

### **Rising Unemployment and Medicaid**

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**October 16, 2001**

#### **The Problem**

There are two channels through which Medicaid spending is affected by an economic slowdown. The first is through increased enrollment, which means higher costs. The Medicaid program has the responsibility in the United States for covering low-income children and their parents as well as low income disabled and elderly. As parents lose jobs during an economic downturn, many see their incomes fall below state eligibility thresholds making them eligible for the program. Second, as the economy contracts states also face declining revenues and thus have fewer resources with which to pay for an expanding Medicaid program.

At the same time that the slowing economy has begun to drive up Medicaid spending, states have had to cope with rising health care costs that have little to do with the weak economy.<sup>1</sup> States have been faced with increasing Medicaid enrollment among children, parents, and the disabled that had stemmed from recent eligibility expansions and increasing participation rates. The general increases in prescription drug and hospital costs have also affected Medicaid programs acutely while Medicaid managed care has become less effective in controlling acute care spending. Long-term care expenditures have been driven up by concerns over quality of nursing home care and labor force shortages. A major court decision, *Olmstead v. L.C.*, is requiring states to expand coverage of services for disabled populations in the community.

States could respond to fiscal pressures by making cuts that could have undesirable consequences. They may restrict eligibility standards thus reducing coverage or cut benefits in ways that adversely affect beneficiaries or the providers who serve them. State responses to rising Medicaid costs could have other undesirable effects. For example, cuts in state programs, coupled with possible tax increases, would offset some of the effects of the federal efforts to stimulate the economy.

In this analysis, we

- 1) estimate the effect of increased unemployment rates on Medicaid enrollment,
- 2) estimate the impact of increased enrollment on Medicaid expenditures, and
- 3) simulate the effects that increased federal matching rates might have on state Medicaid expenditures.

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<sup>1</sup> Brian Bruen and John Holahan, "Medicaid Spending Growth Remained Modest in 1998, But Likely Headed Upward." Kaiser Commission on Medicaid and the Uninsured, February 2001.

## The Link Between Unemployment and Increased Medicaid Enrollment

**Findings:** An increase in the unemployment rate from 4.5% to 5.5% would increase the number of non-disabled adults by 400,000, children by 1.0 million, and the disabled by 130,000 (see Table 1). An increase in the unemployment rate to 6.5% would add over 800,000 non-disabled adults, 2.1 million children, and 260,000 disabled. The overall number of beneficiaries would rise by 1.5 million or 3.6% if the unemployment rate rose to 5.5% and by 3.3 million or 7.2% if the unemployment rate rose to 6.5%.

**Method:** These estimates were generated using the results from two recent studies that analyzed the effect of unemployment on Medicaid enrollment using state-level data (including data from the recession of the early 1990s) on Medicaid enrollment, unemployment rates, and other characteristics.<sup>2</sup> These studies allow estimates of “enrollment elasticities”—the percent change in Medicaid enrollment that would result from a one percent (not percentage *point*) change in the unemployment rate, holding other things equal.<sup>3</sup> The elasticities for three separate Medicaid populations—non-disabled adults, children, and disabled adults and children—from these studies as well as new estimates developed specifically for this analysis, are illustrated in Table 2.

Each of the studies finds statistically significant effects of the unemployment rate on Medicaid enrollment. There is more variation in the estimates for children than those for adults. Some variation is to be expected given the differences in the models and data years across studies. As might be expected, enrollment by the disabled is less affected by unemployment than that of the other two groups.

The new findings utilize the elasticity estimates generated specifically for this analysis for several reasons. First, these elasticity estimates lie between those of the two prior studies. Second, only the new model provides an estimate for the disabled. Third, the other two studies include additional economic variables that are correlated with the contemporaneous unemployment rate—it is therefore more difficult to generate a pure estimate of the effect of rising unemployment using these models. Furthermore, some of the policies currently being considered would be triggered by the unemployment rate alone, not related measures of economic performance. The model used here lets the contemporaneous unemployment rate alone describe the economic environment.<sup>4</sup>

## The Cost Implications of Increased Medicaid Enrollment

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<sup>2</sup> Leighton Ku and Bowen Garrett. “How Welfare Reform and Economic Factors Affected Medicaid Participation: 1984-96.” Assessing the New Federalism Discussion Paper, Number 00-01. Washington, DC: The Urban Institute, 2000. Bowen Garrett and Alshadye Yemane. “Nationwide Trends in Medicaid Enrollment and Expenditures.” Urban Institute Working Paper, 2001.

<sup>3</sup> For example, if unemployment rose by 10%, say from 5% to 5.5%, then an elasticity of .2 would mean that Medicaid enrollment would increase by 2% (.2 x 10%).

<sup>4</sup> The model estimated by Garrett and Yemane (2001) allows for a lagged effect of the unemployment rate in addition to a contemporaneous effect, which leads to a higher estimated total impact after a full year has passed. Most of this effect, however, is captured in the simpler model without the lag.

**Findings:** Using the new estimates of increased enrollment, expenditures would rise to \$209.7 billion with an unemployment rate of 5.5% and to \$212.4 billion with an unemployment rate of 6.5% (see Table 3). Spending by the federal government would rise by \$3 billion and state spending by \$2.3 billion if the unemployment rate hit 6.5%. This is in comparison to the April 2001 Congressional Budget Office (CBO) baseline spending levels of \$207 billion (\$117 billion federal, \$91 billion state)<sup>5</sup> which assumed an unemployment rate of 4.5%.

**Method:** These expenditure estimates were derived by multiplying the estimated increases in enrollment by the estimated costs of new enrollees. Medicaid costs per new enrollee were derived by using 1998 Medicaid spending per enrollee on children, non-disabled adults, and disabled adults and children. Figures were inflated to 2002 using the April 2002 CBO baseline estimate of spending per enrollee for acute care compared to the same data from HCFA (Health Care Financing Administration) for 1998. Using analyses of MEPS (Medical Expenditure Panel Survey) data on health care expenditures and health status from previous work, Medicaid expenditures were adjusted to reflect that the newly unemployed population was likely to be considerably healthier than those people already on Medicaid<sup>6</sup>. This resulted in downward adjustments of cost by 15% to 20%. The resulting estimates of cost per enrollee were \$1,115, \$1,877, and \$5,671 for children, non-disabled adults, and the disabled, respectively, for 2002.<sup>7</sup>

### **A Policy Option: A Short-Term Increase in Federal Medicaid Matching Rates**

While enrollment growth due to a recession (that increased the unemployment rate to 6.5%) could add \$3.0 billion to federal Medicaid expenditures and \$2.3 billion to state Medicaid expenditures, it is important to remember that increased enrollment is only one fiscal problem that states are facing. Health care costs are rising for a number of other reasons cited above. Before recessionary fears developed over the summer and before the terrorist attacks of September 11, CBO projected Medicaid spending would increase by 10% in 2001 and another 9% in 2002.<sup>8</sup> Rising health care costs are a major reason why state expenditures are expected to increase significantly. In addition to spending growth, revenue growth is slowing in some states and revenues are beginning to decline in others.<sup>9</sup>

It is difficult to know with any degree of precision the likely gap states will face between their spending and their revenues in 2002. State expenditures in 2002 from their own revenues are likely to be about \$750 billion.<sup>10</sup> If states had to close a gap of 5%, the combination of spending reductions and revenue increases would amount to \$37.5 billion. (States can close

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<sup>5</sup> This does not include spending on disproportionate share payments or administrative costs.

<sup>6</sup> John Holahan, "Health Status and the Cost of Expanding Insurance Coverage." *Health Affairs*, forthcoming.

<sup>7</sup> These are estimates of costs for enrollees ever on the program during the year, not full-year enrollees.

<sup>8</sup> Congressional Budget Office, April 2001 Baseline.

<sup>9</sup> National Association of State Budget Officers, "State Budget Shortfalls Mounting Substantially," [www.nasbo.org](http://www.nasbo.org), October 4, 2001.

<sup>10</sup> National Association of State Budget Officers/Reforming States Group, "1998-1999 State Health Care Expenditure Report." Millbank Memorial Fund, 2001. This report provided data on state expenditures from general fund and other state funds for 1999; this amounted to \$640 billion. A 6% annual increase is assumed between 1999 and 2002, resulting in \$762 billion in estimated state expenditures (excluding federal funds). Preliminary NASBO estimates for 2001 were \$721 billion. Inflating by 6% results in a 2002 estimate of \$764 billion.

budget gaps by using reserves or rainy day funds, but the budget gaps—across all states—can also be more than 5%.) If cuts were made to health care programs, it could adversely affect coverage and the provision of necessary services. Even if Medicaid and other health programs are largely exempted, reduced state spending or increased revenue measures could offset much of the fiscal stimulus intended by an increase in federal spending.

One way to forestall the response would be to increase federal Medicaid matching rates on a short-term basis, e.g., one to two years depending on the length of the economic downturn. While the National Governors Association has made arguments for increasing federal matching rates on a more permanent basis, a strong argument can also be made for increasing them for the short term. Increased federal Medicaid matching rates on a short-term basis would permit states to avoid responses that could either reduce health care coverage or reduce the stimulating effects of increased federal spending.

The effects of increasing matching rates on acute care Medicaid spending for adults and children, the groups most likely to be affected by an economic downturn, are shown in Table 3. The effects of increasing federal matching payments on acute care spending for all groups are shown in Table 4.

With an unemployment rate of 6.5%, a 10% higher federal match rate on acute Medicaid spending for adults and children would increase federal spending by \$5.7 billion and provide enough fiscal relief to states to offset the effects of recession-induced enrollment increases (see Table 3). For example, with no change in matching rates, state Medicaid spending would increase by \$2.3 billion with a 6.5% unemployment rate. A 10% higher match would reduce state spending by \$0.3 billion.

Larger increases could provide more fiscal relief to states. A 20% enhanced match would increase federal spending by \$8.3 billion relative to the baseline; a 30% enhanced match would increase federal spending by \$11.0 billion relative to the baseline. Still assuming an increase in the unemployment rate to 6.5%, state spending would fall by \$3.0 billion relative to the baseline with a 20% enhanced match. A 30% enhanced match would reduce state spending by \$5.7 billion despite the increased enrollment.

An even more expansive policy would be to increase the matching rate for acute care services for *all* groups, including the disabled and elderly. Under this scenario, higher federal matching rates would increase federal spending and reduce state spending by even greater amounts than if increased rates applied only to non disabled adults and children (see Table 4). With an unemployment rate of 6.5%, a 10% enhanced match increases federal spending by \$9 billion, a 20% enhanced match by \$14.9 billion and a 30% enhanced match by \$20.8 billion. In these scenarios state spending would fall by \$3.6 billion relative to the baseline with a 10% enhanced match, \$9.6 billion with a 20% enhanced match and \$15.5 billion with a 30% enhanced match.

Designing a federal stimulus package involves several considerations, including its size and duration and the distribution between tax reductions and spending increases. Any increase in federal matching rates for Medicaid needs to fit within these overall parameters. But some

recognition needs to be given to the impact of a recession on states and their ability to support existing programs, especially those like Medicaid whose costs increase in an economic downturn. Moreover, failure to consider the effects of pro-cyclical policies at the state level will result in reduced effectiveness of any federal stimulative effort.

*The views expressed are those of the authors and do not necessarily reflect those of the Urban Institute, its trustees, or its sponsors.*

**Table 1. Medicaid Enrollment Changes under Different Unemployment Rates**

Medicaid Group	Elasticity Estimate	2002 CBO Baseline (in 000's)	Unemployment Rate Baseline	Percent change in enrollment under 5.5% unemp	Change in enrollment under 5.5% unemp (in 000's)	Percent change in enrollment under 6.0% unemp	Change in enrollment under 6.0% unemp (in 000's)	Percent change in enrollment under 6.5% unemp	Change in enrollment under 6.5% unemp (in 000's)	Percent change in enrollment under 7.0% unemp	Change in enrollment under 7.0% unemp (in 000's)
Adults	0.186	9,723	4.5%	4.1%	400	6.2%	600	8.3%	800	10.3%	1,000
Children	0.204	23,000	4.5%	4.5%	1,040	6.8%	1,560	9.1%	2,090	11.3%	2,610
Blind/disabled	0.078	7,600	4.5%	1.7%	130	2.6%	200	3.5%	260	4.3%	330

Source: Urban Institute estimates based on application of elasticity estimates to CBO 2002 enrollment estimates.

**Table 2. Estimates of the unemployment rate elasticity of Medicaid enrollment**

Study	Data years	Elasticity Estimate		
		Non-disabled		Disabled
		Adults	Children	
Ku and Garrett (2000)	1984-1996	0.143	0.077	n/a
Garrett and Yemane (2001)	1991-1998	0.227	0.303	n/a
Garrett (2001)	1991-1998	0.186	0.204	0.078

Note: All figures were significantly different from zero at the 5% level or higher.

Source: Urban Institute analysis of HCFA 2082 data, and state data from various sources.

Table 3

**Federal and State Medicaid Expenditures at Different Match Rates, 2002 Projections  
Adults & Children, Acute Care Only**

	Enrollees (in millions)	Expenditures			Change in Federal Expenditures	Change in State Expenditures
		Federal	State	Total		
<b>No Change to Match</b>						
1. Unemployment Rate = 4.5% (Baseline)	44.7	\$117.0	\$90.1	\$207.1	\$0.0	\$0.0
2. Unemployment Rate = 5.5%	46.3	\$118.5	\$91.2	\$209.7	\$1.5	\$1.2
3. Unemployment Rate = 6.0%	47.1	\$119.3	\$91.8	\$211.1	\$2.3	\$1.7
4. Unemployment Rate = 6.5%	47.9	\$120.0	\$92.4	\$212.4	\$3.0	\$2.3
<b>10% Enhanced Match</b>						
1. Unemployment Rate = 4.5%	44.7	\$119.5	\$87.6	\$207.1	\$2.5	-\$2.5
2. Unemployment Rate = 5.5%	46.3	\$121.1	\$88.7	\$209.7	\$4.1	-\$1.4
3. Unemployment Rate = 6.0%	47.1	\$121.9	\$89.2	\$211.1	\$4.9	-\$0.9
4. Unemployment Rate = 6.5%	47.9	\$122.7	\$89.7	\$212.4	\$5.7	-\$0.3
<b>20% Enhanced Match</b>						
1. Unemployment Rate = 4.5%	44.7	\$122.0	\$85.1	\$207.1	\$5.0	-\$5.0
2. Unemployment Rate = 5.5%	46.3	\$123.7	\$86.1	\$209.7	\$6.7	-\$4.0
3. Unemployment Rate = 6.0%	47.1	\$124.5	\$86.6	\$211.1	\$7.5	-\$3.5
4. Unemployment Rate = 6.5%	47.9	\$125.3	\$87.1	\$212.4	\$8.3	-\$3.0
<b>30% Enhanced Match</b>						
1. Unemployment Rate = 4.5%	44.7	\$124.5	\$82.6	\$207.1	\$7.5	-\$7.5
2. Unemployment Rate = 5.5%	46.3	\$126.3	\$83.5	\$209.7	\$9.3	-\$6.6
3. Unemployment Rate = 6.0%	47.1	\$127.1	\$83.9	\$211.1	\$10.1	-\$6.1
4. Unemployment Rate = 6.5%	47.9	\$128.0	\$84.4	\$212.4	\$11.0	-\$5.7

Source: Urban Institute estimates (2001), based on projections from the April 2001 CBO Baseline.

Notes: Does not include the U.S. Territories. Expenditures do not include disproportionate share hospital (DSH) payments, administrative costs, or accounting adjustments. CBO projects that Federal Medicaid payments including these expenditures will be \$141.6 billion in federal fiscal year 2002, implying that total Medicaid expenditures (federal and state funds) will be approximately \$251 billion in FFY 2002.

Table 4

**Federal and State Medicaid Expenditures at Different Match Rates, 2002 Projections  
All Groups, Acute Care Only**

	Enrollees (in millions)	Expenditures			Change in Federal Expenditures	Change in State Expenditures
		Federal	State	Total		
<b>No Change to Match</b>						
1. Unemployment Rate = 4.5% (Baseline)	44.7	\$117.0	\$90.1	\$207.1	\$0.0	\$0.0
2. Unemployment Rate = 5.5%	46.3	\$118.5	\$91.2	\$209.7	\$1.5	\$1.2
3. Unemployment Rate = 6.0%	47.1	\$119.3	\$91.8	\$211.1	\$2.3	\$1.7
4. Unemployment Rate = 6.5%	47.9	\$120.0	\$92.4	\$212.4	\$3.0	\$2.3
<b>10% Enhanced Match</b>						
1. Unemployment Rate = 4.5%	44.7	\$122.7	\$84.4	\$207.1	\$5.7	-\$5.7
2. Unemployment Rate = 5.5%	46.3	\$124.3	\$85.4	\$209.7	\$7.3	-\$4.7
3. Unemployment Rate = 6.0%	47.1	\$125.1	\$85.9	\$211.1	\$8.1	-\$4.1
4. Unemployment Rate = 6.5%	47.9	\$126.0	\$86.5	\$212.4	\$9.0	-\$3.6
<b>20% Enhanced Match</b>						
1. Unemployment Rate = 4.5%	44.7	\$128.4	\$78.7	\$207.1	\$11.4	-\$11.4
2. Unemployment Rate = 5.5%	46.3	\$130.2	\$79.6	\$209.7	\$13.2	-\$10.5
3. Unemployment Rate = 6.0%	47.1	\$131.0	\$80.0	\$211.1	\$14.0	-\$10.0
4. Unemployment Rate = 6.5%	47.9	\$131.9	\$80.5	\$212.4	\$14.9	-\$9.6
<b>30% Enhanced Match</b>						
1. Unemployment Rate = 4.5%	44.7	\$134.1	\$72.9	\$207.1	\$17.1	-\$17.1
2. Unemployment Rate = 5.5%	46.3	\$136.0	\$73.8	\$209.7	\$19.0	-\$16.3
3. Unemployment Rate = 6.0%	47.1	\$136.9	\$74.2	\$211.1	\$19.9	-\$15.9
4. Unemployment Rate = 6.5%	47.9	\$137.8	\$74.6	\$212.4	\$20.8	-\$15.5

Source: Urban Institute estimates (2001), based on projections from the April 2001 CBO Baseline.

Notes: Does not include the U.S. Territories. Expenditures do not include disproportionate share hospital (DSH) payments, administrative costs, or accounting adjustments. CBO projects that Federal Medicaid payments including these expenditures will be \$141.6 billion in federal fiscal year 2002, implying that total Medicaid expenditures (federal and state funds) will be approximately \$251 billion in FFY 2002.