No. 2553 May 5, 2011

Medicaid Provides Poor Quality Care: What the Research Shows

Brian Blase

Abstract: While targeted public assistance can work, Medicaid has become far too large and unwieldy to serve those who truly need it. A variety of research shows that Americans enrolled in Medicaid have less access to health care, and when they do receive care, the quality is often inferior to the care provided to other similar patients. This Heritage Foundation paper lays out the research, and shows how Medicaid is failing current enrollees and taxpayers and must be fundamentally reformed. The Medicaid expansion contained in Obamacare will further weaken the program—hurting those who really need it, as well as unduly burdening the taxpayers who pay for it.

Medicaid is a costly and unsustainable welfare entitlement program that delivers low-quality health care to many of its enrollees.¹ Low provider payment rates in many states mean that Medicaid recipients have a hard time finding a doctor, forcing many to rely on expensive and overcrowded hospital emergency rooms for non-emergency care. Medicaid patients frequently receive inferior medical treatment, are assigned to less-skilled surgeons, receive poorer postoperative instructions, and often suffer worse outcomes for identical procedures than similar patients both with and without health insurance.

By 2020, the Patient Protection and Affordable Care Act, commonly known as Obamacare, will enroll up to 25 million additional people in Medicaid,² raising the total number of Americans enrolled in Medicaid at any one time to more than 70 million.³ Moreover,

Talking Points

Published by The Heritage Foundation

- Although the states and federal government spent more than \$400 billion in 2010 on Medicaid, there is a lack of academic studies showing that the program provides recipients with quality health care.
- Medicaid enrollees have more limited access to providers, in large part due to low provider payment rates.
- Medicaid patients frequently receive inferior medical treatment, are assigned to less-skilled surgeons, receive poorer post-operative instructions, and often suffer worse outcomes than similar patients without Medicaid.
- Medicaid has become too large to provide good services to those who genuinely need public assistance. Eligibility expansions have caused a substantial degree of crowd-out with the result that taxpayer money is spent on people who could afford private coverage.
- Medicaid expansions, such as the one contained in Obamacare, will increase crowdout, exacerbate current problems, and likely hurt overall population health.

This paper, in its entirety, can be found at: http://report.heritage.org/bg2553

Produced by the Center for Health Policy Studies

Published by The Heritage Foundation 214 Massachusetts Avenue, NE Washington, DC 20002–4999 (202) 546-4400 • heritage.org

Nothing written here is to be construed as necessarily reflecting the views of The Heritage Foundation or as an attempt to aid or hinder the passage of any bill before Congress.



many new Medicaid enrollees will be those who previously had private health insurance.⁴ Because people who are privately insured routinely have better access to physicians and receive higher quality health care, policymakers should not expect significant health improvements from the federally mandated expansion of state Medicaid programs. In fact, the expansions may potentially worsen overall population health as the expansion will exacerbate existing problems, such as inaccessible doctors and an overabundance of standard care delivered in emergency rooms.

The simple truth about Medicaid is that the program has become too large to provide good services to people who genuinely need public assistance. Eligibility expansions have caused a substantial degree of crowd-out with the result that taxpayer funds are being spent on individuals who could afford private coverage. This diverts resources from the genuinely needy populations on the program. There is also no evidence that suggests states that have expanded Medicaid have had better health outcomes for their poorer populations. The open-ended federal reimbursement of state Medicaid spending is a large factor for the irresponsible growth in program eligibility. Given the size of the U.S. budget deficit, it is fiscally irresponsible to continue spending hundreds of billions on a program that delivers such

bad results. Congress should chart another course and give states greater leeway to determine how to provide safety-net health care within a framework that encourages states to be wise stewards of taxpayer dollars.

Low Quality: Findings from the Professional Literature

While most of those enrolled in Medicaid are relatively healthy children and their mothers, a small subset of enrollees are more likely to have a serious disease, such as diabetes, AIDS, anemia, or psychosis. These Medicaid patients are thus typically in worse condition⁵ at the time of their diagnosis, and tend to have more advanced medical conditions than either the insured or the uninsured.⁶ Medicaid patients typically also have worse average health outcomes after treatment, even after adjusting for demographic characteristics and prior health status, such as the number and type of co-morbidities.⁷

Risk of Death. Rachel Rapaport Kelz and her colleagues found, for example, that after colon cancer surgery, Medicaid patients had a 22 percent greater chance of complications and a 57 percent greater chance of dying in the hospital than the privately insured. The risk for uninsured individuals was in the middle—less than the risk for Medicaid recipients and greater than the risk for individu-

 Most of the studies referenced in this paper contain tables with cross-tabulations comparing the health status of individuals depending on insurance coverage. For example, see Table 2 in Damien J. LaPar *et al.*, "Primary Payer Status Affects Mortality for Major Surgical Operations," *Annals of Surgery*, Vol. 252, Issue 3 (September 2010), pp. 544–551.

6. Kathleen McDavid *et al.*, "Cancer Survival in Kentucky and Health Insurance Coverage," *Archives of Internal Medicine*, Vol. 163 (October 2003), pp. 2135–2144, and LaPar *et al.*, "Primary Payer Status Affects Mortality for Major Surgical Operations."

^{7.} A co-morbidity is a secondary illness in the same person that co-exists with the primary illness being treated or observed.



^{1.} Brian Blase and Nina Owcharenko, "Solving the Medicaid Crisis," forthcoming Heritage Foundation WebMemo.

^{2.} Obamacare mandates that states must enroll any applicant who lives in a household with an annual income that is below 138 percent of the federal poverty level in the program. On March 30, 2011, in testimony before the House Energy and Commerce Committee, Richard Foster, the chief actuary at the Centers for Medicare and Medicaid Services, updated earlier estimates of new Medicaid enrollees due to the Obamacare expansion from 20 million to 24.7 million. "The Estimated Effect of the Affordable Care Act on Medicare and Medicaid Outlays and Total National Health Care Expenditures," at http://republicans.energycommerce.house.gov/Media/file/Hearings/Health/033011/Foster.pdf (May 4, 2011).

^{3.} I.e., up to 25 million people in addition to the estimated 50 million currently enrolled. See Department of Health and Human Services, "2010 Actuarial Report: On the Financial Outlook for Medicaid," December 2010, at *https://www.cms.gov/ ActuarialStudies/downloads/MedicaidReport2010.pdf* (May 4, 2011).

^{4.} Steven D. Pizer, Austin B. Frakt, and Lisa I. Iezzoni, "The Effect of Health Reform on Public and Private Insurance in the Long Run," Social Science Research Network, March 9, 2011, at *http://ssrn.com/abstract=1782210* (May 1, 2011).

als with private coverage.⁸ Kathleen McDavid and her colleagues found lower cancer survival rates for Medicaid enrollees. The risk of mortality for individuals with Medicaid was higher than the risk for the privately insured by 56 percent for colorectal cancer, 14 percent for lung cancer, 66 percent for female breast cancer, and 149 percent for prostate cancer. Of three of the four measures, Medicaid recipients had a higher risk of mortality than the uninsured.⁹

University of Virginia researchers recently completed the most comprehensive study yet relating insurance coverage and surgical outcomes.¹⁰ The study controlled for individual characteristics and co-morbidities as well as other important factors, such as whether the surgery was elective, and hospital characteristics. Based on eight surgical procedures, the authors found that Medicaid patients were more likely to die in the hospital than the uninsured and the privately insured.¹¹ In the technical language of empirical research, these findings were statistically significant.¹² In fact, Medicaid recipients were twice as likely to die after surgery than privately insured patients.

Medicaid patients were also more likely to suffer complications than the privately insured and the uninsured. Medicaid patients stayed in the hospital an average of 10.5 days, compared to 7 days for the uninsured and 7.4 days for the privately insured. Aggregate hospital costs for patients with Medicaid were about 21 percent higher than costs for the uninsured, and 26 percent higher than costs for the privately insured. The University of Virginia researchers concluded that "Medicaid and Uninsured payer status [were] the highest significant independent predictors of in-hospital mortality after controlling for all patients, hospital- and operationrelated variables."¹³

Stroke Damage. Jay Shen and Elmer Washington found similar results as both uninsured and Medicaid stroke patients were more likely to have worse outcomes after a stroke than were individuals with private coverage.¹⁴ Medicaid enrollees stayed in the hospital 11.4 days for intra-cerebral hemorrhages¹⁵ compared to 8.5 days for the uninsured, and 6.9 days for individuals with private coverage. The total hospital charges were much greater for Medicaid enrollees, averaging \$55,244, compared to \$34,358 for the uninsured and \$31,972 for individuals with private insurance. They found the same results for patients who experienced cerebral artery occlusion and for patients who experienced carotid artery occlusion.¹⁶

Poor Pediatrics. Worse access and poorer health outcomes for Medicaid enrollees are typical for children, as well. Assessing the use of health services by insurance status among children with asthma, researchers found that a child with asthma was five times more likely to see an asthma specialist if she had private coverage than if she was insured by Medicaid. Children with Medicaid were also 50 percent more likely to be seen by a doctor in the emer-

- Rachel Rapaport Kelz et al., "Morbidity and Mortality of Colorectal Carcinoma Surgery Differs by Insurance Status," Cancer, Vol. 101, No 10 (November 2004), pp. 2187–2194.
- 9. McDavid et al., "Cancer Survival in Kentucky and Health Insurance Coverage."
- 10. For an in-depth discussion of the University of Virginia study, see Avik Roy, "The Urgency of Medicaid Reform," *The Health Care Blog*, March 9, 2011, at http://thehealthcareblog.com/blog/2011/03/09/the-urgency-of-medicaid-reform/ (May 1, 2011).
- 11. LaPar et al., "Primary Payer Status Affects Mortality for Major Surgical Operations."
- 12. Statistical significance essentially means that there is less than a 1 in 20 likelihood that the result occurred by chance.
- 13. LaPar et al., "Primary Payer Status Affects Mortality for Major Surgical Operations."
- 14. Jay J. Shen and Elmer L. Washington, "Disparities in Outcomes Among Patients with Stroke Associated With Insurance Status," *Stroke* (March 2007), pp. 1010–1016.
- 15. Intra-cerebral hemorrhage occurs when a diseased blood vessel in the brain bursts, allowing blood to leak inside the brain.
- 16. For cerebral artery occlusion, the respective length of hospital stay for individuals on Medicaid, the uninsured, and the privately insured are 6.9 days, 6.2 days, and 4.9 days, respectively. The total respective charges are \$25,774; \$21,307; and \$19,143. For carotid artery occlusion, the corresponding figures are 4.7 days, 5.2 days, and 2.7 days for the length of stay and \$22,532; \$19,837; and \$17,465 for total charges.



gency room in the past year. Finally, after adjusting for primary provider type, use of asthma specialist, age, sex, and other treatment factors, children with Medicaid were 40 percent less likely to have had three or more routine primary care visits for their asthma condition.¹⁷

Limitations. While Medicaid patients have worse average health outcomes, it is possible that factors outside the ones controlled in the studies may be important in explaining the result.¹⁸ For example, while observational studies control for the presence of a variety of health factors, they often fail to control for the severity of patient comorbidities. Moreover, differences in co-morbidities likely indicate differences in important social and behavioral influences, such as cigarette smoking, alcohol use, marital status, and compliance with instructions. Although these factors clearly influence health, in many studies they are not controlled. These specific factors were controlled, however, in the University of Virginia study, and compliance with post-treatment instructions is not relevant when looking at outcomes while patients are still in the hospital.

Marginal Benefits from Targeted Changes. Economists Jonathan Gruber and Janet Currie employed an empirical technique that addresses some of the methodological flaws of observational studies.¹⁹ They found that targeted changes in Medicaid eligibility, restricted to specific low-income groups (such as teen mothers and high school dropouts), increased the use of a variety of obstetric procedures.²⁰ Medicaid expansions were associated with a decrease in infant mortality of 8.5 percent and a decreased risk of low birth weight.²¹ Gruber and Currie found that moving from a lack of insurance to Medicaid reduced the likelihood that a child would go a year without seeing a physician in any setting by 50 percent. Moreover, they estimated that the 15.1 percentage point rise in Medicaid eligibility between 1984 and 1992 reduced child mortality by 5.1 percent.²²

Gruber and Currie's work suggests that the size of the expansion can result in marginal benefits. As they state, "targeted eligibility changes had sizable and significant effects on birth outcomes, but broad eligibility changes had little effect."²³

Poor Access, Worse Care

Although it is not possible from the observational studies to definitively claim that having Medicaid is worse than having private insurance or even being uninsured, there are several reasons to believe it might be. First, Medicaid enrollees have more limited access to providers, in large part from low provider payment rates in many states. Several states reimburse doctors and other medical

- 18. For an extensive discussion of the limitations of observational studies in assessing health outcomes, see Richard Kronick, "Health Insurance Coverage and Mortality Revisited," *Health Services Research*, Vol. 44, Issue 4 (2009), pp. 1211–1231, and Helen Levy and David Meltzer, "The Impact of Health Insurance on Health," *Annual Review of Public Health*, Vol. 29 (2008), pp. 399–409.
- 19. Observational studies generally take the form of quasi-experiments. A quasi-experiment results from a policy change that impacts a certain subgroup of the population, but leaves other subgroups unaffected. This technique avoids some of the empirical difficulties of determining cause and effect as long as individuals cannot choose whether to be in the treatment group. In these studies, the treatment group is the population impacted by the Medicaid expansion. The control group, which was not impacted by the policy change, is used for measuring the impact of the change on the treatment group.
- 20. Janet Currie and Jonathan Gruber, "Public Health Insurance and Medical Treatment: The Equalizing Impact of the Medicaid Expansions," *Journal of Public Economics*, Vol. 82, No. 1 (2001), pp. 63–89.
- 21. Janet Currie and Jonathan Gruber, "Saving Babies: The Efficacy and Cost of Recent Changes in Medicaid Eligibility of Pregnant Women," *Journal of Political Economy*, Vol. 104, No. 6 (December 1996), pp. 1263–1296.
- 22. Janet Currie and Jonathan Gruber, "Health Insurance Eligibility, Utilization of Medical Care, and Child Health," *The Quarterly Journal of Economics*, Vol. 111, No. 2 (May 1996), pp. 431–466.
- 23. Currie and Gruber, "Saving Babies."



^{17.} Alexander N. Ortega *et al.*, "Use of Health Services by Insurance Status Among Children With Asthma," *Medical Care*, Vol. 39, Issue 10 (2001), pp. 1065–1074.

professionals at extremely low rates, some at lower than one-third commercial rates.²⁴ In addition to low reimbursement rates, Medicaid requires an enormous amount of paperwork with a lag time between date of service and date of payment that is more than twice as long as Medicare or commercial insurance lag times. Another frustrating feature for providers is a denial rate for Medicaid claims that is three times larger than for Medicare and commercial insurance.²⁵

Dearth of Doctors. According to a 2004–2005 survey, only about half of American physicians accept all new Medicaid patients.²⁶ Of those physicians accepting new patients, 51 percent receive more than 30 percent of their revenue from Medicaid patients. Additionally, small physician practices are increasingly deciding to not see Medicaid enrollees.²⁷ The result: Medicaid enrollees are increasingly served by a subset of providers.

In Texas, where Medicaid pays very little, less than one-third of practicing doctors accept Medicaid, and many limit the number of Medicaid patients they treat.²⁸ Robert Pear, health care reporter for The New York Times, recently reported on the widespread access problem in Louisiana that is frustrating both physicians and enrollees.²⁹ He quoted one woman as saying that "My Medicaid card is useless for me right now. It's a useless piece of plastic. I can't

find an orthopedic surgeon or a pain management doctor who will accept Medicaid."

While low payment rates limit the number of doctors willing to see Medicaid enrollees, they also influence the setting in which the patient is seen and the quality of care he receives. Since the uninsured and Medicaid populations often lack a regular place of care, they receive a greater proportion of their care in the emergency room, a setting that corresponds to higher rates of medical errors.³⁰ Children with Medicaid are more likely to have a primary provider who works in an emergency room or ambulatory care center.³¹ Additionally, outcomes are likely affected by the fact that the uninsured and Medicaid populations are often assigned to less experienced and less skilled surgeons. The powerful link between higher surgeon volume and better outcomes has been well documented.³²

Worse Cardiac Care. Unsurprisingly, Medicaid patients have worse outcomes after cardiac procedures than privately insured individuals. James Calvin and his fellow researchers attempted to explain why this is the case, and they found that physicians treat Medicaid patients in ways that can negatively impact health. For instance, Medicaid patients often receive fewer procedures, such as catheterization,³³ than do privately insured individuals. This is probably, in part, because of differences in payment rates.

- 26. Peter J. Cunningham and Jessica H. May, "Medicaid Patients Increasingly Concentrated Among Physicians," Center for Studying Health System Change Tracking Report No. 16, August 2006, at http://hschange.org/CONTENT/866/ (May 1, 2011).
- 27. Ibid.

^{33.} Cardiac catheterization is the insertion of a tube into a chamber or vessel of the heart.



^{24.} Medicare rates are generally estimated to be between 70–80 percent of commercial payment rates. Kaiser Family Foundation, "Medicaid-to-Medicare Fee Index, 2008," StateHealthFacts.org, at http://www.statehealthfacts.org/ comparetable.jsp?ind=196&cat=4 (May 1, 2011).

^{25.} Athena Health, "PayerView 2010: Improving the Way Providers and Payers Work Together," May 2010, at http://www.athenahealth.com/_doc/pdf/whitepapers/PayerView_Whitepaper_2010_Final.pdf (May 1, 2011).

^{28.} Associated Press, "Doctors Threaten to Pull Out of Texas Medicaid," July 12, 2010, at http://www.nbcdfw.com/news/health/ Doctors-Threaten-to-Pull-Out-of-Texas-Medicaid-98202569.html (May 1, 2011).

^{29.} Robert Pear, "Cuts Leave Patients with Medicaid Cards, But No Specialist to See," The New York Times, April 1, 2011, at http://www.nytimes.com/2011/04/02/health/policy/02medicaid.html?ref=robertpear (May 1, 2011).

^{30.} Lucian L. Leape et al., "The Nature of Adverse Events in Hospitalized Patients: Results of the Harvard Medical Practice Study II," New England Journal of Medicine, Vol. 324, No. 6 (February 1991), pp. 377–384.

^{31.} Ortega et al., "Use of Health Services by Insurance Status Among Children With Asthma."

^{32.} Ethan A. Halm, Clara Lee, and Mark R. Chassin, "Is Volume Related to Outcome in Health Care? A Systematic Review and Methodological Critique of the Literature," Annals of Internal Medicine, Vol. 137 (September 2002), pp. 511–520.

Perhaps more important, there are many discharge medications, such as aspirin and beta-blockers, or interventions, such as smoking-cessation counseling and rehabilitation, which were much less likely to be offered to Medicaid recipients. The researchers suggest several explanations for why Medicaid recipients receive fewer guideline-recommended therapies. One plausible explanation is that cardiologists are more prone to use evidence-based therapies to treat heart attacks than non-cardiologists, and Medicaid patients were much less likely to be treated by cardiologists.³⁴

Expansions Erode Overall Quality

A decade and a half before Congress debated Obamacare, the state of Tennessee undertook the largest statewide Medicaid expansion in the United States. Dubbed TennCare, the expansion was a major experiment, and its results should have produced abundant skepticism of Medicaid.

Within a year of TennCare's enactment, more than half a million additional Tennesseans (slightly more than 10 percent of the state's population) were enrolled in Medicaid managed care plans.³⁵ Despite costly overruns, some of the initial results showed a positive impact on access to care. More people, by virtue of their TennCare coverage, stated that they had a regular place of care and were able to get an appointment either the same day or next day than those without any insurance. Additionally, a higher percentage of people in the expansion group than the uninsured group paid nothing out of pocket.³⁶

A recent Heritage Foundation study examined TennCare's impact on overall population health by comparing trends in mortality rates between Tennessee and its eight neighboring states before and after TennCare.³⁷ The key finding is that the surrounding states experienced robust declines in mortality rates in the four years after TennCare's enactment, while Tennessee's decline was much more modest. The average decline in mortality rates in the surrounding states was 5.2 percent; in Tennessee the decline was only 2.1 percent, the smallest decline in the region. The results suggest that TennCare more likely produced a decline rather than an increase in the overall quality of health care in Tennessee.

There are two plausible explanations for why Medicaid expansions may lower overall population health. First, expanding health insurance that has little or no cost-sharing may have caused some individuals with more pressing medical needs to be "crowded out" by newly covered individuals with less pressing needs. Second, Medicaid expansions invariably cause a crowd-out of patients with private insurance and corresponding networks of physicians who often provide patients with quicker and superior care.

As households with private coverage become eligible for public coverage, many of them will switch to the highly subsidized public coverage. In a 2008 paper, economists Jonathan Gruber and Kosali Simon studied recent expansions of Medicaid and the Children's Health Insurance Program (CHIP), and estimated a 60 percent crowd-out rate.³⁸ This means that of every 10 individuals who became Medicaid-eligible, six decided to switch their insurance and replace their private coverage with Medicaid coverage. In their work on Medicaid, Gruber and Currie commented on crowd-out as it pertained to pregnant women:

^{38.} Jonathan Gruber and Kosali Simon, "Crowd-Out 10 Years Later: Have Recent Public Insurance Expansions Crowded Out Private Health Insurance?" *Journal of Health Economics*, Vol. 27 (2008), pp. 201–217.



^{34.} James E. Calvin *et al.*, "Insurance Coverage and Care of Patients with Non-ST-Segment Elevation Acute Coronary Syndromes," *Annals of Internal Medicine*, Vol. 145 (November 2006), pp. 739–748.

Centers for Medicare and Medicaid Services, Office of the Actuary, "United States Personal Health Care Expenditures (PHCE), All Payers, State of Residence, 1991–2004," at https://www.cms.gov/NationalHealthExpendData/downloads/res-states.pdf (May 2, 2011).

Lorenzo Moreno and Shelia Hoag, "Covering the Uninsured through TennCare: Does It Make a Difference?" *Health Affairs*, Vol. 20, No.1 (January/February 2001), pp. 231–239.

^{37.} Brian Blase, "Obama's Proposed Medicaid Expansion: Lessons from TennCare," Heritage Foundation WebMemo No. 2821, March 3, 2010, at http://www.heritage.org/research/reports/2010/03/obamas-proposed-medicaid-expansion-lessons-from-tenncare.

Most of these women had private insurance before becoming Medicaid-eligible, and some may have been "crowded out" onto the public program, moving from insurance which reimburses medical care more generously to insurance with much less generous reimbursement. This movement was accompanied by reductions in procedure use. Thus, on net, the Medicaid expansions had an equalizing effect, increasing the treatment intensity of the previously uninsured while lowering it among the previously insured.³⁹

The research cited in this paper demonstrates that Medicaid patients frequently receive different often inferior—treatment than patients with private health insurance. And differences in treatment are likely to cause differences in outcome. Therefore, to evaluate the health impact of Medicaid expansion, it is necessary to account for both individuals who were uninsured and became eligible for Medicaid, and for individuals who replaced private coverage with Medicaid. It remains a distinct possibility, therefore, that Medicaid expansions that involve a massive crowd-out of private coverage can worsen population health overall.

Don't Expand Medicaid, Reform It

Medicaid must be fundamentally reformed because it is failing current enrollees and taxpayers. Although the states and federal government spent more than \$400 billion last year (up from below \$72 billion in 1990) on Medicaid, there is a lack of academic studies showing that the program provides recipients with quality health care.⁴⁰ The observational studies show that even uninsured individuals often have better outcomes than individuals with Medicaid. In many areas of the country, Medicaid cards do not guarantee access to health care.

Medicaid has become too large to serve those individuals who truly need public assistance. While targeted Medicaid could potentially have a net beneficial impact, broad eligibility expansions likely do more harm than good when all the effects are considered.

Real Medicaid reform reduces the incentives for states to expand their programs unsustainably, and will give states the freedom to function as "laboratories of democracy" and experiment with different techniques for providing the poor with better health care. Health care reform that encourages state experimentation will allow health policy experts to compare and contrast a variety of approaches, and Medicaid enrollees will likely have better access to health care and taxpayers will benefit from a much better use of their tax dollars.

—Brian Blase is a Policy Analyst in the Center for Health Policy Studies at The Heritage Foundation, and a doctoral candidate in economics at George Mason University.

^{40. &}quot;2010 Actuarial Report: On the Financial Outlook for Medicaid."



^{39.} Janet Currie and Jonathan Gruber, "Public Health Insurance and Medical Treatment: The Equalizing Impact of the Medicaid Expansions," *Journal of Public Economics*, Vol. 82, No. 1 (2001), pp. 63–89.