

kaiser
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medicaid
and the uninsured

Rising Unemployment, Medicaid and the Uninsured

Prepared by
John Holahan
A. Bowen Garrett
The Urban Institute

January 2009



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The Kaiser Commission on Medicaid and the Uninsured provides information and analysis on health care coverage and access for the low-income population, with a special focus on Medicaid's role and coverage of the uninsured. Begun in 1991 and based in the Kaiser Family Foundation's Washington, DC office, the Commission is the largest operating program of the Foundation. The Commission's work is conducted by Foundation staff under the guidance of a bipartisan group of national leaders and experts in health care and public policy.

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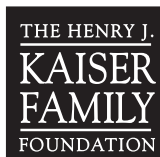
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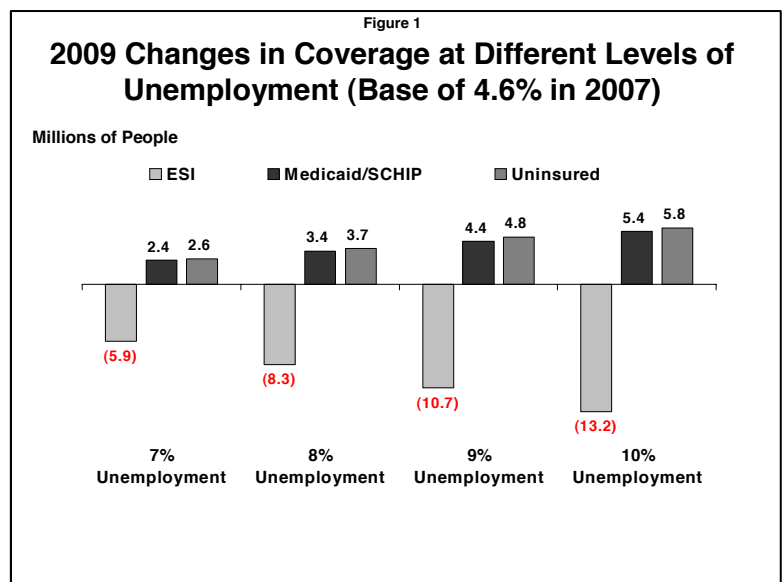
Executive Summary

The U.S. economy continues to decline. The November unemployment data shows that the national unemployment rate had increased to 6.7 percent up from an average of 4.6 in 2007. Nine states now have unemployment rates of 7.5 percent or more and seventeen states have had more than 2.0 percentage point increases of their unemployment rates in the last year. Economic forecasts suggest that the unemployment rate will continue to rise and could reach 10 percent. Increasing unemployment reduces family incomes and health coverage as well as state revenues. By December, 44 states faced or are facing budget shortfalls in FY 2009 or FY 2010. In response to the last economic downturn, legislation was enacted to provide federal fiscal relief to states, half of which was in the form of an enhanced federal match rate to increase the federal share of Medicaid costs. This strategy proved to be successful in helping states avoid deeper Medicaid cuts and maintain Medicaid eligibility levels (a condition of receiving the federal funding). An increase in the federal Medicaid match rate is currently being considered by Congress to help states meet the growing demands and costs for the program.

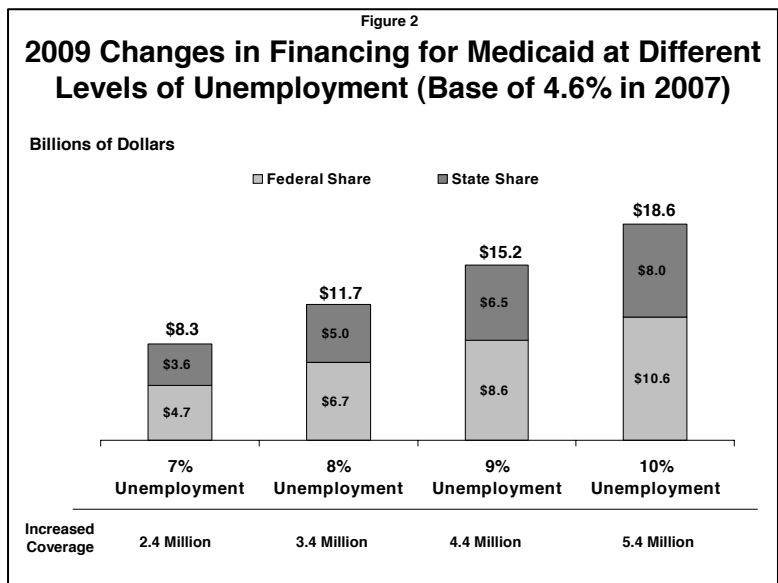
This brief estimates baseline levels of coverage and spending for Medicaid/SCHIP (assuming steady unemployment). Then, this brief estimates for 2009 the impact of increased unemployment on health care coverage, state costs for Medicaid/SCHIP and the uninsured and the potential impact of proportional statewide budget cuts on Medicaid and SCHIP funding assuming that states maintain eligibility levels for public programs. If states reduce eligibility levels or established enrollment barriers, then Medicaid and SCHIP enrollment and spending will be depressed and the number of uninsured would be higher than the estimates in this report. In addition, states may not be able to provide additional funding to hospitals and other providers to care for the uninsured.

Changes in Health Coverage. Losing a job often means that people lose health insurance. Many individuals, especially children will become eligible for Medicaid. Medicaid eligibility standards for adults are much more restrictive so many adults are likely to become uninsured. In 2007 there were 45 million non-elderly uninsured Americans. We estimate that if unemployment rises from an average of 4.6 percent in 2007 to 7 percent in 2009, the number of people with employer sponsored insurance (ESI) would decline by 5.9 million, Medicaid and SCHIP enrollment would increase by 2.4 million and there would be an additional 2.6 million uninsured. If

unemployment hits 10 percent, ESI would fall by 13.2 million, Medicaid and SCHIP would increase by 5.4 million and the uninsured would increase by 5.8 million.



State Costs for Medicaid. Increasing Medicaid enrollment affects state budgets since states are responsible for a share of Medicaid and SCHIP expenditures. For Medicaid and SCHIP, the federal share of Medicaid costs varies by state based on a statutory formula that relies on states' per capita income relative to the national average. The federal share of Medicaid ranges from 50 percent to 76 percent there is an enhanced match rate for SCHIP. In the case of SCHIP federal allocations are fixed and beyond a certain level of enrollment, new costs must be fully borne by states. Assuming current eligibility rules, spending for Medicaid and SCHIP would increase by \$8.3 billion of which the state share would be \$3.6 billion with a 7 percent unemployment rate. At a 10 percent unemployment rate, Medicaid and SCHIP spending as a result of increased enrollment would increase by \$18.6 billion, of which the state share would be \$8.0 billion.

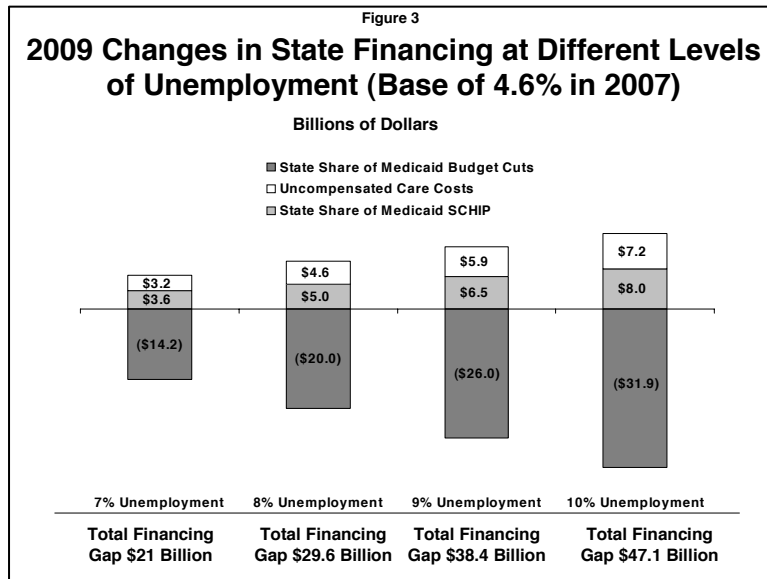


Impact on Revenues. Along with increasing expenditures, increased unemployment results in declines in state revenues and therefore affects states ability to pay for state programs including Medicaid and SCHIP. For every one percentage point increase in unemployment, state revenues are expected to decline by 3 to 4 percent. Assuming that all state programs are cut proportionately to deal with these revenue declines, Medicaid and SCHIP could face state funding cuts of 3 to 4 percent. However, for Medicaid and SCHIP, because of the federal matching dollars, a state with a 60 percent federal match rate must cut Medicaid spending by \$2.40 to save \$1 in state Medicaid spending. If unemployment reaches 7 percent, the Medicaid/SCHIP “share” of state budget cuts would amount to \$14.2 billion and could reach \$31.9 billion at 10 percent unemployment. The average federal share for Medicaid is 57 percent and the SCHIP matching rate is 30% higher. Thus state budget cuts of \$14.2 to 31.9 billion require overall cuts in Medicaid/SCHIP spending of at least twice as much. Such reductions in state and federal Medicaid spending will likely have additional negative effects on employment income, tax revenue and economic output at the state level.

Costs for the Uninsured. More uninsured puts pressure on state budgets because states often finance uncompensated care at local hospitals and clinics. Uncompensated care is also financed by Medicaid and Medicare disproportionate share hospital payments, some indirect graduate medical education payments, state and local appropriations, and a variety of other programs such as the Veterans Administration, the Indian Health Service and Community Health Centers. There is also some “shifting” of costs to the privately insured. Most of these revenue streams are not likely to increase in the current environment in response to a larger uninsured population, thus most of these costs that we project are likely to borne by providers, states and or their localities or the uninsured will have less access to care. At a 7 percent unemployment rate, the increased costs of funding additional uncompensated care costs at current levels would be \$3.2 billion and \$7.2 billion at 10 percent unemployment.

Financing Gap for Medicaid/SCHIP and the Uninsured due to Increased Unemployment.

Program cuts in conjunction with increased funding needs associated with increased enrollment in Medicaid and SCHIP and higher uncompensated care costs as a result of higher unemployment could result in program funding gaps of \$21 billion at 7 percent unemployment and \$47.1 billion at 10 percent unemployment in 2009 alone; unemployment rates are expected to remain high and state fiscal conditions weak in 2010, further exacerbating the situation. These figures are on top of baseline increases in Medicaid and SCHIP enrollment (expected to increase by 1.3 million over 2007 levels) and costs primarily as a result of continued declines in employer coverage. Based on the experience during the last economic downturn, these estimates of changes in coverage and spending on Medicaid and SCHIP are conservative, but reflect the substantial funding gap at the state level.



Conclusion. The results from this analysis show that increases in unemployment pose serious budget issues for states. Growth in the unemployment rate drives up the number of new Medicaid and SCHIP enrollees, as well as the uninsured, just as state revenues decline reducing the ability of states to fund the current Medicaid program much less the increased costs associated with greater need for health coverage. Forty-one states and the District of Columbia are projecting FY 2009 mid-year shortfalls of \$42 billion with gaps reaching \$145 billion in FY 2010. States will fall under increasing pressure to make Medicaid cuts to address these shortfalls. Reductions in state Medicaid spending or increases in state taxes to pay for Medicaid would likely worsen the impact of the recession. As state budget conditions continue to deteriorate and unemployment rises, the argument for temporarily increasing federal payments to states through increases in the federal matching assistance percentage becomes stronger.

Introduction

The U.S. economy continues to decline. The November unemployment data released on December 5, 2008 shows that the unemployment rate had increased to 6.7% and that 533,000 people had either become unemployed or left the labor force.¹ The number of people working part-time who would prefer full-time work has also increased. Figure 1 shows that nine states now have unemployment rates of 7.5% or higher while another ten states have unemployment rates between 6.5% and 7.4%.

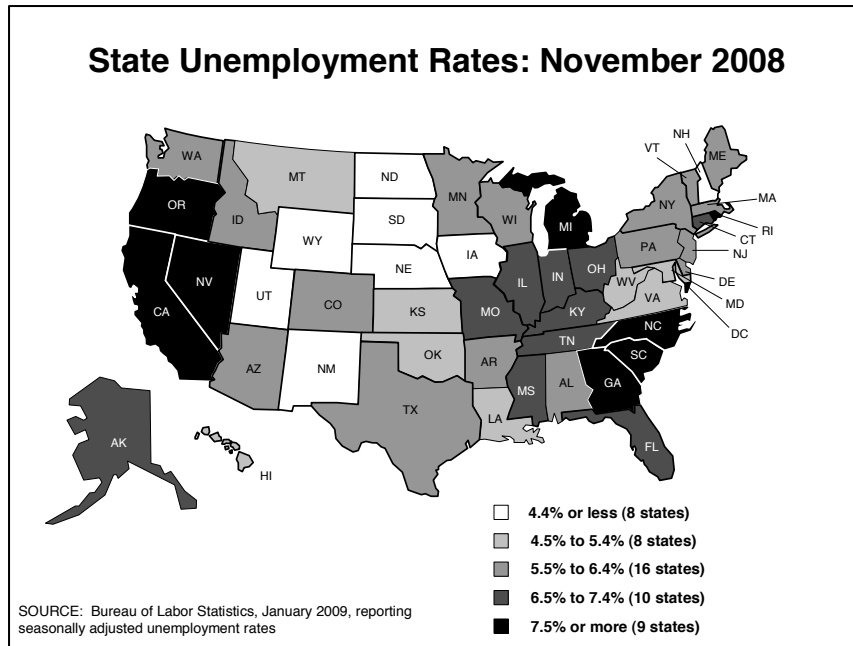
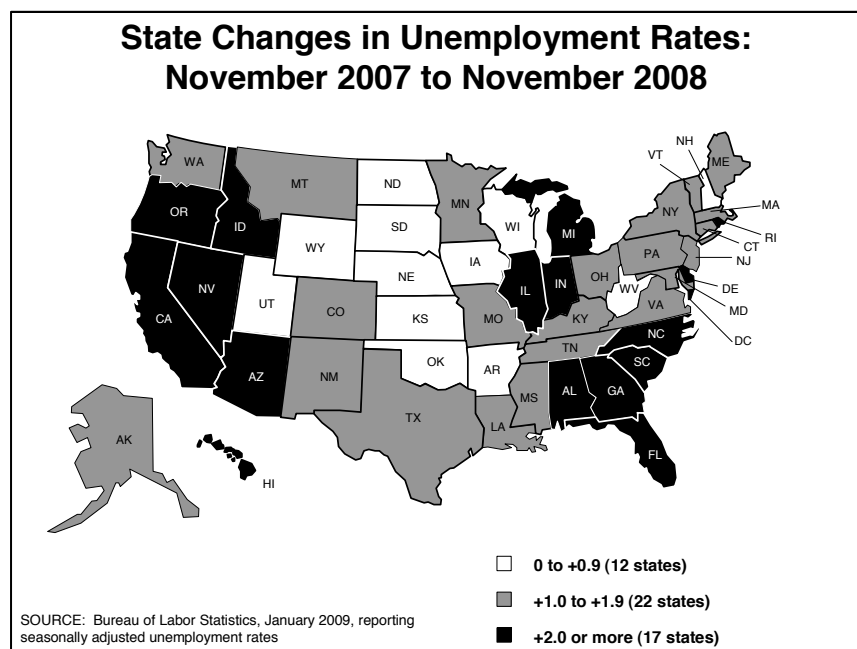


Figure 2 show that 17 states have had more than 2.0 percentage point increases of their unemployment rates in the last year.



Economic forecasts suggest that the unemployment rate will continue to rise. Goldman Sachs has projected that the unemployment rate would increase to 9% by December of 2009.² Mark Zandi of Economy.Com has forecast that unemployment rates would increase to 10% without fiscal stimulus and 8% with a \$400 billion stimulus package.³ The nation's governors have requested a two-year temporary increase in federal matching rate payments to address the costs associated with Medicaid.

Increasing unemployment affects health insurance coverage as well as state revenues. Losing a job means that people often lose health insurance; while people have the opportunity of obtaining COBRA coverage (the opportunity to buy their current employer coverage), this is usually very expensive because the individual must shoulder both the employer and employee contribution for coverage. Furthermore, as labor markets weaken, employers may not be able to contribute as much to health insurance or may reduce the offer of coverage. Many individuals will become eligible for Medicaid as incomes decline. The likelihood of obtaining public coverage is greater for children where eligibility levels are typically set at 200 percent of poverty or greater compared to Medicaid eligibility standards for adults are much more restrictive. Those who do not obtain COBRA coverage, purchase non group insurance, or gain public coverage often become uninsured.

Increasing Medicaid enrollment affects state budgets. While those who are losing employer coverage are generally more healthy than those already on Medicaid, increased enrollment nonetheless has a significant effect on Medicaid and SCHIP costs. Since states are responsible for a share of Medicaid and SCHIP expenditures, state expenditures increase. In the case of SCHIP federal allocations are fixed and beyond a certain level of enrollment, new costs must be fully borne by states.

Increases in the number of uninsured also has implications for state and local budgets. Local hospitals and clinics are faced with more uninsured people needing their services. Since state and local tax revenues have fallen, helping hospitals and clinics finance these additional services becomes much more difficult.

Along with increasing expenditures, declines in state revenues affect states ability to pay for Medicaid and SCHIP. As noted above, both programs require states to pay a share of overall spending. Increases in unemployment have a substantial negative effect on state general revenues. Thus, the ability to finance Medicaid and SCHIP is seriously compromised during economic recessions, even if there were no enrollment increases.

In this brief, we present estimates of the impact of rising unemployment on Medicaid enrollment and spending as well as on the number of uninsured and state and local costs of uncompensated care for the newly uninsured. Finally, we estimate the Medicaid "share" of the state revenue decline i.e. the reduction in states' ability to finance Medicaid and SCHIP.

Methods

Medicaid enrollment is driven by a number of factors. These include changes in state eligibility standards, health care costs, employer offers of health insurance coverage and changes

in income . But the business cycle is also an important determinant particularly for non disabled adults and children. As unemployment increases workers and their dependants may lose access to employer coverage. This can happen because of unemployment, reduced employer contributions to health insurance, reduced eligibility for employer sponsored insurance, and movement from full to part-time work. Individuals then either become eligible and enroll in public coverage, purchase non group coverage or become uninsured. Separating the effect of increasing unemployment from other factors is challenging.

In our analysis we examine state level data from 1990-2003 from the Current Population Survey, as well as other sources. We estimated regression models of coverage rates for four types of coverage – employer sponsored insurance (ESI), Medicaid and SCHIP (which includes other state funded coverage), non- group private coverage and lack of health coverage or uninsurance. The models were structured to estimate the relationship between each type of coverage and the unemployment rate. The models controlled for state health insurance costs, eligibility thresholds, various demographic characteristics, state income distribution, time trends and state fixed effects. These control variables allowed us to estimate the relationship between each type of coverage and the unemployment rate holding the effects of other factors constant.

In this paper we revised the baseline used in the paper published earlier this year.⁴ We estimated a 2009 baseline based on changes observed from between 2004 and 2007; essentially we assumed that the economy would continue to grow slowly and that insurance coverage would change the same way it had between 2004 and 2007, that is, we assume no recession.

We used the econometric results to estimate the impact of the increases in the unemployment rate from the baseline using the 2007 average unemployment rate (4.6%). We then estimated the impact of an increase in the unemployment rate to 7%, 8%, 9%, and 10% on the number of adults and children in each category including Medicaid and SCHIP. The Medicaid and SCHIP spending data adjusted for the expected differences between health status of previous and new enrollees and adjusted to 2009 to estimate the impact on program expenditures based on current Medicaid/SCHIP spending on adults and children. We project that the 2009 costs per new Medicaid/SCHIP enrollee would be \$2,223 for children and \$5,606 for adults.

We compared the actual experience for the 2000 – 2003 recession with changes the model would have predicted. We find that the unemployment parameters would have predicted less change in coverage than actually occurred. (See Appendix for further discussion). However, the actual changes in coverage that occurred between 2000 and 2003 reflect more than simply the change in the unemployment rate. For example, Medicaid eligibility was expanded in the late 1990s and SCHIP began to be implemented. Both of these caused significant increases in Medicaid enrollment. Moreover health care costs continued to grow considerably faster than underlying wage growth which seems to have reduced employer sponsored insurance.

There are three other issues worth mentioning. First, the period covered by the data in this analysis includes the 1990-1992 recession as well as that in 2000-2003. In the latter downturn Medicaid eligibility was broader and SCHIP was enacted. It is likely that the impact of an unemployment increase would be greater in the latter recession. By using the entire period,

the overall unemployment effect could understate the effect that applies to the latter and subsequent recessions. Second the rising unemployment rate is a proxy for all macroeconomic changes in employment that are occurring. This includes moving out of the labor force and moving to part-time work. Both of these are highly correlated with the unemployment rate. But to the extent that they're not perfectly correlated, our unemployment effects could be either too high or too low. Third, to the extent that the control variables are correlated with macroeconomic changes in employment for which the unemployment rate is a proxy, our unemployment effects may understate the full impact of the economic decline on each type of coverage.

Baseline Estimates

Under the baseline, we assumed that the economy would continue to grow slowly and that insurance coverage would change the same way it had between 2004 and 2007, that is, we assume no recession. Under this scenario, in 2009 employer coverage would continue to decline and the number of individuals covered by Medicaid and SCHIP would increase. Specifically, Medicaid and SCHIP coverage would increase by 1.3 million even in the absence of an economic downturn. The uninsured would fall by 300,000. The results presented in the rest of this paper are on top of these baseline changes and show just the effects of increased unemployment.

The Effects of Rising Unemployment on Coverage

For children, the results shown in Table 1 show that a 1.0 percentage point increase in the seasonally adjusted unemployment rate would cause the proportion of children receiving employer-sponsored insurance to fall by 0.95 percentage points but Medicaid/SCHIP coverage to increase by 0.79 percentage points. Changes in non-group coverage and uninsurance were not statistically significant. These results indicate that coverage through Medicaid and SCHIP offsets most of children's decline in ESI during an economic downturn.

Table 1. Recession estimates: The effect of a 1 percentage point increase in the unemployment rate on the percentage of children and non-elderly adults with various types of health coverage

	Children	Non-elderly adults
ESI	-0.95 percentage points	-0.92 percentage points
Medicaid/SCHIP	+0.79 percentage points	+0.20 percentage points
Uninsured	No statistically significant change	+0.59 percentage points
Non-group coverage	No statistically significant change	+0.18 percentage points

For adults under age 65, the picture is somewhat different. A 1.0 percentage point rise in the unemployment rate would reduce the proportion of adults with employer-sponsored insurance by 0.92 percentage points. The proportion of adults receiving Medicaid would rise by 0.20 percentage points, non-group coverage would increase by 0.18 percentage points, and the percentage of adults without coverage would grow by 0.59 percentage points. Because Medicaid and SCHIP provide much less coverage for adults than for children, newly unemployed adults

are more likely, compared to children, to end up with non-group coverage or to become uninsured.

Table 2 shows the impact on changes in coverage for children and adults for different unemployment rates using the econometric estimates in Table 1. (As noted above, our projected 2009 baseline reflects an economy with a 4.6% unemployment rate, the average for 2007, the last year for which insurance data is available). For children, increasing the unemployment rate to 7% would reduce employer sponsored insurance by 1.8 million and increase Medicaid enrollment by 1.5 million. A 10% unemployment rate would result in 4.1 million children losing ESI and 3.4 million enrolling in Medicaid and SCHIP.

The effects on adults are larger. A 7% unemployment rate would result in a drop in ESI of 4.1 million. There would be an increase in Medicaid/SCHIP of almost 0.9 million, an increase in the uninsured of 2.6 million and an increase in non-group coverage of 790,000.

Table 2. The national impact of various percentage point increases in unemployment on the number of children and non-elderly adults with various types of health coverage: 2009

Children		(millions)			
	ESI	Medicaid/SCHIP	Uninsured	Non-group coverage	
7%	-1.8	1.5	Not Significant	Not Significant	
8%	-2.6	2.1	Not Significant	Not Significant	
9%	-3.3	2.8	Not Significant	Not Significant	
10%	-4.1	3.4	Not Significant	Not Significant	

Non-elderly Adults		(millions, unless otherwise stated)			
	ESI	Medicaid/SCHIP	Uninsured	Non-group coverage	
7%	-4.1	880 thousand	2.6	790 thousand	
8%	-5.7	1.2	3.7	1.1	
9%	-7.4	1.6	4.8	1.5	
10%	-9.1	2.0	5.8	1.8	

Total		(millions, unless otherwise stated)			
	ESI	Medicaid/SCHIP	Uninsured	Non-group coverage	
7%	-5.9	2.4	2.6	790 thousand	
8%	-8.3	3.4	3.7	1.1	
9%	-10.7	4.4	4.8	1.5	
10%	-13.2	5.4	5.8	1.8	

Source: Urban Institute, December 2008

Notes: (1) ESI is employer-sponsored insurance. (2) Totals may not add because of rounding and changes that, disaggregated, are less than statistically significant (3) The baseline reflects a 4.6% unemployment, the average for 2007. We projected the baseline for 2009 assuming that unemployment rates remained at 4.6%. In other words, the relatively strong economy in 2007 continued. Under baseline, ESI is expected to fall and Medicaid and the uninsured are expected to increase. The estimate shown in Table 2 shows the impact of alternative increases in the unemployment rate relative to an economy with a 4.6% unemployment rate.

At the other extreme, an increase in the unemployment rate of 10% would mean a reduction in employer sponsored insurance of 9.1 million. In response there would be an increase in Medicaid/SCHIP enrollment of 2.0 million, an increase in the uninsured of 5.8 million, and an increase in non-group coverage of 1.8 million.

The total effects (adults and children) from a 7% unemployment rate would be a decline of 5.9 million with ESI, with an increase of 2.4 million on Medicaid and SCHIP and 2.6 million more uninsured. A 10% unemployment rate there would be a decline of 13.2 million with ESI, with an increase of 5.4 million in Medicaid/SCHIP and 5.8 million more uninsured.

In Table 3 we estimate the cost implications for Medicaid and SCHIP of given percentage point increases in unemployment. We use the projected increases in Medicaid and SCHIP enrollment times our estimate of the cost per child and per adult. We multiply these cost estimates by the changes in coverage shown in Table 2 to derive a projection of spending increases. At a 7% unemployment rate, total Medicaid spending would increase by \$3.3 billion for children and \$4.9 billion for non elderly adults in 2009. The state share would increase by \$1.4 billion for children and \$2.1 billion for non elderly adults. The total increase in state expenditures would be \$3.6 billion overall. At a 10% unemployment rate spending on children would increase by \$7.5 billion and \$11.1 billion for adults or an increase of \$18.6 billion overall. The state share would be \$3.2 billion for children and \$4.8 billion for non elderly adults, or \$8.0 billion overall. Overall increases in state spending at 8% and 9% unemployment rates would be \$5.0 billion and \$6.5 billion, respectively.

Table 3. The national impact of various percentage point increases in unemployment on projected Medicaid and SCHIP costs: 2009

		Children	Non-elderly adults	Elderly adults	Total
Baseline projected costs	Total	\$71.2 billion	\$208.2 billion	\$73.2 billion	\$352.6 billion
	State share	\$30.6	\$89.5	\$31.5	\$151.6
Additional costs if unemployment rate equals:					
7%	Total	\$3.3	\$4.9	\$0	\$8.3
	State share	\$1.4	\$2.1	\$0	\$3.6
	Federal share	\$1.9	\$2.8	\$0	\$4.7
8%	Total	\$4.7	\$7.0	\$0	\$11.7
	State share	\$2.0	\$3.0	\$0	\$5.0
	Federal share	\$2.7	\$4.0	\$0.0	\$6.7
9%	Total	\$6.1	\$9.0	\$0	\$15.2
	State share	\$2.6	\$3.9	\$0	\$6.5
	Federal share	\$3.5	\$5.2	\$0.0	\$8.6
10%	Total	\$7.5	\$11.1	\$0	\$18.6
	State share	\$3.2	\$4.8	\$0	\$8.0
	Federal share	\$4.3	\$6.3	\$0.0	\$10.6

Source: Urban Institute, December 2008; Congressional Budget Office, March 2007 Medicaid and SCHIP baselines

Notes: (1) ESI is employer-sponsored insurance. (2) Totals may not add because of rounding. (3) The cost increases for children, including the state share of such costs, assume the increase is divided between Medicaid and SCHIP in proportion to each program's current aggregate spending on children. (4) This table underestimates the impact of unemployment on Medicaid costs because it does not include any change in seniors' enrollment. We expect any effects on seniors' enrollment to be smaller than for the non-elderly population.

One complication is that states may have difficulty funding their share of the matching funds that are required under Medicaid. This could lead to reductions in eligibility or increases in enrollment barriers that bring actual enrollment below those we have projected. To some degree this should already be included in the econometric estimates but in this current fiscal environment as unemployment rates increase to the higher levels in Table 2, it may simply be impossible for states to come up with matching funds. Thus, in this scenario Medicaid and SCHIP numbers would be too high and the uninsured too low. With SCHIP there are fixed allocations. States would have to pay the full marginal cost of covering additional children. They are highly unlikely to do so. Thus there could be less of an increase in Medicaid and SCHIP children and more of an increase in the uninsured. This is particularly true if unemployment rates reach the upper range shown in Table 2.

Changes in Unemployment Rates and State Tax Revenues

Finally, Kim Reuben at the Urban Institute has shown that a 1% percentage point increase in the unemployment rate causes state general fund revenue to drop by 3-4% below expected levels.⁵ Since states must balance their budgets and if all state spending is reduced proportionately, a 1 percentage point increase in unemployment would entail a 3-4% reduction in Medicaid and SCHIP spending. These results have major implications for the ability for states to fund their existing Medicaid programs let alone new enrollment.

If we take the mid-point of the Reuben estimates and assume a 3.5% decline in general revenues for each percentage point increase in the unemployment rate, this would imply that a 3.5% decline in revenues available to finance Medicaid and SCHIP spending. The results are shown in Table 4. At a 7% unemployment rate the loss of Medicaid related state revenues would be \$14.2 billion and at a 10% unemployment rate \$31.9 billion. Even if states initially protect Medicaid enrollment and made disproportionate cuts in other parts of states budgets, states will still face a significant need for federal revenues to support their existing programs, in addition to the need to finance the costs of new enrollees. The average federal share for Medicaid is 57 percent and the SCHIP matching rate is 30% higher. Thus state budget cuts of \$14.2 to \$31.9 billion require overall cuts in Medicaid/SCHIP spending of at least twice as much. Such reductions in state and federal Medicaid spending are likely to further adversely affect employment, income, tax revenue and economic output at the state level.

Table 4. Change in “Medicaid Share” of State Revenue Decline

Unemployment Rate	Revenue Reduction (in billions)
7%	\$14.2
8%	\$20.0
9%	\$26.0
10%	\$31.9

The Cost of the Newly Uninsured

Table 2 also showed that there would be increases in the number of uninsured adults from 2.6 million at a 7% unemployment rate up to 5.8 million at a 10% unemployment rate. We estimated the amount of uncompensated care that would be implied by these increases in the number of uninsured. We used calculations from Hadley et al on the amount of uncompensated care provided to adults on a per capita basis for the full year uninsured. Adjusting the Hadley et al data to 2009,⁶ we estimate uncompensated care would be \$1,240 per adult. Multiplying this figure times the estimated increase in the number of uninsured we find that at a 7% unemployment rate, uncompensated care costs would increase by \$3.2 billion and, at a 10% unemployment rate, by up to \$7.2 billion (Table 5).

The Hadley et al paper showed that most uncompensated care is financed through a variety of federal and state programs. These include Medicaid and Medicare disproportionate share hospital payments, some indirect graduate medical education payments, state and local appropriations, and a variety of other programs such as the Veterans Administration, the Indian Health Service and Community Health Centers. Finally, there is some “shifting” of costs to the privately insured. Most of these revenue streams are not likely to increase in the current environment in response to a larger uninsured population. Federal Medicaid and Medicare DSH payments have already been set and are not likely to adjust because of rising unemployment. The same is true for graduate medical education programs. Budgets for federal programs such as the VA have also been established. Finally it is highly unlikely that much of the cost of the newly uninsured can be shifted to private payers particularly in light of the likely decline in rates of employer sponsored insurance. Thus most of these costs that we project will put pressure on providers, as well as states and localities to fund the increased costs. If they cannot provide additional funding, access to care for the uninsured is likely to fall.

Table 5. Uncompensated Care Costs of Newly Uninsured

Unemployment Rate	Uncompensated Care Costs
7%	\$3.2
8%	\$4.6
9%	\$5.9
10%	\$7.2

Financing Gap for Medicaid/SCHIP and the Uninsured due to Increased Unemployment.

Program cuts in conjunction with increased funding needs associated with increased enrollment in Medicaid and SCHIP and higher uncompensated care costs as a result of higher unemployment could result in program funding gaps of \$21 billion at 7 percent unemployment and \$47.1 billion at 10 percent unemployment for 2009 alone; unemployment rates are expected to continue to be high and state fiscal conditions to remain weak in 2010. These figures are on top of baseline increases in Medicaid and SCHIP enrollment and costs as a result of continued declines in employer coverage. In addition, based on the experience during the last economic downturn, these estimates of changes in coverage and spending on Medicaid and SCHIP are conservative, but reflect the substantial funding gap at the state level.

Conclusion

The results from this analysis show that increases in unemployment pose serious budget issues for states. Growth in the unemployment rate drives up the number of new Medicaid and SCHIP enrollees, as well as the uninsured, just as state revenues decline reducing the ability of states to fund the current Medicaid program much less the increased costs associated with greater need for health coverage. Forty-one states and the District of Columbia are projecting FY 2009 mid-year shortfalls of \$42 billion with gaps reaching \$145 billion in FY 2010. States will fall under increasing pressure to make Medicaid cuts to address these shortfalls. Reductions in state Medicaid spending are likely to worsen the impact of the recession, resulting in greater

uninsured and adversely affecting employment, income tax revenue and economic output at the state level.

The nation's governors have argued for an increase in the federal matching assistance percentage to help them address the health care costs associated with the recession. This paper suggests that these increases in federal matching payments are warranted. Without fiscal stimulus it is quite likely that many states will not be able to pay their share of Medicaid or SCHIP and thus enrollment growth may be constrained. States may in fact have great difficulty in maintaining their current programs even without enrollment growth. Further, states and localities will face serious difficulties in providing care to the newly uninsured.

Appendix

Do the Econometric Estimates Understate the Effect of Unemployment on Coverage Changes?

As a check on our econometric estimates we compared the actual experience in the 2000 and 2003 recession. Between 2000 and 2003, the unemployment rate increased by 2 percentage points, from 4.0% to 6.0%. The results are shown in Table 6. The actual change in coverage for adults was a decline in ESI of -3.8 percentage points, an increase of Medicaid of .8 percentage points and an increase in the uninsured of 2.4 percentage points. These changes are roughly twice what would have been expected from the regression estimates. For children, roughly the same picture emerges. The decline in ESI was 4.3 percentage points, the increase in Medicaid/SCHIP 4.8 percentage points and the uninsured rate declined by 0.5 percentage points. The econometric estimates would have predicted a decline of about half this much for employer coverage and one-third as much of an increase in Medicaid and the uninsured. The change in the uninsured was insignificant.

**Table 6. Health Insurance Coverage, 2000-2003
Actual Change Compared with Regression-Based Estimates**

			Percentage Point Change in Coverage	Percentage Point Change in Coverage Associated with a One Percentage Point Change in the Unemployment Rate	
			Actual	Implied	Regression Based
	2000	2003	2000-2003	2000-2003	
All Children (millions)	76.3	77.6			
Employer	65.4%	61.1%	-4.3% *	-2.2%	-0.95%
Medicaid/SCHIP	16.7%	21.5%	4.8% *	2.4%	0.79%
Uninsured	12.3%	11.8%	-0.5% *	-0.3%	0.00%
All Adults (millions)	168.8	175.1			
Employer	68.9%	65.1%	-3.8% *	-1.9%	0.92%
Medicaid and State	5.3%	6.1%	0.8% *	0.4%	0.20%
Uninsured	17.9%	20.3%	2.4% *	1.2%	0.59%

The problem in using the actual changes shown in Table 6 as an estimate of the macroeconomic effect is that no other underlying factors such as rising health care premiums and changes to Medicaid/SCHIP eligibility are controlled for and thus not all the actual changes in coverage can be attributed to unemployment rate increases. The finding that public coverage for children increased by more than employer coverage fell in Table 6 is evidence that forces beyond the macroeconomic downturn are at work over this period. But the comparison does raise the question of whether the econometric results could be on the low side. This could be because the econometric analysis, to obtain a sufficient amount of data for reliable estimates, used data from 1990 to 2003. The recession of the early 1990s was likely to have resulted in less of an increase in Medicaid and SCHIP coverage than the recession of 2000-2003 because Medicaid coverage

was less extensive and SCHIP did not exist. This could have resulted in a downward bias in the econometric estimates. When we re-estimated model only using data between 1994 and 2003, there was roughly a 17% increase in the unemployment rate effect on Medicaid/SCHIP coverage for children (the estimate for adults was unchanged). The remaining difference between the actual and predicted would be the other factors that were changing during this period.

Another possibility, as discussed above, is that the control variables that are correlated with the unemployment rate may inadvertently capture some aspects of the economic downturn that are also correlated with the unemployment rate. Yet omitting relevant control variables from the model would clearly be expected to produce biased estimates. When we estimated the model with no control variables except the state fixed effects and the time period indicators, we found that unemployment rate effect increased by 73% for children and 44% for adults. Thus, we conclude that other factors that were changing along with the unemployment rate were responsible for some of the change seen in Table 6. On balance, we conclude that our estimates of the unemployment rate effects on coverage could be too low than too high, and may therefore be viewed as conservative estimates.

We also compared the estimates used in this paper to those of earlier studies, and the comparison lends support to the reasonableness of the current estimates (Table 7). When the elasticities used in Holahan and Garrett⁷ are converted to the same units as the current estimates, the effects of unemployment on Medicaid/SCHIP are quite similar. The similarity is striking considering that administrative data on Medicaid enrollment were used in the earlier study in contrast to the CPS data used here. Results obtained by Cawley and Simon⁸ for Medicaid for children are higher (1.040 vs. 0.791). Their Medicaid results for adults are not directly comparable due to differences in the estimation sample (women only versus men and women combined). Women are much more likely than men to be eligible for public however, and so it is reasonable that the result for women (0.680) is higher than our result for adults overall (0.196).

The ESI result for adults is very similar to the average of the Cawley and Simon (2003) results estimated for men and women separately. A weighted average of the uninsured results for children and adults (0.427) is similar to what Gruber and Levitt⁹ estimated for all non-elderly combined (0.500). The uninsured result for adults is between what Cawley and Simon obtained for men and women separately. But the earlier study found essentially no effect of unemployment on uninsurance for women. No effect seems unlikely, as it is reasonable to expect that some fraction of women who lose ESI would not manage to obtain other coverage as unemployment rates rise.

The Glied and Jack¹⁰ estimates for private coverage (which is mostly ESI) and public coverage (mostly Medicaid/SCHIP) are in the same direction but substantially smaller in magnitude than the other reported estimates. In addition to state unemployment rates, the Glied and Jack study included state income per capita (log), industry composition controls, and a separate variable for labor force participation. The inclusion of additional measures of economic conditions that are highly correlated with the unemployment rate likely contributes to a smaller estimated effect of the unemployment rate relative to the other studies. Although potential richness can be gained by including additional related measures of economic conditions, for policy simulations, that benefit is outweighed by the convenience of summarizing economic

conditions with a single measure. The influence of other correlated aspects of the changing economy will be loaded onto the unemployment rate in estimation to the extent it is not also captured by the control variables.

Table 7. Comparison of Unemployment Effect Estimates across Studies

	ESI	Medicaid/ State	Nongroup	Uninsured
Children				
Present study	-0.957	0.791	0.051	0.065
Cawley and Simon (2003) ¹		1.040		0.000
Holahan and Garrett (2001) ²		0.773		
Adults (non-elderly)				
Present study	-0.915	0.196	0.175	0.585
Cawley and Simon (2003) ³	Men			0.700
	Women			0.030
Glied and Jack (2003) ⁴	-0.147	0.035		
Holahan and Garrett (2001) ²		0.235		
All non-elderly				
Gruber and Levitt (2002)				0.500

Source: Authors' estimates and cited publications.

Notes: Blank cells indicate comparable figures were not available.

¹Marginal effects from Table 4 of the study, multiplied by 100 for comparable scaling.

²Elasticities used in simulations were converted to marginal effects and evaluated at CPS sample means from the present study.

³Marginal effects from Table 2 (men) and Table 3 (women) of the study, multiplied by 100 for comparable scaling.

⁴First column is the overall marginal effect on private insurance (mostly ESI) from Table 3 of the study. Second column is the overall marginal effect on public coverage (mostly Medicaid/State) from Table 5 of the study.

Notes

¹ Uchitelle, L., Andrews, E.L., Labaton, S. “US Loses 533,000 Jobs in Biggest Drop Since 1874.” New York Times. December 5, 2008.

² www.bloomberg.com; 11/21/2008.

³ [www.economy.com/mark-zandi/documents/Senate Budget Committee](http://www.economy.com/mark-zandi/documents/Senate_Budget_Committee), 11/19/2008.

⁴ Stan Dorn, Bowen Garrett, John Holahan and Aimee Williams, “Medicaid, SCHIP and Economic Downturn: Policy Challenges and Policy Responses” Kaiser Commission on Medicaid on the Uninsured; April 2008.

⁵ K. Reuben, Urban Institute, unpublished multivariate calculations based on data from the National Association of State Budget Officers, February 2008. This estimate measures the difference between General Fund revenue projections and actual revenue, subtracting any increased General Fund dollars attributable to changes in state tax laws. Put differently, the estimate shows the unexpected revenue shock to General Fund revenue resulting from a 1 percentage point increase in unemployment.

⁶ Jack Hadley, John Holahan, Teresa Coughlin and Dawn Miller, “Covering the Uninsured in 2008: Current Costs, Sources of Payment, and Incremental Costs”, *Health Affairs*, September/October, 2008; 27(5): w399-w415.

⁷ Holahan, John and Garret, Bowen. “Rising Unemployment and Medicaid.” Health Policy Online No. 1 Washington, DC: The Urban Institute, 2001. Available at: <http://www.urban.org/url.cfm?IC=410306>.

⁸ Cawley, John and Kosali I. Simon. “Health Insurance Coverage and the Macroeconomy.” *Journal of Health Economics*. 24(2). 299-315. March 2005.

⁹ Gruber, John and Larry Levitt. “Rising Unemployment and the Uninsured.” Publication #6011. Washington, DC: The Kaiser Family Foundation, 2002. Available at: <http://www.kff.org/uninsured/6011-index.cfm>.

¹⁰ Glied, Sherry, and Katherine Jack. “Macroeconomic conditions, health care costs, and the distribution of health insurance coverage.” National Bureau of Economic Research Working Paper 10029. Cambridge, MA: NBER, 2003. Available at: <http://www.nber.org/papers/w10029>.

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