Who Benefits from Medicaid Expansion?
Black and White Household Spending Across Medicaid Eligibility Status

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This paper examines the impact of Medicaid eligibility on the financial wellbeing of black and white households. Drawing on research on racial stratification in the United States, I propose that expanded Medicaid coverage (where the eligibility threshold is set at 138% or more of the federal poverty line) is likely to disproportionately benefit low-income black households. Using the 2009 to 2014 Consumer Expenditure Surveys, I implement hierarchical linear models estimating the impact of Medicaid eligibility on households’ healthcare-related expenditures, on non-medical expenditures, on financial and non-financial investments, and on inter-household cash transfers. Results indicate that access to Medicaid allows low-income black households to reduce their healthcare-related expenditures, and to increase their investment outlays. Analyses also reveal indirect effects of Medicaid eligibility on higher-income black households. Higher-income black households living in Medicaid-expanded states make fewer inter-household cash transfers than similar households in states with low Medicaid eligibility thresholds. Estimated effects for white households, by contrast, are substantively small and indicate little to no effect of Medicaid on spending, investment, or cash transfer levels.
The cost of medical care in the United States has increased dramatically over the past decades (Banthin, Cunningham and Bernard 2008; Cunningham 2015). As a result, an increasing number of individuals are experiencing healthcare-related financial problems. Between 2010 and 2012, for instance, almost a quarter of non-elderly U.S. adults reported difficulties paying their medical bills (Richman and Brodie 2014). Low-income households are particularly at risk of experiencing care-related financial difficulties (Richman and Brodie 2014). These rising healthcare financial burdens can force households to forgo needed treatment (Briesacher, Gurwitz and Soumerai 2007), can make it difficult for households to afford essential goods and services (Gellad, Haas and Safran 2007; Madden et al. 2008), and may even lead to bankruptcy (Cook, Dranove and Sfekas 2010; Gross and Notowidigdo 2011). Importantly, the financial consequences of healthcare are likely not limited to actual care-seekers. When faced with financial hardships, individuals often rely on their kin network for help (Shapiro 2004; Stack 1975). These “linked lives” (Elder 1995) mean that the financial consequences of obtaining care likely spread from low-income care-seekers to their better-off relatives.

In this paper, I examine the role of Medicaid coverage in minimizing the financial consequences of healthcare costs for low-income households and their better-off relatives. Specifically, I examine the extent to which Medicaid coverage allows households to avoid having to cut back on consumption and investments as a strategy for offsetting medical costs (Berkowitz, Seligman and Choudhry 2014). Because the impact of Medicaid coverage on financial wellbeing likely varies across social location, I compare Medicaid effects for black and white households. Relative to whites, blacks have lower wealth levels (Oliver and Shapiro 2006) and more difficult access to credit (Charles, Hurst and Stephens 2008; Cohen-Cole 2011). As a result, black households must likely disproportionately rely on spending cuts as a means to cope with medical costs. Compared with whites, the financial consequences of helping poorer relatives are also likely greater for middle class black households, in part because of lower asset levels and in part because they tend to have poorer kin networks (Heflin and Pattillo 2006; O'Brien 2012; Shapiro 2004). For these reasons, I argue that expanded Medicaid coverage likely has a greater impact on spending patterns for black households relative to white households.

To estimate the effect of Medicaid coverage on households’ consumption and investment patterns, I rely on state-level variation in Medicaid eligibility for families with income between 100% and 138% of the federal poverty line (FPL). Using hierarchical linear regression models, I
estimate the effect of Medicaid eligibility at the state-level on healthcare spending, non-healthcare spending, financial investments, and inter-household cash transfer patterns for black and white households in two income categories (100% to 138% FPL, and over 138% FPL). Results from these models suggest that for low-income black households, obtaining health insurance coverage through Medicaid leads to lower out-of-pocket spending on health insurance, which allows greater levels of financial investments. For higher-income black households, having low-income relatives obtain Medicaid coverage allows a reduction in the amount of resources shared via cash transfers and paying for poorer relatives’ healthcare costs. By contrast, the impact of expanded Medicaid eligibility on low-income and higher income white households appears to be relatively limited.

BACKGROUND

Healthcare cost in the United States have increased substantially in recent years (Auerbach and Kellermann 2011; Banthin, Cunningham and Bernard 2008; Cunningham 2015). Low-income and uninsured individuals have been particularly affected by these trends, such that both groups report greater than average difficulties paying their medical bills (Richman and Brodie 2014). The consequences on these rising costs on individuals’ wellbeing can be dramatic. Research on cost-related treatment non-adherence, for instance, finds that almost a quarter of the Medicare population reports not being able to obtain prescribed medication because of cost barriers (Briesacher, Gurwitz and Soumerai 2007). For low-income individuals, the risk of having to forgo treatment and medication because of high healthcare costs are even greater (Gellad, Haas and Safran 2007; Weinick, Byron and Bierman 2005).

Forgoing care, however, is not the only means of coping with increased healthcare costs. Households adopt a wide variety of strategies, including taking on debt, drawing on accumulated savings, and cutting back on non-medical expenditures. For instance, medical costs have been found to play a significant role in consumer bankruptcy, especially for uninsured individuals (Cook, Dranove and Sfekas 2010; Dranove and Millenson 2006; Gross and Notowidigdo 2011; Himmelstein et al. 2009). Several studies also present some evidence that individuals reduce spending on certain essentials in order to offset medication and treatment costs (Gellad, Haas and Safran 2007; Madden et al. 2008; Nekhlyudov et al. 2011).
To examine the impact of rising medical costs on individuals’ ability to acquire non-medical goods and services, I propose to examine the impact of health insurance coverage via Medicaid on patterns of expenditure and outlays for households living near the poverty line. Affordable health insurance is an important tool for minimizing the negative financial consequences of healthcare seeking (Galbraith et al. 2005). The 2010 Patient Protection and Affordable Care Act (ACA) has aimed to increase access to health insurance for near poor individuals by encouraging states to raise their Medicaid eligibility thresholds to 138% of the Federal Poverty Line (FPL). While initially planned as mandatory, a 2012 Supreme Court decision allowed states to opt-out of Medicaid eligibility expansions, creating significant variation in the availability of health insurance for low-income households across states. This variation in Medicaid eligibility rules across states provides a unique opportunity to estimate the effect of not having access to affordable health insurance on households’ consumption patterns.

Medicaid Coverage and Household Consumption

The impact of Medicaid eligibility on low-income households’ spending patterns is likely to vary significantly across social locations. In particular, I argue that blacks and whites in the United States are likely to differentially benefit from Medicaid coverage. Individuals who decide to obtain medical care despite high costs are faced with three options: (1) they can use some of their accumulated assets to pay for medical care; (2) they can turn to credit and pay for medical care using loans; and (3) they can reduce their other, non-medical expenses in an effort to offset medical costs. Given patterns of racial inequality in wealth and access to credit, these options are not equally available to black and white households. Blacks have much lower wealth levels than whites on average, in terms of both real and financial assets (Killewald 2013; Krivo and Kaufman 2004). Blacks also experience significant constraints in obtaining access to different types of credit (Charles, Hurst and Stephens 2008; Cohen-Cole 2011; Cohen 2012; Williams, Nesiba and McConnell 2005). This means that while white households may be able to use assets and credit to minimize the impact of medical costs on their non-medical spending, black households will be more likely to have to cut back on non-medical spending to offset medical costs.

The impact of Medicaid coverage is also unlikely to be limited to those households actually obtaining care. Drawing on the linked lives principle—a core element of the life course
perspective denoting the fact that “individual lives are interdependent and socially embedded” (George 2013)—I argue that better off relatives of Medicaid-eligible households are also likely to experience benefits from coverage expansion. Individuals are often embedded in friendship and kin networks, which they solicit for resources in times of need (Shapiro 2004; Stack 1975). Research on inter-household transfers tends to suggest that blacks exchange a larger amount of resources across households than whites (Chénier, Fink, Keister 2016). This is especially relevant in the context of blacks’ lower credit access and wealth levels. Because middle class black households have fewer assets than their white counterparts, they are likely to be more adversely affected by the financial aid they provider to poorer kin (O'Brien 2012). Middle class blacks are also more likely to have poor relatives than middle class whites, leading to a greater strain on their resources (Chiteji and Hamilton 2002; Heflin and Pattillo 2006). For these reasons, the impact of Medicaid eligibility for low-income households on their better off relatives’ spending is likely much larger for blacks than for whites.

Hypotheses

The effect of being eligible for Medicaid coverage on low-income households’ expenditure and outlay patterns can be estimated comparing households with income between 100% and 138% FPL according to whether they reside in a state that offers Medicaid coverage at these income levels. Assuming that relatives are more likely to live in the same state than in different states, a similar comparison can also be used to estimate the spillover effects of low-income individuals’ medical spending burdens on their higher income relatives. In both cases, this analytic strategy rests on the assumption that Medicaid eligibility actually leads to greater Medicaid enrollment. Research suggests this is indeed the case, although Medicaid enrolment rates for eligible individuals tend to be well below 100%, especially for low-income and non-white populations (Sommers and Epstein 2010; Stuber and Bradley 2005).

To validate the proposed analytic strategy, I first verify that Medicaid eligibility leads to greater Medicaid enrollment. Households living near the poverty line (i.e., 100% to 138% FPL) in states where Medicaid coverage extends to 138% FPL should have more of their members covered under Medicaid that similar households living in states with an eligibility threshold set at 100% FPL or less. Because blacks are more likely to rely on publicly provided health insurance than whites (Cohen and Martinez 2015; Smith and Medalia 2015), I expect the effect of
Medicaid eligibility on enrolment to be greater for blacks than for whites. For households with income levels above the 138% FPL threshold, Medicaid eligibility should have no effect on Medicaid enrolment rates.

The same analytic strategy can then be used to test substantive hypotheses regarding households’ expenditures and outlay patterns. All hypotheses are summarized in Table 1. First, I examine whether Medicaid eligibility leads to a reduction in households’ healthcare related spending. I expect near-poor households (100% to 138% FPL) living in a state where Medicaid eligibility extends to 138% FPL to have lower out-of-pocket healthcare spending and lower out-of-pocket health insurance spending than similar households residing in states with lower coverage thresholds. Because low-income households may also obtain help paying for medical costs from better-off kin, I also expect out-of-pocket healthcare spending to be lower for higher-income households (over 138% FPL) living in states where Medicaid eligibility extends to 138% FPL. Because of blacks’ disproportionate enrollment in public insurance programs, lower wealth levels, and lower access to credit, I expect these effects to be greater for black than for white households. For higher income households, I expect to observe an effect for black households only. This is because higher income black households are more likely than whites to help lower income kin defray unexpected costs (such as those associated with emergency medical procedures) and are more likely to be adversely affected by this help (because of lower wealth levels).

The previous hypothesis covers cases where higher income households’ contributions to near poor relatives take the form of paying for their medical expenses. Inter-households contributions, however, can also take the form of direct cash transfers. Medicaid eligibility’s expected effect on near poor households’ health-related expenditures could potentially reduce low-income household’s need for cash transfers from better-off relatives. I therefore expect cash transfer levels for higher income households living in states where Medicaid coverage extends to 138% FPL to be lower than those of similar households in states where Medicaid coverage thresholds are lower. Again, because black households are more likely to rely on inter-household transfers, I expect to observe this difference for black households only.

These expected reductions in healthcare-related costs (for near poor households) and in contributions to low-income relatives (for higher income households) mean that households living in states with higher Medicaid eligibility thresholds may have greater levels of disposable
income left over for purchasing other, non-medical goods and services. Given the expectations outlined above, I expect Medicaid eligibility to lead to higher non-medical spending for near-poor households, with a larger effect for blacks than for whites. For higher income households, I expect to see greater spending levels for black households living in states with Medicaid eligibility thresholds set at or above 138% FPL, but not for white households.

Finally, reductions in expected healthcare spending and in inter-household transfers may also allow both near poor and higher income households to increase investments in financial and non-financial assets. Again, given the expectations outlined above, I expect Medicaid eligibility to lead to higher outlays on various assets for near-poor households, with a larger effect for blacks relative to whites. For higher income households, I expect to see greater financial and non-financial outlays for black households living in states with Medicaid eligibility thresholds set at or above 138% FPL, but not for white households.

Table 1. Expected Effects of Medicaid Eligibility\(^1\) (State-Level) on Enrollment and Spending (Household-Level)

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Income between 100% and 138% FPL</th>
<th>Income above 138% FPL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Black</td>
<td>White</td>
</tr>
<tr>
<td>H1: Medicaid enrolment</td>
<td>+ +</td>
<td>+</td>
</tr>
<tr>
<td>H2: Health insurance costs</td>
<td>- -</td>
<td>-</td>
</tr>
<tr>
<td>H3: Medical costs</td>
<td>- -</td>
<td>-</td>
</tr>
<tr>
<td>H4: Cash help</td>
<td>.</td>
<td>.</td>
</tr>
<tr>
<td>H5: Total expenditures</td>
<td>+ +</td>
<td>+</td>
</tr>
<tr>
<td>H6: Investments</td>
<td>+ +</td>
<td>.</td>
</tr>
</tbody>
</table>

\(^1\)Repeated signs (+ + / – –) indicate the expected relative magnitude of the effect

\(^1\)Medicaid eligibility: household’s state of residence offers Medicaid coverage to households with income between 100% and 138% FPL.

**METHODS**

**Data**

Household spending and health insurance enrollment data are obtained from the 2009 to 2014 Consumer Expenditure Surveys (CE). The CE is a quarterly survey of households’ expenditure and outlay patterns administered by the U.S. Bureau of Labor Statistics (BLS) to a nationally representative probability sample of U.S. households. It provides detailed data on the whole range of households’ expenditures and outlays, as well as background data on household...
members’ demographic, financial, and socioeconomic characteristics. The CE is administered in
respondents’ homes by trained Census Bureau personnel using Computer Assisted Personal
Interview (CAPI) technology. Each quarter approximately 7,000 households are sampled and are
then interviewed every three months over a full calendar year. Spending data is updated at each
interview. Background information on each household member is collected in a pre-interview
phase, carried forward, and (for a subset of variables) is updated in households’ fourth interview.
This results in a nested design, where observations at the household-quarter level are nested at
the household-level (for additional details, consult National Research Council 2013).

State-level data on Medicaid eligibility criteria and income cut-offs for 2009 to 2015 are
obtained from the Annual Updates on Eligibility Rules, Enrollment and Renewal Procedure, and
Cost Sharing Practices in Medicaid and CHIP issued by the Henry J. Kaiser Family
Foundation’s (KFF) Commission on Medicaid and the Uninsured. All reports are available
online. The Consumer Expenditure Survey provides state identifiers for all households residing
in cities or towns with 125,000 residents or more (approximately 11% of CE households live in a
smaller agglomeration and were therefore excluded from analyses). Household-level data is
available in the CE for 38 states and the District of Columbia. Combining the KFF and the CE
data yields a multi-level data structure with observations at the household-quarter level (level 1),
nested in households (level 2), and in turn nested in states (level 3). The analyses below use
quarterly data from households interviewed between January 2010 and March 2015 inclusively.
My final analytic sample includes 121,636 observations.

**Independent Variables**

I measure Medicaid eligibility using a state-level variable indicating whether adults with
dependent children who reside in that state and whose income is between 100% and 138% of the
Federal Poverty Line are eligible to enroll for health insurance coverage through Medicaid.

At the household-level, I measure households’ Medicaid eligibility using a categorical
variable indicating households’ income as a percentage of the Federal Poverty line for
households of that size (below 100% FPL, between 100% and 138% FPL, above 138% FPL).

To estimate the effect of Medicaid eligibility for blacks and whites separately, I create a
household-level measure of race (white, black, and other). For single-headed households, I use
the race of primary respondent. For married or cohabiting households, I use the race of both
partners when these report the same race or ethnicity. Households with partners reporting
different racial or ethnic backgrounds (less than 2.5% of observations) are classified as other,
along with Hispanic, Asian, Native American, and Pacific Islander households.

Dependent Variables

I test each of the proposed hypotheses using a different dependent variable. All dependent
variables are measured at the household-quarter level (level 1). Values for all expenditure and
outlay variables are logged before being used in statistical models (a value of 1 is added to each
variable to avoid undefined values).

To test hypothesis 1, I measure Medicaid enrollment as the total number of individuals in
the household who report being currently enrolled under a Medicaid plan.

To test hypothesis 2, I measure health care costs as households’ total out-of-pocket
expenditures on prescription drugs, medical services (e.g., physicians’ services, eye and dental
care, tests, hospitalization and nursing home costs, ambulance fees), and medical equipment
(e.g., eyewear, orthopedic equipment, convalescent equipment). Null out-of-pocket expenditures
for medical care can mean that no care was received, that received care was free, or that received
care was fully reimbursed by an insurance policy.

To test hypothesis 3, I measure health insurance costs as the households’ total out-of-
pocket spending on health insurance premiums, including Blue Cross Blue Shields plans,
traditional fee for service plans, preferred provider plans, Long Term Care (LTC) insurance,
Health Maintenance Organization (HMO) plans, Medicare payments (including prescription drug
premiums), and commercial Medicare supplement plans.

To test hypothesis 4, I measure cash help as total cash transfers to individuals living in a
different household. This includes both voluntary and legally-mandated transfers (such as
alimony). The variable used to create this measure also includes households’ contributions to
charitable, educational, political, and religious organizations.

To test hypothesis 5, I measure total non-medical spending as the sum of all household
expenditures, minus all expenditures on healthcare and health insurance. The largest categories
of non-medical spending are housing (excluding mortgage-related costs, which I model as an
investment), utilities, transportation, education, food, clothing, and entertainment.
To test hypothesis 6, I measure financial investments as total household outlays on mortgage principal and interest, total out-of-pocket contributions to retirement pensions, and total outlays on life insurance premiums.

Controls

The analytic strategy used (see below) involves comparisons of black and white households from different income groups in order to isolate the effects of Medicaid eligibility on their spending patterns. Because black and white households in the same income group may still differ across dimensions that impact spending choices, I adjust all model estimates using the following covariates.

I control for differences in households’ socioeconomic status using a measure of households’ (log) total income in the year of the survey, the educational attainment of the head of household (less than high school; high school; some college; college graduate; graduate degree), and the occupational sector of the head of household (private sector; federal, state, or local government; self-employment; not working).

I control for households’ demographic characteristics using measures of the number of children (under 16 years old), of adults (between 16 and 64 years old), and of older individuals (65 years old and over) in the households. I also include a measure of the households’ family structure (cohabiting/married partners only; cohabiting/married partners with children; single parent with children; single individual; and other family structures), and of the age of the oldest person in the households.

Finally, I also control for households’ Census region of residence (Northeast, Midwest, South, and West), for the size of the agglomeration households reside in (more than 4 million people; 1.2 to 4 million; 0.33–1.19 million; and 125,000 to 329,000), for the year of the interview, and for the quarter of the interview.

Analytic Strategy

Formal tests of the proposed hypotheses require estimating the effect of Medicaid eligibility on health insurance enrollment and household spending patterns for four different groups of households: white households in the Medicaid eligibility zone (income is between 100% and 138% FPL), white households above the eligibility zone (income is over 138% FPL),
black households in the eligibility zone, and black households above the eligibility zone. Note that I do not rely on estimates of the effect of Medicaid eligibility for households with income below 100% of the poverty line. Comparing states with expanded (100%–138% FPL) Medicaid coverage to states without expanded Medicaid coverage does not allow for an estimate of the effect of Medicaid eligibility for households with income below 100% FPL, because some states without expanded coverage still offer Medicaid coverage to households with income at or below 100% FPL.

To obtain estimates, I calculate the predicted marginal effect of state-level Medicaid eligibility for each of the four key groups using hierarchical linear models of the form:

$$y_{ijk} = (\beta_0 + \mu_{jk} + \mu_k) + \beta_1 \text{Eligibility}_k + \sum_r \beta_r \text{Race}_{jk} + \sum_f \beta_f \text{FPL}_{jk} + \sum_{(r \times f)} \beta_{(r \times f)} (\text{Eligibility}_k \times \text{Race}_{jk} \times \text{FPL}_{jk}) + \sum_c \beta_c x_{ijk} + \epsilon_{ijk}$$

where $\mu$ are random intercepts at the household $(j)$ and the state $(k)$ level; Eligibility is a state-level variable indicating whether resident households with income between 100% and 138% of the federal poverty line are Medicaid-eligible in that state; Race is white, black, or other; FPL is a categorical variable indicating household income as a percentage of the federal poverty line (below 100%, 100% to 138%, over 138%); Eligibility$\times$Race$\times$FPL is a three-way interaction term (including all terms for lower-order interactions and main-effects); $x$ are the control variables; $\epsilon$ is a random error at the household-quarter level; $i$ indexes household-quarters; $j$ indexes households; and $k$ indexes states. All models are estimated using Stata’s mixed command; marginal effects of Medicaid eligibility for each group are computed using Stata’s margins command (StataCorp 2015).

RESULTS

Figure 1 shows the estimated impact of Medicaid eligibility (state-level) on all dependent variables (household-quarter level) for black and white households. Estimates are provided for households in the Medicaid eligibility zone (income is between 100% and 138% FPL) and above the eligibility zone (income is over 138% FPL). Estimates are obtained from the HLM models described above, with all covariates held constant at the mean.
If the model adequately captures the impact of state-level Medicaid eligibility on household-level outcomes, we should observe an increase in Medicaid enrollment for households whose income places them within the Medicaid eligibility zone (100% to 138% FPL), but no effect on households outside the eligibility zone (over 138% FPL). Estimates from the model are partly consistent with this expectation. The model shows that expanded Medicaid eligibility is associated with a greater number of household members actually enrolled in Medicaid for blacks ($p < 0.001$), but has no significant effect on Medicaid enrollment rates for eligible white households ($p = 0.281$). These findings are consistent with earlier research indicating that, relative to whites, blacks disproportionately rely on publicly provided services, as opposed to so-called private benefits obtained through employment or private spending. By contrast, expanded Medicaid eligibility has no impact on enrollment rates for households with income greater than 138% FPL. This provides some support for H1: in terms of enrollment, low-income black households benefit more than low-income white households from Medicaid expansion.

Figure 1 also examines the effect of Medicaid eligibility on out-of-pocket healthcare and health insurance spending. The Health Insurance panel shows the estimated impact of Medicaid eligibility (state-level) on average out-of-pocket health insurance premiums (household-quarter level) paid by black and white households in and above the Medicaid eligibility zone. Again, estimates are obtained from the HLM model with all covariates held constant at the mean. Estimates show that health insurance spending for Medicaid-eligible low-income black households is only approximately 0.70 times ($e^{-0.30}$) the amount spent by non-eligible low-
income black households. This estimate, however, is not statistically significant at the 0.05 level ($p = 0.056$). I interpret this as evidence of considerable uncertainty in the magnitude of health insurance spending reduction for black households, rather than evidence of no effect of Medicaid eligibility on black households’ out-of-pocket health insurance spending. Consistent with the previous model—which showed no increase in Medicaid enrollment for Medicaid-eligible white households—the model suggests no impact of Medicaid eligibility on health insurance spending for eligible low-income white households.

For households with income above 138% FPL, no effect of expanded Medicaid eligibility was expected. While this holds for black households, the models show a small but statistically significant increase in higher-income white households’ out-of-pocket insurance spending. This could reflect a selection effect: states that chose expanded Medicaid could have decided to do so precisely because individual market and employer-based health insurance premiums were higher there than in other states. If this is the case, however, it is unclear why no similar effect is found for black households above the eligibility zone. Overall, these results provide some support for H2: Medicaid eligibility is associated with lower health insurance spending for black households, although estimates of this effect show significant uncertainty as to its actual magnitude.

Eligibility has little effect on white households’ insurance spending.

The **Healthcare** panel from Figure 1 shows the estimated impact of Medicaid eligibility (state-level) on the total out-of-pocket health care spending (household-quarter level) for the same four groups. Estimates are derived from the same model as previously. For households in the eligibility zone (100% to 138% FPL), the model shows that Medicaid eligibility has no statistically discernible effect on health care spending. Lack of an average effect, however, does not necessarily indicate a lack of effect for individual black households. For instance, lack of an average effect is compatible with Medicaid expansion being associated with an increase in medical costs for some households (for example, by allowing households that did not previously have access to health care to now obtain care at a relatively low—but non-zero—cost) and a roughly equivalent decrease for others (for example, by now offering coverage for necessary care that previously uninsured households covered out-of-pocket).

For households living above the eligibility cut-off, the estimates provide interesting evidence of indirect effects of Medicaid expansion. While Medicaid expansion is not associated with a change in health care spending for white households, it is associated with a significant
decrease in health care spending for higher income black households. Higher-income black households living in states offering Medicaid coverage to its near-poor population have health care costs that are only about 0.82 times \( e^{-0.18} \) those of other higher-income black households. This suggests that some of the costs of medical care for low-income black households are actually paid for by better-off relatives. Medicaid coverage appears to reduce the amount of money contributed by better-off kin toward low-income relatives’ medical bills. These results provide some support for H3: while increased Medicaid coverage does not have a net negative effect on average medical spending for black households living near the poverty line, it does allow better-off black households to reduce the amount of money they contribute to poorer relatives’ medical treatment.

The Cash Transfers panel of Figure 1 shows the estimated impact of state-level Medicaid eligibility on households’ cash contributions to other households. The model shows that for white households—at either income levels—Medicaid coverage has no statistically significant impact on total amounts of money contributed to other households. For black households, however, the estimates indicate that Medicaid coverage is associated with a reduction in cash transfers. For households near the poverty line—those who are actually eligible for Medicaid coverage—this reduction is not statistically significant, despite the relatively large estimated effect size. For black households above the 138% FPL eligibility threshold, however, the reduction in cash transfers is statistically significant \( (p = 0.017) \) and substantively large. These households make cash contributions to other households representing only 0.73 times those made by similar black households in states that do not offer Medicaid coverage to individuals living near poverty. These results provide some support for H4, and suggest that increased Medicaid coverage allows higher-income households to reduce their cash help to poorer relatives. Medicaid coverage, in other words, allows non-poor households to keep their money, rather than have to contribute it to impoverished relatives facing medical crises.

The Total Spending panel of Figure 1 shows the estimated impact of Medicaid eligibility on black and white households’ levels of non-medical expenditures. Estimates from the total spending model show virtually no effect of Medicaid eligibility on levels of non-medical spending for either black or white households, at any income level. The only statistically significant effect of Medicaid eligibility on total spending is for higher income black households. This effect is substantively small, and in the opposite direction relative to expectations. This
model, in other words, provides no support for H5. Medicaid expansion does not lead to a greater ability to engage in non-medical spending, for any of the four examined racial and income groups.

Finally, the Investments panel of Figure 1 shows the estimated impact of Medicaid eligibility on total financial investment outlays for the same four groups. The model shows evidence of direct effects of Medicaid eligibility on eligible households’ financial outlays. For black households living near the poverty line in states where Medicaid coverage extends to 138% FPL, total financial outlays are approximately 1.20 times \( e^{0.21} \) as large as those of similar black households in states without expanded Medicaid coverage \( (p = 0.022) \). Obtaining Medicaid coverage, in other words, appears to have an overall positive impact on black households’ investments in housing, retirement funds, and life insurance policies. For white households, no impact was expected. The models indicate, however, that financial investments for Medicaid-eligible white households near the poverty line are lower in states where Medicaid is offered to these households than in states where it is not. These results are surprising, and may indicate that white households in states without Medicaid eligibility use housing investments as a form of self-insurance against medical emergencies.

For white households with income above the 138% FPL threshold, living in a state offering Medicaid coverage to individuals living below that threshold has a slight positive effect on levels of financial investments. The effect, although statistically significant \( (p = 0.01) \), is substantively small: these households have financial investment levels that are only 1.04 times higher than their counterparts in states without Medicaid coverage for the near-poor. For black households, the model shows no significant effect. Overall, this suggests little to no indirect effect of Medicaid coverage on financial investment levels for the better-off kin of Medicaid recipients. These results provide some support for H6: I find evidence that Medicaid coverage allows near-poor black households to increase their levels of long-term investments, but find little to no evidence of indirect effects of Medicaid coverage on financial investment levels for the better-off kin of black or white Medicaid recipients.

Overall, the analyses presented here provide a relatively clear picture of Medicaid’s impact on black households’ financial wellbeing. Medicaid coverage has a direct effect on black households who meet income requirements for Medicaid eligibility. For these households, living in a state providing them with Medicaid coverage is associated with higher rates of Medicaid
enrollment, which in turn allows them to reduce spending on health insurance and increase spending on long-term financial investments. Medicaid coverage also has indirect benefits on higher income black households. For these households, living in a state which provides Medicaid coverage to individuals living near the poverty line is associated with lower spending on medical care and lower cash transfers to other households. We interpret this as evidence that better-off black households in states without expanded Medicaid coverage find themselves having to financially contribute to covering their poorer relatives’ medical costs and other financial needs when these poorer relatives face medical crises.

For white households, the evidence presented here indicates a much less consistent effect of Medicaid coverage. The indicators examined here tend to suggest little to no direct effect in terms of Medicaid enrollment, health insurance and health care costs, and inter-household transfers for white households living near the poverty line. Lack of average effect does not preclude the existence of effects on individual households, but the evidence presented here suggests no net positive or negative impact of Medicaid coverage for this population overall. The only exception to this pattern is in terms of financial investment, where Medicaid coverage is associated with lower investment levels. As discussed above, this is an unexpected finding, and may indicate a tendency for low-income white households with no Medicaid coverage to self-insure through housing or life insurance investments. In terms of indirect effects, we see the same absence of clear, coherent patterns for white households. All estimated effects are either statistically non-significant or substantively small. Medicaid expansion, in other words, appears to have clear direct and indirect benefits for black households, but to have little to no consistent effects for white households.

**DISCUSSION**

When faced with high medical costs, households must decide between running down their accumulated assets, relying on credit and loans, or reducing consumption levels to offset costs. Which strategy households choose is partly a function of their social location. Because black households have fewer assets on average and experience significant constraints in obtaining credit, I proposed that they would likely engage in larger spending reductions than white households. This is true of low-income households, but I also argued that this applies to the better off relatives who provide them with financial and in-kind help. Relative to whites,
middle class blacks have lower wealth levels and are more likely to have poor relatives—making them more likely to experience negative effects from low-income relatives’ high medical costs.

To examine this process empirically, I relied on state-level variation in Medicaid eligibility thresholds in the period following the passage of the Patient Protection and Affordable Care Act (ACA). Low-income households with Medicaid access, I argued, would not have to engage in cost offsetting strategies to pay for medical care. By comparing these households to similar households in states that did not offer Medicaid coverage up to 138% of the poverty line, I argued that we can obtain valid estimates of the negative consequences of medical costs on households’ consumption and investment patterns. To do so, I analyzed household expenditure and outlay data from the Consumer Expenditure Survey. Using Kaiser Family Foundation data on states’ Medicaid eligibility thresholds between 2009 and 2015, I proposed hierarchical linear models relying on a three-way interaction (Medicaid eligibility × income level × race) to estimate the impact of Medicaid eligibility on consumption and investment patterns for black and white low-income households and their higher income relatives.

The analyses suggested interesting—although somewhat unexpected—conclusions. For low-income black households, the models indicated that not being eligible for Medicaid is associated with needing to spend more out-of-pocket on health insurance (but surprisingly not on healthcare, which could be a sign of significant cost-related care avoidance for uninsured black households). Non-eligible black households also cut back on long-term financial and non-financial investments (on owned housing, retirement pensions, and life insurance), but not on day-to-day non-medical spending. Not being eligible for Medicaid, in other words, appears to force low-income black households to make a tradeoff between current and long-term wellbeing, such that investing in health insurance means not being able to invest in other types of assets. For higher income black households, Medicaid eligibility for the near poor was associated with lower cash transfers and lower spending on medical care. Given the lack of effect for low-income households’ medical spending, this could indicate that low-income blacks rely primarily on help from relatives to defray medical costs. Higher income blacks’ other types of spending were unaffected, which suggests that the help they provide does not force them to engage in extensive spending or investment reductions.

While differences in spending patterns across Medicaid eligibility for black households more or less conformed to expectations, estimates of the effect Medicaid on white households’
spending patterns yielded unexpected conclusions. For white households, it appears that Medicaid eligibility has very little effect on consumption and investment patterns. This holds for both low-income and higher income white households. This suggests two potential interpretations. The first is that white households may not rely on Medicaid to the same extent as black household do. Near poor white households may have access to health benefits through their employers at greater rates than black households do. Research on precarious employment and on racial differences in public service reliance suggests that this could be the case (Kalleberg 2011; Lieberman 1998). A second possible interpretation is that white households are more likely to finance care through accumulated assets or credit. This solution may lead to financial problems in the long term, but it also means that no reduction in spending on investments is needed to offset costs in the short run.
REFERENCES


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