

# Uneven Burden: Economic Analysis of Medicaid Expenditure Changes in Ohio<sup>‡</sup>

Robert Greenbaum, Ph.D. and Anand Desai, Ph.D.

School of Public Policy and Management • The Ohio State University • Columbus, Ohio 43210

April 2003

The full report is available at <http://www.ppm.ohio-state.edu/ppm/medicaid.pdf>

## Introduction

In tight economic times, one of the main concerns that individuals and families face is the loss of healthcare benefits. Unfortunately, a poor economy also implies shrinking tax revenues and reduced fiscal capacity to maintain previous levels of expenditures. Ohio, like other states constitutionally mandated to balance their budget, finds itself in an economic bind.

Given the difficult economic outlook, it would appear that funding for Medicaid cannot be continued at current levels. Some of the uncertainty regarding how deep and where expenditure reductions might occur was removed when Governor Taft proposed \$491 million in cuts over the next two fiscal years in the state's growth in funding for Ohio's Medicaid program. The governor's proposal provides a starting point for discussions on the consequences of potential changes in the level of spending for Medicaid.

Recipients of this assistance are not distributed evenly across Ohio; hence, there will be differential consequences of the proposed reductions in different areas of the state. We report here on our analysis of how the proposed cuts will affect, in the aggregate, the economies of the 88 Ohio counties.

In an effort to reduce costs, states may choose to redefine the optional populations that are eligible for services. For instance, in good economic times, states have increased the income levels up to which families or parents may be eligible to receive Medicaid services; similarly, the definition of "medically needy" has also been extended to cover a wider range of beneficiaries. During hard economic times, coverage for these optional groups can legally be reduced or eliminated. States may also choose to redefine the set of optional services that are provided.

While these programs operate under federal and state guidelines, they are administered at the county level. The urban counties have among the largest numbers of people receiving Medicaid. The facilities in these counties also serve many of the recipients in adjoining counties. So, both in terms of demand for and supply of Medicaid

services, the urban counties will bear the brunt of these proposed reductions. On the other hand, in percentage terms or in per capita terms, many of the rural counties are more heavily dependent on Medicaid both as assistance to the recipients and as the source of economic activity in the county. In other words, the implications of such reductions differ depending upon the level and nature of economic activity.

It should be noted that these analyses rest on a number of simplifying assumptions that do not capture the full complexity of the effects of reductions in public expenditures. Furthermore, while we do not include potential trade-offs involved in maintaining current levels of service, we also do not include any estimates of delayed, forgone, or alternative healthcare.

## Background on Medicaid in Ohio<sup>1</sup>

Ohio's Medicaid program began in 1968. The program is a partnership between the state and federal governments where states are required, by law, to serve Medicaid eligible recipients and the federal government reimburses the states for a part of the expenditures. For every dollar spent on Medicaid healthcare services in Ohio, the federal government reimburses (federal match) the state just over \$0.58 on average.<sup>2</sup> Table 1 provides summary information on this program for the three most recent (State Fiscal) years for which data are currently available.

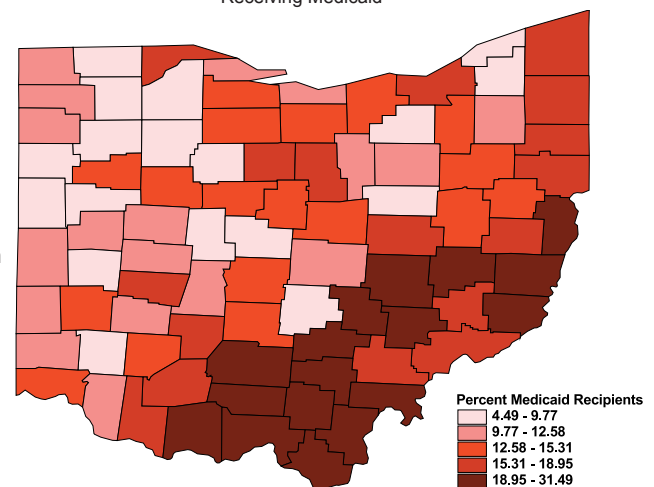
Table 1. Comparison Medicaid Data for SFY1999-2001<sup>3</sup>

	Number of recipients	Total Expenditures
SFY1999	1,387,581	\$6,988,518,930
SFY2000	1,409,705	\$7,638,797,112
SFY2001	1,676,157	\$7,975,591,719

The recipients are distributed unevenly across the counties (MAP 1), ranging from a low of almost 5% to a high of over 30% of the county population.

The Medicaid program consists of a complex system of interdependent components with multiple categories of aid, delivery systems, categories of services and recipients. There is considerable variety in the cost of services per recipient. Younger adults and children typically incur fewer expenses compared to the recipients who are "aged, blind, or disabled" (ABD). The ABD population consists of less than a third of the Medicaid recipients. However, they account for approximately 80% of the expenditures.

MAP 1. Percentage of County Residents Receiving Medicaid



The average expenditures per recipient vary across counties from a low of a little over \$3,100 in Huron County to almost \$8,600 in Holmes County. This distribution is uneven in the sense that in SFY 2000 the average expenditure for an ABD recipient was approximately \$14,000 while that for other recipients was approximately \$1,400.<sup>4</sup>

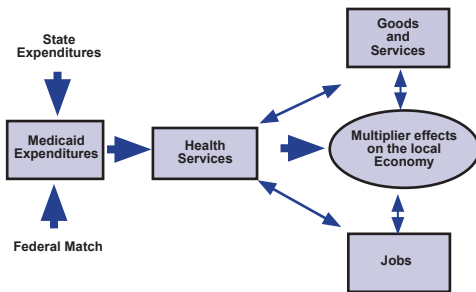
## Medicaid's Role in the Economy

Medicaid expenditures comprise between one quarter and one third of a state's budget. In anticipation of similar cuts in other states, a number of studies have attempted to determine the potential effect of changes in Medicaid funding on local and state economies. These studies find that the effects of changes in expenditures go beyond the healthcare sector of the state economy.

### Reduction in Economic Activity

An approach to measuring the effect of changes in spending levels is to estimate the "multiplier effect" of each state dollar. The logic underlying the multiplier is that whenever a dollar is spent in the economy, additional expenditures are generated that lead to a compounding effect. For instance, the federal government matches every dollar spent by the state in Ohio by approximately \$1.40, which makes its way through the health services sector of the economy through the provision of healthcare goods and services. These goods and services place demands on other sectors of the economy, generating in turn, jobs and additional goods and services. Figure 1 provides a linear schematic of the cyclical flow of Medicaid dollars through the economy.

Figure 1. Medicaid's Role in the Economy



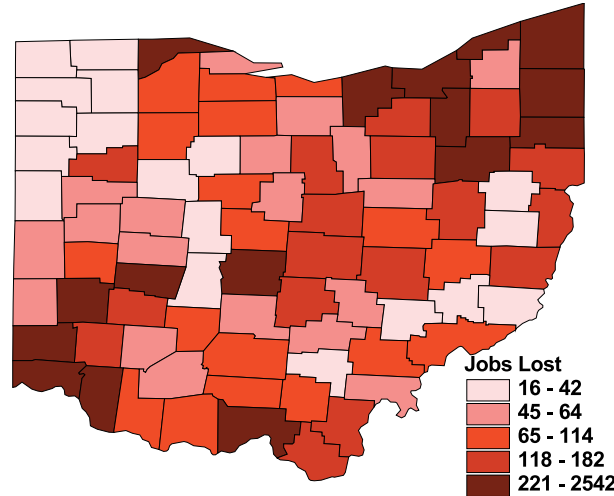
Estimates of the multiplier effect vary by location, the type of expenditure and sector of the economy. We use a multiplier of 3.15 as our estimate.<sup>5</sup>

Thus, cutbacks of \$491 million in state Medicaid expenditures would lead to a total effect equivalent to a reduction of approximately \$1.547 billion in the state economy over the two-year budget period. It is important to emphasize that economic forecasting is an inexact science, and any multiplier should be interpreted as an indicator of the order of magnitude of the effects rather than precise estimates of the actual size of the effect.

## Jobs Lost

Using the same multiplier, a reduction of 33.69 jobs is estimated for a million dollar decrease in Ohio's Medicaid spending.<sup>6</sup> Thus, the proposed cuts would amount to a reduction of approximately 16,500 jobs. The distribution of the lost jobs across the counties is displayed in MAP 2. As is to be expected, the majority of the job losses are likely to occur in the most densely populated counties.

MAP 2. Number of Jobs Lost



This loss of jobs translates into lost income and taxes on that income. A job loss of 16,500 translates into a loss of approximately \$22 million in state income tax revenue. We expect local income, sales, and property taxes would likely also be adversely affected.

## County Dependence Indices

The preceding analysis focused primarily on Medicaid expenditures and the potential effects of the proposed reduction of \$491 million in state spending. Medicaid, however, is only one component of a network of support services available to the poor and economically disadvantaged segments of society. In some counties, the dependence on public assistance is substantial and goes beyond healthcare and associated services.

Similarly, the size and role the health services sector plays in the local economy also varies considerably across the counties. In order to capture the vulnerability of the counties in terms of their dependence on public assistance as well as their dependence on the health services sector, we constructed two Dependence Indices.

### Poverty and Healthcare Indices

A Dependence Index is constructed by expressing the proportion of dependence at the local level as a ratio of the same proportion at the state level.

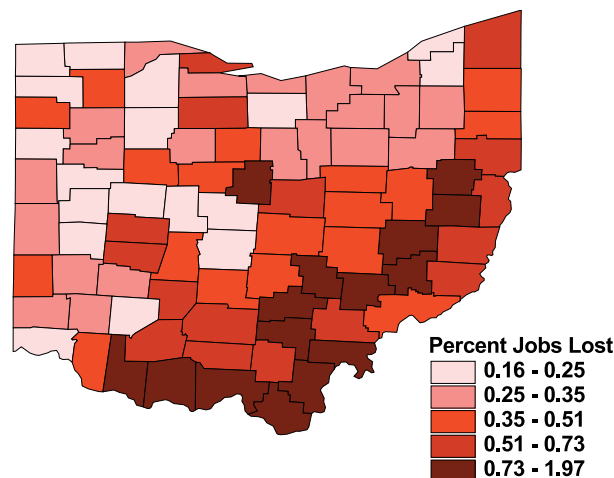
If the proportion of county employees working in health services is the same as those at the state level, then the index will be equal to one. Values other than one represent higher or lower levels of dependence on that sector of the economy.

The Poverty Dependence Index is based on county level data measuring transfer payments, the number of households with incomes below 100% of the federal poverty level, and Medicaid expenditures on county residents. The Health Dependence Index reflecting dependence on the health services sector is based on county level data from County Business Patterns measuring the number of establishments

in the healthcare sector, employment in these establishments, and associated payroll.

The values for each of these indices range from approximately 0.5 to 2, providing another indication of the diversity across the state in terms of levels of poverty and extent of the role that healthcare services in the local economy.

MAP 3. Percentage of Jobs Lost



However, these more populated counties, due to the diversity of economic opportunity, are best able to cope with the loss. MAP 3 provides an alternative picture of the consequences of the loss in jobs by showing the percentage of jobs lost in each county due to the cutbacks in Medicaid spending. The percentage of jobs lost varies from approximately 0.16% in Union County to almost 2% in Meigs County.

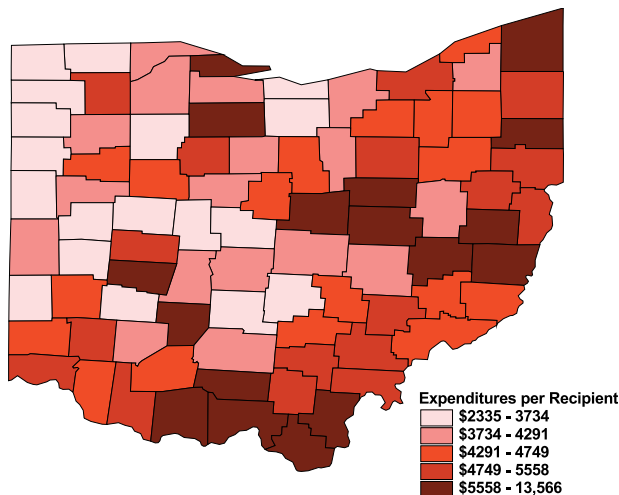
## Uneven Distribution of the Burden

Based on the indices, counties are likely to face differential effects of any cuts in Medicaid expenditures. The range of index values imply that there are some counties where poverty levels are approximately half that of the overall state. Other places in the state have poverty levels that are twice as much as the overall state level. The healthcare dependence index also varies over a similar range.

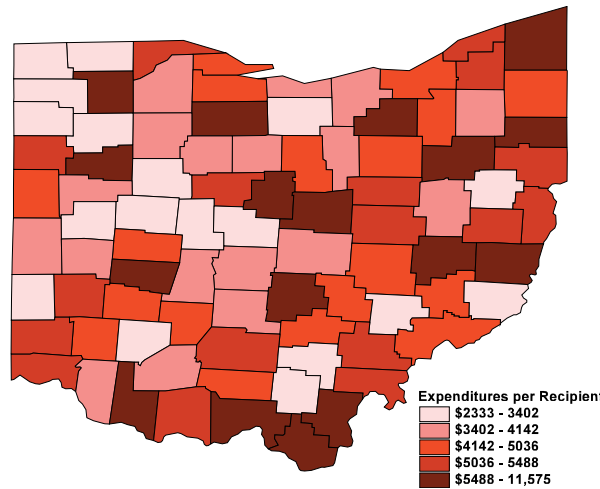
It is generally acknowledged that the southeastern part of the state is economically disadvantaged and will feel the most severe effects of the proposed reductions in expenditures. What is not as well known is the dependence of the southern and southeastern parts of the state on the healthcare services sector of the economy. The southern counties are both poor and dependent on the healthcare sector. This reliance on public assistance and the healthcare sector makes these areas of the state doubly vulnerable to the adverse effects of changes in Medicaid funding.

The multiplier does not capture the differences in the level of economic activity at the county level or in different parts of the state, nor does it capture the dependence of the residents of these counties on Medicaid. To capture the vulnerability of the county to the cuts in Medicaid expenditures, we use the indices as a weighting factor to estimate the adverse effects of the cuts in Medicaid expenditures. These indices are used to weight the Medicaid expenditures per recipient in each county (MAP 4 and MAP 5).

MAP 4. Expenditures per Recipient Weighted by Poverty Index



MAP 5. Expenditures per Recipient Weighted by Health Index



The level of poverty in the county as a whole is much less where the index is a half than where it is close to two; hence, what this analysis suggests is that a loss of a Medicaid dollar in an affluent county will not be felt as severely as it would be in a poor county. That is not to suggest that an individual who has lost Medicaid coverage will suffer any less hardship in one county than in another, but it is possible that in the more affluent counties in which there is typically greater economic opportunity, the individual affected by cutbacks will have greater opportunities to find other sources of support or income. Similarly, counties heavily dependent on healthcare services sector of the economy will be proportionately worse off than counties that are less dependent.

The two maps together show how the counties will experience the burden of the proposed cuts. The counties in the northwest are not poor, but some of them do have considerable healthcare services activity. The effect on these counties will not be as severe as that encountered by the counties in the south and the southeast that are both dependent on healthcare and are poor. Regardless of how we choose to measure, it is apparent that the eastern half of the state will feel the effects of any reductions in Medicaid expenditures more severely than the western half.

This dichotomy can be clearly seen in MAP 6. We have combined the two dependence indices into a single index, which also ranges from a 0.5 to 2. MAP 6 identifies the counties that are above and below the overall state level.

## Conclusion

In this report, we focus only on the direct economic costs of Medicaid cutbacks and do not explore the effects on health outcomes, which are likely to have more indirect consequences measured in terms of lost productivity, quality of life and general welfare. Furthermore, we do not attempt to measure the potential trade-offs involved in maintaining current levels of service. These trade-offs likely include the need to either raise additional revenue or make expenditure cutbacks elsewhere in the state budget.

It should be reiterated that these analyses rest on a number of simplifying assumptions that do not capture the full complexity of the effects of reductions in public expenditures. As with all economic forecasts, our results should be interpreted as indicative of trends rather than precise estimates.

While dependence on public assistance grows as economic conditions worsen, our analysis demonstrates that the burden is not distributed evenly across the state. Some parts of the state will suffer greater hardship because of their dependence on public assistance and the healthcare sector of the economy.

The proposed cuts will also affect the demand for healthcare services, particularly for preventive care. People will tend to put off "optional" care, make greater use of emergency services or shift the demand to other charitable sources of healthcare. These shifts in demand can occur primarily among those beneficiaries who are relatively healthy and therefore pose the smallest burden, in purely monetary terms, on the system. Most of these shifts in demand can only be temporary, and it is difficult to predict the precise consequences of delayed care.

From our analysis, it is clear that the effects of cutbacks will not be trivial and will affect those individuals and communities that are least able to help themselves. While the burden of these cutbacks will be borne by all the counties, different parts of the state vary in their capacity to bear this burden. Consequently, those parts of the state that are both poor and dependent of the healthcare services sector of the economy are doubly vulnerable.

<sup>†</sup> This study was supported, in part, by funding from The Health Foundation of Greater Cincinnati. We thank Tricia Petras for excellent research assistance.

<sup>1</sup> Data for State Fiscal Year (SFY) 2001 were provided by the Ohio Department of Job and Family Services. Other Medicaid information was obtained from the various reports prepared by the Office of Ohio Health Plans of Ohio Department of Job and Family Services available at [www.state.oh.us/odjfs/ohp](http://www.state.oh.us/odjfs/ohp).

<sup>2</sup> "Ohio Medicaid Report," Prepared by the Office of Ohio Health Plans of Ohio Department of Job and Family Services, April 2001, pages 1-2. The federal match in FY 2002 was 50% for administrative services, 58.8% for Medicaid services, and as high as 71.2% for the children's program (SCHIP).

<sup>3</sup> Foreword, "Ohio Medicaid Report, Update of April 2002," Prepared by the Office of Ohio Health Plans of Ohio Department of Job and Family Services, page 1 and data provided by the Department.

<sup>4</sup> *Ibid.*, page 1.

<sup>5</sup> "Medicaid: Good Medicine for State Economies," Families USA, 2003, [www.familiesusa.org](http://www.familiesusa.org).

<sup>6</sup> *Ibid.*, Table 3, page 8.

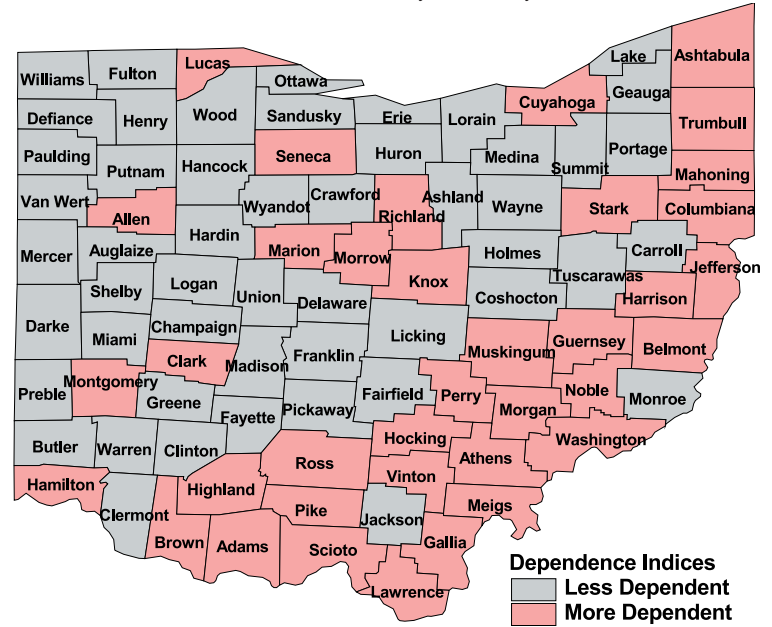
## Summary

We report on how proposed cutbacks in Ohio will affect local economies in the state's 88 counties. While all areas in the state would be affected by reductions in state expenditure on Medicaid, some of the more economically fragile counties in the southern and southeastern parts of the state would likely suffer the greatest hardship. These economically depressed counties are doubly vulnerable since some of them are also dependent on the health services sector of the economy, which will be adversely affected by such cuts. We also find that the majority of the counties least vulnerable to cuts are located in central and northwest Ohio.

Our measures of such hardship estimate that when compared to the overall effect on the state, the effect of Medicaid cutbacks on individual counties varies from half as much to twice as much as the state level. These differential effects reflect the levels of relative poverty in the counties and the dependence of the county economies on the health services sector of the economy. MAP 6 identifies the counties that are above and below the overall state level.

We estimate that a cut from the General Revenue Fund (GRF) of \$491 million, equivalent to the governor's recent proposed changes in state Medicaid expenditures, will work its way through the economy and result in reduced economic activity equivalent to a reduction of more than \$1.5 billion over a two year period. We estimate the resulting losses to be approximately 16,500 jobs and the reduction in state income tax revenues to be approximately \$22 million. As with all economic forecasts, our results should be interpreted as indicative of trends rather than precise estimates.

MAP 6. County Vulnerability to Medicaid Cuts



The full report is available at <http://www.ppm.ohio-state.edu/ppm/medicaid.pdf>

The Ohio State University  
School of Public Policy and Management  
300 Fisher Hall  
2100 Neil Avenue  
Columbus, OH 43210-1144

07700-590000-61801  
Project 744324

FIRST  
CLASS

