



Economic Impact of Reducing Medicaid and BadgerCare Expenditures

Economic Impact Analysis by Professor Steven C. Deller, PhD*
Professor of Agricultural and Applied Economics – UW-Madison

State Budget and Health Implications by Wisconsin Council on Children and Families:

Linda A. Hall, Senior Health Policy Analyst
Jon Peacock, Wisconsin Budget Project Director

Executive Summary

The Medicaid program represents the second largest general fund expenditure in the state budget. The combined appropriations for Medicaid and BadgerCare in 2002-03 are about \$3.7 billion from all funding sources, of which \$1.1 billion is state general purpose revenue (GPR). The cost of the two programs is now expected to exceed that funding level by about \$64 million GPR this year.

Medicaid and BadgerCare constitute the primary health care access vehicle for 617,000 low-income, elderly and disabled individuals. Of the program participants, more than 431,000 are from low-income families that, for the most part, have at least one working or recently unemployed parent. In 2001-02 these individuals represented almost 73 percent of total enrollment, but accounted for less than 28 percent of program costs.

As the state faces its largest fiscal crisis ever, state officials must examine expenditures levels in each state program. Given the size of the Medicaid and BadgerCare budgets, it is reasonable to assume that they will become targets for budget reduction proposals, even though government support for health care coverage to the groups served by these programs is a high priority for many Americans. Nevertheless, the magnitude of the state's budget crisis makes it clear that preserving these programs in the next biennium will take more than platitudes about "doing the right thing" for Wisconsin's children.

The Wisconsin Council on Children and Families decided to examine the economic impact of Medicaid and BadgerCare program reductions and contacted Professor Steven C. Deller, who is a UW-Madison professor of Agricultural and Applied Economics and an expert in economic modeling of this type. Using IMPLAN, a computerized, economic input-output model, Professor Deller analyzed the effect of a 10 percent cut in Medicaid and BadgerCare, which would reduce total expenditures by \$367 million per year, of which roughly \$148 million would be state GPR funds.

The analysis indicates that a 10 percent cut in Medicaid and BadgerCare would directly cause 5,700 lost jobs, with an accompanying loss of \$240 million in wages, salaries and other types of income. After this initial impact, Wisconsin would experience additional losses in jobs and income -- in total, 9,100 jobs and \$394 million in lost income. The lost

economic activity would also result in a \$30 million decline in total state and local government revenues, due to lower income, sales and other taxes.

The impact would be most significant on the health care sector, which now accounts for about 11.5 percent of total jobs in the state and 10.6 percent of the state's economic activity. The health care sector currently employs more than 255,600 people and indirectly supports nearly 142,000 additional jobs. In terms of revenues and payments to health care providers, forty-one percent of the \$367 million reduction or \$151.4 million would be experienced by doctors and dentists. Hospitals would experience the next largest reduction, 36 percent or \$131.6 million in lost revenues.

After the initial impacts on the health care sector, the effects of reduced health care spending ripple through other portions of the state's economy. The total impact in the service sector, which includes retail, restaurant, and health care, would be 7,298 jobs lost. This number represents 80 percent of the total job loss. The construction, manufacturing and trade sector would lose 1,221 jobs, or 13 percent of the total jobs lost. In the remaining sectors, including agriculture, 556 jobs would be lost.

It is important to note that \$218 million of the initial \$367 million loss to the economy is created by a loss of federal matching funds. The Medicaid and BadgerCare programs bring substantial matching funds into our state. On average, every additional dollar of state spending for those two health care programs puts \$2.50 into the health sector, before any other economic multiplier effects are taken into account.

Some less direct, but nonetheless significant, impacts on Wisconsin workers and the economy are not measured by the model. For example, among those who retain their jobs, but lose health care access due to the program reductions, decreased productivity would be expected. Workers who cannot access preventive health care services experience declining health status. Those who cannot access important maintenance medications for conditions such as hypertension eventually become sick, perform poorly, miss work and often end up hospitalized. This results in lost productivity and financial losses for the employer. Ultimately, the health of the state's economy is dependent on the productivity of its workforce.

The model also does not measure increases in uncompensated care that result from decreased health care coverage. When workers and their families lose health care coverage, they often are unable to pay for care or turn to costly emergency rooms. The costs of unpaid medical services ultimately are shifted to premiums paid by employers and employees in their health insurance programs. Medicaid and BadgerCare offer preventive, primary and acute health care services at cost-effective rates that help reduce cost shifting.

In very challenging economic times, these programs' positive impact on the state's economic health must not be overlooked. The ability of the Medicaid and BadgerCare programs to bring millions in federal dollars to the state, to support the productivity of tens of thousands of workers, and to contribute to more affordable health insurance should be considered as state officials search for paths out of the current fiscal crisis.

** The opinions expressed in this paper are those of WCCF and do not necessarily reflect Professor Deller's views.*

Table of Contents

Introduction	4
The Economic Model	4
<i>Table 1 - Economic Impact of 10% Medicaid / BadgerCare Program Reduction</i>	5
Lost Jobs and Productivity	6
<i>Figure 1 – Lost Jobs and Income under 10% Medicaid/BadgerCare Program Reduction</i>	6
<i>Table 2 – Lost Income and Jobs at Various Stages</i>	7
The Health Care Sector in Wisconsin	7
<i>Table 3 – Health Care Sector Jobs</i>	7
<i>Figure 2 – Economic Impact of 10% Medicaid/BadgerCare Program Reduction on Wisconsin’s Health Care Sector</i>	8
Local and State Government Revenue Impact	8
<i>Figure 3 – Lost State and Local Government Revenues under 10% Medicaid/BadgerCare Program Reduction</i>	9
How Federal Law Affects State Medicaid Spending and State Tax Changes	9
Medicaid and BadgerCare Program Information	10
<i>Table 4 – Major Categories of Medicaid/BadgerCare Eligibility</i>	10
<i>Table 5 – Medicaid & BadgerCare Enrollment and Spending by Eligibility Group (2001-02)</i>	11
<i>Figure 4 – Enrollment in Medicaid-Related Programs (2001-02)</i>	11
<i>Figure 5 – Spending for Medicaid-Related Programs by Program Category (2001-02)</i>	12
Conclusion	13

Introduction

Medicaid and BadgerCare are the primary health care access vehicles for about 617,000 low-income, elderly and disabled individuals. Of the program participants, more than 431,000 individuals are from low-income families that, for the most part, have at least one working or recently unemployed parent.

In 2002-03, the appropriations for these programs are roughly \$3.7 billion from all funding sources. However, the combined cost of the two programs is now expected to exceed the \$1.1 billion appropriation of general purpose revenues (GPR) by about \$64 million. At more than \$1 billion GPR, the Medicaid program alone represents the second largest general fund expenditure in the state budget. To continue to operate these programs as currently configured is estimated to cost an additional \$1.16 billion (\$570.6 million GPR) in the next biennium. Increased costs in the program are due both to rising health care costs and an increase in program participants as the number of unemployed and uninsured begin to rise.

Some people argue that state spending and taxes for programs like these are simply a drag on the state economy. Yet state spending can also create jobs and boost the economy, especially if that spending brings federal matching funds into the state. This report examines the economic impact of a 10 percent reduction in the Medicaid and BadgerCare programs, using a computer model of the Wisconsin economy.

The Economic Model

For this analysis, IMPLAN, an economic input-output model was used. IMPLAN is designed to estimate the economic impact of industry final demand changes in a specific area. The model measures positive and negative changes and can be used to measure those changes in Wisconsin as distinct from surrounding states. IMPLAN traces economic flows through three stages: direct impact, indirect impact and induced demand. The model uses multipliers that are specific to various sectors of the economy to calculate the changes at each stage. (For more information on the IMPLAN model, consult the Minnesota IMPLAN Group web site at: http://www.implan.com/about_us/what_is_implan.htm.)

In the analysis, the direct impact is a reduction in base Medicaid and BadgerCare funding. In the indirect impact stage, the model measures changes as health care providers experience reduced revenues, employ fewer people and purchase fewer goods and services in their local economy. Additional jobs and income are lost when the individuals and firms affected by health care providers reduced spending decide to reduce their purchases of other kinds of goods and services. Through the multiplier effect the general economy is affected, not just the health care industry. Finally, the analysis estimates the losses to state and local government when individuals and businesses pay less in income, sales, property, and other taxes.

The impact analysis was generated using an input-output model (social accounting matrix or SAM) for the state of Wisconsin using data for 2000, the most current year available. Input-output models are a “spreadsheet-like” representation of the economy. All buyers within an economy are distributed across the columns of a spreadsheet and all sellers are distributed down the rows. Any individual cell represents the sales between buyers (demand) and sellers (supply). This “spreadsheet of the economy” can be used to trace shocks to one part of the economy through the rest of the economy (i.e., the multiplier effect).

The model uses two assumptions that create some limitations: 1) fixed proportion or linear technology, and 2) full utilization of resources. The first of these two assumptions means that all impacts are linear, therefore, a 10% reduction in spending has twice the impact of a 5% reduction. The second assumption means that the economy is considered to be at full employment at *all* times and that employment and wages paid will go up and down proportionally within the multiplier effect. In the real world, some changes in spending might just be absorbed by the health care industry and not trigger layoffs or wage reductions. However, with a 10% reduction in spending it is reasonable to assume that layoffs and wage reductions would begin to occur.

The analysis demonstrates that a 10%, or \$367 million, reduction in Wisconsin’s Medicaid and BadgerCare programs would result in 5,700 persons being laid off with an accompanying loss of \$240 million in wages, salaries and other types of income.

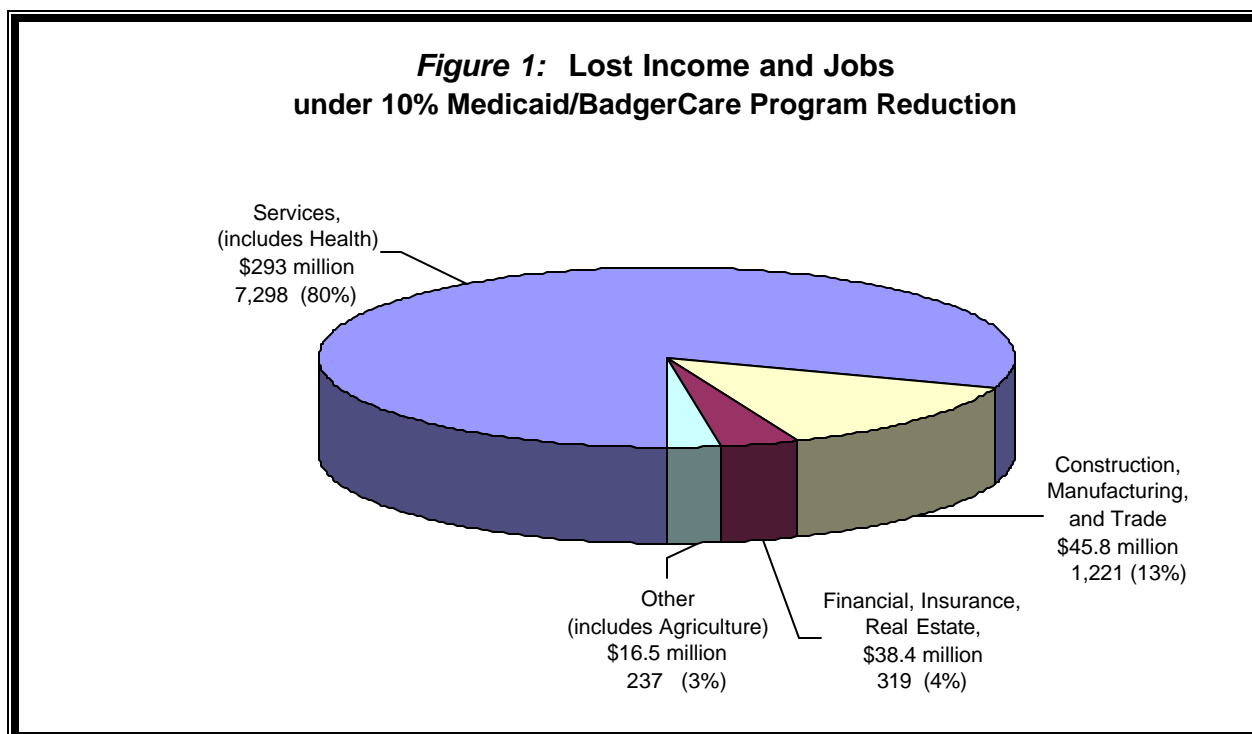
Table 1: Economic Impact of 10% Medicaid / BadgerCare Program Reduction

	<u>Lost Jobs</u>	<u>Lost Wages (millions)</u>	<u>Lost Federal Medicaid Dollars (millions)</u>	<u>Lost State and Local Revenues (millions)</u>
Direct Impact	5,726	\$ 240.4	\$ 218.4	\$ 30.3
Indirect Impact	1,025	\$ 49.7	-	
Induced Impact	<u>2,348</u>	<u>\$ 103.9</u>	<u>-</u>	<u>-</u>
Total Impact	9,099	\$ 394.0	\$ 218.4	\$ 30.3

After the initial impact, Wisconsin would experience additional losses in jobs and income. In total, 9,100 jobs and \$394 million in lost income. The lost economic activity would also result in a \$30 million decline in total state and local government revenues due to lower income and sales taxes.

Lost Jobs and Productivity

The impact on the job market would be considerable. As indicated in the table above, a total of 9,100 jobs would be expected to be lost with a ten percent Medicaid and BadgerCare program reduction. Job losses in the health care sector would be observed first. Then as the effects of reduced health care spending flow through the state's economy, other sectors would experience job losses also. Total impact in the service sector, which includes retail, restaurant, and health care, would be 7,298 jobs lost. This number represents 80% of the total job loss. The construction, manufacturing and trade sector would lose 1,221 jobs or 13% of the total jobs lost. In the remaining sectors, including agriculture, 556 jobs would be lost.



As Figure 1 shows, millions in lost wages would occur in each sector. While the services sector would experience the largest loss, \$293.0 million in wages, the construction, manufacturing and trade sector would also decline by \$45.8 million. In total, \$393.7 million in income would be lost.

The jobs and income loss would happen in stages. In the first stage, as shown in Table 2, approximately 5,700 jobs with \$240.4 million in wages would be lost. In the next stage, 1,000 jobs and another \$49.7 million in income would be lost. In the final stage, 2,400 jobs and \$103.9 million in wages would be lost.

Table 2: Lost Jobs and Income at Various Stages

Stage	Lost Jobs	Lost Income
1. Initial	5,726	\$240,359,776
2. Indirect	1,025	\$49,703,439
3. Induced	<u>2,348</u>	<u>\$103,872,867</u>
Total	9,099	\$393,936,082

For those who retain their jobs, but lose health care access due to the program reductions, decreased productivity would be expected. Workers who cannot access preventive health care services experience declining health status. Those who cannot access important maintenance medications for conditions such as hypertension eventually become ill, perform poorly, miss work and often end up hospitalized. This results in lost productivity and financial losses for the employer. Reduced productivity across many employers would ultimately affect the state's economic health, since that health is dependent on the productivity of the state's workforce.

Lack of health care access by workers soon becomes the problems of other employers when those workers seek free medical services from doctors, hospitals and other providers, because those providers then shift the cost of the unpaid services to other employers' health plans. Untreated health conditions usually cost more when they are finally treated, especially if treatment occurs in emergency rooms or inpatient situations, so the costs that are shifted to other employers are higher than they would be if workers had access to primary care at the outset.

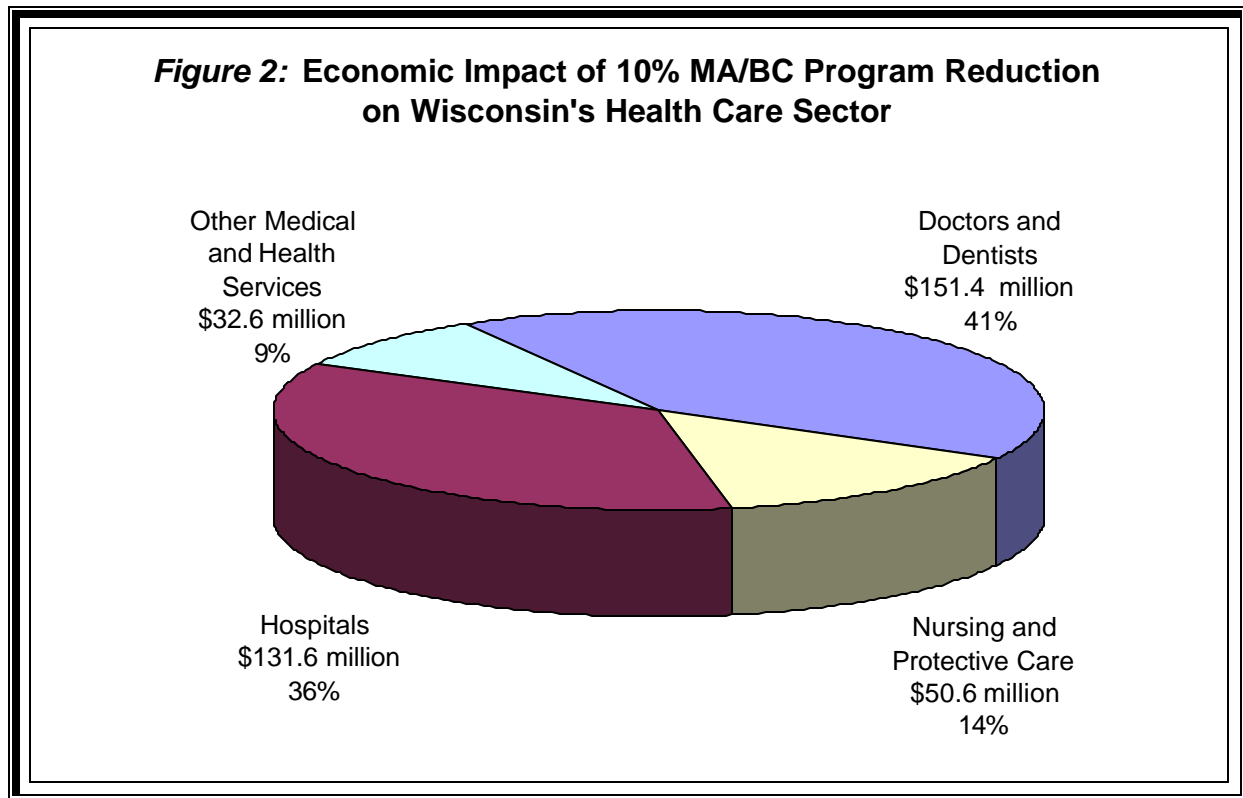
The Health Care Sector in Wisconsin

The health care sector has been one of the fastest growing areas of the Wisconsin economy. It currently employs more than 255,600 people in Wisconsin and indirectly supports nearly 142,000 additional jobs. The table below illustrates the types of jobs in health care. The health care sector now accounts for 11.5 percent of total jobs in the state and 10.6 percent of economic activity. (These figures are conservative, because the model does not include data on a few types of health sector jobs, such as pharmacists and public health workers).

Table 3: Health Care Sector Jobs

Doctors and Dentists	81,004
Nursing and Protective Care	49,605
Hospitals	97,431
Other Medical and Health Services	<u>27,582</u>
Total	255,622

A ten percent, \$367 million, reduction in Medicaid and BadgerCare program spending would have a major impact on the health sector in Wisconsin. Of the total reduction, doctors and dentists would experience the largest impact, a \$151.4 million reduction in revenues. This decrease would represent 41% of the total impact on the health sector. Hospitals would experience the next largest reduction, \$131.6 million in revenues or 36% of the total. Nursing and protective care services would be reduced by \$50.6 million, and other medical and health services would decline by \$32.6 million.

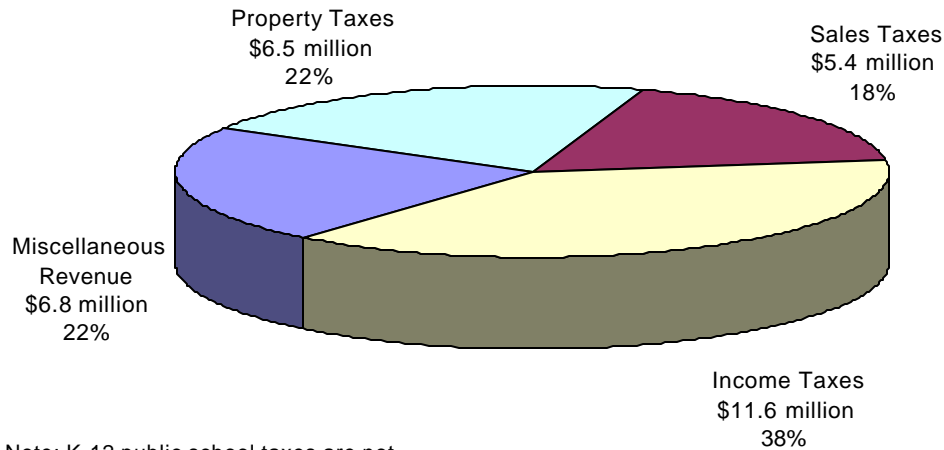


Local and State Government Revenue Impact

Since reducing health care spending significantly reduces jobs and income in the state, it also affects state and local revenue. The IMPLAN model analyzes those impacts as well.

A ten percent Medicaid and BadgerCare program reduction would translate into lost income, property and sales taxes, as well as miscellaneous revenues. As Figure 3 illustrates, the largest reduction would be an \$11.6 million loss in income taxes. Property tax revenues would decrease by about \$6.5 million. This estimate excludes property taxes for K-12 schools, because the IMPLAN model does not address these taxes due to their variability across local jurisdictions. Sales taxes would be projected to decline by \$5.4 million. Thus, the effect of reduced spending on these programs would permeate local government budgets and their ability to provide services to their residents.

Figure 3: Lost State and Local Government Revenues under 10% Medicaid / BadgerCare Program Reduction



Note: K-12 public school taxes are not included.

How Federal Law Affects State Medicaid Spending and State Tax Changes

Expenditures for Medicaid and BadgerCare are particularly cost-effective investments in Wisconsin's economy because the state spending brings substantial federal funding into the state. On average, each dollar spent on Medicaid and BadgerCare puts \$2.50 into the state economy (before any multiplier effects are computed), because the state funding is matched with federal funds. (The ratio of federal to state dollars is lower for Medicaid than it is for children enrolled in BadgerCare – \$1.44:\$1.00 versus \$2:45:\$1.00, but the weighted average is about \$1.50 in federal funds for each state dollar spent on these programs.)

For state income tax changes, federal law can have the opposite effect. Because state income tax payments can be claimed as itemized deductions, the amount of money that a state income tax increase takes out of the hands of Wisconsin taxpayers is reduced by the increased federal deductions. In other words, federal tax policy has the effect of cushioning the state increase. Conversely, a cut in state income taxes reduces federal deductions and increases the net federal taxes, so not all of the funding lost to the state treasury ends up in the hands of Wisconsin taxpayers.

The effect of a state tax change on federal deductions depends on how that change is structured; particularly on whether it predominately affects people who itemize deductions. One tax break that might be considered by the Legislature later this year is the taxation of dividends. The income tax exemption for certain dividends that President Bush has proposed could also reduce state tax collections, since most states use the federal definition of taxable income. Unless Wisconsin "decouples" from that

law, adoption of the new definition in the federal and state tax code would decrease state income tax collections by about \$100 million per year. However, only about three-fourths of that amount would stay in the hands of Wisconsin taxpayers, because nearly a fourth of the total would be consumed by higher federal taxes, as a result of reduced itemized deductions.

In short, a cut of \$100 million in state Medicaid spending would remove about \$250 million from the health care sector of the state economy – before computing multiplier effects – because of the matching federal funds. On the other hand, a \$100 million state income tax cut, such as the proposed dividend exemption, would only put about \$75 million to \$80 million into the economy – before multiplier effects are taken into account – because of the indirect increase in federal taxes.

Medicaid and BadgerCare Program Information

The Medicaid program spent \$1.07 billion in state GPR funds in 2001-02, which makes it the second largest general fund expenditure. The GPR appropriation for BadgerCare was about \$48 million. Total spending from all sources for both programs was \$3.47 billion in 2001-02, of which 32 percent was state GPR funding.

Table 4: Major Categories of Medicaid/BadgerCare Eligibility

AFDC-related Medicaid – People in families with dependent children whose net family income is no greater than the standard in 1996 for the Aid to Families with Dependent Children (AFDC) program. For a family of three, eligibility is capped at \$647 per month, which is 52 percent of the federal poverty level (FPL). However, children are eligible up to 100 percent of FPL, or \$1,252 per month.

Elderly, blind and disabled – People who meet eligibility requirements for the supplemental security income program and who are over age 65 or are totally and permanently blind or disabled. For individuals the income limit is \$629 per month (85 percent of FPL), except for those who receive long-term care services in a nursing home or community-based waiver program, in which case the income limit is \$1,635 per month.

Healthy Start – Children up to age six and pregnant women in families with income less than 185 percent of FPL, or \$2,316 per month for a family of three.

BadgerCare – Children and parents who are uninsured and ineligible for Medicaid, and whose family income does not exceed 185 percent of FPL or \$2,316 per month for a family of three. Once enrolled, families can stay in the program until their income reaches 200 percent of FPL.

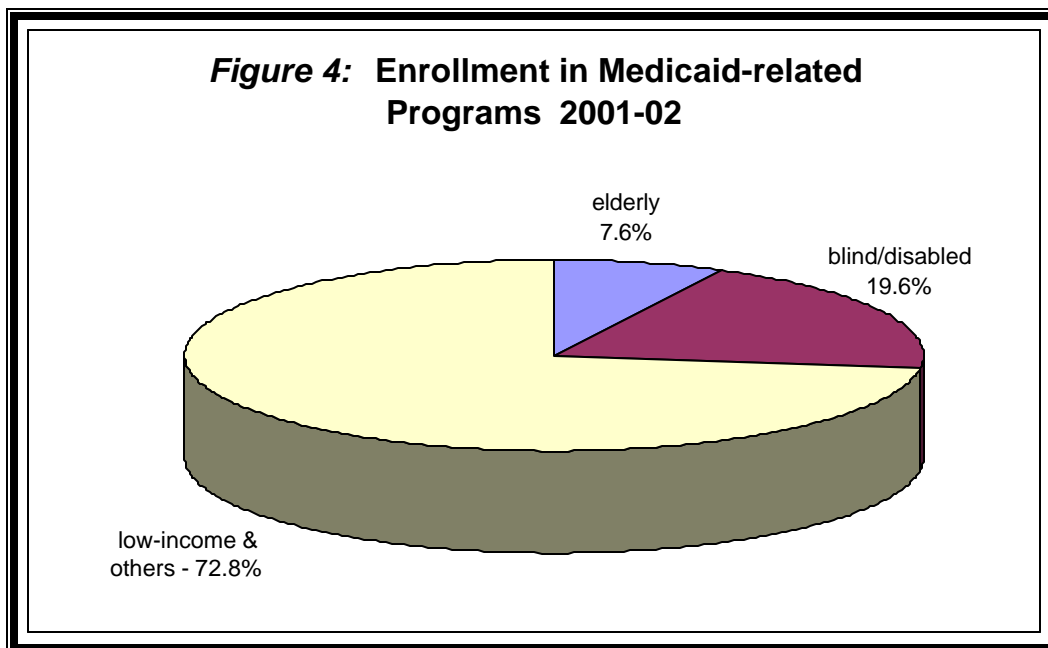
(The income limits referenced here will generally increase in the spring of 2003, in proportion to the change in the federal poverty level.)

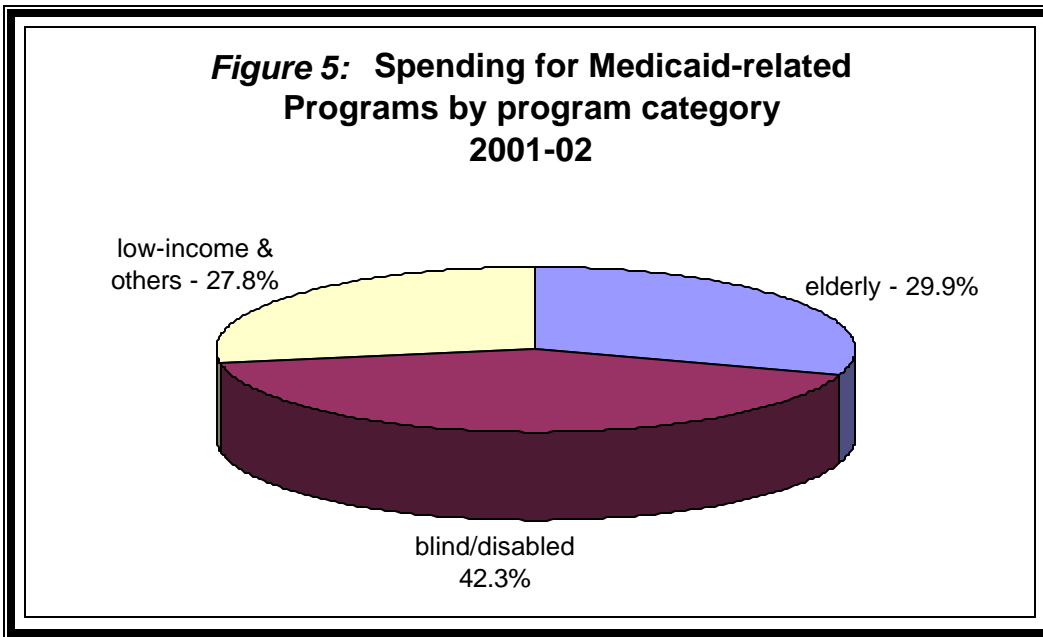
There are many different categories of eligibility for Medicaid. Table 4 on the previous page briefly summarizes the major groups who are eligible.

Table 5: Medicaid & BadgerCare Enrollment and Spending by Eligibility Group (2001-02)			
<u>Category</u>	<u>Enrollment (avg. per month)</u>	<u>Spending (all funds – millions)</u>	<u>Average annual cost per person</u>
Elderly	42,954	\$933	\$21,274
Blind/Disabled	110,227	\$1,318	\$11,956
Low-income Families and Other	410,575	\$865	\$2,107

(Source: Legislative Fiscal Bureau, Jan. 2003 Informational Paper #43)

Figures 4 and 5 illustrate the proportion of total enrollment and costs for each of the three general groups of participants. They show that although low-income families and “other” represented almost 73 percent of total Medicaid and BadgerCare enrollment, they accounted for less than 28 percent of total expenditures. On the other hand, the elderly comprised just 7.6 percent of total enrollees, but accounted for almost 30 percent of total spending. Medicaid enrollees who are blind or have total disabilities accounted for 19.6 percent of all enrollees and a little over 42 percent of expenditures.





Enrollment in Medicaid programs declined steadily in Wisconsin from the early 1990s through 1998, as a result of the improving economy and welfare reform, which ended the linkage between participation in welfare programs and Medicaid. Over a five-year period, total enrollment across all categories of eligibility declined by about 19 percent.

Since 1999, enrollment has risen sharply, because of the current recession, the creation of BadgerCare, and the re-enrollment of low-income families that went off Medicaid when it was “delinked” from welfare programs. The average enrollment in Medicaid in FY 2001-02 was 555,254, an increase of more than 157,000, or nearly 40 percent, compared to FY 1998-99. Most of the increase in that period was because of the creation of BadgerCare, which averaged a little more than 90,000 enrollees in 2001-02. The annual increases in total Medicaid and BadgerCare enrollment have averaged 11.8 percent over the last three fiscal years.

Growth in the total cost of Medicaid slowed in the mid 1990s, averaging just 3.4 percent annually from the beginning of 1994-95 through the end of 1998-99. Over the last three fiscal years, through the end of 2001-2002, combined expenditures for Medicaid and BadgerCare grew by an average of 10.5 percent per year. Despite significant increases in the average cost per person in all types of health care, the Medicaid costs over the last few years have grown a little slower than the total number of enrollees. That can be attributed to the fact that the enrollment growth has been in the coverage of low-income families, rather than in the far more expensive care for the elderly and people with disabilities.

Conclusion

This economic input-output analysis indicates that reducing Wisconsin's Medicaid and BadgerCare programs by 10%, or \$367 million (including \$218.4 million in federal funds), would result in 5,700 persons being laid off, with an accompanying loss of \$240 million in wages, salaries and other types of income. After the initial impact, Wisconsin would experience additional losses in jobs and income – bringing the total to 9,100 jobs and \$394 million in lost income. The lost economic activity would also result in a \$30 million decline in total state and local government revenues due to lower income, sales and other taxes.

While the health care sector would experience the largest decline due to reduced spending on these programs, nearly all sectors of the economy would be affected, including the manufacturing, trade, and service sectors. Because most low-income Medicaid and BadgerCare participants are in the workforce, the health of the state's workforce would be expected to decline as workers lose access to health care.

To the extent that workers seek care but cannot pay for it, unpaid health care costs would be shifted to other health plans purchased by employers and employees causing increases in their premiums. Thus, other Wisconsin residents would still help pay the health care tab for those less fortunate workers, but without the benefit of the substantial federal cost sharing that offsets about three-fifths of the costs of Medicaid and BadgerCare.

Reduced spending in the Medicaid and BadgerCare programs would affect many aspects of the state's economy and threaten the health care of many low-income parents and children. In these challenging economic times, the positive effects of spending on these public health care programs should not be ignored.

As state officials address the multi-billion dollar budget crisis and search for ways to reduce state spending, the ability of Medicaid and BadgerCare program spending to maintain the state's economic health, the productivity of its workers and to draw down federal dollars should be considered carefully.

February 11, 2003