

**The Economic Impact of the
Medicaid Home and Community-based Services Waiver
Program**

Prepared for

**Disability Community Alliance
and
Utah Developmental Disabilities Council**

Prepared by

**Jan Crispin-Little
Bureau of Economic and Business Research
University of Utah**

January 2006

Table of Contents

| | |
|---|----------|
| Executive Summary | 2 |
| Introduction | 3 |
| Section I | |
| The Economic Impact of the Medicaid Home and Community-based Waiver Program | 4 |
| Medicaid Overview | 4 |
| Estimating the Job, Earnings and Fiscal Impacts of the Medicaid Home and Community-based Waiver Program | 4 |
| Impacts on Jobs and Earnings | 4 |
| Fiscal Impacts | 5 |
| Total Economic Impact Estimates | 5 |
| Table 1: Summary Impact Estimates of the Medicaid Home and Community-based Waiver Program | 6 |
| Table 2: Economic Impact of \$1 Million of State Funds Allocated to the Medicaid Home and Community- Based Services Waiver Program | 6 |
| Appendix | |
| Estimating Economic Impacts Using RIMS II | 7 |
| Methodology and Assumptions | |
| Estimating Fiscal Impacts | 8 |

Economic Impact of the Medicaid Home and Community-based Services Waiver Program

Executive Summary

The study presents economic impact estimates of the Medicaid Home and Community-based Services Waiver Program. This program is designed to provide services to people with disabilities who qualify for a nursing home level of care so they can remain at home or in their community. It is expected to inject approximately \$20.6 million of new Medicaid funding into the state's economy. These federal dollars, when combined with the state's contribution of \$8.4 million will provide much needed services to over 1,900 Utah residents with disabilities. The dollars will support and generate economic benefits to the state in the form of jobs, earnings and fiscal revenues. The economic benefits are summarized below.

In 2006, the economic impacts of the federally funded portion of the Medicaid Home and Community-based Services Waiver program will be 661 jobs, roughly \$18.6 million in earnings for Utah workers and \$1.85 million in state and local tax revenue.

For every \$1.00 Utah budgets for the proposed program in 2006, the federal government will contribute another \$2.42 in Medicaid funding. This means that every \$1.0 million in state funds appropriated to this program will be matched with \$2.42 million from the federal government.

The economic impacts, when put in the context state appropriations, show that every \$1.0 million the state commits to this program will support 77 jobs, generate \$2.2 million in earnings for Utah residents and \$216,000 in tax revenue-\$181,000 in state taxes and \$35,000 in revenue for local units of government.

Every \$1.0 Utah spends for the proposed program will return \$0.13 to the state's treasury through taxes on earnings generated by Medicaid spending.

Introduction

People with intellectual disabilities and related conditions, traumatic brain injuries and physical disabilities need specialized services unique to their disabilities in order to live and work independently. These services are provided by the state through Medicaid. Currently, over 1,900 people are on a waiting list to receive these services. According to the latest figures made public by the state of Utah (2004), approximately \$8.4 million in general fund monies is needed to garner sufficient Medicaid funds to provide needed specialized services to individuals on the waiting list.

In this context, the Utah Developmental Disabilities Council and the Disability Law Center contracted with the Bureau of Economic and Business Research (BEBR) to undertake a study that shows the economic impact of these additional Medicaid dollars on the state's economy. These impacts include the number of jobs and total earnings that will be supported through Medicaid spending during 2006. The tax impacts (effects on state and local tax revenues) have also been estimated.

The impacts presented in this report show only those benefits to the state's economy that can be measured using economic impact modeling techniques. However, there are likely additional, but less easily measurable outcomes of funding this program such as: family preservation, family members being able to maintain employment, people on the waiting list being able to find and keep employment, etc. It is

difficult to determine and quantify the psychological impact on families of having a child with developmental disabilities. Marital and financial stresses are often consequences of caring for family members with disabilities. This program may help alleviate some of those stresses, which in turn, may result in measurable benefits to the community. These potential benefits are not addressed in this report.

Section I

The Economic Impact of the Medicaid Home and Community-based Services Waiver Program

Medicaid Overview

Title XIX of the Social Security Act is a program that provides medical assistance for individuals and families with low incomes and limited resources. This program, known as Medicaid, became law in 1965 and is designed in such a way that individual states and the federal government jointly cover the costs of health insurance for low-income individuals.

Under the program, the percentage of health care expenses paid by the federal government can vary considerably from state to state and from year to year. To calculate the Medicaid matching rate for each state, the federal government compares the average per capita personal income for each state with the national average per capita income. States with lower relative per capita incomes have higher federal matching rates. In 2006, Utah's federal Medicaid match will be 70.76%. This means that for every Medicaid dollar spent in Utah roughly 70 cents comes from the federal government.

Within broad national guidelines that are provided by the federal government, each state establishes its own eligibility standards, determines the type, amount, duration and scope of program services, sets the rate of payment for services and administers its own program. As Medicaid is an entitlement program there is no cap on the amount a state can receive, the amount a specific state receives is determined by the state's contribution (state monies allocated for Medicaid) and the federal match for that state.

Medicaid Home and Community-based Services Waiver Program

The goal of the Medicaid Home and Community-based Services Waiver Program is to use state funds to access federal Medicaid funds for individuals with disabilities. People with intellectual disabilities and related conditions, traumatic brain injuries and physical disabilities need specialized services unique to their disabilities in order to live and work independently to the fullest extent practical. These services are provided by the state through Medicaid. At present, 1,945 individuals are on a waiting list to receive these services. According to the most recent state estimates, providing approximately \$8.4 million in general fund money will be needed to provide specialized services to individuals on the list. Based on the state's 2006 federal matching rate (70.76), allocating \$8.4 million of state money to this program will garner an additional \$20.6 million in federal Medicaid funding.

Estimating the Job, Earnings and Fiscal Impacts of the Medicaid Home and Community-based Services Waiver Program

The impact of the proposed program can be estimated by analyzing the direct, indirect and induced impacts of the federal match. Dollars spent for Medicaid that are generated from outside the state of Utah inject "new" money into the state's economy. As this new money flows through the Utah economy, it supports and creates jobs, generates earnings for Utah workers and tax revenue for state and local governments.

Impacts on Jobs and Earnings

The direct effects of Medicaid spending are reflected in the jobs and wages paid to those workers in businesses that provide services to individuals participating in the proposed program. These direct

expenditures ultimately support jobs and earnings for workers in other industry sectors. This is known as the multiplier effect.

The full multiplier effect is the sum of all economic activity associated with Medicaid spending for this program. For example, some portion of the Medicaid dollars that service providers receive will be spent locally. This spending leads to subsequent rounds of spending by yet other businesses in Utah. In addition, employees of these service providers also spend a portion of their earnings in Utah which, in turn, sustains jobs and provides income for workers in other sectors. In each round of spending, the impact dissipates as money is taxed, saved or used to purchase goods from outside the state. Therefore, the multiplier effect continues but grows smaller as spending turns into income in ever decreasing shares. The impacts that result from purchases made by businesses represent the *indirect economic* effects. Purchases made by employees are the *induced economic* effects.

The jobs and earnings estimates presented in this report were developed using a standard tool of regional impact analysis known as the Regional Input-Output Modeling Systems (RIMS II). This model, developed by the Bureau of Economic Analysis of the U.S. Department of Commerce, provides a 473-sector input-output model of the Utah economy. The model tracks the flow of an industry's spending company's spending (or input requirements) through the Utah economy and then infers the amount of output required from each industrial sector to satisfy that industry's purchase requirements. Implicit in RIMS II multiplier coefficients is the rate at which a dollar of spending leaves the Utah economy. A more detailed discussion of the methodology used to generate the jobs and earnings impacts is provided in the Appendix.

Fiscal Impacts

The fiscal impacts presented are tax revenues that will result from additional earnings generated when Medicaid dollars are spent in Utah. The fiscal impacts have been calculated using tax-to-earnings ratios derived by dividing the total amount of tax revenue received in a given year by total reported earnings in Utah during that same year. A more detailed discussion of the methodology used to generate the fiscal impacts is provided in the Appendix.

Economic Impact of the Medicaid Home and Community-based Services Waiver Program

In 2006, the impact of Medicaid money received for the Medicaid Home and Community-based Services Waiver Program will be a total of 661 jobs and \$18.6 million in earnings for Utah workers. The fiscal impacts will total \$1.85 million-\$1.55 million in state tax revenue and about \$300,000 in local tax revenue. *These are the economic impacts or effects on the local economy that will be generated by Medicaid expenditures during 2006.*

Based on these estimates, \$1 million in federal Medicaid monies received by the state of Utah and used for this program will support 32 jobs, generate \$872,000 in earnings for Utah workers and roughly \$87,000 in state and local tax revenue. (Table 1)

Table 1.
Summary Economic Impact Estimates of the Medicaid Home and Community-based Services Waiver Program: 2006

| | |
|--|----------------|
| State Allocation | \$8.4 million |
| Federal Match | \$20.6 million |
| Jobs ¹ | 661 |
| Earnings ¹ | \$18.6 million |
| State Tax Revenue ¹ | \$1.55 million |
| Local Tax Revenue ¹ | \$300,000 |
| ¹ Estimates are based on the federal match only. Note: Projections are always subject to risk. Therefore, the estimates presented here have been rounded. Source: Calculated by the Bureau of Economic and Business Research, University of Utah. | |

Another way to assess the impacts of the program is in the context of Utah's financial contribution. Based on the impact estimates presented in this report, \$1 million allocated by the state to this program generates \$2.42 million in federal matching funds, which in turn will support 77 jobs. These jobs in turn will generate \$2.1 million in earnings, \$181,000 in state tax revenue and \$35,000 in revenue for local units of government. (Table 2)

Table 2.
Economic Impact of \$1 million of State Funds Allocated to the Medicaid Home and Community-based Services Waiver Program: 2006

| | |
|--|---------------|
| Every \$1 million in state allocation will result in..... | |
| Federal Match | \$2.4 million |
| Jobs ¹ | 77 |
| Earnings ¹ | \$2.2 million |
| State Tax Revenue ¹ | \$181,000 |
| Local Tax Revenue ¹ | \$35,000 |
| ¹ Estimates are based on the federal match only. Note: Projections are always subject to risk. Therefore, the estimates presented here have been rounded. Source: Calculated by the Bureau of Economic and Business Research, University of Utah. | |

Appendix

Estimating Economic Impacts Using RIMS II

Methodology and Assumptions

The economic activity estimates described here are based on information provided by the Division of Health Care Financing. This information included Utah's 2006 federal matching rate (70.76%) and estimation of the state's portion of the program cost (\$8.4 million). These two data elements were used to derive the amount of Medicaid that will flow into the state for this program. That amount is calculated to be \$20.6 million.

The economic impact of the proposed program was estimated using RIMS II, an economic impact model developed by the U.S. Department of Commerce, Bureau of Economic Analysis. Because the composition of purchases specific to the program was unknown, BEBR used the RIMS Direct Effect multipliers for employment and earnings to estimate the economic impacts.

Estimating impacts using Direct Effect multipliers requires the direct employment associated with firms that will provide services to individuals utilizing the program and the direct wages paid to those employees. Estimates of employment and wages of these service providers were derived using data from the 2004 *Input-Output Accounts of the United States* (I-O Accounts) published by the U.S. Department of Commerce, Bureau of Economic Analysis, <http://www.bea.doc.gov> as well as information from the Utah Department of Workforce Services.¹

Impacts occur as money is spent in the local economy. The industries in which these expenditures occur will determine the magnitude of the impacts. Working with the Disability Law Center, BEBR identified industry sectors within which the federal money would most likely be spent. These industry sectors were then matched with an aggregated industry sector (Social Assistance) in the RIMS II model. Included in the Social Assistance industry sector are companies that provide a wide range of social assistance services such as job training, nonmedical home care and homemaker services, group support and companionship, community housing services and vocational rehabilitation services.

Using information from the I-O accounts, BEBR estimated the labor component of the Social Assistance Industry. This labor component ratio was 49%; meaning that every \$1 of output in the Social Assistance Industry sector requires \$0.49 of labor. BEBR applied this ratio to the Medicaid funding match (\$20.6 million) to derive direct employee compensation. The Direct Effect earnings coefficient from the RIMS II model was applied to this figure to estimate the total direct, indirect and induced earnings that will result from the infusion of \$20.6 million in federal Medicaid.

To derive direct employment, total direct employee compensation was divided by the average annual wage paid to Utah employees working in the Social Assistance industry sector. This information is published by the Utah Department of Workforce Services in its *2005 Annual Report of Labor Market Information*, accessible at <http://jobs.utah.gov>.

Using information contained in the annual report, BEBR determined the average annual wage received by workers in the Social Assistance industry during 2004. An annual escalation rate of 3% per year was applied to the 2004 average annual wage to adjust for inflation. By dividing the employee compensation

estimate by the estimated average annual wage, BEBR generated a direct employment estimate. The Direct Effect employment coefficient from the RIMS II model was applied to this employment number to estimate the total direct, indirect and induced employment that will result from the infusion of \$20.6 million in federal Medicaid

Leakage: Implicit in the RIMS II multipliers is the rate at which a dollar of spending leaves the Utah economy. For example, when the input requirements of an industrial sector can be supplied by local businesses, the multiplier effect of the initial expenditure is greater than if the input requirements cannot be supplied locally. An example of an industry sector with a small multiplier effect is the retail sector. This sector has a “trade margin” which is defined as the difference between gross receipts and cost of goods sold. Purchases made in the retail trade sector need to be adjusted and expressed in terms of the trade margin. The trade margin of Utah's retail sector is 20%; expressed conversely, all purchases made in the retail sector should be reduced by 80% before they are subjected to multiplier analysis to reflect the fact that little of what is sold in the retail sector is manufactured locally.

Estimating Fiscal Impacts

State Tax Impacts

State tax impacts are based on the relationship between earnings and selected state tax collections expressed as a ratio that represents the effective state tax rate. The taxes included in the analysis were: (1) individual income tax, (2) state sales tax, and (3) a variety of miscellaneous taxes. To compensate for annual fluctuations, BEBR used three years of state tax data to establish a ratio of earnings to tax receipts of 8.34%. This rate was applied to the earnings estimates to generate state tax impacts.

Local Tax Impacts

The fiscal impact on local units of government was derived using the same methodology used to estimate state tax impacts. The ratio of earnings to local tax receipts is 1.61%. This rate was applied to the earnings estimates to generate local tax impacts.