
(DRAFT, UNDER REVIEW)
Abstract (<150 words)

Abstract: Since the Supreme Court overturned the federal ACA Medicaid mandate, state governments are allowed to opt in or out of the Medicaid coverage expansion. This article first estimates the level of public support for the Medicaid expansion in each state, and, second, investigates the role of public support in explaining state decisions to adopt the expansion. Our findings suggest a significant positive relationship between the level of public support and the likelihood of state adoption; however, many states are incongruent with majority opinion in their state. In particular, controlling for many other economic and political factors, states are less likely to adopt the Medicaid expansion under Republican control and as the percent of the black population increases. This latter finding is particularly concerning given that Blacks are significantly more supportive of the Medicaid expansion than Whites. Our discussion highlights the democratic deficits at the state level around this coverage policy.

Key words: Health reform, state Medicaid expansion, public opinion, race.
Before the ink was dry from President Obama’s signing of The Patient Protection and Affordable Care Act (ACA) on March 23rd 2010, almost half the states rose up against the bill. The attorneys general from 20 states jointly filed a lawsuit in the Florida US District Court, and the Commonwealth of Virginia filed in a Virginia federal court, claiming the ACA unconstitutional. The media attention around these lawsuits primarily focused on the individual mandate, which the Supreme Court ultimately ruled constitutional; however, one of the four main legal challenges concerned the federally mandated Medicaid expansion. In a decision that surprised stakeholders across the political spectrum, the Supreme Court ruled against federal authority to mandate the Medicaid expansion, allowing states the option to expand coverage.\textsuperscript{1,2} While the proportional cost of the mandated expansion itself was not large for the states, the plaintiff’s claim and the Supreme Court ruling focused on the fact that states would lose all of their Medicaid funding if they did not adhere to the expansion. Essentially, the majority in the decision (7-2) ruled in favor of the states on the question of coercion and financial burden.\textsuperscript{3} Thus, the Court ruled that the federal government could allow states the option of expanding the Medicaid program with a federal financial inducement (thus upholding the expansion), but could not mandate state Medicaid expansions.

After the Supreme Court’s decision, twenty-five states (plus the District of Columbia) elected to expand the program during the first year of implementation, and six more states as of July, 2015.\textsuperscript{4,5} This means that, despite the passage of the ACA that intended to expand coverage to near universalism (undocumented immigrants were never included under the bill), over four million Americans remain uninsured.\textsuperscript{5} In the non-expansion states, over half of low income Americans who were uninsured in 2010 remain without access to affordable coverage.\textsuperscript{6,7} These
Americans fall in the so-called coverage gap: they are not poor enough to qualify for traditional Medicaid and yet do not earn enough to qualify for subsidies on the exchange.\textsuperscript{8}

Although it is difficult to argue that this distribution of subsidies is equitable, some might argue that states’ decisions are fair based on notions of democratic responsiveness. Indeed, underlying the Supreme Court’s majority arguments about the original federal ACA Medicaid mandate acting too coercively is the invocation of states’ rights and the fundamental belief that states should be able to exercise democratic accountability thereby responding to citizen desires. Yet, while Americans value the benefits of democratic responsiveness that a federalist structure helps attain, several studies confirm that welfare policies enacted and implemented at the state and local level are racially biased.\textsuperscript{9,10} Because we know that state discretion with regard to the Medicaid expansion has created greater inequality and given past studies suggesting racial bias, it is important to interrogate first, whether state decisions regarding the Medicaid expansion correspond to state-level public opinion, and, second, whether state adoption decisions are racially biased.

**Federalism, Policy Responsiveness, and Racial Bias**

The basic premise of representative democracy is that elected officials are responsive to public demands, but certain institutional structures of government—federal, parliamentarian, etc.—may be more capable than others in responding to citizen desires.\textsuperscript{11} A central argument underlying considerations of the relationship between federalism and representation is that states (or smaller governmental units) can improve representation because they are more responsive to local preferences.\textsuperscript{12–15} This argument largely rests on the logic of size and proximity; that is, because sub-national governments are smaller and closer to the people, citizens are better able to
understand and relate to issues at the local level, are therefore more engaged in local issues, and can pressure local officials to respond to their demands.16–18

Yet, despite a wealth of theoretical work reflecting this positive view between federalism and responsiveness, there is a vast body of critical work on the failings of democratic systems to represent citizen desires.11,19,20 Studies of representation under the US political system reflect a biased toward upper income and more highly educated individuals, which leads to systematic under-representation of the poor.20–23 First, of the organizations in Washington DC that attempt to influence political matters, less than one percent claim to represent the poor, and those who advocate on behalf of marginalized groups tend to privilege the voices of their more affluent members.23–25 Second, it is difficult for groups representing the poor to credibly claim that their constituency will deliver on Election Day since persons with relatively low incomes and less education are significantly less likely to vote in any election—whether federal, state or local.26 The fact that a sizable proportion of the poor do not vote is a concern given that their policy preferences are significantly different from those of more affluent people who are more likely to vote.27

Studies that consider state-level responsiveness are somewhat more mixed on whether state policies are more likely to reflect citizen desires. On the one hand, several studies analyzing the American states report a positive relationship between public preferences and policy outcomes.15,28 Erickson, Wright, and McIver’s29 seminal study, Statehouse Democracy, demonstrates a clear correlation between voter ideology and aggregate state policy. Based on this finding, they argue that state governments are responsive because liberal states have more liberal policies, and conservative states have more conservative policies.
One concern with Erickson, Wright, and McIver’s study, however, is that they are only able to demonstrate responsiveness in the aggregate, whereas one could imagine that any governmental unit might be more or less responsive depending on the particular policy under consideration. Lax and Phillips address this concern by estimating state-level support for 39 policies across eight issue areas. They find that policy is highly responsive to policy-specific opinion, but also find evidence of a “democratic deficit” such that policy is congruent with majority will only half the time. Indeed, analyzing policy congruence is an important conceptual advance to understanding responsiveness of political decisions. Rather than simply look at whether there is a positive association between public opinion and policy outcome, it is important to also consider whether a policy is responsive (a positive relationship) to public opinion but incongruent with majority will. And, when policies are incongruent with majority will, what other factors drive policy adoption?

In general, past research points to important political and economic factors, such as gubernatorial and legislative party control and state per capita income, as having important effects on policy decisions. However, even controlling for these factors, the role of race in the American states has been important. The influence of race on American politics has been explored from many fields of social science. While overt racial prejudice has drastically diminished in the post-civil rights era, more subtle discriminatory social phenomena prevail with updated labels, such as new racism, symbolic racism, modern racism, subtle racism, and racial resentment. These studies suggest that new racial frames continue to portray racial minorities as “demanding,” and “undeserving” individuals with a “lack of work ethic and responsibility,” especially in association with social welfare programs. In particular, because the media since the 1970s have persistently and disproportionally portrayed African Americans in stories about
poverty and crime, Blacks have become the stereotypical face of welfare and crime policy among the American public.\textsuperscript{39} As such, several studies show that attitudes toward Blacks became a key predictor of White Americans’ social policy preferences and voting behavior at the national level.\textsuperscript{35,40,41} And, we find racial effects on social welfare policy development among the American states as well. For example, as the percent of African Americans among the total state population increases, states are less generous in the provision of social benefits and more likely to enact punitive policies, which punish behavior.\textsuperscript{9,34,42} Moreover, several studies find evidence of racial bias in decisions related to various facets of welfare assessment.\textsuperscript{43}

Hispanics have also been subject to racial bias in welfare policy development.\textsuperscript{44} Particularly due to politicized concerns about illegal immigration and misperceptions about welfare dependency among immigrant families, the presence of a large Hispanic population tends to be associated with lower welfare program benefits and restrictive eligibility criteria for welfare programs, such as Temporary Assistance for Needy Families.\textsuperscript{10,45,46}

**Medicaid, Public Opinion, and Race**

At the national level, public support for Medicaid has always been high. In 1972, when asked whether spending for Medicaid should be increased, decreased, or stay the same, 53\% of Americans supported an increase in spending, 35\% said stay the same, with less than 10\% favoring a decrease.\textsuperscript{47} During the Medicaid expansionary period in the 1980s, support for expanding Medicaid spending increased every year—by the late 1980s more than 60\% of Americans supported *increasing* Medicaid spending.\textsuperscript{48–51} Even during the extremely fiscally distressed period between 2008 and 2011, the vast majority of Americans (75\%) either supported an increase or maintaining Medicaid funding.\textsuperscript{52,53} And, when asked whether Medicaid should be
cut to reduce the federal deficit, a surprisingly high number (54%) were strongly opposed to this idea.\textsuperscript{54}

Underneath this overall popularity, however, is a prolonged difference in support to expand the Medicaid program among Blacks and Whites, and this gap is growing. Tesler\textsuperscript{55} shows that when asked about expanding Medicaid across four nationally representative surveys in the 1993 and 1994, 69% of Blacks and 43% of Whites supported expansion on average, whereas this division grew to 83% of Blacks and 38% of Whites in 2009 and 2010. This increase in the gap is correlated with an increased race-based antipathy and resentment of White voters. Tesler, also finds that support for the Medicaid expansion is viewed as a component of the ACA and strongly associated with President Obama, and, as a result, the expansion policy itself has become racialized.\textsuperscript{55}

Given the racial associations with the ACA at the national level, it is important to understand how state-level public opinion impacts state adoption decisions concerning the Medicaid expansion, and whether state-level public opinion has a racial bias. Most previous studies of Medicaid decision-making have conceptualized voter demand for Medicaid expansions at the state level as relatively weak, because it is a means-tested targeted program where the recipients are more vulnerable and therefore garner less political influence and clout.\textsuperscript{56} However, we know little about how public support (among all state residents) for the program varies across the fifty states and whether state decisions regarding Medicaid are responsive to public opinion. Employing a relatively recent methodological technique—Multilevel Regression and Post-stratification—we are able to study the role of state-level public opinion on state Medicaid policy.
To understand whether states are responsive to public opinion, two conceptual measures are used: one called “policy responsiveness” and the other “congruency”. To judge policy responsiveness we examine whether there is a positive relationship between public opinion and state adoption of the Medicaid expansion; that is, as public support for the Medicaid expansion increases are states more likely, on average, to adoption the expansion? To determine whether a state is congruent with public opinion we examine whether state adoption is consistent with majority opinion. The congruency measure gives us a sense of the tipping point. For example, especially under highly salient, controversial issues, such as gay rights policies, states have been shown to be responsive to public opinion (a positive relationship), but incongruent with simple majority will where ideology and partisanship pull policy adoption toward higher levels of support often requiring supermajorities before a state will adopt. Because the Medicaid expansion decision is also highly salient and ideologically charged, we may similarly find policy responsiveness but incongruence. Moreover, given the racial bias associated with the ACA, we may also find that state adoption is related to racial differences in support for the Medicaid expansion combined with the proportion of African Americans in the state.

Methods

To examine whether state Medicaid expansion decisions are responsive and congruent, we first estimate state-level public opinion, and then conduct logistical regression analysis on a dichotomous response variable. Data for the dependent variable comes from Kaiser Family Foundation’s summary of state Medicaid expansion decisions as of October 2013 when they
defined states as either “moving forward” or “not moving forward.” At that time, the decision to expand was exactly half: 25 states adopting and 25 states not adopting the Medicaid expansion.*

**Public support.** To estimate state-level public opinion, we used four national-level survey datasets from the Kaiser Family Foundation’s monthly tracking poll, which asked “As you may know, the health care law expands Medicaid to provide health insurance to more low-income uninsured adults. The federal government will initially pay the entire cost of this expansion, and after several years, states will pay 10% and the federal government will pay 90%. The Supreme Court ruled that states might choose whether or not to participate in this expansion. What do you think your state should do? Do you think your state should keep Medicaid as it is today or expand Medicaid to cover more low income uninsured people?” The question was asked four times over 10 months (July 2012†, January 2013, March 2013, and April 2013), allowing us to pool the data for a sample size of 4,516 across all four datasets.

**Multilevel Regression and Post-stratification.** Because it is cost-prohibitive to conduct state-level public opinion surveys, they are rarely if ever done. To our knowledge, there have been no state-level public opinion surveys across all fifty states on questions pertaining to Medicaid policy. As a result, the most commonly used method for estimating state-level opinion has been disaggregation, which requires a large set of national polls to disaggregate the opinion

---

* Although we could use more recent data on state decisions (three additional states have now expanded), we continue to use the 2013 data because the timing of our public opinion data (discussed below) corresponds more closely to the 2013 decisions.

† July 2012 survey wording was slightly different: “As you may know, the health care law expands Medicaid to provide health insurance to more low-income uninsured adults, including adults with no children whose incomes are below about $16,000 a year. The federal government will initially pay the entire cost of this expansion, and after several years, states will pay 10% and the federal government will pay 90%. The Supreme Court ruled that states may choose whether or not to participate in this expansion. What do you think your state should do? (Keep Medicaid as it is today, with no new funding from the federal government and no change in who will be covered by the program or expand Medicaid to cover more low-income uninsured people, with the federal government initially paying the entire cost of the expansion and your state eventually paying 10%?”
percentages by state. Yet, even with large samples, the disproportionate sample distributions of those surveys have proven to be problematic for accurate state-level estimation. Due to these limitations, an alternative method, Multilevel Regression and Post-stratification (MRP), has been developed and provides more accurate state-level opinion estimates with smaller errors and higher correlations, particularly when national samples are smaller.

The MRP method requires two main stages: (1) Estimating demographic subgroup responses through utilization of a multilevel model (Multilevel-Regression-part) using individual and state-level information; and (2) weighting individual responses by the actual state population for each respondent type (Post-stratification-part). To estimate Medicaid expansion opinions for different demographic groups, we generate subgroups by combining four main individual characteristics for each state: race (White, Black, Hispanic and others), gender (male, female), age (18-29, 30-49, 50-64, over 65), and education (less than high school, high school graduate, some college, college graduate or more). In total, 96 subgroups are generated for each state. For example, one subgroup consists of individuals who have less than high school-level of education, are 18-29 years old, White and male, and another subgroup consists of individuals who have more than college-level education, are over 65 years of age, Hispanic or other ethnic background, and female. The aggregated 4,516 survey respondents from four surveys were assigned to those subgroups accordingly.

The probabilities of supporting Medicaid expansion for 96 demographic subgroups are estimated (see Equations 1 through 9 in Appendix A). In addition to respondents’ opinion on Medicaid expansion, individual demographic attributes and their state-level information are used, such as states’ per capita income, percentage Democratic presidential vote share (averaged over three elections in 2000, 2004, and 2008), and geographical information (East, Midwest, South,
West). At the end of the first stage, we estimated the probability of supporting the Medicaid expansion for 4,800 subgroups across 50 states.

In the second stage, the estimated subgroup level of support ($\theta_c$) is weighted according to the proportion of each subgroup’s actual population in each state ($N_c$), (see Equation 10 in Appendix A).\textsuperscript{58} To calculate the population count for each subgroup, we used the Census Bureau’s “1-percent Public Use Microdata Sample,” which provides demographic information for each state’s voting age population in 2000.\textsuperscript{‡} This two-step approach produces the estimated percentage of voting residents who take a particular position—in this case, a public support level on Medicaid expansion for all 50 states.

**Modeling state Medicaid expansion adoption.** As discussed above, in addition to public opinion and race, several other variables have been found to be important predictors in models of state Medicaid policy (and welfare policy more generally) including political party control, state income, the cost of the welfare program, and interest group strength. The measurements for the other variables in the model are fairly straightforward and well established in the literature. Therefore, with the exception of interest group strength, measurement details are provided in Appendix B, and descriptive statistics in Table 1.

**Interest group pressure.** In addition to public opinion, political demands for the Medicaid expansion also come from provider groups who have consistently advocated for Medicaid benefit and reimbursement expansions because Medicaid payments go directly to provider groups, not to reimburse enrollees. Safety-net providers, including public and non-profit hospitals and community health centers, provide the bulk of care to Medicaid recipients. Although Medicaid provider payments are notoriously low relative to rates paid by private

\textsuperscript{‡} We had to use 2000 because the 2010 1-percent Public Use Microdata Sample is not publically available yet.
insurance companies, many public and community non-profit hospitals and primary care safety-net providers have a cost structure that Medicaid funds are not only desirable but create financial sustainability.\textsuperscript{59,60} Given this, safety-net providers have a vested interest in state Medicaid policy and often play an active role in state-level Medicaid policy decisions.\textsuperscript{56,61–63}

\textit{Measuring the strength of safety-net interest groups.} Unfortunately, there is very limited data on interest group strength at the state-level, especially for this particular nuanced sector of health care interests. Although Gray, Lowery, and Benz\textsuperscript{64} conducted a groundbreaking multi-year study of state-level health interest groups, it does not separate out the safety-net institutions. This is important because even though hospitals, nursing and residential care facilities provide significant levels of care to Medicaid recipients, their interests vary according to ownership type. Moreover, Gray et al.’s study is based on data from the 1990s, and attempts to updating their earlier estimations would be inaccurate due to limited state disclosure and tracking requirements for lobbyists.\textsuperscript{64}

Thus, given these limitations, we attempt to capture safety-net interest groups’ influences on the Medicaid expansion decision by measuring the size of the safety-net providers in each state as a proxy. For community health centers, we use the total number of patients served in 2011 divided by total state population in 2011.\textsuperscript{65}\textsuperscript{§} On average, the community health centers provided services for 7% of the state population, ranging from 2% in Nevada to 21% in West Virginia (see Table 1).

Another measurement which attempts to capture the size of a state’s safety-net is the amounts of payments that care providers receive for providing a disproportionate share of their

\textsuperscript{§} Because Nevada’s total number of patients served in 2011 data was not available from the National Association of Community Health Center, we used the latest available—2006 data—as a proxy, and divided by Nevada’s 2006 total population.
care to Medicaid and Medicare recipients (acroynistically called ‘DSH payments’). Presumably, if states have high DSH payments relative to their population size, one would think that hospitals in the state would have a very strong interest in advocating for the Medicaid expansion since under the ACA provisions when Medicaid expansion coverage began in 2014 the federal government would end DSH payments. Clearly, safety-net hospitals in states without a Medicaid expansion are much worse off since they will continue to take care of the uninsured (those who fall in the Medicaid gap in coverage) and at the same time lose their DSH payments. In 2011, the average DSH payment per capita was $80 dollars, and ranged from about $4 dollars in Wyoming to almost $500 dollars in Tennessee (see Table 1).

Findings

Public Support Across the American States

Especially in comparison to opinions about the ACA more broadly, public support for the Medicaid expansion is fairly strong. According to a separate nationally representative survey conducted in 2013, while only 32% of Americans had a favorable view of the ACA, over half supported the Medicaid expansion (55%). While public support for the Medicaid expansion varies across the American states, most states are clustered fairly close to the 50% mark indicating that the public is equally divided in many states (see Figure 1). For example, the average across all the states is 51% in favor of the expansion (sd=5.27), and 33 states have support levels between 45-55%. Even the maximum and minimum do not suggest extreme levels of support or opposition: the highest public support is 65% in Hawaii and the lowest is 42% in Idaho.

[Figure 1 about here]
In addition to geographic variation in support for the Medicaid expansion, support levels also vary by race. The racial differences found in national public opinion surveys—over 82% of Blacks and over 65% of Hispanics support the Medicaid expansion, compared to only 46% of Whites—holds at the state-level as well. When employing the post-stratification methodology to estimate state-level support for the Medicaid Expansion, race is the key predictive factor where (as we discuss in more detail below) Blacks and nonwhite Hispanics have significantly higher levels of support compared to Whites.

**Policy Responsiveness**

As predicted, the likelihood of a state adopting the Medicaid expansion is positively related to the level of public support in the state. This relationship appears to be fairly robust since across various model specifications its significance is maintained, though, not surprisingly, its significance is reduced as more variables are added to the model (see Table 2). The other consistently significant predictors of state adoption are political party control and the size of the Black population (measured as proportion Black) in the state. As expected, Democratic party control (including governorship and state legislature) is positively associated with adoption, while proportion Black is negatively associated with adoption. One obvious concern is that because the population of African Americans is much higher in the Southern states and the vast majority of the Southern states have not adopted the Medicaid expansion, the race variable is spurious to other un-measurable factors in southern states. In this case, we would inappropriately attribute race to predicting expansion. To test for this concern, we included regional dummy variables to capture other un-measurable state-level factors. While the significance level decreases—meaning that we have slightly less confidence that the odds-ratio is correct (a .06 confidence level)—the odds-ratio actually becomes more negative meaning that the odds of a
state adopting the Medicaid expansion in a state with a high proportion of Blacks is significantly lower (OR=.49) compared to a state with a low proportion of Blacks all else equal.

[Table 2 about here]

**Congruency and the Tipping Point**

As discussed above, when considering democratic accountability it is important to analyze whether policy adoption is congruent with popular will alongside policy responsiveness. Using a simple majority (51% in favor) as a cutoff point, we find that 33 states are congruent where 15 adopted the Medicaid expansion with majority support and 18 states did not adopt and have support levels below 51% (see Figure 2). However, 17 states are incongruent with majority support where 10 states adopted the Medicaid expansion under minority support and 7 states did not adopt despite majority public support. If we extend the cutoffs one standard deviation (5%) to account for estimation error, the thresholds extend to 46% and 56%, and now only four states remained incongruent with public support. In particular, three states (KY, ND, WV) expanded Medicaid despite less than 46% of the public supporting the decision, while Mississippi did not expand despite more than 56% of residents supporting expansion.

[Figure 2 about here]

Another way to think about the level of congruency is to consider the extent to which other influences in the state pull policymakers away from direct democratic accountability. In this case, as illustrated in the logistic regression results, party control and the proportion of the Black population are key factors. To illustrate this incongruence, we show the difference in the predicted probability of adoption due to public support between column one (simple model with only public support) and column 8 (the full model) which adjusts for all other factors (see Figure...
3). One can observe that once all other factors are taken into account, the probability of adoption is quite low in several states despite relatively high levels of public support.

[Figure 3 about here]

To better understand the impact of race on state adoption, we re-estimate state-level public support by each racial group. For this analysis, we repeat the earlier MRP process for each racial group allowing us to estimate the level of support for Whites, Blacks and Hispanics. We then plot this by state Medicaid adoption decisions, which show the predicted level of support needed for a state to adopt the Medicaid expansion (see Figure 4).**

[Figure 4 about here]

The point where the curve crosses the middle of the y-axis illustrates the average level of public support needed to adopt the policy, or the so-called “tipping point.” The far left curve in figure 4 shows the predicted state-level public support using only White respondents (n=3,314) from the sample. When we add Hispanic and other race respondents (n=738) to the White-only group, the tipping point shifts significantly to the right to 51%. And, when we add Blacks (n=464) (i.e. including all racial groups), the required state-level support for the expansion significantly moves to the right to about 54%.††

Discussion

** Note, since the samples were segmented by race, the estimates exclude $\alpha_j^{race}$ and $\alpha_{jk}^{race+gender}$ components from Equation 1.

†† Although MRP is a superior method estimating state-level public opinions with mid to small nationally representative samples, roughly 1,000 responses are needed to perform with little validity issues.(30) Unfortunately, the numbers of racial minority respondents were not large enough to perform MRP for each group. As an alternative, we decided to show relative changes to the graphs by adding minority groups to the sample of white respondents, large enough to perform MRP individually.
Our findings document that state-level public support is positively associated with state adoption of the Medicaid expansion, and the majority of states (33) act in congruence with the state’s majority will. However, our findings also demonstrate incongruence where party control and the size of the Black population pulls policymakers away from direct democratic accountability on this particular issue.

Our finding of the importance of party control is not a surprise, especially in light of the highly politicized nature of the ACA. It is also consistent with other policy studies. According to an analysis of 39 policies across eight issue areas conducted by Lax and Phillips, party control was one the main significantly predictive factors explaining policy incongruence. Race has also been found to be a predictive factor in other studies looking specifically at social welfare policies targeted at the poor. What our study adds to this consistent finding is revealing its connection to radicalized public opinion. In particular, because race is the most predictive factor in estimating state-level public support, where Blacks are much more likely to support the Medicaid expansion compared to Whites, the higher tipping points for states with a higher proportion of Blacks means that Black voices are being systematically ignored.

This race finding raises important questions about the protection of minority rights and whether the denial of access to public health insurance benefits in states that rejected the Medicaid expansion is democratically just. When the ACA was passed in 2010, it was supposed to be a national health care reform in which coverage policies would be consistently implemented across all 50 states. Obviously, the Supreme Court decision on the ACA Medicaid expansion changed that intent. But, the arguments used by the Supreme Court were based on assumptions that states would act in democratically accountable ways, especially in relation to
the Court’s majority claim of “federal coercion.” This study raises questions about to whom states are democratically accountable.
Appendix A: Multilevel Regression and Post-stratification equations for estimating public opinions on Medicaid expansion

\[
\Pr(y_i = 1) = \logit^{-1}(\beta^0 + \alpha^{race}_{j[i]} + \alpha^{gender}_{k[i]} + \alpha^{race,gender}_{j[i],k[i]} + \alpha^{age}_{l[i]} + \alpha^{educ}_{m[i]} + \\
\alpha^{age,educ}_{l[i],m[i]} + \alpha^{state}_{n[i]})
\]  
(1)

\[
\alpha^{race}_{j} \sim N(0, \sigma^{race}_{j}), \text{for } j = 1,2,3
\]  
(2)

\[
\alpha^{gender}_{k} \sim N(0, \sigma^{gender}_{k}), \text{for } k = 1,2
\]  
(3)

\[
\alpha^{race,gender}_{j,k} \sim N(0, \sigma^{race,gender}_{j,k}), \text{for } j = 1,2,3 \text{ and } k = 1,2
\]  
(4)

\[
\alpha^{age}_{l} \sim N(0, \sigma^{age}_{l}), \text{for } l = 1, \ldots, 4
\]  
(5)

\[
\alpha^{educ}_{m} \sim N(0, \sigma^{educ}_{m}), \text{for } m = 1, \ldots, 4
\]  
(6)

\[
\alpha^{age,educ}_{l,m} \sim N(0, \sigma^{age,educ}_{l,m}), \text{for } l = 1, \ldots, 4 \text{ and } m = 1, \ldots, 4
\]  
(7)

\[
\alpha^{state}_{n} \sim N\left(\alpha^{region}_{o[n]}, \beta^{medincome} * \text{medincome}_n + \beta^{presvote} * \text{presvote}_n, \sigma^{state}_n\right), \text{for } n = 1, \ldots, 50
\]  
(8)

\[
\alpha^{region}_{o} \sim N(0, \sigma^{region})_o, \text{for } o = 1, \ldots, 4
\]  
(9)

\[
y^{MHP}_{state n} = \frac{\sum_c n_c \theta_{c}}{\sum_c n_{c}}
\]
(10)
Appendix B: Variable Measurement

**Democrat party control.** Utilizing a common measure of state political party control, we use the combination of two variables: the percentage of state Democrat legislators across the two chambers and the state governor’s party affiliation. The data were drawn from the National Conference of State Legislatures and National Governors Association, respectively. Democratic governors were coded as 1 and Republican governors were coded as 0, then the percentage of Democrat legislator was added. Nebraska, a nonpartisan state, is coded as zero. The average of this variable is 0.86 (sd=0.63).

**State per capita income.** As a proxy of state median income, we used the American Community Survey’s state-level 3-year (2009-2011) average per capita income estimate. The US average per capita income was $26,729 (sd=3,875) and ranges from $19,889 in Mississippi to $36,613 in Connecticut.

**State’s cost for Medicaid expansion.** To measure the states’ expected additional expenses for adopting the ACA Medicaid expansion, we used the Urban Institute’s estimate. The incremental impact of the Medicaid expansion was estimated and we used the change in the percent share of the state’s expenditure. Delaware showed the highest expected saving (-11.0%) thru Medicaid expansion while Mississippi showed the lowest saving (6.6%), which means Mississippi was estimated to spend 6.6% additional expenditure under ACA with Medicaid expansion. The average incremental cost change was 1.5% (sd=3.96).

**Proportion of racial minority population.** The American Community Survey’s estimate on the state population in 2012 was used to measure the proportion of Black and Hispanic populations of the states. Not surprisingly, there are huge variations in the percent of Blacks and Hispanic across the American states. On average, across the states, Blacks made up 10.1% of the population (sd=9.51). Mississippi showed the highest Black population proportion (37.5%), while Montana had only 0.4%. Hispanic accounted about 11% of state populations in 2012, ranging from 47.0% in New Mexico to 1.3% in West Virginia.
Figure 1. Estimated State-level Public Support on Medicaid Expansion
Figure 2. Medicaid Expansion Decisions and Congruence with Public Opinion

Note: State decisions are congruent if States decided to expand Medicaid when the public opinion was greater than 51% or States decided not to expand Medicaid when the public opinion was equal or less than 51%.
Figure 3. Difference in probabilities of adopting Medicaid expansion between the public opinion model (Column 1) and the full model (Column 8)
Figure 4. Plot of State Level Public Support by State Adoption of Medicaid Expansion by Racial Group

<table>
<thead>
<tr>
<th>Included Racial Groups</th>
<th>Avg. Support (%)</th>
<th>Std. Err.</th>
<th>Std. Dev.</th>
<th>95% C.I.</th>
</tr>
</thead>
<tbody>
<tr>
<td>White Only</td>
<td>44.8*</td>
<td>0.61</td>
<td>4.36</td>
<td>44.58 – 46.06</td>
</tr>
<tr>
<td>Add Hispanic &amp; Other</td>
<td>50.7*</td>
<td>0.65</td>
<td>4.59</td>
<td>49.34 – 51.95</td>
</tr>
<tr>
<td>All racial groups</td>
<td>54.1*</td>
<td>0.59</td>
<td>4.14</td>
<td>52.92 – 55.28</td>
</tr>
</tbody>
</table>

Note: *All curves’ average support levels are significantly different from each other at .05 levels.
Table 1. Descriptive Statistics

<table>
<thead>
<tr>
<th>Category</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>States adopting the Medicaid expansion</td>
<td>0.50</td>
<td>0.51</td>
<td>0 – 1</td>
</tr>
<tr>
<td>Public Support (%)</td>
<td>50.63</td>
<td>5.27</td>
<td>41.91– 65.09</td>
</tr>
<tr>
<td>Democrat party control</td>
<td>0.86</td>
<td>0.63</td>
<td>0.00 – 1.89</td>
</tr>
<tr>
<td>Per capita income ($k)</td>
<td>26.73</td>
<td>3.88</td>
<td>19.89 – 36.61</td>
</tr>
<tr>
<td>State’s incremental cost for Medicaid expansion (%)</td>
<td>1.53</td>
<td>3.96</td>
<td>-10.98 – 6.59</td>
</tr>
<tr>
<td>Safety-Net Interest Groups:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHC clients per state population (%)</td>
<td>7.13</td>
<td>3.91</td>
<td>2.23 – 20.47</td>
</tr>
<tr>
<td>DSH payment per state population ($)</td>
<td>80.00</td>
<td>79.63</td>
<td>3.99 – 477.02</td>
</tr>
<tr>
<td>Proportion of Racial Minority Population</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black (%)</td>
<td>10.14</td>
<td>9.51</td>
<td>0.35 – 37.49</td>
</tr>
<tr>
<td>Hispanic (%)</td>
<td>10.99</td>
<td>10.13</td>
<td>1.28 – 46.98</td>
</tr>
</tbody>
</table>
Table 2. Odds Ratios and Standard Errors for Logistic Regression on States’ Medicaid Expansion Decision

<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
<th>(6)</th>
<th>(7)</th>
<th>(8)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Support (%)</td>
<td>1.19*</td>
<td>1.11</td>
<td>1.10</td>
<td>1.32**</td>
<td>1.16*</td>
<td>1.61**</td>
<td>2.15^</td>
<td>4.22^</td>
</tr>
<tr>
<td></td>
<td>(0.08)</td>
<td>(0.10)</td>
<td>(0.11)</td>
<td>(0.12)</td>
<td>(0.08)</td>
<td>(0.23)</td>
<td>(0.86)</td>
<td>(3.12)</td>
</tr>
<tr>
<td>Democrat party control</td>
<td>12.47***</td>
<td>11.02**</td>
<td>10.03*</td>
<td>12.68*</td>
<td>10.03*</td>
<td>12.68*</td>
<td>10.03*</td>
<td>12.68*</td>
</tr>
<tr>
<td></td>
<td>(8.97)</td>
<td>(8.29)</td>
<td>(9.46)</td>
<td>(15.09)</td>
<td>(9.46)</td>
<td>(15.09)</td>
<td>(9.46)</td>
<td>(15.09)</td>
</tr>
<tr>
<td>Per capita income ($k)</td>
<td>12.47***</td>
<td>11.02**</td>
<td>10.03*</td>
<td>12.68*</td>
<td>10.03*</td>
<td>12.68*</td>
<td>10.03*</td>
<td>12.68*</td>
</tr>
<tr>
<td></td>
<td>(8.97)</td>
<td>(8.29)</td>
<td>(9.46)</td>
<td>(15.09)</td>
<td>(9.46)</td>
<td>(15.09)</td>
<td>(9.46)</td>
<td>(15.09)</td>
</tr>
<tr>
<td>State’s incremental cost for Medicaid expansion (%)</td>
<td>0.85</td>
<td>1.05</td>
<td>1.23</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.15)</td>
<td>(0.19)</td>
<td>(0.27)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Region (Base: South)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>East</td>
<td>3.83</td>
<td>0.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(3.82)</td>
<td>(0.13)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Midwest</td>
<td>9.97*</td>
<td>1.75</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(10.53)</td>
<td>(3.21)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>West</td>
<td>11.93*</td>
<td>0.16</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(12.69)</td>
<td>(0.36)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Safety-Net Interest Groups:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHC clients per state population (%)</td>
<td>1.15</td>
<td>0.83</td>
<td>0.86</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.10)</td>
<td>(0.13)</td>
<td>(0.18)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DSH payment per state population ($)</td>
<td>0.99</td>
<td>0.99</td>
<td>0.99</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.00)</td>
<td>(0.01)</td>
<td>(0.01)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proportion of Racial Minority Population</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black (%)</td>
<td>0.81**</td>
<td>0.70*</td>
<td>0.49^</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.06)</td>
<td>(0.12)</td>
<td>(0.18)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hispanic (%)</td>
<td>1.00</td>
<td>0.98</td>
<td>0.96</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.04)</td>
<td>(0.06)</td>
<td>(0.08)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of states</td>
<td>50</td>
<td>50</td>
<td>50</td>
<td>50</td>
<td>50</td>
<td>50</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>LR chi²</td>
<td>8.00**</td>
<td>24.89***</td>
<td>26.15***</td>
<td>16.14**</td>
<td>12.02**</td>
<td>24.61***</td>
<td>35.79***</td>
<td>43.46***</td>
</tr>
<tr>
<td>R²</td>
<td>0.115</td>
<td>0.359</td>
<td>0.377</td>
<td>0.233</td>
<td>0.173</td>
<td>0.355</td>
<td>0.516</td>
<td>0.627</td>
</tr>
</tbody>
</table>

***p<0.001, **p<0.01, *p<0.05, ^p<0.06
References


52. The Public’s Health Care Agenda for the 113th Congress [Internet]. 2013. Available from: http://www.ropercenter.uconn.edu


60. Wynn B, Coughlin T, Bondarenko S, Bruen B. Analysis of the Joint Distribution of Disproportionate Share Hospital Payments: A Policy Framework for Targeting Financially


