentage points. Furthermore, after conducting the t-test value was 0, revealing the difference was statistically significant as it is less than 0.05 (Table 3).

Level of Education

In general, a smaller percentage of Medicaid-insured adults have not graduated from high school compared to the uninsured population, which can be observed in Table 4. The percentages of adults who have finished high school do not differ significantly between the two groups. Additionally, a higher percentage of Medicaid-insured adults have graduated from college or a technical school compared to uninsured adults. After conducting a paired t-test, the difference between Medicaid-insured and uninsured adults who did not graduate high school was statistically significant (p = 0.00005). The difference between Medicaid-insured and uninsured adults who graduated high school was not statistically significant (p=0.05). The difference between Medicaid-insured and

Table 3. Gender of Medicaid-Insured Adults and Uninsured Adults, Per State.

State	Male - Medicaid (%)	Female - Medicaid (%)	Male - Uninsured (%)	Female - Uninsured (%)	Difference - Medicaid	Difference - Uninsured (pp)
Colorado	38.53	61.47	59.68	40.32	22.94	19.37
Illinois	35.65	64.35	54.06	45.94	28.70	8.11
Indiana	32.35	67.65	55.38	44.62	35.31	10.76
Iowa	36.73	63.27	61.52	38.48	26.54	23.05
Kentucky	32.77	67.23	57.11	42.90	34.46	14.21
Maine	41.05	58.95	62.63	37.37	17.89	25.27
Massachusetts	45.82	54.18	63.31	36.69	8.36	26.62
Michigan	36.55	63.45	56.95	43.05	26.89	13.90
Minnesota	39.23	60.77	57.64	42.37	21.53	15.27
Nebraska	33.37	66.63	54.01	45.99	33.26	8.02
New Jersey	30.28	69.72	51.05	48.95	39.44	2.09
New York	40.46	59.55	61.20	38.80	19.09	22.41
Oregon	44.44	55.56	69.26	30.74	11.11	38.52
Utah	36.58	63.42	57.03	42.97	26.84	14.07
Washington	40.48	59.52	53.69	46.31	19.04	7.37

The data is organized by a color scale where white corresponds to the lowest percentages and dark orange corresponds to the highest. The highest percentages are concentrated in the Female-Medicaid and Male-Uninsured columns.

Table 4. Education Level of Medicaid-Insured Adults vs. Uninsured Adults, Per State.

States	Did Not Finish High School-Medicaid (%)	Did Not Finish High School-Uninsured (%)	High School Graduate-Medicaid (%)	High School Graduate-Uninsured (%)	College/Technical School-Medicaid (%)	College/Technical School-Uninsured (%)
Colorado	9.75	21.86	33.03	34.09	33.95	23.33
Illinois	14.69	29.91	35.36	34.06	28.60	15.38
Indiana	15.17	24.86	42.08	34.59	28.34	21.80
Iowa	12.13	32.10	40.95	34.98	33.04	20.37
Kentucky	15.24	23.42	41.96	42.37	29.63	20.79
Maine	10.63	8.28	44.34	43.31	27.40	30.36
Massachusetts	19.62	24.10	33.80	34.17	20.75	19.78
Michigan	11.75	8.99	41.93	40.05	31.67	27.52
Minnesota	8.26	24.02	31.86	33.87	32.15	22.54
Nebraska	15.04	36.64	43.47	34.52	29.20	16.48
New Jersey	14.39	25.83	39.07	33.83	22.43	20.05
New York	15.29	25.86	39.65	31.98	23.51	19.65
Oregon	17.90	23.32	31.46	30.04	31.58	25.44
Utah	9.57	21.65	38.80	39.78	30.43	20.55
Washington	10.72	27.32	30.59	33.97	32.47	20.35

Data is color-coded from white (lowest percentage) to dark orange (highest percentage). The highest percentage in the “Did Not Finish High School” section is in the uninsured column. The “High School Graduate” and “College/Technical School” sections have the highest percentages in the Medicaid columns.

uninsured adults who graduated from college/technical school was statistically significant ($p=0.00004$). Furthermore, the average percentage of Medicaid-insured individuals who did not complete high school is 13.34%, while the average percentage of uninsured adults who did not complete high school is 23.88%. Maine and Michigan are outliers, as the percentage of Medicaid-insured and uninsured individuals is similar, but ultimately, the percentage is higher for the uninsured who did not complete high school. The average percentage of Medicaid-insured adults who have attended college or technical school is 29.01%, while the average of uninsured adults who have attended a college or technical school is 21.63%. Oregon is an outlier to this trend, as its percentage of Medicaid-insured individuals who have attended college or a technical school versus its uninsured individuals who have attended college or a technical school is similar. However, the percentage is higher for the uninsured individuals who have attended a college or a technical school.

Data is color-coded from white (lowest percentage) to

dark orange (highest percentage). The highest percentage in the “Did Not Finish High School” section is in the uninsured column. The “High School Graduate” and “College/Technical School” sections have the highest percentages in the Medicaid columns.

Employment Status

Using variables EMPLOY1 and PRIMINS2, an analysis of employment status regarding insurance status was conducted. In general, the uninsured population had a higher percentage of individuals who were self-employed and employed for wages, while the Medicaid-insured population had a higher percentage of individuals who were out of work for over a year, which is clearly shown in Table 5. After conducting a t-test, the difference between Medicaid-insured and uninsured adults who were employed for wages was statistically significant ($p = 0.000000002$). The difference between Medicaid-insured and uninsured adults who are self-employed was statistically significant ($p=0.0000001$). The difference between Medicaid-insured and uninsured

Table 5. Employment Status of Medicaid-Insured Adults vs. Uninsured Adults, Per State.

States	Employed for Wages-Medicaid (%):	Employed for Wages-Uninsured (%)	Self-Employed-Medicaid (%):	Self-Employed-Uninsured (%):	Out of Work-Medicaid (%)	Out of Work-Uninsured%
Colorado	28.33	45.19	13.42	20.05	9.17	4.30
Illinois	28.21	46.13	11.40	15.09	10.05	4.25
Indiana	29.01	45.20	8.68	17.59	7.54	5.67
Iowa	32.69	47.33	11.60	18.31	7.91	3.70
Kentucky	23.34	41.32	8.95	21.58	7.38	5.53
Maine	24.11	46.92	11.76	28.45	6.31	1.91
Massachusetts	30.89	48.56	14.18	17.99	9.01	3.24
Michigan	28.49	43.87	8.57	18.80	8.57	6.54
Minnesota	32.74	44.21	11.50	20.94	5.02	3.82
Nebraska	29.42	43.65	11.75	15.92	5.71	4.34
New Jersey	28.97	39.36	8.60	18.45	10.47	6.40
New York	32.24	41.76	10.57	22.21	7.60	5.33
Oregon	29.94	43.82	13.45	23.32	7.14	3.18
Utah	20.00	49.45	9.57	20.44	8.21	3.96
Washington	18.52	44.79	11.86	15.87	10.93	4.41

The data follows a color scale from white (lowest percentage) to dark orange (highest percentage). In the “Employed for Wages” and the “Self-employed” section, the highest percentages are in the uninsured columns, while in the “Out of work” section, the highest percentages are in the Medicaid column.

adults who have been out of work for over a year was statistically significant as well ($p=0.0000004$). The average percentage of Medicaid-insured individuals who are employed for wages is 27.85%, while the average percentage of uninsured individuals who are employed for wages is 44.75%. Moreover, the average percentage of Medicaid-insured individuals who are self-employed is 11.05%, while the average percentage of self-employed uninsured individuals is 19.62%. Finally, the average percentage of Medicaid-Insured Individuals who have been out of work for more than a year is 8.06%, while the average percentage of uninsured individuals who have been out of work for more than a year is 4.45%. There were no noticeable outliers to any of these trends.

DISCUSSION

This study examined primary care utilization and demographics across 15 Medicaid expansion states using the 2024 BRFSS dataset. Overall, the data reveal that Medicaid recipients are more likely to utilize primary care, which is associated with preventative healthcare services. The data also revealed that in these states, despite having expanded Medicaid under the Affordable Care Act (ACA), disparities exist between the Medicaid-insured and the uninsured population, raising debate regarding Medicaid accessibility. A primary finding was the large difference between Medicaid-insured and uninsured individuals in primary care utilization. On average, 78.36% of Medicaid-insured adults reported visiting a doctor within the past year. Whereas, on average, 41.30% of uninsured adults reported visiting a doctor within the past year. These results are largely supported by existing literature. Studies reveal that Medicaid has reduced financial barriers to healthcare. They have led to a reduction in unpaid bills and medical debt. Specifically, a study found that medical debt decreased by 12% in Medicaid-expansion states compared to a 1% decrease in non-expansion states (6). This suggests that Medicaid-insured individuals have incentives—such as low bills—to see a primary care provider. In contrast, uninsured individuals may not have these same motivators. In fact, a 2019 report revealed that uninsured individuals often assume medical costs are unaffordable and delay or avoid going to the doctor due to fear of high costs (7). The percentage point difference between Medicaid and uninsured adults' primary care utilization ranges from 32.03 to 40.66, which is also a prominent finding of this study. Since Medicaid status correlates to higher rates of primary

care utilization, these individuals are more likely to gain access to preventative care. A finding corroborated by a 2020 study analyzing Stanford datasets, which found that if a patient had ≥ 1 primary care visit per year, the patients' preventive services increased by 27% for vaccination, 122% for colonoscopy, and 75% for mammography (8). These findings highlight Medicaid's vital role in reducing healthcare-related financial barriers and improving access to preventative care. However, they also demonstrate that even in Medicaid expansion states, a portion of the population remains uninsured and is statistically less likely to visit a primary care provider, and in turn receive reduced access to preventative services. Further analysis suggests that demographic factors may contribute to these disparities in Medicaid accessibility.

Examining the gender of Medicaid-insured adults and uninsured adults provides context for primary care utilization disparities. It was found that females made up a higher percentage of the Medicaid population, while males made up a higher percentage of the uninsured population. On average, 61.95% of Medicaid enrollees were female, while around 38.35% were male. Conversely, for the uninsured population, around 58.52% were male, while 41.48% were female. These findings suggest that women correlate with Medicaid enrollment, while men correlate with being uninsured, which may illustrate possible hurdles in obtaining Medicaid coverage. A key component is employment patterns. Men are more likely to work in industries with limited coverage options. A 2025 report by the United States Census Bureau revealed that four occupational groups—farming, fishing, and forestry; food preparation and serving; construction and extraction; building and grounds maintenance—had higher uninsured rates compared to non-working individuals aged 19-64. These groups, which are all male-dominated, had uninsured rates 7.2-14.7 percentage points higher than nonworkers (9). Another factor to explain the disparities in Medicaid eligibility is that women are more likely to qualify for Medicaid. One reason is that they are statistically more likely to have a lower income than men. A 2024 study found that women are paid \$1.86 less an hour, or 12.8% less than men (10). Furthermore, a 2023 report by the U.S. Bureau of Labor Statistics found that 59% of part-time workers were women (11). Prior to the ACA, to be eligible for Medicaid, one had to meet a specific categorization group, such as pregnant women or low-income adults (12). This means most low-income adults were not eligible for Medicaid. However,

after the ACA, eligibility was expanded to 138% of the poverty level. With all of these findings taken together, since women are more likely to work part-time and have lower incomes, this increases their chances of being eligible for Medicaid. Medicaid is also a critical provider of maternity care. Therefore, women may be more incentivized to apply. While it varies from state to state, Medicaid provides family planning services such as contraceptive methods, breast and cervical cancer testing, and testing for sexually transmitted infections and HIV. Medicaid also pays for about 41% of births in rural areas. Medicaid's involvement in maternity care is a key factor as to why $\frac{2}{3}$ of Medicaid-insured women are in their childbearing years. Additionally, Medicaid programs like the Breast and Cervical Cancer Prevention and Treatment Act extend limited coverage to uninsured women for cancer treatment. As of 2021, 43,000 women were enrolled in Medicaid through this program (13). In sum, women dominating the majority of adult Medicaid enrollment suggests that social factors may be an obstacle preventing men from enrolling.

Another implication of the findings is the relationship between educational attainment and Medicaid insurance coverage. Specifically, it was found that the average percentage of Medicaid-insured individuals who did not complete high school is 13.34% while the average percentage of uninsured adults who did not complete high school is 23.88%. Additionally, the average percentage of Medicaid-insured adults who have attended college or technical school is 29.01%, while the average of uninsured adults who have attended a college or technical school is 21.63%. Ultimately, these varying statistics indicate that higher education may be associated with Medicaid status, while lower education could be linked with being uninsured. Furthermore, this suggests that adults with higher education may be in a better position to utilize healthcare services, whereas those without it may face navigational barriers. A reason lower education and uninsured status could be related is due to the long and complex Medicaid application. In a 2020 study of Medicaid recipients, participants called the application process "really stressful" and "very challenging" when referring to the paperwork (14). Additionally, the application process varies from state to state, with some states requiring re-application, in-person interviews, and asset tests. These are hurdles to some as documents are hard to locate, and finding time and transportation for interviews is difficult (15). The readability and design of the Medicaid application add to these barriers. In a survey of all 50 states, respondents

noted that the application was at an 11th to 18th grade reading level, a smaller font size than 12-point, and the formatting was crowded (16). This is, in particular, relevant, since a higher percentage of uninsured adults did not complete high school or attend a college/technical school; Their reading level could limit their understanding of the application. In a cross-national study, it was found that more-educated individuals have higher literacy skill levels as opposed to less-educated individuals (17).

Finally, the last variable analyzed in this study was the employment status of the Medicaid-insured population and the uninsured population. It was shown that the average percentage of Medicaid-insured individuals who are employed for wages is 27.85%, while the average percentage of uninsured individuals who are employed for wages is 44.75%. Moreover, the average percentage of Medicaid-insured individuals who are self-employed is 11.05%, while the average percentage of self-employed uninsured individuals is 19.62%. Finally, the average percentage of Medicaid-insured Individuals who have been out of work for more than a year is 8.06%, while the average percentage of uninsured individuals who have been out of work for more than a year is 4.45%. These findings reveal an association between employment status and Medicaid status. Specifically, individuals who are unemployed or are on long-term leave from work may be related to Medicaid status. Furthermore, since many uninsured individuals are employed, perhaps they are not offered insurance benefits by their employers. This inference is substantiated by previous literature. For example, a 2020 study found that 24% of private industry workers in the lowest 10% wage category have access to employee-sponsored medical plans, while 94% of workers in the highest 10% of wages have access to medical plans (18). In other words, employment does not guarantee insurance, and even in Medicaid-expansion states, people still find themselves working without health insurance. Additionally, many more Medicaid-insured individuals are out of work compared to uninsured individuals because they have a higher likelihood of qualifying for Medicaid. A 2025 report found that the median income for able-bodied non-working Medicaid recipients was 0. This same study also found that the majority of nonworking Medicaid recipients have health problems, preventing them from working (19).

Limitations

The BRFSS data used for analysis in the study were not weighted. Therefore, the unweighted percentages

may not be fully representative of state populations. Additionally, since multiple independent t-tests were conducted across demographic groups, this increases the risk of multiple-comparison error. However, no formal adjustments were made as p-values were intended to be exploratory rather than confirmatory. Still, statistical significance findings should be interpreted with caution.

CONCLUSION

In essence, through analysis of the 2024 BRFSS survey, it was found that despite Medicaid-expansion, severe disparities exist in Medicaid-expansion states. To be more specific, across Medicaid expansion states, Medicaid-insured adults were, on average, 37 percentage points more likely to report a primary care visit within the past year, compared to uninsured adults. Furthermore, these disparities were found to correlate with demographic factors such as gender, employment, and education status. Uninsured status was associated with lower education, being employed for wages, and being a man. Whereas Medicaid-insured status correlated to higher education, being unemployed, and being a female. Therefore, while Medicaid has improved access to coverage and, in turn, primary care utilization, efforts are needed to make this applicable to broader populations. However, this study was limited by the demographic composition of the BRFSS sample, which was disproportionately white. This prevented analysts of racial disparities between the Medicaid-insured and uninsured populations. Thus, these findings suggest that policy efforts should go beyond eligibility expansion. Examples include a simplified enrollment process and outreach. These findings are particularly relevant due to current policy changes that are affecting Medicaid. For example, the passing of President Trump's One Big Beautiful Act of 2025 (OBBBA). OBBBA has cut around \$1 trillion from Medicaid and has increased paperwork for applications (20). Starting in January 2027, states are required to conduct eligibility checks for those covered under Medicaid expansion every six months (20). Furthermore, OBBBA will only grant Medicaid expansion coverage if a recipient works, volunteers, or participates in work-related activities for 80 hours per week or is enrolled in school part-time, unless they are exempt due to pregnancy, medical vulnerability, caring for a disabled family member, or are a parent of a child under 14 (20). In this study, it was revealed that a significant portion of the uninsured population has not graduated from high school. Therefore, a more complex

application may act as a barrier. Additionally, new work requirements could negatively affect the portion of Medicaid users who are unemployed/out of work for over a year.

CONFLICT OF INTEREST

The author declares that there is no conflict of interest related to this work.

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