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### Determinants of voting behavior on healthcare policy: Analysis of Oregon Measure 111

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#### Abstract

In 2022, Oregon became the first state to make affordable and clinically appropriate healthcare a constitutional right by passing Measure 111. The amendment also requires the state to balance this right with funding for education and other public services. This paper examines what factors influenced county-level support for the measure, using an empirical median voter framework. The results show that the share of Democratic voters was the strongest and most consistent predictor of support, explaining most of the differences across counties. Counties with larger populations under age 18 were significantly less supportive, likely due to concerns about education funding. These findings suggest that political views and concerns about trade-offs with other public priorities play a central role in shaping support for healthcare reforms.

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# 1 Introduction

The United States consistently ranks among the highest in healthcare spending, reaching an estimated \$14,570 per person in 2023 (Centers for Medicare & Medicaid Services, 2024). Yet this level of spending is accompanied by relatively poor health outcomes, including high rates of avoidable mortality (Jones & Kantarjian, 2015). These inefficiencies raise questions about access, equity, and the broader structure of the U.S. healthcare system. Although the Affordable Care Act expanded access to coverage, a significant number of Americans remain uninsured (Tolbert et al., 2024), and fundamental questions about healthcare as a right versus a market good continue to shape political debates.

In 2022, Oregon became the first U.S. state to constitutionally recognize the right to affordable and clinically appropriate healthcare by passing Measure 111. The amendment requires the state to ensure this right while also balancing funding for education and other public services (Botkin, 2022a). Although Oregon is known for its progressive stance, Measure 111 was approved by only a narrow margin, 50.73% voted in favor while 49.27% opposed it, revealing significant differences in voter preferences among counties (Botkin, 2022b). This presents an opportunity to examine how local demographic and economic factors shape public support for healthcare rights.

Understanding the determinants of support for such ballot initiatives is essential as other states consider similar measures. Prior studies show that access to public insurance can influence political behavior: Baicker and Finkelstein (2018), using the Oregon Medicaid lottery, find that Medicaid coverage increased voter turnout in the 2008 election, especially among lower-income and Democratic-leaning groups. These findings suggest that health policy is not only a service provision issue but also one that interacts with civic identity and political participation. Moreover, the Oregon Plan in early 90s ranked treatments by cost-effectiveness, but public feedback shifted priorities toward life-saving treatments, even if they were less cost-effective, over services that offered small health gains to many, showing that public values can override expert rankings (Hadorn, 1991; Musgrove, 1999).

Healthcare is often seen as a quasi-public good because it may not fully meet the usual features of a public good. As Karsten (1995) explains, healthcare can be limited (rival) and hard to get (excludable). For example, people without insurance or money may be denied care, and in places with few doctors, care may be limited. This means some people get more access than others. These features affect how people vote. Voters who do not have good access to care, like the uninsured, may vote yes on policies that promise more healthcare, because it helps them personally. Others may worry that expanding care will lead to longer wait times or higher taxes, so they vote no to protect their own access or income. Political beliefs also matter. People who see healthcare as a basic right often support public programs. Those who think healthcare should be earned or bought may oppose government plans. So, the way voters see healthcare, either as a public good or something private, affects how they vote. A recent survey also shows that many Americans view healthcare as a public good and want the government to play a stronger role in providing it (Community Catalyst & HIT Strategies, 2025).

This paper uses an empirical median voter approach to examine county-level variation, considering the very close vote in support of Measure 111. I use cross-sectional data from 36 Oregon counties to test whether political ideology, income, insurance coverage, racial composition, age, and other local characteristics influenced the share of 'Yes' votes. The findings contribute to a better understanding of how political, economic, socioeconomic, and demographic factors shape support for healthcare reform.

## 2 Empirical Approach and Data

### 2.1 Empirical Approach

I use an empirical median voter framework to explore how local economic and demographic factors shaped support for Oregon’s constitutional right to healthcare. Congleton and Bennett (1995) describe the median voter model as a framework that incorporates both the preferences of the median voter and the influence of special interests, so this hybrid model can better explain political outcomes than models based solely on interest group pressure. Also, Holcombe (1989) examines the theoretical and empirical foundations of the median voter model, arguing that while the median voter model does not fully describe all political outcomes, it is still a central benchmark for thinking about majority rule and the development of political institutions. Many recent studies such as Kimenyi and Shugart (2010) have used related modeling approaches to investigate shifts in constitutional frameworks and policy reforms. The median voter approach also has been used to analyze voting on ballot measures, making it a relevant framework for analyzing Oregon’s Measure 111. For example, Matti and Zhou (2017) apply it to the Brexit vote, while Hall and Karadas (2018) and Hall and Shultz (2016) study state-level votes on pension reform and tuition equity. Most closely related, Lawson and Hall (2023) use the median voter model to examine Oregon’s Measure 88 on driver’s licenses for undocumented immigrants. These studies show that the model is helpful for understanding how different groups vote on policy questions.

Table I: Summary Statistics

Variable	Mean	SD	Min	Max
Yes Vote (%)	40.69	10.68	24.09	69.36
Median Households Income (1000\$)	66.58	12.70	45.46	100.12
Unemployed (%)	3.19	0.71	1.10	4.20
Female (%)	49.62	1.38	45.00	51.70
Population Under 18 (%)	20.15	2.79	14.16	27.08
Uninsured (%)	6.91	1.65	3.50	10.30
Rural (%)	48.21	29.53	1.15	100.00
African-American (%)	0.79	0.90	0.00	5.40
Democrat (%)	41.35	16.17	18.46	80.72

### 2.2 Data

The analysis uses cross-sectional data for 36 Oregon counties from the 2022 election. Voting outcomes (the percentage of “Yes” votes on Measure 111) are drawn from the Oregon Secretary of State (2022), while demographic, socioeconomic, rurality, and health insurance coverage variables come from the US Census Bureau, American Community Survey (2019), 5-Year Estimates. Furthermore, the percentage of the Democrat variable is sourced from the MIT Election Data and Science Lab (2018).

### 2.3 Variable Selection

Summary statistics are provided in Table I. I use the percentage of Oregon’s population who voted ‘Yes’ to this reform as my dependent variable. Also, I include variables capturing political ideology, economic conditions, health coverage, demographic composition, and rurality as my explanatory variables. It can be seen that there is considerable variation across counties in

rural population share, income, and political affiliation, with Democratic vote share ranging from 18.5% to over 80%. Regarding variable selection, I include the percentage of Democratic votes in the 2020 presidential election to proxy political orientation. Partisan affiliation is a strong predictor of support for healthcare policies. Prior research shows that counties with more Democratic voters are consistently more supportive of public health programs like Medicaid expansion. This effect often outweighs economic or demographic factors (Sances & Clinton, 2021). Median household income is used to approximate the economic position of the median voter, as commonly done in public choice models (Meltzer & Richard, 1981). Although traditional models predict that voters with lower incomes would be more inclined to support redistribution, more recent empirical evidence complicates this view. For instance, Barnes (2013) suggests that in some cases, higher-income median voters may actually favor greater redistributive spending.

The unemployment rate is included to reflect economic vulnerability. Previous studies suggest that personal or regional exposure to unemployment can cause individuals to shift slightly leftward ideologically, especially with lower levels of education. Previous studies show that the personal or regional exposure to unemployment is associated with stronger support for left-leaning parties and for policies such as income redistribution (Turner & Ryan, 2023). So, I acknowledge that in Democratic-leaning counties, the ideological environment may reinforce the tendency of unemployed voters to support healthcare expansion. I include the percentage of uninsured individuals as a key variable, as prior research offers mixed findings on how lack of coverage influences political behavior. While Baicker and Finkelstein (2018) find that Medicaid expansion boosted voter turnout, especially in Democratic counties, Courtemanche et al. (2020) report no significant political participation effect. Given this, uninsured rates may still play an important role in shaping support for healthcare reform.

Furthermore, I include the percentage of female residents based on findings that women are more likely to support welfare-enhancing policies, including healthcare, due to higher average healthcare needs and longer life expectancy (Cylus et al., 2011). The percentage of African-American residents is also included to capture racial disparities in access to care, which may shape stronger support for healthcare reforms (Dean et al., 2023).

The percentage of the population under 18 is added as a key demographic variable. Measure 111 includes language about balancing the right to healthcare with funding for other essential public services, especially education. Opponents of the amendment have voiced concern that establishing healthcare as a right could divert funds away from public schools. As such, counties with a larger share of children may have been more cautious, and I expect a negative relationship with support for the measure.

Finally, I include the percentage of the population living in rural areas as a continuous variable,<sup>1</sup> Cahill and Ojeda (2021) show that where people live affects their likelihood of voting. People in poor health usually vote less, but in rural areas, strong religious and community ties help keep them engaged in politics. So, looking at whether a county is rural or urban can help us better understand what influences voter behavior.

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<sup>1</sup>Results using a binary rural indicator (1 = majority rural) yield similar findings; key coefficients retain significance, though the under-18 variable becomes significant at the 10% level rather than 5%.

Table II: Determinants of County-Level Voting on Measure 111: OLS Results

Dependent Variable:	'% Yes' Vote on Measure 111 by County				
	(1)	(2)	(3)	(4)	(5)
Median HH Income (\$)	0.444*** (0.109)	0.413** (0.118)	0.334** (0.112)		-0.089* (0.039)
Unemployed (%)	4.597* (1.904)	-0.197 (2.074)	-0.197 (1.896)		0.103 (0.532)
Female (%)	2.225* (1.006)	0.303 (1.027)	0.628 (0.947)		0.102 (0.267)
Pop Under 18 (%)		-1.710** (0.570)	-1.571** (0.524)		-0.333* (0.162)
Uninsured (%)		1.749† (0.896)	1.636† (0.821)		0.232 (0.243)
Rural (%)		-0.141** (0.053)	-0.112* (0.050)		0.024 (0.016)
African-American (%)			3.560* (1.377)		0.617 (0.419)
Democrat (%)				0.646*** (0.024)	0.695*** (0.038)
Intercept	-113.919* (49.818)	28.373 (59.098)	10.815 (54.463)	13.992*** (1.058)	15.912 (15.286)
R-squared	0.496	0.669	0.733	0.956	0.980
Adjusted R-squared	0.449	0.600	0.666	0.954	0.974
Residual Std. Error	7.933	6.753	6.174	2.284	1.733
F-statistic	10.490	9.765	10.970	731.5	162.9
Observations	36	36	36	36	36

Notes: Standard errors in parentheses.

Significance levels: \*\*\*  $p < 0.001$ , \*\*  $p < 0.01$ , \*  $p < 0.05$ , †  $p < 0.1$

### 3 Results and Discussion

Table II shows the results from five OLS models estimating the percentage of “Yes” votes on Oregon Measure 111 across counties. The models are built step by step to show how economic, demographic, and political factors affect support for the amendment.

In the first three models, median household income is positive and statistically significant at 1%, suggesting that higher-income counties were more likely to support the amendment. However, once political ideology is added in Model (5), the income coefficient becomes negative and still significant at the 5% level. This change suggests that the earlier positive effect of income may have been influenced by its correlation with Democratic vote share. In other words, higher-income counties may support the amendment not because of income alone, but because they tend to vote more Democratic.

The unemployment rate is only significant in Model (1), with a positive sign. But in later models, its effect becomes small and not statistically significant. This shows that unemployment by itself does not strongly predict support for healthcare reform when other variables like

insurance coverage are considered. A correlation analysis in the Appendix shows a moderate positive relationship between unemployment and the uninsured rate ( $r = 0.34$ ), suggesting that these two variables overlap in what they capture. The share of female residents is significant in the first model but loses significance in later models. This may be due to the small sample size or the possibility that gender effects are also captured by political ideology.

The percentage of people under age 18 shows a consistent negative effect across all models, and it is statistically significant at 5% in the last specification. Counties with more children were less likely to support Measure 111. One reason could be concern among families that guaranteeing a right to healthcare might reduce funding for education. Given Oregon's well-known struggles in K-12 education (Rider et al., 2022), this result suggests that families may have been cautious about shifting resources away from schools.

The share of the uninsured population is positive and statistically significant at the 10% level in earlier models but becomes insignificant in the final specification. This suggests that counties with more uninsured residents may be more inclined to support expanding healthcare access, consistent with self-interest voting, where individuals without coverage are more likely to back policies that directly benefit them. The African-American population share is also significant and positive in Model (3), and still positive (though not significant) in Model (5). This aligns with past research showing that racial disparities in access to care can lead to stronger support for healthcare reform.

In earlier models, the rural percent had a strong and negative effect, suggesting that rural counties were less supportive of the amendment. But in the final model, once political ideology is included, the coefficient turns positive, although it is not statistically significant. This reversal shows that rurality may be closely tied to partisanship. As Cahill and Ojeda (2021) explain, rural voting behavior is shaped more by identity and community values than by individual health needs. Once political ideology is accounted for, the unique effect of being rural becomes unclear.

Model (4) shows that political ideology, measured by the share of Democratic voters, on its own explains over 95% of the variation in support for Measure 111. In Model (5), where all variables are included, the Democratic vote share remains the strongest and most significant predictor. This confirms that partisanship plays a central role in shaping public opinion on healthcare policy. While some demographic and economic variables still contribute to explaining the vote, their effects are much smaller compared to political identity.

These results show that political ideology not only predicts support for the amendment but also helps explain the effects of other variables like income and rurality. This highlights how deeply political identity shapes public opinion on healthcare policy, especially when trade-offs with other public services, like education, are involved. However, I acknowledge that the analysis is limited by the small number of observations (36 counties), which may affect the precision of estimates and the generalizability of results.

## 4 Conclusion

Measure 111 passed by a very narrow margin, 50.73% voted yes, while 49.27% voted no, which shows how divided public opinion was on making healthcare a constitutional right. This close result fits with the median voter model, where just a small shift in preferences can decide the outcome. My findings suggest that political beliefs played a bigger role than income or local health needs in shaping support. This makes sense when we think about healthcare as a quasi-public good, it's not always fully available to everyone, and expanding access often means making trade-offs with other public services like education. Voters may support the idea

in theory but worry about the costs. These results show how important it is to understand both personal interests and political identity when it comes to passing major health policy changes.

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## 5 Appendix

To assess multicollinearity, I report both a Pearson correlation matrix and the Variance Inflation Factor (VIF) scores. While there is moderate correlation between some variables (e.g., rurality and percent Democrat), all VIF values are below 5, indicating acceptable multicollinearity levels and supporting the robustness of the OLS estimates.

Table III: Correlation Matrix of Independent Variables

	Median Income	Democrat	Unemployed	Female	Pop Un18	Uninsured	Black	Rural
Median Income	1.00	0.69	-0.03	0.23	0.19	-0.20	0.44	-0.55
Democrat	0.69	1.00	0.23	0.36	-0.13	-0.05	0.60	-0.72
Unemployed	-0.03	0.23	1.00	-0.12	-0.15	0.34	0.16	-0.32
Female	0.23	0.36	-0.12	1.00	-0.40	-0.26	0.06	-0.28
Pop Un18	0.19	-0.13	-0.15	-0.40	1.00	0.40	0.04	-0.06
Uninsured	-0.20	-0.05	0.34	-0.26	0.40	1.00	-0.02	0.02
Black	0.44	0.60	0.16	0.06	0.04	-0.02	1.00	-0.48
Rural	-0.55	-0.72	-0.32	-0.28	-0.06	0.02	-0.48	1.00



Table IV: Variance Inflation Factor (VIF) Values

Variable	VIF
Median Income	2.88
Democrat	4.48
Unemployed	1.66
Female	1.59
Pop Un18	2.38
Uninsured	1.87
Black	1.66
Rural	2.59