Costs, Access, and Utilization Under Medicaid: A Review of the Evidence
Established in 2000, the Missouri Foundation for Health is dedicated to its mission of empowering the people of the communities we serve to achieve equal access to quality health services that promote prevention and encourage healthy behaviors. In support of its mission, the Foundation undertakes policy research to educate the public and decision makers on effective health policies that will result in long-term, positive health system change in the state of Missouri. Formulating sound health policies advances the Foundation’s efforts to increase access to high quality, cost-effective preventive and curative care, especially for the uninsured, underinsured, and underserved in our service region of 84 Missouri counties and the City of St. Louis.

The Missouri Foundation for Health does not take responsibility for any analysis, errors, or omissions of fact found in this report.
In an effort to inform the discussion regarding practical policy options to expand health care coverage for the uninsured in Missouri, the Missouri Foundation for Health (MFH) has established the Cover Missouri Project. Under this project, MFH has engaged The Urban Institute to produce a series of papers which considers strengths and weaknesses of the current health care system in Missouri and explores options for decreasing the number of uninsured. MFH offers these studies as a means to further understand and ultimately improve access to health care coverage.

Missouri currently faces considerable challenges related to creating an equitable and comprehensive system of health care for all Missourians. In 2005, between 635,000 and 707,000 Missouri residents were without health insurance. In addition, eligibility cuts and cost-sharing changes to Missouri’s Medicaid program made in 2005 increased the number of uninsured. Ultimately, these changes may shift Missouri from being one of the 12 states with the lowest uninsurance rates to being among the 12 states with the highest rates of uninsurance.

Research broadly documents the serious health and financial consequences associated with being uninsured. The uninsured live sicker and die younger than those with insurance. They forego preventive care and seek health care at more advanced stages of disease. Society then bears these costs through lower productivity, increased rates of communicable diseases, and higher insurance premiums. Those without health insurance often must choose between visiting a doctor and paying for other essentials.

This paper, “Costs, Access, and Utilization Under Medicaid: A Review of the Evidence,” represents the second report in the series emerging under the Cover Missouri Project. It compares and contrasts Medicaid to both private insurance and being uninsured in terms of a recipient’s access to and use of health care. The paper also provides an examination of costs under both Medicaid and private insurance. Finally, the paper studies the evidence on whether the growth in Medicaid spending is greater than observed in the private sector, which helps determine if the growth in Medicaid costs relate directly to the program itself or reflect changes in the overall health care system.

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Vice President for Health Policy
Missouri Foundation for Health
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John Holahan, PhD, is Director of the Health Policy Center at The Urban Institute. He has managed numerous health research projects in the last 25 years and authored many books and papers on health policy. His recent work has focused on the Medicaid program, as well as state health policy more broadly, and issues of federalism and health. He has published research on the reasons for the increase in uninsured over the past decade and on the effects of proposals to expand health insurance coverage on the number of uninsured and the cost to federal and state governments.

Sharon K. Long, PhD, is a Principal Research Associate with the Health Policy Research Center at The Urban Institute. Her recent publications include studies of the effectiveness of the Medicaid program in providing access to care, state efforts to expand insurance coverage, the implications of the continuing decline in employer-sponsored coverage for low-income workers, and the effects of managed care on disabled adults.

About The Urban Institute

The Urban Institute is a nonprofit nonpartisan policy research and educational organization established to examine the social, economic, and governance problems facing the nation. It provides information and analysis to public and private decision makers to help them address these challenges and strives to raise citizen understanding of the issues and tradeoffs in policy making. The Urban Institute works to promote sound social policy and public debate on national priorities through gathering and analyzing data, conducting policy research, evaluating programs and services, and educating all Americans. More information about The Urban Institute may be found at www.urban.org.
The Medicaid program works as the backbone of the financing system that provides health and long-term care services to low-income Missouri residents. In fiscal year (FY) 2006, the federal government will support Missouri Medicaid by paying 62 percent of the cost, with the state having responsibility for the remaining 38 percent. In other words, for every dollar of Medicaid spending by the state of Missouri, the federal government contributes $1.63.

In Missouri, as in the rest of the nation, the costs of Medicaid have been increasing faster than state revenues. Much of the increased Medicaid costs can be attributed to rising enrollment levels due, in part, to an economic downturn and to declining rates of employer-sponsored insurance. Nevertheless, rising costs pose serious issues for state lawmakers who are faced with difficult choices between tax increases and cuts in state spending for Medicaid and other services, such as, K-12 and higher education or infrastructure maintenance. The rising costs of Medicaid have forced states, including Missouri, to make very difficult tradeoffs.

This report examines the value of Medicaid spending in terms of the relative effectiveness of each dollar of Medicaid spending compared to health care spending in the private sector. It also studies the significance of Medicaid spending in terms of its effects on health care access and use by program beneficiaries. Additionally, evidence is presented on whether Medicaid is a high-cost program given the health and disability status of the population it serves. Also included are comparisons of spending on different types of services under Medicaid and private insurance since optional benefits under Medicaid are often viewed as “excessive” or at the “edge of the Medicaid benefit package.”

The report then examines the evidence on whether the growth in Medicaid spending is greater than what has been observed in the private sector. This will assist in determining whether the growth in Medicaid costs relate directly to the program itself or reflect changes in the health care system beyond the Medicaid program. Finally, the report considers how well Medicaid works at providing health care to program beneficiaries, relative to both the care Medicaid beneficiaries would have received if uninsured and the care they would have received with private insurance.
Based on the evidence, the following conclusions have been reached:

- Medicaid spending levels on a per person basis are less than those of private insurance even after accounting for the poorer health and disability status of the population on Medicaid.
- Per person Medicaid spending on optional or “edge of the benefit package” services is lower than under private insurance.
- The growth in Medicaid spending on a per person basis, although high, is slower than the growth seen in the private sector.
- On virtually all measures of access and utilization Medicaid beneficiaries fare considerably better than the uninsured.
- On most measures of access and utilization, Medicaid beneficiaries report levels equal to those with private insurance, with children on Medicaid faring better than children with private insurance on some measures.
- Having health insurance, including Medicaid, increases access to and use of health care and, subsequently, improves health.

### Background on the Medicaid Program in Missouri

The Medicaid program in Missouri covers low-income elderly, pregnant women, children, parents, and persons with disabilities. It has, until recently, provided a wide range of acute care services, some of which are mandatory benefits (e.g., hospital and physician services), and others that are provided as state options (e.g., prescription drugs, dental services, physical therapy, and vision and hearing services). The program also covers institutional and community-based long-term care services, supports state systems of care for people with mental illness and developmental disabilities, and provides financial support for state and local public health systems.

Medicaid is a major support for institutional care of low-income elderly and disabled persons, covering about one-half of all nursing home expenditures in the state and contributing to the costs of care for two-thirds of all nursing home residents. It also pays Medicare premiums, deductibles, and co-insurance for about 220,000 low-income elderly and disabled persons in Missouri. In some cases, Medicaid also covers the costs of a number of acute care services not covered by Medicare for these beneficiaries.

Missouri has been spending about $900 million on prescription drugs for older people and persons with disabilities under its Medicaid program. Much of this expenditure will be shifted to Medicare in January 2006, although the state will be required to make a “clawback” payment to the federal government based on Missouri Medicaid spending levels prior to the Medicare prescription drug benefit.

Finally, Medicaid provides considerable support for safety net hospitals in the state. These hospitals not only provide care to the Medicaid population but also serve large numbers of uninsured people. Medicaid supports these hospitals through both direct payment for services and through Disproportionate Share Hospital (DSH) payments, which helps defray costs of caring for the uninsured.

This report focuses on acute care services because they are generally central to the Medicaid policy debate. A large portion of

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**What’s the Clawback?**

The Medicare Prescription Drug Improvement and Modernization Act (MMA) of 2003 requires that states assist in paying for the prescription drug costs for individuals eligible under both Medicare and Medicaid. As of Jan. 1, 2006, states are responsible for making monthly payments to the federal government for a portion of the drug expenditures for these dual eligibles. This payment, known as the clawback, will constitute the largest single source of state funds flowing to the federal government from 2006 onward.
Medicaid spending for long-term care (and the increase in Medicaid expenditures) has occurred as states have moved care of the low-income elderly, the developmentally disabled, and the mentally ill into the Medicaid program in order to obtain federal matching payments. For many of the low-income people residing in these institutions, no private alternative to Medicaid exists.

States, including Missouri, have attempted to move Medicaid beneficiaries out of nursing homes by expanding personal care services and home- and community-based waivers. Although a substantial component of Medicaid costs, these waivers are generally not at issue in debates about the costs of Medicaid.

Is Medicaid a High-Cost Program?

The first question is whether the high cost of Medicaid relates to inefficiencies and waste in the delivery of care in the program or to the high health care needs of the population it serves. Recently, studies comparing Medicaid and private insurance have used statistical methods to control for differences in the characteristics of people with these different types of coverage. Using data from the Medical Expenditure Panel Survey (MEPS) from 1996 to 1999, Jack Hadley and John Holahan found that when the health and disability status of the two populations are controlled for Medicaid is the lower cost alternative, especially for adults and for persons in fair or poor health.

Health and Disability Status of Medicaid Beneficiaries

Fundamentally, the health status of both adults and children on Medicaid is markedly worse than their privately insured counterparts. Among adults the disparity is particularly large. As shown in Figure 1 and Table 1, about one-third of adults on Medicaid report fair health, compared to only 11% of privately insured adults. Similarly, 8% of children on Medicaid report fair health, compared to only 3% of privately insured children.

*Significantly different from zero at the 5% level.
Medicaid report that they are in fair to poor health compared with only 11 percent of the privately insured. By contrast, nearly 60 percent of low-income adults with private insurance reported that they were in excellent or very good health, compared with only 34 percent of Medicaid beneficiaries. The health status differentials for children were similar, although smaller in magnitude.

### Table 1. Health and Disability Status of Low-Income Adults and Children on Medicaid and with Private Insurance, 2001

<table>
<thead>
<tr>
<th>Adults</th>
<th>Self-Reported Health Status (%)</th>
<th>Medicaid</th>
<th>Private Insurance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Excellent</td>
<td>13.8</td>
<td>27.7*</td>
</tr>
<tr>
<td></td>
<td>Very Good</td>
<td>19.9</td>
<td>30.8*</td>
</tr>
<tr>
<td></td>
<td>Good</td>
<td>29.1</td>
<td>30.2</td>
</tr>
<tr>
<td></td>
<td>Fair</td>
<td>21.3</td>
<td>8.8*</td>
</tr>
<tr>
<td></td>
<td>Poor</td>
<td>16.0</td>
<td>2.5*</td>
</tr>
<tr>
<td></td>
<td>Limitations (%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fair or Poor Mental Health</td>
<td>25.6</td>
<td>4.3*</td>
</tr>
<tr>
<td></td>
<td>Needs Help with ADL/IADLs**</td>
<td>11.3</td>
<td>1.2*</td>
</tr>
<tr>
<td></td>
<td>Used Assistive Devices</td>
<td>6.9</td>
<td>1.3*</td>
</tr>
<tr>
<td></td>
<td>Difficulty Lifting, Walking, or with Steps</td>
<td>15.6</td>
<td>3.1*</td>
</tr>
<tr>
<td></td>
<td>Social or Cognitive Limitations</td>
<td>21.4</td>
<td>3.7*</td>
</tr>
<tr>
<td></td>
<td>Work/Housework/School Limitations</td>
<td>26.8</td>
<td>5.3*</td>
</tr>
<tr>
<td></td>
<td>Deceased or Institutionalized</td>
<td>2.4</td>
<td>0.5*</td>
</tr>
<tr>
<td></td>
<td>Any Limitations</td>
<td>48.0</td>
<td>10.8*</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Children</th>
<th>Self-Reported Health Status (%)</th>
<th>Medicaid</th>
<th>Private Insurance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Excellent</td>
<td>40.4</td>
<td>49.4*</td>
</tr>
<tr>
<td></td>
<td>Very Good</td>
<td>27.5</td>
<td>31.3</td>
</tr>
<tr>
<td></td>
<td>Good</td>
<td>24.4</td>
<td>16.2*</td>
</tr>
<tr>
<td></td>
<td>Fair</td>
<td>6.4</td>
<td>2.5*</td>
</tr>
<tr>
<td></td>
<td>Poor</td>
<td>1.3</td>
<td>0.6*</td>
</tr>
<tr>
<td></td>
<td>Limitations (%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fair or Poor Mental Health</td>
<td>5.2</td>
<td>2.2*</td>
</tr>
<tr>
<td></td>
<td>Needs Help with ADLs</td>
<td>1.4</td>
<td>0.5*</td>
</tr>
<tr>
<td></td>
<td>Needs Help with IADLs</td>
<td>10.6</td>
<td>8.6*</td>
</tr>
<tr>
<td></td>
<td>Limited in Any Activity (age &lt;5)</td>
<td>1.1</td>
<td>0.3</td>
</tr>
<tr>
<td></td>
<td>Special Group (age &lt;5)</td>
<td>2.4</td>
<td>1.5</td>
</tr>
<tr>
<td></td>
<td>Deceased or Institutionalized</td>
<td>0.4</td>
<td>0.1</td>
</tr>
<tr>
<td></td>
<td>Any Limitations</td>
<td>20.4</td>
<td>12.6*</td>
</tr>
</tbody>
</table>

* Significantly different from Medicaid at the 5% level.
** Activities of Daily Living (ADLs); Instrumental Activities of Daily Living (IADLs)
Disability is also much more prevalent in the Medicaid population (Figure 2). Almost half of adults covered by Medicaid report physical or cognitive limitations – roughly four times as many as among low-income adults with private insurance. Among children on Medicaid, about 20 percent report a limitation, compared to 13 percent among the privately insured.

**Health Care Spending Under the Medicaid Program**

When health and disability status are controlled for by using a multivariate framework, Medicaid spending is clearly and consistently lower than spending under private insurance.¹ If individuals covered by Medicaid were given private insurance and received services consistent with private coverage utilization levels and private coverage provider payment rates, then per capita spending on medical services would increase by $1,265 for an adult and by $76 for a child compared to their expenditures under Medicaid (Figure 3). In other words, spending for adults with the health conditions of the typical Medicaid beneficiary would increase from $3,145 to $4,410 per year if they were switched to private coverage. Per capita medical spending for children on Medicaid would increase from $719 to $795 per year if they were switched to private coverage. The true differences would be even larger since these estimates are for medical services only and do not include administrative costs, which are generally higher in private insurance than in Medicaid.

These differences are particularly striking for Medicaid beneficiaries in fair or poor health. Per capita medical spending for an adult Medicaid beneficiary in fair or poor health would increase from $9,615 to $14,785 per year if the Medicaid beneficiary were insured privately – an increase of nearly 54 percent over their cost in the Medicaid program (Figure 4). The results for children were less dramatic because the spending per beneficiary was so much lower under Medicaid to begin with; however, children in fair or poor health would still cost 60 percent more with private insurance than they do under the Medicaid program.

As Hadley and Holahan’s research shows,¹ strong evidence exists, after controlling for
the worse health and disability status of Medicaid beneficiaries, that Medicaid costs are significantly less than costs under private insurance. Therefore on a per person basis, Medicaid is a lower-cost program compared to private insurance coverage.

**Medicaid Benefit Package**

Medicaid is often criticized for offering a rich benefit package that exceeds the services available to individuals with private coverage. Hadley and Holahan¹ examined the distribution of spending on various

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services for Medicaid beneficiaries and low-income individuals with private coverage. As shown in Figure 5, they found that about 90 percent of the spending for both populations is on the core acute-care services: hospital inpatient and outpatient care, physician and other office-based care services, and prescription drugs. Those with private insurance actually spend more than Medicaid beneficiaries on dental care and other services that are optional benefits under Medicaid ($248 versus $158).

The Implications of Lower Per Capita Spending Under Medicaid

The fact that Medicaid per capita spending levels are lower than under private insurance is due, in part, to lower provider payment rates under Medicaid. Previous research has shown that inadequate payment rates have affected some providers’ willingness to participate in the Medicaid program. Thus, Medicaid could be seen as a second tier health system that, although less costly, has lower levels of provider access. The fact that Hadley and Holahan found a much greater differential in spending for those in fair or poor health than for those in better health suggests a lower level of access for those most in need of health care services.

While the Hadley and Holahan study could not examine the detailed content of care (e.g., specialist services, surgical procedures, and diagnostic tests) to fully determine this, it did observe whether there were differences in basic measures of utilization (e.g., doctor visits, office visits, and hospital days) between Medicaid beneficiaries and the privately insured. They found few significant differences between Medicaid and the low-income privately insured. The exception to this finding was that children on Medicaid were more likely to have doctor visits. This finding may reflect Medicaid’s emphasis on well-child preventive care as well as the lower cost sharing requirements in Medicaid in comparison to private plans. Thus, people on Medicaid perform well when examining basic measures of utilization but perhaps less well when probing more specialty and technology intensive services. Moving Medicaid
beneficiaries into private insurance could result in better access to specialty care and better quality care but would increase the costs of Medicaid substantially.

**Is Medicaid Spending Growing Faster Than Private Spending?**

Overall, national Medicaid expenditures grew from $205.7 billion in 2000 to $275.5 billion in 2003, an increase of 34 percent, or about 10 percent per year over the period. Missouri’s Medicaid expenditures increased by 38.5 percent over the same three-year period. If we exclude long-term care costs and focus on spending on acute care (the primary focus of debates on Medicaid expenditures), national Medicaid spending increased by 46 percent over the period, or about 13 percent per year.

The growth in Medicaid spending over this period reflects both an increase in Medicaid costs per enrollee and an increase in the number of Medicaid enrollees. On a per person basis, Medicaid spending for acute care services grew an average of 7 percent per year, over the 2000-2003 period. This rate of increase, while high, compares favorably with the rates of increase in health care spending in the private sector over the same period (Figure 6). Data from the 2004 study by Strunk and Ginsberg show that health care spending per person with private coverage increased by 9 percent per year, while data from the 2003 Kaiser/Health Research and Educational Trust (HRET) Survey show that monthly premiums for employer-sponsored insurance increased by almost 13 percent per year. While increases in Medicaid spending per capita were important and contributed to the high rates of spending growth in the Medicaid program, they were significantly less than the per capita spending growth seen in the private sector.

**Fig. 6. Increases in Medicaid Spending Per Person on Acute Care Services Has Been Less Than for Those With Private Insurance**

<table>
<thead>
<tr>
<th>Medicaid Acute Care Spending Per Enrollee</th>
<th>Health Care Spending Per Person with Private Coverage</th>
<th>Monthly Premiums for Employer-Sponsored Insurance</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.9%</td>
<td>9.0%</td>
<td>12.6%</td>
</tr>
</tbody>
</table>

Percentage increase between 2000 and 2003

The high rates of total Medicaid spending growth seen over the 2000-2003 period were largely driven by the rapid growth in Medicaid enrollment. Over this period, the number of aged and disabled beneficiaries (the most expensive group of beneficiaries) grew by almost 3 percent annually over the three years, while the number of children and non-disabled adults (generally parents) grew by 10 percent per year (Figure 7). The growth in the number of children and non-disabled adults accounted for about 90 percent of the Medicaid enrollment growth over this period, for a total of 8.4 million people.

The increase in enrollment of children and non-disabled adults between 2000 and 2003 was largely due to the ongoing economic recession and rising health care costs. Increasing numbers of families turned to Medicaid as the unemployment level rose and the share of workers with employer-sponsored coverage fell due to rises in premiums.

Although a small part of the overall caseload growth, the increased Medicaid enrollment among aged and disabled adults is important, as they are a high-cost population. Enrollment growth for these adults was also due to higher health care costs (particularly prescription drug costs) and, for working-age disabled adults, the economic recession. Other trends are also of relevance for this population group, including the aging of the population (as the population ages, the share with disabilities is increasing) and expanded access to home- and community-based waiver programs under Medicaid. It is likely that the aging of the U.S. population and the continued growth of home- and community-based waiver programs will continue to push enrollment up among aged and disabled adults.

![Fig. 7. Medicaid Enrollment Growth Has Been a Major Reason for the Growth in Total Medicaid Expenditures](image)

Source: The Urban Institute estimates based on KCMU Medicaid enrollment data collected by Health Management Associates from 44 states inflated proportionally to national totals, 2004.
Thus far evidence has been presented showing that Medicaid spending on a per person basis is less than that of the private sector and that the per person growth in Medicaid spending has been lower than the growth in spending in the private sector. This section presents evidence on how well Medicaid dollars are being spent.

The goal of the Medicaid program is to ensure access to care for low-income individuals in order to protect and improve their health. Unlike the limited research on the costs of the Medicaid program, rich literature exists that examines access to and use of care by beneficiaries in public programs, i.e., Medicaid and the State Children's Health Insurance Program (SCHIP). These studies look both at the overall level of care obtained by beneficiaries in public coverage as well as how access and utilization of health services for those with public coverage compares to that obtained by individuals with private insurance and the uninsured.

The best way to determine the effect of public coverage would be to randomly assign individuals to public coverage, private coverage, and uninsurance and then compare their access and use to determine how it varies with type of insurance coverage. Clearly, this kind of experiment is neither possible, nor ethical. In the absence of experimental evidence on the effects of public programs, researchers have conducted a wide range of studies that rely on observational data and “natural experiments” to assess the value of public coverage. Studies based on observational data compare access and use for individuals who have public coverage to those with private insurance or no insurance, attributing any differences in access or use to public coverage. Fortunately, natural experiments exist allowing researchers to take advantage of a change in policy (e.g., the poverty-related expansions of eligibility for Medicaid in the late 1980s/early 1990s and the introduction of SCHIP in the late 1990s).

Such situations allow researchers to compare access and use for those affected by the policy change to access and use for similar individuals who were not affected, attributing any differences between the two groups to the policy change.

This section reviews the findings from both types of studies and focuses on key measures of access to and use of care, including whether the individual has a usual source of care, self-reported unmet need for care, receipt of care by a physician or other health professional, and receipt of preventive care. Although many of the studies also examine use of hospital care and emergency room care, these are not included here because of the difficulty in interpreting the findings with respect to such care. Higher levels of hospital care or emergency room use may indicate higher levels of need for such care, or it may indicate poorer access to care.

Comparing Public Coverage to Private Insurance and Being Uninsured

Early studies of access to care under Medicaid, as well as several recent studies of access to care under SCHIP, have used descriptive methods to contrast the patterns of access and use by individuals with different types of insurance coverage. While these studies provide insight into disparities in access to care and service use by individuals with public coverage as compared to those with private insurance and the uninsured, they are not able to separate the effects of insurance status from the effects of differences in the characteristics of individuals who have different types of insurance coverage.
Moving beyond simple descriptive studies, a number of studies have used a multivariate framework to help control for the differences in characteristics that may confound estimates of the effects of insurance status on access and use. By controlling for a range of factors, such as the individual's demographic characteristics, health and disability status, family circumstances, and local health market conditions, these studies attempt to disentangle the effects of insurance status from the effects of differences in the characteristics of individuals with public coverage compared to the characteristics of those with other types of insurance coverage.

The general finding of this body of work is that having insurance, including public coverage via Medicaid and/or SCHIP, is associated with better access to care and increases in the use of health care services relative to being uninsured. Adults and children with public coverage have significantly better access to care (as measured by having a usual source of care and lower unmet need for care) than those without insurance. For example, the share of adults with a usual source of care was 24 percentage points higher for those with public coverage than for those who were uninsured (Figure 8). Similarly, the share of children with a usual source of care was 9 percentage points higher for those with public coverage relative to children without insurance (Figure 9).

Consistent with those findings, use of care is also significantly higher for those with public coverage. Both adults and children with public coverage are significantly more likely than the uninsured to have a doctor's visit, a dental care visit, and to receive preventive care (as measured by receipt of a Pap smear or clinical breast examination for women and a well-child visit for children) (Figures 8 and 9). As shown, the probability of having a doctor's visit was 25 percentage

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**Fig. 8. Adults With Public Coverage Have Better Access and Use Than the Uninsured**

<table>
<thead>
<tr>
<th>Service</th>
<th>Percentage Point Difference Under Public Coverage Relative to Being Uninsured</th>
</tr>
</thead>
<tbody>
<tr>
<td>Usual source of care</td>
<td>24*</td>
</tr>
<tr>
<td>Unmet need for medical/surgical care</td>
<td>10*</td>
</tr>
<tr>
<td>Unmet need for dental care</td>
<td>7*</td>
</tr>
<tr>
<td>Unmet need for Rx</td>
<td>15*</td>
</tr>
<tr>
<td>Doctor or other health professional visit</td>
<td>25*</td>
</tr>
<tr>
<td>Dental visit</td>
<td>15*</td>
</tr>
<tr>
<td>Clinical breast exam</td>
<td>20*</td>
</tr>
<tr>
<td>Pap smear</td>
<td>19*</td>
</tr>
</tbody>
</table>

*Significantly different from zero at the 5% level.
Note: Negative numbers are in parentheses.
points higher for adults and 17 percentage points higher for children with public coverage relative to their counterparts without coverage. For children, the difference in the probability of having a well-child visit was even greater, at 26 percentage points.

When access and use under public coverage is compared to that under private insurance, public coverage does as well as private insurance on most measures for both adults and children. Most studies find few, if any, significant differences in access and use between public coverage and private insurance for adults. However, the few differences that are found suggest somewhat poorer access to care under public coverage on some dimensions for adults. In contrast, for children, there is evidence that public programs provide care that is better than private insurance in some respects.

Looking first at adults, there are no significant differences in the probability of having a usual source of care, unmet need for medical care/surgery or prescription drugs, having a doctor’s visit, or receiving preventive care (for women) between adults on Medicaid and low-income adults with private insurance coverage (Figure 10). However, the adults on Medicaid were less likely to report dental visits (11 percentage points lower) and more likely to report unmet need for dental care (4 percentage points higher) than those with private coverage.

It is likely that the lower levels of access and use for dental care reflect the design of the Medicaid program. In contrast to physical health care, dental care is an optional service under Medicaid that many states have opted to provide on a limited basis or to forego altogether for adults. The limited coverage of these benefits under Medicaid may explain the gap in access for dental care for Medicaid beneficiaries relative to the privately insured.23

Similar to the findings for adults, a 2001 study19 of access to care for children with public coverage finds, among other things, that access to care is generally comparable...
for children on Medicaid and low-income privately insured children (Figure 11). However, this study also finds that health care use is significantly higher for Medicaid children in terms of visits to a physician or other health care professional (6 percentage points higher), well-child visits (9 percentage points higher), and dental care visits (10 percentage points higher). The higher levels of well-child visits and dental care visits are clearly indicative of better access to care for Medicaid children, which provides evidence that public coverage improves access to care relative to private insurance for low-income children along these dimensions.
Unlike adults on Medicaid, children on Medicaid must be provided needed care under the Early and Periodic Screening, Diagnosis and Treatment (EPSDT) program, including optional services (like dental care) that may not be covered under their state’s Medicaid program. It is likely that because of this policy Medicaid does a better job of providing these services to children than does private coverage, the opposite of the findings reported above for adults.

Although the studies using multivariate methods accounted for a range of variables that may influence access and use, they have an important limitation that recent research has begun to address: they do not fully separate the effects of who enrolls in public coverage from the effects of public coverage itself. This is a limitation because, as noted above, health insurance status is not a random event; on the contrary, a variety of reasons may underlie an individual’s decision to enroll or not enroll in public coverage. If these reasons also directly affect the individual’s health care access and use, then observed differences in access and use among public coverage, private insurance, or being uninsured may be due, in part, to unmeasured differences between the individuals rather than the individual’s actual insurance status, biasing the estimates of the impacts of having public coverage.

Several studies have attempted to deal with selection issues by estimating the impacts of public coverage on access to and use of care using instrumental variables methods. In general, the studies find that controlling for selection into insurance status has significant implications for estimates of the impacts of insurance coverage. For example, a 2005 study focusing on low-income mothers found that, after controlling for insurance selection, the benefits of having Medicaid coverage versus being uninsured for low-income mothers were substantially larger than estimates that did not account for selection into insurance status, indicating greater gains from public coverage than prior studies would suggest (Figure 12). That

Fig. 12. For Adults, the Gains From Public Coverage Relative to Being Uninsured May Be Even Larger Than Previously Thought
study estimates, for example, that the gain in having a usual source of care from public coverage relative to being uninsured increased from 18-25 percentage points for adults after controlling for selection into insurance coverage.

For children, the gain in having a usual source of care from public coverage relative to being uninsured increased from about 15 percentage points to 39 percentage points after controlling for selection into insurance coverage (Figure 13). Similarly, a 2005 study by Selden and Hudson of access to care for children, also found larger effects of public coverage after controlling for selection into type of insurance (Figure 14). This growing literature suggests that the gains from public coverage may well be larger than previously believed; however, more studies are needed to determine whether these findings will hold up for other populations and using alternative estimation methods.

**The Gains From Expanding Public Coverage**

Beyond studies comparing individuals with public coverage to those with private insurance or the uninsured, there is broad literature that takes advantage of natural experiments created by changes in program eligibility to estimate the gains in access and use that follow enrollment into public coverage. Several studies have used longitudinal data to compare access and use after enrollment in a public program to the individual’s access and use prior to enrollment using a pre-post framework. All of these studies have found significant improvements in access to and use of care following enrollment in public coverage, particularly for those who were uninsured prior to enrollment. For example, a 2004 evaluation of New York’s SCHIP program found that, after enrolling, children were significantly more likely to have a usual source of care (12 percentage points higher)

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**Fig. 13. For Children, the Gains From Public Coverage Relative to Being Uninsured May Be Even Larger Than Previously Thought**

<table>
<thead>
<tr>
<th>Percentage point difference under public coverage relative to being uninsured</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estimate without controlling for selection</td>
</tr>
<tr>
<td>Usual source of care</td>
</tr>
<tr>
<td>Doctor or other Health Professional Visit</td>
</tr>
<tr>
<td>Dental visit</td>
</tr>
</tbody>
</table>

*Significantly different from zero at the 5% level.

and less likely to have an unmet health need (from 4-10 percentage points lower) relative to their circumstances prior to enrollment (Figure 14). Similarly, health care use increased under SCHIP, with the probability of a doctor’s visit increasing by 6 percentage points, preventive care by 9 percentage points, and dental visits by 3 percentage points. One limitation of these studies, however, is that they do not control for other factors beyond enrollment in the public program, which may have been occurring over the same time period as the pre-post changes that they were studying. For example, families may choose to enroll in public coverage because of a health crisis so that, in the absence of public enrollment, their service use would have increased anyway. Under this scenario, an estimate of the impact of enrolling in public coverage using a pre-post framework will overstate the gains to public coverage. To address this potential bias in the estimates of the effects of public coverage, several researchers have turned to “differences-in-differences” (DD) or comparative change models to estimate the effects of expansions in public coverage on access to care.\(^{41}\)

A number of studies using the DD framework compare changes over time in access to care for individuals newly eligible for public coverage (or newly enrolled in public coverage) to changes over time in access for similar individuals whose eligibility for public coverage does not change.\(^{28, 42-47}\) Although there are some methodological limitations to these studies, a frequent conclusion from this work is that the expansion in public coverage led to improvements in access to and use of care.

Among these studies, there is one that uses a DD model to examine the impacts of the recent eligibility expansions under SCHIP on children with chronic conditions.\(^{48, 49}\) As summarized in Figure 15, that study finds evidence that SCHIP significantly improved access to dental care (unmet need for dental

<table>
<thead>
<tr>
<th>Percentage point change with SCHIP expansion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Usual source of care: <strong>12</strong>(^*)</td>
</tr>
<tr>
<td>Unmet need for medical/surgical care: <strong>4</strong>(^*)</td>
</tr>
<tr>
<td>Unmet need for dental care: <strong>7</strong>(^*)</td>
</tr>
<tr>
<td>Unmet need for Rx: <strong>4</strong>(^*)</td>
</tr>
<tr>
<td>Doctor or other health professional visit: <strong>6</strong>(^*)</td>
</tr>
<tr>
<td>Preventive care visit: <strong>12</strong>(^*)</td>
</tr>
<tr>
<td>Dental visit: <strong>3</strong></td>
</tr>
</tbody>
</table>

*Significantly different from zero at the 5% level.
Note: Negative numbers are in parentheses.
care for newly eligible children with chronic conditions was reduced 7 percentage points), although there were no significant changes in the likelihood of either a dental visit or doctor visit under SCHIP. However, because the study focused on the impacts of SCHIP on access and use for the entire population of children made eligible under SCHIP and not on the children who enrolled, these estimates likely understate the effects of SCHIP on the children who gained coverage.\(^5\)

Turning to the broader set of studies that used DD models to examine the effects of the Medicaid expansions of the late 1980s, there is further evidence of some positive effects on health care use. As shown in Figure 16, the findings from a 2003 study show no change in the share of children with a usual source of care following the Medicaid expansions; however, the share of children with a doctor visit was significantly higher following the expansion in coverage (up 9 percentage points).\(^4\)

For pregnant women (Figure 17), where the hope was that the expansion in Medicaid coverage would reduce the share of women who failed to obtain timely prenatal care, findings from a 2001 study show that both white and African American women were less likely to delay the initiation of prenatal care under the Medicaid expansions, with the share of women delaying the initiation of prenatal care dropping by up to 8 percentage points.\(^4\)

Somewhat surprisingly, the improvements in care for pregnant women under the Medicaid expansions did not translate into a reduction in low birth weights or reduced infant mortality.\(^5\) However, there is reason to be cautious in interpreting the findings for birth outcomes since the analyses often were not able to control for the timing of prenatal care under Medicaid and many of the studies focus on samples of women who were likely to have gained eligibility under the Medicaid expansions rather than samples of women who actually enrolled in Medic-
aid under the expansions. As with the SCHIP analysis, it would be expected that the effects on birth outcomes for women who enrolled under the expansions to be larger than those for women who gained eligibility for coverage (but may not have actually enrolled).

**The Gains From Better Access and Use With Public Coverage**

While there is compelling evidence that having health insurance, including public coverage through Medicaid or SCHIP, significantly improves access and use of care, it does not guarantee an improvement in

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**Fig. 16. Expanding Medicaid Coverage Improved Access and Use for Children**

![Bar chart showing percentage point change with Medicaid expansions](chart16.png)

- Usual source of care: 2
- Doctor or other health professional visit: 9*
- Dental visit: 5

*Significantly different from zero at the 5% level.


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**Fig. 17. Expanding Medicaid Coverage Reduced Delays in the Initiation of Prenatal Care for Pregnant Women**

![Bar chart showing percentage point change with Medicaid expansions](chart17.png)

- White Women: (7)* (6)* (3)* (5)* (6)* (7)* (8)*
- African American Women: (7)* (6)* (5)* (6)*

*Significantly different from zero at the 5% level.

Note: Negative numbers are in parentheses.

health. Recent in-depth reviews weigh the evidence from the broad literature addressing the relationship among health insurance, use of care, and health to make an assessment of whether the existing research supports a conclusion that having health insurance improves health. That work, as summarized by Jack Hadley in 2003, concludes that, although none of the studies are definitive and the findings are not universal, studies of different medical conditions conducted at different times, using different data sets and statistical methods, have generated similar estimates of the gains in health from insurance coverage. The existing literature shows that the uninsured use fewer screening and prevention services, delay seeking care when sick, and receive less care than the insured, even when seriously ill or suffering from an identified chronic condition. Together, these factors result in higher rates of morbidity and mortality for the uninsured. Overall, the existing literature provides compelling evidence that having health insurance increases health care use and, subsequently, improves health.

### ENDNOTES


5 Randomization would balance out the other characteristics of the sample members across the treatment groups (i.e., public coverage, private coverage, or uninsured) so that the only difference between the groups is their insurance status.

6 The closest we’ve come to such a study is the RAND Health Insurance Experiment (Newhouse et al. 1993) of the late 1970s/early 1980s, which randomly assigned individuals to different types of insurance coverage (but not to uninsurance). The RAND study was designed to test the effects of differences in cost sharing on health care use and health. Individuals were randomly assigned to insurance plans that either had no cost sharing or 25, 50, or 95% co-insurance rates with a maximum annual family out-of-pocket payment of $1,000 in 1975-1981 dollars (Keeler 1992).


23 It should also be noted that the low-income privately insured also face challenges in obtaining dental care. Only about two-thirds of low-wage workers with private insurance have dental coverage (Collins et al. 2003).

24 This same requirement does not apply for children enrolled in SCHIP.


31 Selden and Hudson make a strong argument that part (and maybe the largest part) of what is driving the differences between models that adjust for the possibility of selection bias and those that do not is errors in the reporting of insurance status by survey respondents. They note that such errors can blur distinctions between types of insurance and bias estimates of the differences in access and use among public coverage, private coverage, and uninsurance toward zero.


40 The Kasper, Giovannini and Hoffman (2000) study also looks at how access to care changes with the loss of health insurance coverage.


49 The study also examined the effects of SCHIP on all children; however, only limited information is presented on the analysis for that population.

50 Further, the authors note that their analysis was constrained by small sample sizes, which would make it difficult to detect with confidence all but relatively large differences in access and use following the implementation of SCHIP.


Cover Missouri Project Publications

The Cover Missouri Project includes a series of reports and fact sheets produced in early 2006. All materials are available online at www.mffh.org. Printed fact sheets and reports are available while supplies last. For more information about the Cover Missouri Project, contact the MFH Health Policy staff at info@mffh.org or toll-free at 1-800-655-5560.