Access and Quality of Care by Insurance Type for Low-Income Adults Before the Affordable Care Act

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Comparing Access to Care and Perceived Health Care Quality By Insurance Type Among Low-Income Adults
Comparing Access to Care and Perceived Health Care Quality By Insurance Type Among Low-Income Adults

Abstract (Word Count: 180)

Objectives: Nineteen states – disproportionately in the South – have not expanded Medicaid under the Affordable Care Act (ACA). Some are considering expanding private coverage. We compared access to care and perceived health care quality by insurance type among low-income adults in three Southern states, prior to the ACA.

Methods: We conducted a telephone survey in 2013 of 2,765 low-income U.S. citizens, ages 19-64, in Arkansas, Kentucky, and Texas. Using logistic regression to adjust for sociodemographics and health status, we compared eleven measures of access and quality of care for respondents with Medicaid, private insurance, Medicare, and no insurance.

Results: Low-income adults with Medicaid, private insurance, and Medicare reported significantly better health care access and quality than uninsured individuals. Medicaid beneficiaries reported greater difficulty accessing specialists but less risk of high out-of-pocket spending than those with private insurance. For other outcomes, Medicaid and private coverage performed similarly.

Conclusions: Low-income adults with insurance report significantly greater access and quality of care than uninsured adults, regardless of whether they have private or public insurance. Access to specialty care in Medicaid may require policy attention.
INTRODUCTION

Though the Affordable Care Act (ACA) aimed to increase the availability of health insurance for low-income Americans through expansion of Medicaid eligibility up to 138% of the federal poverty level (FPL), the United States Supreme Court ruled that Medicaid expansion was optional for states. This left many states debating whether and how to expand insurance coverage for low-income residents. As of January 2016, 31 states have expanded Medicaid, while the remaining 19 states have not adopted Medicaid expansion. The implications of these decisions are particularly dramatic in the South, where only six of the 17 states (plus the District of Columbia) in the Southern census region have expanded. Combined with high poverty and uninsured rates in the region, 80% of the more than 4 million uninsured adults excluded from the Medicaid expansion reside in the South.

While previous research indicates that Medicaid expansion can improve access to care, self-reported health, and survival, some contend that the program is substantially inferior to private insurance. In part due to this concern, several states – Arkansas, Iowa, and New Hampshire – have received approval for the so-called “private option” using federal funds to purchase private health insurance for low-income adults, and other states are considering this approach in lieu of Medicaid expansion. In this context, a key question is how Medicaid and private coverage compare in their ability to provide access to care for low-income beneficiaries. Previous research using national survey data offers some insights, but less attention has been paid to these issues within Southern states, where the public health implications of the Medicaid expansion debate are largest.
Our study objective was to compare access to care and perceived health care quality for low-income adults with Medicaid versus other types of insurance coverage prior to the ACA’s coverage expansion in three Southern states.

METHODS

Data

Our study data come from a random digit dial telephone survey of U.S. citizens ages 19-64 living in Arkansas, Kentucky, and Texas, with family incomes below 138% of the FPL, corresponding to the ACA’s Medicaid eligibility guidelines. Interviews were completed in November and December 2013, before the ACA’s coverage expansions took effect. Respondents were contacted on landlines and cellular phones. Interviews were available in English or Spanish. The overall response rate was 26%, and all responses were weighted to state estimates for citizens ages 19-64 with household incomes below 138% of FPL, from the 2012 American Community Survey. Further details on the survey methods have been published previously.10

We developed a 38-item survey that included questions about health care coverage, utilization, economic circumstances, health status, preventive care indicators, and perceptions of quality of care. The wording of our survey items was drawn from previously validated surveys: the National Health Interview Survey, the American Community Survey, the Behavioral Risk Factor Surveillance System, and the Oregon Health Insurance Experiment. We also collected data on demographic and health characteristics. Health insurance coverage was assessed using state-specific names for Medicaid programs to assist respondents in recognizing their coverage:
Medicaid in Arkansas; Kentucky Health or KenPac in Kentucky; and STAR, STAR+PLUS, or STAR Health in Texas.

To create mutually exclusive coverage categories, we assigned each respondent a primary type of coverage using the following hierarchy: private insurance, Medicare, Medicaid, and uninsured. In our primary model, dual eligible respondents – who receive coverage from both Medicare and Medicaid – were categorized as having Medicare since this is the primary payer for outpatient services; we also conducted a sensitivity analysis in which these respondents were treated as having Medicaid as their primary coverage (presented in Appendix Table A). Individuals who reported only having a type of coverage besides private insurance, Medicaid, or Medicare were excluded from the sample given the small number of respondents in that category (3%).

**Outcomes & Statistical Analysis**

Our study outcomes were not having a personal doctor; difficulty accessing primary care appointments; difficulty accessing specialist appointments; using the ER as a usual source of care; using the ER due to difficulty in getting a doctor’s appointment when needed; cost-related delays in seeking care; spending more than $500 out-of-pocket for medical care in the past year; spending more than $1,000 out-of-pocket for medical care in the past year; having to borrow money or skip paying bills due to medical costs; and perceived overall health care quality.

We compared sample demographic and health characteristics across insurance coverage types using chi-square tests. Then, we used logistic regression to compare outcomes for respondents with private insurance to those with Medicaid, Medicare, and no health insurance. We present both unadjusted and adjusted regression results. The multivariate model adjusted for
sociodemographic and health status covariates that previous literature have suggested influence access to care, health service utilization, and perceptions of health care quality: age, gender, race, ethnicity, marital status, education, income, political affiliation, self-reported health status (fair/poor vs. good/very good/excellent), cell phone use, having any of the nine chronic conditions assessed in the survey (see Table 1), and state of residence. Using the “margins” command in Stata, we then converted these adjusted odds ratios into predicted probabilities for each outcome, using the observed values for all covariates, in order to better convey the magnitude of differences across these coverage types after accounting for other covariates.

The investigators only had access to deidentified data processed by the survey vendor after survey administration was complete, and the study protocol was exempted as non-human subjects research by the investigators’ Institutional Review Board. Analysis was conducted in Stata 12.0.

RESULTS

Our sample size was 2,765, divided evenly across the three states. Table 1 summarizes the demographic and health characteristics of respondents, stratified by primary coverage type. 13% of our weighted sample reported Medicaid coverage, 30% private coverage, 16% Medicare, and 41% were uninsured. Women represented just over half of the sample overall, but made up 77% of those with Medicaid. 16% of the overall sample was Latino and 19% was black. Health status characteristics differed significantly across different insurance types. 25% of privately insured respondents reported fair or poor health status, compared to 50% of Medicaid respondents and 54% of Medicare respondents. Over 80% of Medicaid and Medicare beneficiaries reported at least one chronic condition, compared to 54-57% among privately insured or uninsured respondents.
Table 2 shows unadjusted analyses assessing the association between coverage type and access to outpatient care, ER use, affordability of care, and perceived quality of care. Uninsured respondents consistently reported worse outcomes. In the unadjusted models, Medicaid beneficiaries had more difficulty accessing primary and specialty care, and were more likely to use the ER because a doctor was unavailable, compared to their privately insured peers. Medicaid beneficiaries were significantly less likely to have high out-of-pocket medical costs than privately insured adults. This was consistent at both levels of spending we assessed: spending greater than $500 per year (16.6% vs. 37.7%; OR=0.33; 95% CI=0.21, 0.51; p<0.01) and spending greater than $1,000 per year (9.7% vs. 24.5%; OR=0.33; 95% CI=0.19, 0.57; p<0.01). A slightly larger share of respondents with Medicaid rated care as “Fair/Poor” than did those with private insurance (OR=1.43; 95% CI=0.99, 2.05; p<0.10).

Table 3 shows the results of multivariate analyses. We have summarize the adjusted results in Figure 1, which illustrates odds ratios and confidence intervals when specifically comparing our outcomes of interest for Medicaid beneficiaries and the privately insured. After adjustment for sociodemographics and health status, uninsured individuals were at significantly higher risk of not having a personal doctor and to report difficulty accessing primary care and specialty care. In comparing predicted probabilities from the adjusted model, similar rates of those covered by private insurance (35.5%), Medicaid (31.8%), and Medicare (31.7%) reported not having a personal doctor; this was markedly higher for uninsured respondents (59.0%), a difference of more than twenty percentage points (AOR=3.07; 95% CI= 2.24, 4.19; p<0.01). Overall, Medicaid and private insurance performed similarly for most measures of access to outpatient care, though individuals with Medicaid had higher rates of difficulty accessing
specialist appointments relative to their privately insured peers – 17.3% versus 11.1% after
adjustment (AOR=1.78; 95% CI=1.00, 3.17; p<0.05).

For measures of ER use, uninsured respondents were significantly more likely than
insured respondents to use the ER as a usual location of care or visit the ER due to an inability to
see a doctor for an office visit to address needed care. There were no significant differences
between Medicaid and private insurance for these measures.

In assessing affordability and cost of care, uninsured individuals were significantly more
likely to report delaying care due to cost in the past 12 months; skipping medication doses
because of cost; and borrowing money or skipping paying bills as a result of high medical costs
compared to those with insurance. Meanwhile, there were no significant differences for any of
these outcomes between Medicaid beneficiaries and privately-insured. Medicaid beneficiaries
were significantly less likely to have spent more than $1,000 in out-of-pocket costs for medical
care in the past year than individuals with private insurance – 9.2% versus 24.7%, respectively
(AOR=0.28; 95% CI=0.16, 0.52; p<0.01). Results were similar when comparing out-of-pocket
costs greater than $500 for Medicaid beneficiaries and privately-insured (15.7% vs. 38.3%;
AOR=0.26; 95% CI=0.16, 0.43; p<0.01). Medicare recipients also were less likely to report high
out-of-pocket costs compared to private insurance (14.3% vs. 24.7%; AOR=0.48; 95% CI=0.32,
0.73; p<0.01).

In terms of overall quality of care, uninsured adults were the most likely to rate their care
as “fair” or “poor.” Meanwhile, there was no significant difference in the proportion reporting
“fair” or “poor” quality of care among individuals with private coverage and Medicaid
(AOR=1.18; 95% CI=0.79, 1.76; p=0.41). Those with Medicare reported the highest quality of
care, with only 34.5% reporting “fair” or “poor” quality of care.
DISCUSSION

In this survey of nearly 3,000 low-income U.S. citizens in three Southern states, we find that prior to the ACA’s coverage expansions, measures of access to care, affordability, and self-rated health care quality were generally similar for Medicaid, Medicare, and private insurance, after adjusting for demographic characteristics and health status. Consistent with previous research, all three coverage types performed far better than being uninsured for all outcomes we analyzed. In contrast, there were few significant differences among the three types of insurance covered. These results build off a prior study in these states, which focused on perceptions of Medicaid coverage compared to the private option among low-income adults in general (including among those with neither type of insurance). That study showed that low-income adults generally perceive private coverage and Medicaid as similar in overall quality.10 Our study, in contrast, assesses the actual experiences obtaining care among low-income adults with different types of coverage, and we find that in these states both public and private insurance perform similarly.

In unadjusted analyses, there were notable differences in health care-related outcomes for Medicaid beneficiaries versus privately insurance individuals. However, these results in isolation can lead to the spurious conclusion that Medicaid provides inferior access to care than private coverage, when our multivariate analysis demonstrates that most of these differences are due to underlying demographic and health status differences. More specifically, the typical Medicaid beneficiary (or non-elderly Medicare beneficiary) is often in much worse health on average than those with private insurance or no insurance, which is not surprising given that
disability and poverty are two of the primary pathways for non-elderly adults to become eligible for public insurance in the first place.

However, we did find two areas with significant differences between Medicaid and private coverage, even after multivariate adjustment. 1) Access to specialty care for individuals in Medicaid was worse than for those with private insurance. 2) Medicaid provided better financial protection to low-income adults than private insurance.

The finding regarding specialty care access mirrors the results of a recent national analysis of Medicaid, which indicated similar access to primary care services for low-income adults with private insurance and Medicaid, but worse specialty-care access for Medicaid. The ACA prioritized improving access to primary care, mandating that states increase Medicaid primary care payments to Medicare levels in 2013 and 2014 to increase provider ability and willingness to accept new Medicaid patients. However, we did not find that Medicaid beneficiaries in these states had more difficulty obtaining primary care appointments or a usual source of care. Instead, we found worse access to specialty care for Medicaid beneficiaries compared to the privately insured. This could be attributable to a low number of specialists participating in Medicaid, specialist shortages in certain regions, or primary care physicians having limited referral networks for specialists. Surveys of providers indicate that the predominant deterrent for specialist participation in Medicaid is low payment rates, though patient complexity also plays a role. While many Medicaid patients rely on safety net providers like community health centers for primary care, there is often no comparable option for specialty care, particularly for specialty mental health or substance abuse services. This is an area worthy of ongoing evaluation and monitoring by policymakers. While there were significant differences in specialty access between private and Medicaid recipients in our study, it is worth
noting that the vast majority of Medicaid recipients did not experience any difficulties in this area, with only 17% reporting this barrier in adjusted models.

Meanwhile, we found that Medicaid provided better financial protection to low-income adults than private insurance, consistent with previous research on the topic of underinsurance among poor adults. Medicaid beneficiaries were far less likely to spend more than $1,000 out of pocket for medical costs than those with private coverage – and alternative analyses using different cutoff points for spending showed a similar pattern. More states, particularly those with Section 1115 waivers, are beginning to require higher levels of cost sharing for Medicaid beneficiaries, which may impact the affordability of care for these low-income Americans.

Previous studies have indicated that low-income Americans enrolled in public insurance tend to fare significantly better on affordability-related measures than those with private coverage as a result of higher premiums, deductibles, and cost sharing in private insurance plans – and recent trends suggest this divergence in coverage generosity is continuing to grow over time.

For the remaining outcomes we examined, we found no significant differences between Medicaid and private insurance. Although previous studies, including the randomized Oregon Health Insurance Experiment, indicate that gaining Medicaid coverage can increase ER use, our survey results indicate that Medicaid beneficiaries are utilizing ER services in patterns fairly similar to low-income adults with private insurance.

Overall self-reported quality of health care received was also comparable for those enrolled in Medicaid and private insurance. The research literature has had little evidence to date on how quality of care for Medicaid beneficiaries compares to the privately insured from the patient’s perspective. A recent Gallup poll indicated that 75% of Medicaid beneficiaries are satisfied with the U.S. health system, which was six percentage points higher than those with
employer-sponsored coverage (69%) and ten points higher than those with private coverage purchased directly from an insurer (65%), bellying the argument from some critics of Medicaid that it is low-quality and undesirable coverage.27

Limitations

Our study contains several limitations in design, response rate, and generalizability. To more closely parallel eligibility criteria for Medicaid and other public programs (including the ACA’s 2014 Marketplaces), our sample excluded non-citizen immigrants, who are represent a sizable minority of low-income uninsured adults in several Southern states, including Texas. While non-citizens with permanent residency status can qualify for Medicaid after a 5-year waiting period, there are challenges to reliably assessing non-citizens’ legal status in a telephone survey, so we did not attempt to include this group in our sample.

The majority of those reporting private coverage had employer-sponsored insurance. There is substantial heterogeneity in insurance plan design across employer-sponsored insurance plans and non-employer based plans, including benefits and cost-sharing. Nonetheless, it seems reasonable to assume that employer-sponsored coverage is generally closer in design to “private option” plans than Medicaid – and in some states, private option proposals are explicitly using premium support for employer-based coverage.28

Data for this study were self-reported, which can result in some degree of misreporting error, particularly for items related to health status or clinical conditions. Previous research indicates that some degree of misreporting error in self-reporting insurance coverage status is common, especially for Medicaid.29,30 Our use of state-specific names may have reduced this problem to some degree.
In addition, though our response rates compare favorably to other random digit dial
surveys, like the Gallup Healthways Well-Being Index or the Health Reform Monitoring Survey, they were still much lower than federal government surveys.\textsuperscript{31,32} To address this limitation, we weighted our results to Census demographic benchmarks, which has been shown to mitigate non-
response bias, though this does not necessarily eliminate all potential bias.\textsuperscript{33} It is unclear what impact – if any – non-response bias may have had on our results.

Our study also relies on multivariable regression to adjust for substantial differences across the populations in each type of coverage. This creates two potential concerns. The first is that the groups in different coverage categories may differ on unobservable features that we were unable to adjust for and thus may still confound our results. For instance, people with private insurance are more likely to be working, and we did not have data on employment status. Nonetheless, prior research indicates that most Medicaid beneficiaries have at least one working family member, suggesting that employment alone is not a primary distinguishing factor between these two coverage groups.\textsuperscript{34} A second concern is that in adjusting for sociodemographic characteristics – including race/ethnicity, education, or socioeconomic status – overlooks underlying public health problems, and can render important differences in access to care and quality of care based on those characteristics as either acceptable or undetectable. In a sensitivity analysis, we adjusted only for clinical factors: age, sex, self-reported health status, and presence of chronic conditions. The patterns for Medicaid versus private insurance in this analysis (presented in Appendix Table B) were very similar as in our fully adjusted model. This suggests that the gaps between Medicaid beneficiaries and those with private insurance in our unadjusted analyses were primarily related to health status and disease burden, rather than sociodemographic features.
Lastly, our study was limited to three states, potentially reducing generalizability at the national level. However, these three states contain a diverse population of low-income adults in the Southern census region, a region of significant policy relevance for the ACA. Given the disproportionate presence of millions of uninsured low-income adults in Southern states and the ongoing policy debate about whether and how to expand coverage under the ACA, we feel that these states provide valuable new information on the experiences of low-income adults with different types of health insurance.

PUBLIC HEALTH IMPLICATIONS

For most measures of access, adults enrolled in Medicaid fared similarly to their privately insured peers, after accounting for differences in demographics and baseline health status. As many Southern states continue to evaluate if and how to provide health insurance for low-income adults, policymakers are considering increasing their states’ reliance on private coverage. Meanwhile, officials in some states that have already expanded Medicaid are now proposing to repeal or significantly modify the expansion, further raising the stakes for understanding the impact of these different types of coverage for low-income adults. Our results suggest that, while some tradeoffs in specialty access and affordability may exist between Medicaid and private insurance, coverage expansions to low-income adults will likely lead to substantial gains in overall access to quality health care, regardless whether that coverage is private or public insurance.
REFERENCES


15 Long, S. K. (2013). Physicians may need more than higher reimbursements to expand Medicaid participation: findings from Washington State. Health Affairs,32(9), 1560-1567.


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<tr>
<th>Table 1. Demographic and Health Status Characteristics of Survey Respondents (N=2,765)</th>
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<td><strong>Sample size (N), Weighted %</strong></td>
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<td>Private Health Insurance</td>
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<td>792 (30%)</td>
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<td><strong>Family Income</strong></td>
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<td>54%</td>
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<td>Kentucky</td>
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<td>Texas</td>
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<td><strong>Rural Status</strong></td>
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<td>36%</td>
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<tr>
<td><strong>Presence of 1+ diagnosed condition (out of 9)†</strong></td>
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<tr>
<td>54%</td>
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<td><strong>Average number of diagnosed conditions</strong></td>
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<td><strong>Self-Reported Fair or Poor Health</strong></td>
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**Notes:**
† Conditions assessed were: high blood pressure; a heart attack, coronary artery disease, or heart failure; a stroke; asthma, chronic bronchitis, COPD, or emphysema; chronic kidney disease or dialysis; diabetes; depression or anxiety; cancer, except for skin cancer; and alcoholism or drug addiction.

p-values reflect chi-square tests for differences in each characteristic, based on coverage type.