Economic Impact of MEDICAID and CHIP on the Utah Economy

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Economic Impact of Medicaid and CHIP on Utah's Economy in 2001

Executive Summary

This study provides economic impact estimates of two health care insurance programs on the state of Utah. These programs--Medicaid and Children's Health Insurance Program (CHIP)–receive significant federal funding to help Utah cover the cost of providing health insurance for low-income individuals.

In 2001, the state of Utah allocated approximately $264.7 million to the Medicaid program. The state's contribution was matched by approximately $600.3 million in federal funds. Together, these dollars were used to provide health care services to 173,284 low-income residents throughout the state. During the same year, the state allocated approximately $4.7 million to CHIP. This contribution resulted in a federal match of $18.8 million. More than 26,000 children were enrolled in CHIP last year.

One consequence of the state's current economic slump is an increase in the number of Utah residents who are eligible to receive health care benefits through Medicaid. From 2000 to 2001, the number of individuals who qualified for Medicaid grew from 222,360 to 235,813--an increase of 6.1%. The number of eligible residents who actually received services through the Medicaid program increased by 3.6% from 167,262 in 2000 to 173,284 in 2001.

In this context, it is helpful to put the impact of the state's contribution to both Medicaid and CHIP in perspective. When federally matched, the Medicaid program, and to a lesser extent CHIP, becomes large and important health insurance funding programs for the state's less advantaged citizens. Without such a well-funded program, many of these individuals would forgo health care, utilize health care services less frequently, or access more expensive forms of health care (trips to the emergency room rather than preventive trips to a physician). All of these alternatives impose "hidden" costs on the Utah economy. Uncompensated care not only increases the cost of health insurance for those individuals who can afford to pay, but it depletes the resources of health care providers and hospitals.

In contrast, a well-funded health insurance program provides at least the basic health services to individuals who cannot afford them. In addition, the money spent for these services flows through the Utah economy, supporting jobs and providing income for Utah workers and generating tax revenue for state and local units of government. In fact, Utah's contribution to Medicaid and CHIP in fiscal year 2001, resulted in a federal match of $619.0 million which supported thousands of jobs and provided millions of dollars in earnings for Utah workers. These impacts are summarized below.

- For every $1.00 Utah budgeted to the Medicaid program in fiscal year 2001, the federal government contributed another $2.27. This means that every $1.0 million in state funding appropriated to the Medicaid program in 2001 was matched with $2.27 million from the federal government

- For every $1.00 Utah budgeted to CHIP in fiscal year 2001, the federal government contributed another $4.00. This means that every $1.0 million in state funds appropriated for CHIP in 2001, brought $4.0 million in federal monies.

- In 2001, the federally funded portion of Utah's Medicaid program supported 16,818 jobs and provided $437,413,719 in earnings for Utah workers. So, a $1.0 million allocation of state funds for Medicaid supported 64 jobs and provided $1.6 million in earnings for Utah residents.

- In 2001, the federally funded portion of Utah's CHIP supported 560 jobs and provided $16,146,146 in earnings for Utah workers. So, a $1.0 million allocation of state funds for CHIP supported 120 jobs and provided $3.4 million in earnings for Utah residents.

- For every $1.00 Utah spent for the Medicaid program in 2001, $0.12 was returned to the state's treasury through the generation of net new state tax revenue. In 2001, tax revenues generated by federally funded health care services for Medicaid participants totaled $47.3 million. Of this, $31.6 million went to the state's treasury. Local units of government realized a tax benefit of $15.7 million.

- For every $1.00 Utah spent on CHIP in 2001, $0.25 was returned to the state's treasury through the generation of net new tax revenue. In 2001, tax revenues generated by federally funded health care purchases for CHIP participants totaled $1.7 million. Of this, $1.1 million went to the state's treasury. Local units of government realized a tax benefit of $581,262.

- The impacts presented here show the jobs and earnings *supported*, not *created*, with federal dollars. Therefore, cuts in state funding for Medicaid and CHIP would not result in an immediate loss of jobs or earnings. However, if the cuts are severe and prolonged, job losses could occur within three to five years.

Economic Impact Medicaid and CHIP - 2001		
	Medicaid	**CHIP**
Federal Contribution	$600,364,379	$18,880,000
Jobs	16,818	560
Earnings	$437,413,719	$16,146,176
Fiscal Impacts		
State Government	$31,625,012	$ 1,167,369
Local Governments	$15,746,894	$ 581,262
Total	$47,371,906	$1,748,631
Source: Federal Medicaid and CHIP contribution: Bruce Wood, Utah State Department of Health. Estimates of Jobs, Earnings and Fiscal Revenue: Bureau of Economic and Business Research, University of Utah, David Eccles School of Business.		

Impact of State Contribution		
Every $1,000,000 of state contribution resulted in . . .		
	Medicaid	CHIP
Federal Contribution	$2,270,000	$4,000,000
Jobs	64	120
Earnings	$1,664,576	$3,459,900
State Tax Revenue	$120,349	$250,151

Economic Impact of Medicaid and CHIP on the Utah Economy

Introduction

This study was undertaken by the Bureau of Economic and Business Research (BEBR) at the request of Utah Issues. The express purpose of the study was to estimate the economic impact of Medicaid and CHIP expenditures on the state of Utah during 2001.

The importance of this information is especially critical when state budgets are declining and policy makers must carefully evaluate the cost of funding public programs. In this climate, many public agencies claim that their efforts promote economic development, and while it is certainly true that publically supported activities enhance the overall quality of life for local residents, economic development requires the creation of new jobs and income.

New jobs are created when money from outside a region enters the local economy. Activities such as export-oriented manufacturing plants and out-of-state visitors are prime examples of activities that foster economic expansion. These activities bring new dollars into Utah which translate to additional jobs and income for Utah residents. In comparison, most state government expenditures, and spending for education and health care services are generally a reallocation of jobs and income among different industries within the state. So, although specific agency functions may provide a framework for economic development, they do not create new jobs and income for the state's economy.

Utah's Medicaid and CHIP programs are exceptions. Medicaid and CHIP expenditures represent an injection of new spending into the economy rather than a reallocation of existing resources because they include a substantial federal match. This federal match provides health care funding that would otherwise be taken from other sources or lost altogether.

The federal match enters the Utah economy when the state contributes to the Medicaid program and CHIP. Conversely, when the state cuts Medicaid funding, it loses a portion of the federal contribution and health care spending declines. Cuts in Medicaid and CHIP not only limit the availability of health care for less advantaged individuals, if severe enough, and long enough in duration, program cuts could, over a period of time result in a loss of job losses and income.

Section I
The Economic Impact of Medicaid and CHIP on the Utah Economy

Program Overview

The Medicaid Program

Title XIX of the Social Security Act is a program which provides medical assistance for certain individuals and families with low incomes and limited resources. The program, known as Medicaid, became law in 1965 and is designed so states and the federal government jointly cover the costs of health insurance for low-income people. The federal government pays a certain percentage of every state's expenditures for health care benefits provided under Medicaid.

The percentage of health care expenses paid by the federal government can vary considerably from state to state and from year to year. To compute 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, but each state receives at least a 50 percent matching rate. In 2001, Utah's "blended" matching rate for Medicaid was about 70.0%; that is, on average, for every Medicaid dollar spent in Utah, roughly 70¢ came from the federal government.[1] Medicaid is an entitlement program, so although the federal matching rates vary from state to state, there is no cap on the amount a state can receive.

Within broad national guidelines which 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. Based on Utah's eligibility requirements in 2001, 235,813 individuals, or about 10% of the state's population qualified for Medicaid; 173,284 individuals actually received services. According to information provided by the Utah Department of Health, Division of Health Care Financing, expenditures incurred through Utah's Medicaid program during 2001 totaled approximately $865.0 million. Of this, $264.7 million was allocated from state funds. The remaining $600.3 million was provided by the federal government.[2]

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[1] Utah's matching rate for "regular Medicaid was actually 71.47. However, the matching rate varies by type of service provided. The blended rate was calculated by dividing total federal dollars contributed for Medicaid by total Medicaid expenditures in 2001. That ratio was 69.40.

[2] Detailed Medicaid spending data are published by the Utah Department of Health in the report "Utah Medical Assistance: Annual Statistical Report of Medicaid & Utah Medical Assistance Program," 2001 (Salt Lake City, Utah). Information regarding the state's contribution to Medicaid and the federal matching funds received in 2001 was provided by Bruce Wood, Utah Department of Health.

Children's Health Insurance Program (CHIP)

The Children's Health Insurance Program (CHIP) is another federal match program that provides children of eligible families access to health care services. CHIP is a state health insurance plan for children whose families cannot afford private health insurance. Implemented in 1998, CHIP has helped nearly 50,000 children. In 2001, approximately 26,700 children were enrolled in CHIP.

Funding for CHIP is provided primarily by the federal government through a federal match program. Unlike Medicaid, CHIP is not an entitlement program and limits the amount of federal money that states may access. The federal match maximum formula changes yearly, but generally ranges between $23 million and $24 million for the state of Utah. In 2001, the federal matching rate for Utah's CHIP was 80.03%, or, for every CHIP dollar spent in Utah, roughly 80¢ came from the federal government. Total spending in Utah for CHIP during 2001 was $23.6 million. Of this, approximately $4.7 million was contributed by the state of Utah. The remaining $18.9 million was provided by the federal government.

Estimating the Job and Income Impacts of Medicaid and CHIP Spending

The impact of Medicaid and CHIP on Utah's economy can be estimated by analyzing the direct, indirect and induced impacts of the federal match. Dollars spent for Medicaid and CHIP that are generated from outside Utah inject new spending into the state's health services sector when they are used to pay for services provided by physicians, hospitals, nursing homes and other health-related business. These direct expenditures ultimately generate income and sustain jobs for individuals not directly associated with the health care industry. This is known as the multiplier effect.

The multiplier effect is the sum of all economic activity associated with Medicaid and CHIP spending in Utah. For example, as health care providers supported by Medicaid and CHIP funding purchase goods and services from other local business, a portion of that money is spent in Utah. This spending leads to subsequent rounds of income and spending by other businesses and individuals. In addition, employees of health care businesses also spend a portion of their earnings in Utah which, in turn, sustains jobs and provides income for workers in other sectors of the economy. 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 business and purchases made by employees with their incomes are the indirect and induced impacts of the Medicaid and CHIP programs.

The jobs and earnings supported by Medicaid and CHIP spending can be estimated using a standard tool of regional economic impact analysis known as the Regional Input-Output Modeling System (RIMS II). Developed by the Bureau of Economic Analysis, U.S. Department of Commerce, RIMS II provides a 480-sector input-output model of the U.S. economy. This model tracks the flow of money, or input requirements, throughout the

Utah economy. The model then infers the amount of output required from each industrial sector to satisfy the purchase requirements. In this case, health care expenditures paid for with federal matching monies represent the initial inputs. The model then estimates the indirect and induced impacts (outputs) that are required to satisfy the initial purchase requirements. Federal matching dollars are the only initial inputs considered in this analysis since it is this money that flows from outside the state.

Caveats to Job and Income Estimates

The jobs and income estimates presented here represent the activities that are *supported* by federal matching money, not *created* by federal matching money. For several reasons, the net economic impacts of federal Medicaid and CHIP spending in Utah are likely to be lower than the job and earnings estimates generated using RIMS II.

In regional impact models, "impacts" are defined as either an expansion or a contraction in the local economy; that is, how does the activity being analyzed impact final demand in the region. In this case, the infusion of Medicaid dollars would contribute to an expansion of local activity because money is flowing into Utah flows from an outside source; however, the full extent of the impact depends on how the economy would react to the loss of this outside money. From this vantage point, the actual loss of jobs and income would initially be lower than the estimate of jobs and income supported by Medicaid spending because some of the current Medicaid participants would still utilize some level of health care by paying for these services with their own funds, or with funds from other sources. In order for the loss of jobs and income to equal the full economic impact estimate provided here, two conditions need to be met: (1) the state loses all federal matching dollars, *and* (2) the individuals who qualify for Medicaid and CHIP would not seek any medical services in Utah.

In reality, the uninsured do seek health care services, albeit at a lower rate than those who are insured. Based on research conducted by the Institute of Medicine Committee on the Consequences of Uninsurance, while the uninsured are much more likely to forgo needed care, some do seek some level of health care. In a study cited by the Institute of Medicine, after adjusting for differences in age, sex, income, and health status, uninsured people were less than half as likely as insured persons to receive care for a condition that physicians deemed highly serious and requiring medical attention. [3,4]

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[3] According to the Institute of Medicine report "Coverage Matters: Insurance and Health Care" (2001) People without insurance are also less likely than people with insurance to receive preventive services and appropriate routine care for chronic conditions. Finally, those who lack health insurance are more likely to be hospitalized for conditions that might have been avoided with timely ambulatory care.

[4] Baker, David W., Martin F. Shapiro, and Claudia L. Schur. 2000. "Health Insurance and Access to Care for Symptomatic Conditions," *Archives of Internal Medicine* 160(9):1269-1274.

Although many people who lack insurance will forgo the care they need until their condition becomes intolerable, others will obtain the health care they need even without insurance, by paying for it out of their pocket or seeking it from providers who offer care free or at highly subsidized rates.[5] Others may utilize emergency room services when their medical condition becomes severe regardless of their ability to pay.

Therefore, the extent to which people continue to utilize health care services will ultimately determine the impact on the economy if Medicaid (or CHIP) funding is reduced. If funding cuts result in fewer individuals seeking services or accessing services less often, in time an overcapacity will develop in the health care system. Eventually the market will compensate for the overcapacity and there will be fewer health care professionals needed in Utah. The timing of the adjustment and the net job loss have not been estimated in this analysis.

Further, without the safety net of Medicaid, a large share of the health care services provided by hospitals to the uninsured would be provided as uncompensated care (the sum of bad debt and charity care)--a burden that is not distributed evenly across providers. Historically, a disproportionate share of uncompensated care has been provided by public hospitals. Public teaching hospitals also tend to bear an even greater share of the burden than non teaching hospitals. Given the disproportionate burden of providing uncompensated care that is carried by public hospitals and the important role they play in providing access to care for the uninsured, cuts in Medicaid could have significant and profound effects on these institutions by damaging their financial viability. Finally, hospitals in the state of Utah are required to provide services to individuals who access care through hospital emergency rooms, regardless of that individual's ability to pay. Individuals who access emergency room services, but cannot afford to pay for such services drive the cost of health up for those who can afford to pay. At some point, uncompensated care will erode the financial viability of the providing institutions.

[5] Institute of Medicine, "Coverage Matters: Insurance and Health Care" (2001) National Academy Press (Washington, D.C.) Accessible at http://www.nap.edu

Estimating Fiscal Impacts

In addition to the impact on jobs and earnings, federal dollars spent for health care in Utah generate fiscal impacts as well. The fiscal impacts presented here represent the indirect tax revenue generated by earnings that can be attributed to Medicaid and CHIP spending in Utah during the study year.

To estimate the fiscal revenue, an effective state and local tax rate was derived by dividing total state and local tax receipts (less corporate income tax) by total state personal income. The base year used was 1999-2000 (the most recent year for which data are available). This ratio (10.83%) was applied to the earnings attributed to Medicaid and CHIP spending to determine the portion of state tax revenue that may result from these expenditures. [6]

Caveats to Fiscal Estimates

The fiscal impact estimates presented here assume that all state and local taxes are tied directly to personal income. This assumption is certainly the case with respect to state income tax, and to a lesser extent sales tax; however, the relationship between personal income and property tax is less obvious. Receipts from property tax (and possibly other types of taxes) may not be in direct proportion to an increase in earnings. Increases in property tax in particular are tied to other factors - primarily increases in property values. Therefore, the fiscal estimates presented here should be viewed as an "upper bound" estimate of the impact on state and local tax revenues.

For clarification, the fiscal impacts that accrue to the state and those that accrue to local units of government are separately identified since only the state portion can be used as a direct offset to the state's contribution for Medicaid and CHIP. Local units of government do not provide funding for these programs.

[6] Total tax revenue (less corporate income tax) in fiscal year 1999 in Utah was $5,699,327,000. Total personal income in calendar year 1999 in Utah was $52,622,000,000. Source: U.S. Bureau of the Census, "Utah State and Local Government Finances by Level of Government and State"; and "State Government Finances: 1999-2000." Accessible at http://www.census.gov.

Economic Impact Estimates

The Economic Impact of the Utah Medicaid Program

In 2001, the federal portion of the state's Medicaid program ($600,364,379) supported both directly and indirectly a total of 16,818 jobs and provided $437,413,719 in earnings for Utah residents. Every $1.0 million of federal Medicaid funding supported approximately 28 jobs and provided $728,252 in earnings for Utah workers.

The fiscal impact of the Medicaid program totaled $47,371,906. Of this $31,625,012 flowed to the state's treasury. The remaining $15,746,894 flowed to local units of government.

In the context of these estimates, a $1.0 million allocation to Medicaid by the state of Utah garnered $2.27 million in federal matching funds, supported 64 jobs, provided $1.66 million in earnings for Utah workers and generated $120,349 in state tax revenues.

The Economic Impact of CHIP

In 2001, the federal portion of the state's CHIP ($18,880,000) supported 560 jobs and provided $16,146,176 in earnings for Utah workers. Therefore, every $1.0 million of federal matching funds for CHIP supported approximately 30 jobs in Utah and provided $864,975 in earnings for Utah workers.

The fiscal impact of CHIP totaled $1,748,631. The state portion of the total was $1,167,369. The remaining $581,262 went to local units of government.

In the context of these estimates, a $1.0 million allocation to CHIP by the state of Utah garnered $4.0 million in federal matching funds, supported 120 jobs, provided $3.4 million in earnings for Utah workers and generated $250,151 in state tax revenues.

Tables 1 and 2 summarize the economic impact estimates.

Table 1 Economic Impact Medicaid and CHIP - 2001		
	Medicaid	**CHIP**
Federal Contribution	$600,364,379	$18,880,000
Jobs	16,818	560
Earnings	$437,413,719	$16,146,176
Fiscal Impacts		
State Government	$31,625,012	$1,167,369
Local Governments	$15,746,894	$ 581,262
Total	$47,371,906	$1,748,631

Source: Federal Medicaid and CHIP contributions: Bruce Wood, Utah State Department of Health.
Estimates of Jobs, Earnings and Fiscal Revenue: Bureau of Economic and Business Research, University of Utah, David Eccles School of Business.

Table 2 Impact of State Contribution		
Every $1,000,000 of state contribution resulted in . . .		
	Medicaid	**CHIP**
Federal Contribution	$2,270,000	$4,000,000
Jobs	64	120
Earnings	$1,664,576	$3,459,900
State Tax Revenue	$ 120,349	$ 250,151

Section II
Estimating Economic Impacts Using RIMS II

The job and earnings estimates presented in this study were generated using a standard tool of regional economic impact analysis known as the Regional Input-Output Modeling System (RIMS II). This model, developed by the Bureau of Economic Analysis of the U.S. Department of Commerce, provides a 480-sector input-output model of the Utah economy. This model tracks the flow of a company's spending, or input requirements, through the Utah economy. The model then infers the amount of output required from each industrial sector to satisfy the same company's purchase requirements.

In this analysis the direct impacts of Medicaid and CHIP are represented by expenditures made for health care services (payments to hospitals, physicians, nursing homes, etc.) The indirect impacts result from spending that occurs when providers of health care services purchase goods and services from yet other Utah companies and these companies purchase goods from yet other firms. Induced impacts occur when employees of health care facilities and employees of companies that provide goods and services to health care facilities spend their earnings on goods from other Utah vendors. The impacts are expressed in terms of employment and earnings, or jobs and income.

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.

Methodology and Assumptions

The economic activity estimates described here are based on expenditure data provided by the Utah Department of Health (UDH) in its annual publication titled "Annual Statistical Report of the Medicaid & Utah Medical Assistance Program Fiscal Year 2001". When necessary, clarification of expenditures was provided by Bruce Wood, Utah Department of Health. The information provided in the UDH annual report shows actual expenditures made during fiscal year 2001.

In the UDH annual report, Medicaid expenditures are grouped into detailed categories of service which provide information on spending patterns (for example, monies spent for nursing facilities, physicians, dentists, etc.). Each category of service was matched to industries within the RIMS II model. The corresponding earnings and employment multipliers were applied to the spending in each industry that derived from federal sources.

The economic impact estimates for CHIP were derived by first estimating the federal portion of CHIP spending based on information provided by the Utah Department of Health. The RIMS II "Health Services" industry aggregate employment and earnings multipliers were then applied to this figure.

A potential drawback of the RIMS II model specifically, and regional impact models in general, is the assumption that all input requirements will be satisfied locally if such capacity exists in the local economy. In reality, companies generally purchase locally only if the cost of purchasing from nonlocal sources is significantly more costly. Therefore, because information about the actual spending patterns of health service providers were not available, the economic estimates presented assume that all purchases occurred locally if a local source could provide the necessary inputs.

Understanding Economic Impacts

Historically, much confusion has surrounded economic analysis. Many users expect that the total impact will be magnitudes larger than the amount of direct spending under consideration and are surprised when the impacts are actually lower than the amount of direct spending. This confusion stems from a misunderstanding of economic multipliers.

Economic multipliers quantify the relationship between an injection of spending and subsequent activity in a regional economy. How subsequent activity is defined is critical. If it is defined as a change in local spending, the multiplier may be relatively large (say, three or four), and the total spending impact may be three or four times as large as the initial amount of spending.

For example, when a local business purchases goods and services from other local businesses, these firms must acquire materials from other organizations located both inside and outside the region. As suppliers rely on other suppliers for inputs and as employees of those suppliers spend their earnings, the total spending in the regional economy increases by orders of magnitude. In this analysis, the activities of a health care provider would have a large impact on *local spending.*

On the other hand, if multipliers are defined in terms of employment and earnings, the total economic impact may be only slightly larger (or in many instances smaller) than the initial injection of dollars.

This occurs because businesses use only a fraction of every dollar of new spending to pay wages, salaries and other labor-related benefits. The remainder of the dollar is applied toward investment, taxes, purchases of raw materials and services for other businesses, etc. Therefore, while the injection of new money into a region may generate an increase in local spending, it generates much more modest increases in *local earnings.*

Multipliers that purport to measure local spending (generally referred to as Output Multipliers) are potentially misleading. Output multipliers generate an impact on local spending estimate that involves significant double-counting because they include purchases made by vendors of both final and intermediate goods and services. For example, if a capital investment project undertaken by a company included the purchase of an air-conditioning unit from a local retailer, the total spending estimate would include the price paid to the retailer of the unit, the price paid by the retailer to the wholesaler, the price paid by the wholesaler to the manufacturer, and the amounts paid by the manufacturer for the raw materials. Obviously the impact on local spending estimate would not reflect the actual value generated in the regional economy. It just provides a large number.

Finally, an impact on local spending estimate reflects the economic structure of the region rather than the actual benefits conferred to the residents of region. A dollar worth of goods purchased from one industrial sector will generate either a large or small level of subsequent spending depending on the interdependence of that sector with the rest of the regional economy. If the sector exhibits little interdependence, subsequent spending will be relatively low and vice versa. A low level of interdependence arises when companies are vertically integrated; that is they rely on internal, or company-owned sources for raw materials and other production inputs.

Table 3 provides a detailed analysis of the impact Medicaid spending has on specific sectors of the Utah economy. An explanation of Table 3 immediately follows.

Table 3
Calculation of the Economic Impact of Medicaid Spending during 2001

(1) Input-Output Sector	(2) Total Spending	(3) Est. Federal Match Spending	(4) Adjusted Utah Purchases	(5) RIMS II Earnings Coefficient	(6) Earnings Generated	(7) RIMS II Adjusted Jobs Coefficient	(8) Job Years Generated
Health Services	$522,603,212	$363,059,247	$360,715,101	0.8552	$308,483,554	32.7	10,690
Insurance Agents, Services	$10,713,750	$215,093	$215,093	0.8064	$173,451	36.8	7
Business Services	$626,880	$448,031	$448,031	0.8031	$359,814	36.7	15
Transportation	$3,728,329	$2,664,637	$2,664,609	0.6731	$1,793,549	26.2	63
Retail trade	$108,377,519	$77,457,413	$15,491,483	0.6632	$10,273,951	36.9	518
Job-training and related services	$13,612	$9,728	$9,728	0.8172	$7,950	44.5	0
Elementary and Secondary Schools	$6,984,529	$4,991,843	$4,991,843	0.8804	$4,394,818	58.6	265
Social Services	$212,002,781	$151,518,387	$151,518,387	0.7387	$111,926,632	38.3	5,260
Total	$865,050,612	$600,364,379	$536,054,275		$437,413,719		16,818
Adj. for QMB Services	($2,250)	$0	$0		$0		0
Adj Totals	**$865,048,362**	**$600,364,379**	**$536,054,275**		**$437,413,719**		**16,818**

Each entry in column 7 measures the total change in number of jobs in all row industries that results from a $1.0 million change in output delivered to final demand by the industry corresponding to the entry adjusted for inflation (in this case, the spending in column 4).

Table 4 illustrates how the economic impact of Medicaid expenditures was estimated. The calculations have been made using the application of sector-specific earnings and employment coefficients from the RIMS II model. A description of the information presented in each column in Table 4 is provided for clarification.

Column (1) Input-Output Sector: The entries in this column are the industrial sectors in Utah from which Medicaid expenditures were made.

Column (2) Total Spending: The entries in this column show the amount spent in each category for health care services provided by the Medicaid program.

Column (3) Estimated Federal Match Spending: The entries in this column show the expenditures from Column (2) that were paid for with federal monies.

Column (4) Adjusted Utah Purchases: The entries in this column show the expenditures that occurred in Utah and that were federally financed. In all but two cases, the adjusted Utah purchases equal the estimated federal match spending. The difference reflects the nature of some purchases made in these sectors. The Retail sector has been adjusted to compensate for the "trade margin" - or the difference between gross receipts and cost of goods sold. Certain purchases made in the Health Services sector have also been adjusted for this reason.

Column (5) RIMS II Earnings Coefficient: The coefficients in this column are the RIMS II earnings coefficients taken from the input-output model for the Utah economy. These coefficients estimate the earnings generated per dollar of direct purchases from a specific sector.

Column (6) Earnings Generated: The estimate in this column shows the earnings for Utah households that occur when Medicaid-related purchases are made from each sector. The elements in this column are simply the products of the elements presented in column 4 and column 5.

Column (7) RIMS II Adjusted Jobs Coefficients: Elements in this column show the Input-Output Model employment coefficient for each sector. The employment coefficients have been adjusted to account for price inflation between the BEA calibration year (1997) and the study year (2001). The coefficients are presented as the change in jobs that occur from a $1.0 million change in output.

Column (8) Jobs Generated: The elements in the final column show the number of jobs that are supported in the Utah economy because of Medicaid-related expenditures. These include both full-time and part-time positions. The elements in this column are obtained by multiplying the elements in column 4 and column 7.