Executive Summary

Worsening economic conditions will likely create substantial increases in demand for enrollment in states' Medicaid and Children's Health Insurance Program (CHIP) programs over the next few years, even apart from the normal growth trend in public coverage. If employment growth falls to the levels seen following the 2001 recession, then demand for these programs will grow as the economy slows.

- Between 700,000 and 1.1 million additional children will enroll in Medicaid/CHIP each year due to slowing employment growth alone.

- Up to 1.5 million total additional persons will enroll in Medicaid each year due to slowing employment growth alone.

Increases in Medicaid/CHIP enrollment combined with federal funding cuts proposed by President Bush in the Medicaid and CHIP programs could create additional pressure on state budgets that are already strained by the weak national economy and the worsening housing crisis.

Nearly every state is required to balance its budget. In the face of the economic slowdown, state governments will therefore face a difficult choice between cutting back on health insurance for children, implementing cuts in other budget areas, or raising taxes. If proposed Administration regulations are implemented, the additional cuts in Federal support will make the problem even more severe.

Enrollment In Medicaid and CHIP Has A Strong Relationship To Economic Conditions

Several previous studies have supported a relationship between economic conditions and rates of health insurance coverage (Kaiser Family Foundation, 2002). There is also evidence that rates of Medicaid and/or CHIP coverage seem to increase during periods of economic recession (Holahan and Garrett, 2001; Ku, 2002).

This JEC study updates and expands upon previous research in two ways:

1) This study uses state-level administrative data on Medicaid enrollment, which is more reliable than the survey-based evidence used in previous studies.

2) This study uses the most current data available to examine the 2000-2005 period. Because of Medicaid and CHIP expansions that took place during the late 1990s, demand for public health insurance coverage may have a different relationship to unemployment today than it did prior to this decade.

In order to determine the relationship between economic conditions and Medicaid/CHIP enrollment, JEC staff examined state-level economic conditions and enrollment in the state Medicaid program. Separate analyses were run for both children's enrollment and total Medicaid enrollment. Coverage levels for children sum total enrollment in both Medicaid programs and separate CHIP programs.

The details of the methodology are described and the underlying statistical results are given in the attached appendix.

The analysis reaches the following conclusions:

- The association between poor economic conditions and children's enrollment in Medicaid/CHIP was large, consistent, and statistically significant. A 10 percent decline in state payroll employment was associated with a 9 to 14 percent increase in children enrolled in public insurance. All findings were highly statistically significant and consistent in direction and magnitude across various methodologies.

- The association between poor economic conditions and total enrollment in Medicaid/CHIP was somewhat smaller than the impact on children alone, but it was still sizable. A 10 percent decline in state payroll employment was generally associated with a 5 to 9 percent increase in total state Medicaid/CHIP enrollment. These findings were generally statistically significant, but they were somewhat more variable across differing methodologies than the findings for children alone.

Study Findings Imply Large Increases in Medicaid/CHIP Demand As Economy Slows

If the same relationships observed over the 2000-2005 period continue to hold, worsening economic conditions will create substantial increases in demand for enrollment in their Medicaid/CHIP programs over the next few years. Economic trends alone could have a substantial effect on state Medicaid coverage, even apart from normal trend growth in public coverage. If employment growth drops from recent levels to the levels seen in the 2001-2003 period, the point estimates from these regressions imply that:

- Between 700,000 and 1.1 million additional children will enroll in Medicaid/CHIP each year due to slowing employment growth alone.

- Up to 1.5 million total additional persons will enroll in Medicaid each year due to slowing employment growth alone.

Once again, this forecast growth is above and beyond the ordinary growth in public Medicaid coverage that is due to population growth and changing trends in private health insurance coverage.

The forecast methodology is described in detail in the attached methodology appendix.

Increases In Medicaid/CHIP Enrollment Combined With Federal Funding Cuts Could Create Additional Pressure On Already Strained State Budgets

Budgets in many states are showing signs of strain as the effects of the real estate slowdown affect the economy:

- A total of 21 states have projected budget shortfalls for FY 2009 (CBPP, 2007).

- States have already drawn down their contingency or reserve funds by $23 billion – or approximately 33 percent -- since 2006. This leaves them with a much reduced emergency funding in case of economic downturns (NASBO, 2007).

- Real state tax revenues (adjusted for changes in rates) showed a year-over-year decline in the third quarter of 2007, the first time this has occurred since 2003 (Rockefeller Institute, 2007).

Medicaid/CHIP expenses account for over one fifth of state expenditures (NASBO, 2007). For this reason, increases in the demand for Medicaid coverage have the potential to significantly increase state budget deficits and therefore the need for either tax increases or budget cuts in other areas.

At the same time, the Administration is proposing substantial cuts in Medicaid/CHIP funding:

- The President's vetoes of two bipartisan Congressional CHIP reauthorization proposals necessitated a short-term extension of the SCHIP program through March 2009. While the extension provides states sufficient funding for short-term, maintenance of existing programs based on the latest state projections of funding needs, those funding levels may become inadequate if demand for SCHIP grows significantly due to worsening economic conditions. This report shows Medicaid/CHIP enrollment for children could increase well beyond current levels in an economic downturn.

- Proposed Administration regulations would cut some $13 billion over the next five years from Federal reimbursement for state Medicaid costs (72 Federal Register). This cost-shift to states would occur even as the need for Medicaid increases during an economic downturn

- The Administration is effectively restricting CHIP and Medicaid income limits that could reduce current CHIP and Medicaid coverage for lower-income children in almost half of U.S. states. Such states would have to substitute state for Federal money if they wished to assist these children (Mann and Odeh, 2007).

Given their current fiscal strains, this will leave state governments with a difficult choice. They will be forced to cut back on health insurance for children in the face of an economic slowdown, impose tax increases, and/or make budget cuts in other areas. If proposed Administration regulations are finalized, the additional cuts in Federal support will make the problem even more severe.

Conclusion

While a slowing economy will likely lead to substantial increases in Medicaid/CHIP demand, the Administration is proposing a range of cutbacks to CHIP and Medicaid funding. These cutbacks will put increased fiscal demands on states at a time when they are ill equipped to handle them.

These findings suggest several courses of action:

- Override the President's veto of CHIP reauthorization, and guarantee sufficient funding levels for the CHIP program to not only maintain current enrollment levels but to address additional needs among uninsured children, as the Congressional CHIP bill would do..

- Delay or cancel proposed regulations that shift Medicaid costs to states, at least until possible impacts of a slowing economy are better understood.

- Increase the Federal Medicaid match percentage (FMAP) to the states as part of a stimulus package to help buffer the impact of the economic slowdown to preserve Medicaid coverage as people lose their jobs and health insurance, as was done during the last economic downturn.

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Methodological Appendix

The JEC study was performed using administrative data from the Medicaid Management Information System (MMIS), which is managed by the Center for Medicare and Medicaid Systems (CMMS) at the Federal Department of Health and Human Services. The MMIS collects data from all states on the number of unique individuals who are enrolled in Medicaid and CHIP programs in that state over the course of a year.

The JEC analysis combines MMIS data on Medicaid/CHIP enrollment with information on the number of payroll jobs in each state, drawn from the Census Bureau's Current Employment Survey (CES). CES payroll jobs data was used instead of survey data on unemployment because it is more reliable at the state level. The CES survey sample is roughly 600 times larger than the sample used in the Current Population Survey (CPS), and it is therefore significantly less variable for smaller states.

The reported results are based on a set of regressions in which MMIS data on changes in annual state-level Medicaid enrollment are used as the dependent variable, while CES data on changes in annual state-level payroll job levels are the key independent variable. The regressions were run for annual changes over the 2000-2005 period, resulting in 305 state/year observations. All regressions were weighted by state population to make results representative for the national population. Because of the relatively limited time period, dummy fixed effects for each state were used to adjust for unchanging demographic differences between states over the 2000-2005 period.

Table 1: Average Effect of Employment Change on Children's Medicaid/CHIP Enrollment

Dependent Variable: Annual log change in state Medicaid enrollment, children, 2000-2005	1 coef (se)	2 coef (se)	3 coef (se)	4 coef (se)
Annual log change in state payroll	-0.875* (0.169)	-1.448* (0.178)	-1.427* (0.177)	-1.328* (0.412)
Linear year trend			-0.003* (0.001)	
State dummies	No	Yes	Yes	Yes
Year dummies	No	No	No	Yes
Number of observations	305	305	305	305
Adjusted R-square	0.079	0.238	0.247	0.266

*Statistically significant at 1% level.
NOTE: All observations weighted by state population in 2000 decennial Census.

Table 1 shows the relationship between employment change and the combined Medicaid and CHIP enrollment of children (aged 0-18). Because the natural log of variables is used, results can be interpreted in percentage terms, so the model in column 1 finds that a

10 percent increase in payroll jobs leads to an 8.9 percent decline in children's Medicaid enrollment.

These regression results were used to forecast potential changes in Medicaid/CHIP enrollments if payroll employment levels decline and the relationships remain as they are calculated in the table.

The forecast assumes that payroll employment growth declines from the 1.6 percent annual growth rate seen over the 2004-2007 period to the -.7 percent annual growth rate seen during the 2001-2003 recession. These payroll employment growth levels were substituted into the regressions in Column 1 and Column 2. (Because we did not wish to make an assumption on future time trends, the models in Columns 3 and 4 could not be used).

Using the central point estimates shown in Column 2 as an example results in forecast Medicaid/CHIP enrollment growth rates for children of 6.8 percent for the recession scenario vs. 3.4 percent based on current levels of employment growth. Applying these growth rates to the estimated Medicaid enrollment level for children of approximately 32 million in 2007 leads to an estimate of approximately 1.1 million additional children enrolling in Medicaid each year.[1]

Table 2 shows the same estimates for total Medicaid/CHIP enrollment of all persons, including children.

Table 2: Effect of Employment Change on Total Medicaid Enrollment

Dependent Variable: Annual log change in state Medicaid enrollment, all ages, 2000-2005				
	1 Coef (se)	2 coef (se)	3 coef (se)	4 coef (se)
Annual log change in state payroll	-0.485* (0.225)	-0.924* (0.257)	-0.865* (0.250)	-0.110 (0.583)
Linear year trend			-0.008* (0.002)	
State dummies	No	Yes	Yes	Yes
Year dummies	No	No	No	Yes
Number of observations	305	305	305	305
Adjusted R-square	0.012	0.041	0.095	0.116

*Statistically significant at 1 percent level.
NOTE: All observations weighted by total state population in 2000 decennial Census.

[1] The 32 million enrollment in Medicaid and CHIP was estimated by taking the 2005 enrollment level of almost 30 million from the MMIS system, and adding two years of growth at the 2003-05 growth rate of 3.7 percent annually.

The forecasts for total enrollment were performed using the same methodology as that described above for children's enrollment.

As can be seen from the regression results, the impacts are smaller for total enrollment than they are for children. In addition, total enrollment results are not statistically significant when individual year dummies are included. This indicates that it is difficult to separate the effects of national trends operating in particular years from the effect of state-level economic situations.

These regressions do not adjust for state-level changes in Medicaid policy that may have been influenced by the fiscal difficulties experienced by the states in the early recession years. These state policies could introduce bias away from finding an effect of employment declines on Medicaid enrollment, since poor economic times can force states to cut back on Medicaid programs. This effect would have been buffered by Federal assistance to states toward the end of the recession.

JEC staff will continue investigating these issues using additional data sources and control variables, which may lead to more detailed understanding of these issues.