HHS Public Access

Author manuscript

Med Care. Author manuscript; available in PMC 2023 April 01.

Published in final edited form as:

Med Care. 2022 April 01; 60(4): 311–315. doi:10.1097/MLR.0000000000001693.

Prevalence of private and public health insurance among transgender and gender diverse adults

Jae Downing, PhD[1], **Kendall A. Lawley, MS**[2,*], **Alex McDowell, PhD, MPH, MSN, RN**[3]

[1]Oregon Health & Sciences University, 3181 SW Samuel Jackson Park Dr, Portland, OR 97249

[2]University of Washington, 1400 NE Campus Parkway, Seattle, WA, 98195

[3]Mongan Institute Health Policy Research Center, Massachusetts General Hospital, Department of Medicine, Harvard Medical School, 100 Cambridge St Boston, MA 02114

Abstract

Background—Little is known about how health insurance **payer** types differ between transgender **and gender diverse (TGD) people** and cisgender people. Much of what is known about insurance coverage among **TGD adults** has been based on research from claims and electronic health record data, which excludes individuals who have not accessed gender-affirming care. Research **designed to** understand how **TGD** populations pay for healthcare to best inform care interventions and public insurance policies **is lacking**.

Objectives—To examine differences in prevalence of public and private health insurance between transgender and cisgender **adults**.

Methods—Using data from the Behavioral Risk Factor Surveillance System, **this study** estimated prevalence of health insurance coverage among **TGD** and cisgender adults residing in 22 states that administered the Sexual Orientation and Gender Identity module and the Healthcare Access module from 2014 to 2019. **This study** estimated the odds of health insurance coverage (no insurance, private insurance, public insurance) among cisgender **adults** compared to **TGD** adults.

Results—TGD people had greater odds of being uninsured, compared to cisgender women. Among non-disabled, non-elderly respondents, **TGD** adults had lower odds of having private insurance and higher odds of public insurance compared to cisgender men. Among respondents who were likely Medicaid eligible, **TGD respondents** had lower odds of having public insurance and higher odds of being uninsured compared to cisgender women.

Conclusions—These findings provide foundational information about the payer mix among **TGD** people and provide insight into barriers to health insurance that **TGD adults** may face.

Keywords

Transgender Persons; Health Services for Transgender Persons; Medicaid; Insurance; Sexual and Gender Minorities

[*]**Corresponding Author:** lawleyk@uw.edu, University of Washington, 1400 NE Campus Parkway, Seattle, WA, 98195.

Conflicts of Interest: We have no potential conflicts of interest to report.

Introduction

Transgender and gender diverse (TGD) populations have poorer health compared to cisgender populations.[1] This may be exacerbated by lower rates of health insurance compared to cisgender people.[2] Adequate insurance coverage is critical to addressing health inequities among TGD populations,[3] yet it is unknown whether differences in **rates of** uninsurance, **or being uninsured**, are driven by inequitable access to public, private, or both types of insurance.

TGD populations may have higher rates of uninsurance due to reduced access to employer-sponsored insurance (ESI). TGD adults face wide-spread employment discrimination, limiting access to jobs that provide ESI.[4] Furthermore, TGD adults, who are more likely than cisgender adults to identify as **sexual minorities** and be in same-sex relationships, may have **had less access** to ESI prior to marriage equality in 2015.[2] While marriage equality had a substantial positive impact on ESI,[5] **disparities remain**.[6]

Differences in uninsurance rates between TGD and cisgender adults may also be attributed to lower rates of enrollment in public insurance (including Medicare and Medicaid) among TGD adults. While recent evidence shows an increase **in** gender-affirming surgeries covered by Medicaid or Medicare,[7] **few** studies have examined **prevalence of** public insurance among the broader TGD population (including those who have not accessed **hormone therapy, surgeries, and other** gender-affirming care). Despite experiencing high rates of poverty and disability,[6] **increasing** Medicaid and Medicare eligibility, access to public insurance may be limited for TGD **adults**. Until May 2021, TGD **adults** were unprotected from discrimination based on gender identity by federal programs.[8] The absence of protections for TGD **adults** may have resulted in reduced enrollment in public insurance.

Knowledge of which types of insurance TGD adults **are** enrolled in **may help to explain why some TGD adults** face inconsistent coverage for gender-affirming care. For example, **ESI coverage of gender-affirming care is increasing**[3]**, yet TGD adults are less likely to have full-time employment than cisgender adults**[2]. Medicaid programs cover gender-affirming hormones **in 34 states**, and gender-affirming surgeries **in 25 states**,[9] **while** Medicare **covers gender-affirming care on a case-by-case basis**.[10]

To reduce health inequalities and improve access to care, it is important to understand how TGD **adults** pay for health care. **Limited** research has **explored** differences in public and private insurance coverage between cisgender and TGD **adults**, irrespective of their gender-affirming care utilization. We address this using representative survey data to describe the payer mix among TGD individuals and examine differences in insurance coverage between TGD and cisgender **adults**.

This study hypothesize**d** that **TGD-identified** adults will be more likely to be uninsured, more likely to have public insurance, and less likely to have private insurance compared to cisgender adults.

Methods

This study used data from the Behavioral Risk Factor Surveillance System (BRFSS) 2014, 2016, 2017, 2018, and 2019 surveys downloaded in December of 2020. The 2015 survey did not include **insurance** information and was therefore excluded. Individual states can elect to include **specific** modules, including gender identity and health insurance coverage **modules**. Data **were** collected from **TGD-identified** and cisgender adults residing in 22 states that included the Sexual Orientation and Gender Identity module and the Healthcare Access module during the study period (see Table, Supplemental Digital Content 1 for included states).

Measures.

Gender identity.—Respondents were asked: *Do you consider yourself to be transgender?* Those who responded *yes* were categorized as **TGD-identified**. Respondents who responded *no* were considered cisgender women if female sex, and cisgender men if male sex. **Respondents were excluded if they were unsure or refused (n = 3,573).**

Primary health insurance.—Respondents were asked: *What is the primary source of your health care coverage?* Those who had "a plan purchased through an employer or union," "a plan that you or another family member buys on your own," or "TRICARE, VA, or Military" were considered to have private insurance. Those with Medicare, Medicaid or other state programs were considered to have public insurance. Those with no coverage or Tribal Health Services were considered uninsured [11].

Covariates.—Demographics included age; race/ethnicity (non-Hispanic white, non-Hispanic black, Hispanic, other/multiple); educational attainment (did not complete high school, high school graduate, some college/technical school, college/technical school graduate); percent of the federal poverty line (FPL) (calculated based on year and state thresholds using median household income and number of adults and children in the household); employment status (employed, unemployed, not looking, retired, unable to work); marital status; presence of children in the household; and **residence** in a Medicaid expansion state. Disability status was assessed based on the presence of at least one functional disability including disability in mobility, cognition, independent living, vision, or self-care.[2]

Statistical Analysis

Data were pooled and reweighted to be representative of each state in the sample. Survey weights in each year were multiplied by the number of all respondents that year divided by the number of respondents surveyed **from 2014–2019**.

The weighted **prevalence** of demographic and **insurance** variables was estimated for each group (**TGD-identified**, cisgender women, cisgender men); Pearson chi-square tests were used to compare **weighted** group frequencies.

Three multivariable-adjusted logit models **assessed the relationship between** insurance outcome (no insurance, private insurance, public insurance) **and** gender identity **(**cisgender

women and men compared to **TGD-identified respondents) controlling for all covariates listed above**. To understand how insurance varied among subgroups, these same **three** models **were run** among three different subsets of respondents: 1) likely **not Medicare-eligible** (non-elderly, non-disabled); likely Medicare-eligible (65+ or at least 1 disability); and likely Medicaid-eligible (under 250% of the FPL). Analyses were conducted using StataMP 15 in December of 2020.

Results

Descriptive.

The sample consisted of 256,136 respondents (0.4% **TGD-identified adults**, 42.2% cisgender women, 57.4% cisgender men) **(**Table 1**)**. Compared to cisgender women and men, a lower proportion of **TGD-identified** respondents were **65+** and retired, while a higher proportion were disabled, unable to work, and under 250% of the FPL. Employment was higher among cisgender men, compared to both cisgender women and **TGD-identified respondents**. A lower proportion of **TGD-identified adults** were married compared to cisgender **respondents**, yet a similar proportion of **TGD-identified adults** and cisgender men had a child in their household. All groups had similar rates of residence in a Medicaid expansion state.

Prevalence of primary health insurance (unadjusted).

TGD-identified adults had the highest prevalence of uninsurance compared to cisgender men and women (23.5%, 16.1%, and 12.8% respectively); this finding was consistent across all subgroups (non-elderly/ non-disabled, likely Medicare-eligible, and likely Medicaid-eligible) (Table 2). The prevalence of public insurance among **TGD-identified** adults (24.6%) was higher than cisgender men (21.8%) but lower than cisgender women (29.3%).

Differences in odds of primary health insurance.

Compared to **TGD-identified adults**, cisgender women had lower odds of uninsurance (AOR= 0.703, 95% CI= 0.580, 0.853) and cisgender men had marginally higher odds of having private insurance (AOR= 1.143, 95% CI= 0.975, 1.341) (Table 3). No differences were observed for public insurance. **Differences** in private insurance **were assessed** among those **not** likely **Medicare** insurance eligible. Compared to **TGD-identified adults**, cisgender women (AOR= 1.382, 95% CI= 1.081, 1.766), and cisgender men (AOR= 1.303, 95% CI = 1.019, 1.665) had higher odds of having private insurance. Third, **the study** looked at differences in public insurance among likely Medicare-eligible respondents **and** no differences were observed. Finally, differences in public insurance among those likely Medicaid-eligible (under 25% FPL) **were estimated**. Compared to **TGD-identified adults**, cisgender women had higher odds (AOR= 1.221, 95% CI= 1.006, 1.481), and cisgender men had marginally lower odds, of having public insurance (AOR= 0.840, 95% CI = 0.692, 1.019) of having public insurance.

Discussion

This study is among the first to use a population-based sample to compare the payer mix for insurance coverage between TGD and cisgender **adults**. Importantly, this study includes TGD adults who have accessed gender-affirming healthcare, **through insurance** and those who have not.

Consistent with our hypotheses and supported by previous studies, **TGD-identified** adults were more likely to be uninsured compared to cisgender adults.[2] **11 TGD-identified adults** have less access to resources and **socioeconomic advantage**,[2] likely creating barriers to insurance, particularly in states with **more limited** Medicaid eligibility. **Without insurance coverage, gender-affirming care, and other health services, may be prohibitively expensive for many TGD adults.**

Contrary to **the study** hypothesis, analyses adjusted for socioeconomic confounders showed that **TGD-identified adults** and cisgender men had similar odds **of** uninsurance. This is not surprising considering prior research that found that men are more likely to be uninsured than women[13]. Additionally, Medicaid eligibility via pregnancy **may** create more **insurance** opportunities for cisgender women. Future research should explore why TGD adults, despite **additional, unique** health needs,[2] face similar uninsurance rates to cisgender men, **and more importantly, the specific barriers to insurance access for TGD adults**.

This study also found that **TGD-identified** adults were less likely to have private insurance, among **non-elderly, non-disabled adults**. ESI **has** expanded to cover gender-affirming care,[3] however, access to ESI remains restricted for TGD **adults** due to employment inequities and the **previous** absence of federal policies banning health insurance discrimination based on gender identity among private insurers. **Many** states do have laws in place **banning** private insurers from gender identity-based discrimination, however, even in these states **some insurers** are exempt from these laws.[14] Previous work shows that TGD **adults** have lower rates of college education, and higher rates of poverty and workplace discrimination, all of which are tied to employment.[6] **Unit** 2020, no federal policies protected TGD **adults** from workplace discrimination, though a patchwork of laws did exist in some states.[14] Additionally, TGD adults may be less likely to have access to ESI through their partner if they are in a same-sex relationship, though marriage equality played an important role in expanding access to ESI for same-sex couples.[5]

Differences in private insurance for TGD **adults** may also result from lack of clarity surrounding access, **as** many TGD **adults** are uncertain about **gender-affirming healthcare coverage.**[15] Future studies should examine whether uptake of private insurance among eligible TGD workers is hindered by lack of clear **coverage** guidelines. **Examining access to coverage information may be a tangible way to begin addressing specific barriers for TGD adults seeking gender-affirming care.**

Additionally, public insurance was similar across likely Medicare-eligible adults. However, **TGD-identified respondents** were more likely to be uninsured than cisgender women in this population. This is concerning considering TGD **adults** have higher rates of

disability.[16] Minority stress and systemic oppression can impact the health of TGD people[17] and many TGD **adults** could benefit from Medicare coverage. It is important to explore factors that may prevent TGD **adults** with disabilities from accessing Medicare coverage. Navigating **complex** healthcare systems can be **difficult** for people with disabilities. This may be **additionally challenging** for **disabled** TGD **adults**.[18]

Finally, **TGD-identified respondents** who were Medicaid-eligible were less likely to have public insurance than cisgender women, but levels similar to cisgender men. This may be due, in part, to lower rates of children **in the household** that afford many cisgender women access to **Medicaid** [2], **or** because less than half of state Medicaid programs cover gender-affirming care, impacting who enrolls in Medicaid programs.[9] Future research should examine uptake of Medicaid among those eligible to understand TGD-specific barriers.

Limitations

In this study, the sample consisted of participants from **only** 22 states, potentially reducing generalizability. **Second, small sample sizes prevented separation of results** beyond private and public insurance to examine outcomes for Medicaid, Medicare, and ESI separately. Third, **the study likely undercounts gender diverse respondents without utilizing the two-question gender identity assessment method**[19] **and was unable to separate results by gender identity or other intersecting identities (including race)** among **TGD-identified** participants due to small sample sizes.[12 19] **Fourth,** use of probabilistic samples to study **TGD** populations before 2016 is controversial due to sex-specific ranking and the way sex was collected. [19 20] However, most of our data was collected after 2016. **Finally, this study does not explicitly test which explanatory factors contribute to the observed differences in coverage.**

Conclusion

This study provides **some of** the first representative estimates of prevalence of private and public insurance among TGD **adults**. These findings provide foundational information about the payer mix of the broader **TGD population** and can inform an understanding of TGD-specific barriers to insurance.

Supplementary Material

Refer to Web version on PubMed Central for supplementary material.

Acknowledgements and Disclosure of Funding:

Downing's time for this publication was supported by the Eunice Kennedy Shriver National Institute of Child Health & Human Development of the National Institutes of Health (K12HD043488).

References

1. Baker KE. Findings from the behavioral risk factor surveillance system on health-related quality of life among US transgender adults. JAMA International Medicine. 2019;179(8):1141–1144.

2. Downing JM, Przedworski JM. Health of Transgender Adults in the U.S., 2014–2016. American Journal of Preventive Medicine. 2018;55(3):336–344. doi:10.1016/j.amepre.2018.04.045 [PubMed: 30031640]

3. Padula W v., Baker K. Coverage for Gender-Affirming Care: Making Health Insurance Work for Transgender Americans. LGBT Health. 2017;4(4). doi:10.1089/lgbt.2016.0099

4. Grant JM, Mottet LA, Justin Tanis J, with Jack Harrison Jody Herman DmL, Keisling M. Injustice at Every Turn A Report of the National Transgender Discrimination Survey. www.TheTaskForce.org

5. Downing J, Cha P. Same-Sex Marriage and Gains in Employer-Sponsored Insurance for US Adults, 2008–2017. American Journal of Public Health. 2020;110(4). doi:10.2105/AJPH.2019.305510

6. Carpenter CS, Eppink ST, Gonzales G. Transgender Status, Gender Identity, and Socioeconomic Outcomes in the United States. ILR Review. 2020;73(3). doi:10.1177/0019793920902776

7. Canner JK, Harfouch O, Lau BD, Key Points C. Temporal Trends in Gender-Arming Surgery Among Transgender Patients in the United States. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5875299/

8. Office for Civil Rights H. Billing Code: XXXX-XX-X Notification of Interpretation and Enforcement of Section 1557 of the Affordable Care Act and Title IX of the Education Amendments of 1972.; 1972. https://www.supremecourt.gov/opinions/19pdf/17-

9. Zaliznyak M, Jung EE, Bresee C, Garcia MM. Which U.S. States' Medicaid Programs Provide Coverage for Gender-Affirming Hormone Therapy and Gender-Affirming Genital Surgery for Transgender Patients?: A State-by-State Review, and a Study Detailing the Patient Experience to Confirm Coverage of Services. The Journal of Sexual Medicine. 2021;18(2). doi:10.1016/j.jsxm.2020.11.016

10. Jensen TS, Chin J, Rollins J, Koller E. Decision Memo for Gender Dysphoria and Gender Reassignment Surgery (CAG-00446N) Decision Memo.

11. Artiga S, Lyons B. Medical Coverage and Access to Care for American Indians and Alaska Natives under the Affordable Care Act. JAMA Internal Medicine. 2016;176(6):860–861. [PubMed: 27182790]

12. Gonzales G, Henning-Smith C. Barriers to Care Among Transgender and Gender Nonconforming Adults. The Milbank Quarterly. 2017;95(4). doi:10.1111/1468-0009.12297

13. Hinton E, Artiga S. Characteristics of Remaining Uninsured Men and Potential Strategies to Reach and Enroll Them in Health Coverage Eligibility for ACA Coverage Among Nonelderly Uninsured Men as of 2015 Total = 14.7 Million Nonelderly Uninsured Men Eligible for Financial Assistance 44% Ineligible for Financial Assistance Due to Income or Offer of ESI Ineligible Due to Immigration Status Coverage Gap Medicaid-Eligible Tax Credit Eligible.

14. Movement Advancement Project. Equality Maps: Employment Nondiscrimination Laws. https://www.lgbtmap.org/equality_maps/employment_non_discrimination_laws.

15. Hughto JMW, Meyers DJ, Mimiaga MJ, Reisner SL, Cahill S. Uncertainty and Confusion Regarding Transgender Non-discrimination Policies: Implications for the Mental Health of Transgender Americans. Sexuality Research and Social Policy. Published online June 11, 2021. doi:10.1007/s13178-021-00602-w

16. Recommended Citation James SE, Herman JL, Rankin S, Keisling M, Mottet L, Anafi M. About the National Center for Transgender Equality.; 2016.

17. Reisner SL, Poteat T, Keatley J, et al. Global health burden and needs of transgender populations: a review. The Lancet. 2016;388(10042). doi:10.1016/S0140-6736(16)00684-X

18. Progovac AM, Cook BL, Mullin BO, et al. Identifying Gender Minority Patients' Health And Health Care Needs In Administrative Claims Data. Health Affairs. 2018;37(3). doi:10.1377/hlthaff.2017.1295

19. Lett E, Everhart A. Considerations for Transgender Population Health Research Based on US National Surveys. Annals of Epidemiology. Published online October 28, 2021. doi:10.1016/J.ANNEPIDEM.2021.10.009

20. Cicero EC, Reisner SL, Merwin EI, Humphreys JC, Silva SG Application of Behavioral Risk Factor Surveillance System Sampling Weights to Transgender Health Measurement. Nursing Research. 2020;69(4). doi:10.1097/NNR.0000000000000428

Table 1.

Characteristics of **BRFSS** Respondents **from 2014–2019** by Gender Identity

	Transgender Individuals		Cisgender Men		Cisgender Women	
	n =1,106		n = 108,097		n = 146,933	
	n	%	n	%	n	%
Age Group[1]						
18–24	114	10.3	7033	6.5	6053	4.1
25–34	112	10.1	10899	10.1	12462	8.5
35–44	130	11.8	12635	11.7	16374	11.1
45–54	183	16.5	18229	16.9	23851	16.2
55–64	253	22.9	24517	22.7	33172	22.6
65+	314	28.4	34784	32.2	55021	37.4
Non-Hispanic white[1]	788	72.8	86833	81.7	117232	80.8
Employment Status [1]						
Employed	484	43.8	48122	56.0	64700	44.1
Unemployed	78	7.1	4786	4.4	5920	4.1
Retired	284	25.7	31555	29.2	46612	31.7
Unable to work	153	13.8	7553	7.0	12955	8.8
Disabled[1]	434	39.2	25518	23.6	44492	30.3
Married[1]	489	44.4	61244	56.9	71905	49.2
Child in Household[1]	240	21.9	26696	24.9	38292	26.2
Under 250% FPL[1]	522	58.2	33571	36.8	55196	46.3
Expansion state[2]	600	54.2	59615	55.1	81271	55.3

[1]. Pearson chi-square test: p<0.001

[2]. Pearson chi-square test: p=0.577

Table 2.

Prevalence of Primary Health Insurance Type by Gender Identity

	Transgender Individuals		Cisgender Men		Cisgender Women	
All Adults	**n = 1,106**		**n = 108,097**		**n = 146,933**	
	n	**%**	**n**	**%**	**n**	**%**
No insurance	192	23.3 (18.5, 28.8)	12959	16.1 (15.6, 16.6)	14198	12.8 (12.4, 13.2)
Private insurance	500	48.7 (42.8, 54.6)	60895	59.5 (58.9, 60.1)	74988	55.7 (55.2, 56.2)
Public insurance	383	24.6 (20.0, 29.9)	32146	21.8 (21.4, 22.3)	55119	29.3 (28.8, 29.7)
Non-Disabled, Non-Elderly	**n = 496**		**n = 58,534**		**n = 68,439**	
	n	**%**	**n**	**%**	**n**	**%**
No insurance	99	26.0 (19.1, 34.2)	8,411	17.4 (16.7, 18.0)	8,060	14.0 (13.5, 14.6)
Private insurance	317	57.8 (49.1, 66.1)	45,099	73.1 (72.4, 73.8)	52,652	72.7 (72.0, 73.4)
Public insurance	67	12.4 (7.1, 21.1)	3,958	7.1 (6.7, 7.6)	6,913	11.4 (10.9, 11.9)
Medicare Eligible	**n = 610**		**n = 49,563**		**n =78,494**	
	n	**%**	**n**	**%**	**n**	**%**
No insurance	93	19.8 (14.0, 27.1)	4,548	13.6 (12.9, 14.4)	6,138	11.1 (10.6,11.6)
Private insurance	183	36.7 (29.1, 45.2)	15,796	34.2 (33.4, 35.1)	22,336	31.4 (30.7, 32.1)
Public insurance	316	40.4 (33.3, 47.9)	28,188	49.3 (48.4, 50.2)	48,205	54.7 (54.0, 55.4)
Under 250% FPL	**n = 522**		**n = 33,571**		**n = 55,196**	
	n	**%**	**n**	**%**	**n**	**%**
No insurance	108	28.4 (21.1, 36.9)	6,793	26.1 (25.1, 27.1)	8,378	19.4 (18.6, 20.1)
Private insurance	175	38.5 (29.9, 47.9)	13,023	41.6 (40.5, 42.6)	18,188	37.7 (36.8, 38.6)
Public insurance	228	31.9 (24.3, 39.9)	13,016	29.8 (28.8, 30.7)	27,598	40.9 (40.0, 41.7)

Note: Unknown/refused categories are not included **due to small cell sizes**; thus number do not sum to total n. Data **are** weighted.

Table 3.

Odds of insurance outcomes among cisgender women and cisgender men relative to TGD individuals

		No Insurance		Private		Public	
		OR	**95% CI**	**OR**	**95% CI**	**OR**	**95% CI**
All[1]	Cisgender women	0.703**	0.580,0.853	1.122	0.957,1.315	1.095	0.922,1.299
	Cisgender men	0.924	0.762,1.121	1.143+	0.975,1.341	0.901	0.759,1.070
Non-Disabled, Non-Elderly[2]	Cisgender women	0.668**	0.509,0.876	1.382**	1.081,1.766	1.069	0.769,1.487
	Cisgender men	0.897	0.684,1.177	1.303*	1.019,1.665	0.731+	0.525,1.018
Medicare Eligible[3]	Cisgender women	0.748*	0.567,0.987	0.961	0.783,1.180	1.138	0.937,1.382
	Cisgender men	0.945	0.716,1.248	1.058	0.861,1.299	0.964	0.793,1.171
Under 250% FPL[4]	Cisgender women	0.794*	0.633,0.995	0.943	0.777,1.145	1.221*	1.006,1.481
	Cisgender men	1.033	0.824,1.295	1.124	0.926,1.365	0.840+	0.692,1.019

** p< 0.01

* p<0.05

+ p<0.10;

reference group is TGD adults; **OR (odds ratio) and CI (confidence interval)**

[1] Adjusted model controls for age, race, ethnicity, 1+ child in the house, any disability, under 250% FPL, residence in Medicaid expansion state, state, year

[2] Adjusted model controls for age, race, ethnicity, 1+ child in the house, under 250% FPL, residence in Medicaid expansion state, state, year

[3] Adjusted model controls for race, ethnicity, 1+ child in the house, any disability, under 250% FPL, residence in Medicaid expansion state, state, year

[4] Adjusted model controls for age, race, ethnicity, 1+ child in the house, any disability, residence in Medicaid expansion state, state, year