ECONOMIC IMPACT OF PROPOSED CAP ON PROVIDER TAXES ON MISSOURI

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EXECUTIVE SUMMARY

The Department of Health Management and Informatics, School of Medicine, at the University of Missouri was asked by the Taxpayer Research Institute of Missouri to examine the potential impact that proposed reduction in provider tax assessment rates would have on Missouri's economy, Missouri communities, and Missouri Medicaid beneficiaries.

This study shows that the potential impact on Missouri would be substantial in terms of the cost shift to the privately insured, reduced federal dollars infused into the economy, on employment in Missouri, and on the ability of the state to provide needed Medicaid benefit coverage to citizens of Missouri, if the provider tax assessment rate decreased from 6.0 percent in SFY 2012 to 3.5 percent in SFY 2017.

The Medicaid program in Missouri covers about one in seven Missourians. As a joint state and federal health insurance program, Medicaid is the largest source of federal revenue to Missouri, an impact made possible by the Federal Medical Assistance Percentage (FMAP). The federal Medicaid payments to Missouri, however, occur only after the state has paid a qualified health care provider for services rendered. To generate state dollars to be able to draw down matching federal dollars, the state levies provider taxes, or assessments, on various health care providers, with hospitals accounting for approximately 75 percent of the taxes assessed. The hospital provider taxes is a major source of revenue to the state, surpassing all but the two largest sources of general revenue — the state sales tax and individual income tax.

In SFY 2012, the federal match rate for Missouri is 63.41 percent, so that for every dollar the state contributed to the Medicaid program, the federal government contributed another $1.73.

The key findings of the study are as follows, given the assumption that the loss in federal revenue will not be replaced with state dollars and no reallocation of resources or reduction in services per beneficiary will take place:

- Missouri could expect to receive an additional $2.4 billion in federal match funds during the period SFY 2015 – SFY 2018, if the proposed provider tax rate changes do not occur, and Missouri can continue to levy a 6.0 percent assessment against hospitals. This would provide an additional $3.8 billion to the Medicaid program.
- If the proposed reductions in Medicaid occur, the lost federal revenue could end up being shifted to private payers for hospital care delivered. These cost shifts to private payers, ultimately, result in higher premiums for private health insurance. It is estimated that the $2.4 billion reduction in federal revenue would increase premiums by $715 per privately insured individual by SFY 2018.
- If the proposed tax rate changes occur, it is projected that from 8,735[1] to 16,479[1] jobs will be lost in the hospital sector by SFY 2018.

- The net loss in Medicaid coverage is expected to decrease the number of beneficiaries in 2018 by 199,790, if state dollars are not substituted for the federal dollars lost, and if services and payments to providers are not reduced. Since the healthy adults covered by Medicaid are already at the federal poverty level (FPL) minimum, the resulting cuts in Medicaid would be at the expense of the most vulnerable populations—the elderly, blind, and disabled beneficiaries.
- While the total change in Medicaid revenues is projected to decrease by $3.8 billion, when the output (direct effect) multiplier is applied, the change due to this direct effect in the state is projected to decrease by $6.4 billion.
- When the indirect and induced effects are included, an additional decrease of $6.8 billion would occur, because of the trickle-down effect on other industries and businesses.
- The combined direct, indirect and induced effects of the $3.8 billion reduction in Medicaid results in a total reduction of $13.2 billion for the state.
- Although the direct loss of employment is projected to be 16,479 jobs by SFY 2018, the total effect of the decrease in state revenues is expected to cause a loss of 27,911 jobs by SFY 2018.

In summary, the impact of the proposed reduction in the hospital provider tax assessment rate from 6.0% of net revenues to 3.5% would be significant in Missouri. The analysis done in this study has been based on data from the hospital sector, but the impact on other provider sectors could be expected to have similar results, compounding the impact for the Medicaid program and for Missouri. These impacts would not only impact the health care industry, but would impact other sectors and populations in the economy, as the costs associated with the reduction in Federal Medicaid dollars are shifted to the private sector. The reduction in Medicaid benefits would affect children, the elderly, blind, and disabled as their eligibility is cut.

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INTRODUCTION

The Department of Health Management and Informatics, School of Medicine, at the University of Missouri, was asked by the Taxpayer Research Institute of Missouri to conduct a study regarding the potential impact of President Obama's proposal to decrease the provider tax assessment rate on Missouri. This study examines the potential impact of the proposed decrease in the provider tax levied on Missouri hospitals (and other health care providers) on Missouri's economy, and on employment within the state. In addition, the study examines the potential impact of the hospital tax reduction on the privately insured and on the Medicaid population in Missouri. These potential impacts will also be examined for the Workforce Investment Areas (WIAs) in Missouri, to illustrate variations in regional impacts of the decrease.

OVERVIEW OF THE PROVIDER TAX PROGRAM

The health care provider tax is used by many states, including Missouri, to help finance state Medicaid programs. The ability of states to levy the tax is authorized by the Medicaid Voluntary Contribution and Provider-Specific Tax Amendment (P.L. 102-234), which was passed by Congress in 1991. This law requires the provider taxes to be broad based and uniformly applied to all providers within specified classes of providers, and not tied directly to an increase in Medicaid payments to any particular provider. The provider taxes cannot exceed 25 percent of the non-federal share of Medicaid expenditures, and states cannot guarantee that the providers paying the tax will receive all their money back. The law allowed states to assess a tax rate of up to 6.0 percent without triggering heightened scrutiny of the state's program.

In 2008, additional changes were made to several features of the program. The threshold tax rate for states was reduced from 6.0 percent to 5.5 percent for fiscal years beginning January 1, 2008, and lasting through September 30, 2011. On October 1, 2011, the rate reverted to the pre-2008 rate of 6.0 percent. Currently, President Obama has proposed that the maximum tax rate be reduced from 6.0 percent to 3.5 percent by 2017. In Missouri, the proposed reduction in the maximum tax rate would be phased in following the schedule in Table 1, since Missouri's fiscal year (SFY) runs from July 1 to June 30 each year. For example, SFY 2011 runs from July 1, 2010, to June 30, 2011.

Table 1: Proposed Provider Tax Reduction Schedule, State Fiscal Year

Year	Proposed Rate
SFY 2011	5.500%
SFY 2012	5.875%
SFY 2013	6.000%
SFY 2014	6.000%
SFY 2015	4.875%
SFY 2016	4.125%
SFY 2017	3.625%
SFY 2018	3.500%

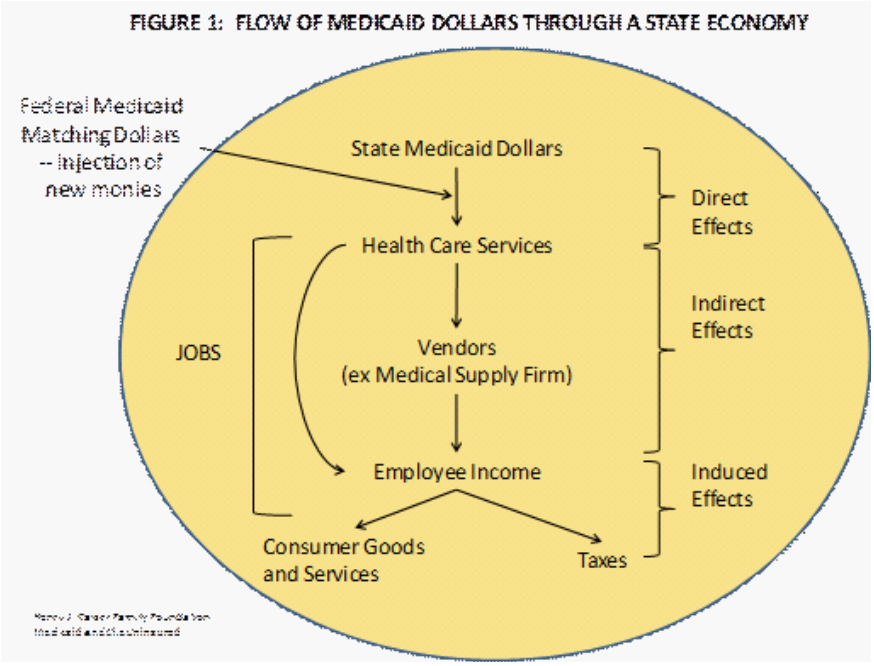
ROLE OF MEDICAID

Medicaid plays a major role in the U.S. health care delivery system, accounting for about one-sixth of all health care spending. In addition, Medicaid, a joint state and federal health insurance program, represents the largest source of federal revenue to states, which supports the capacity of the states to finance health care coverage for their populations. This economic impact of Medicaid is made possible by the Federal Medical Assistance Percentages (FMAP), which varies inversely to a state's average personal income relative to the national average. At a minimum, a state will draw down $1 of federal money for every dollar the state spends on Medicaid, because of the mandated 50 percent federal match of Medicaid dollars spent in a state. However, the state receives the federal matching funds only after the state pays a qualified health care provider for services and submits a claim to the federal government for the funds—the state only receives federal Medicaid monies after it has paid its state share of costs first.

This last point is critical in evaluating the role of the provider tax in a state. The provider tax, also known as a provider assessment program, is used to generate non-federal matching funds for the state Medicaid program. The monies received from the provider tax enable a state to raise revenue for its share of Medicaid spending, generating increased federal matching funds in the process. Basically, the state levies a tax on health care providers and then directs that funding stream to Medicaid payments that flow back to health care providers. The state can then claim federal matching funds for the monies paid to the providers. The initial revenue received from the providers enables the state to increase spending in the Medicaid program, and that increased spending increases the federal match monies the state receives.

Figure 1 provides an illustration of the flow of Medicaid dollars through a state and the impact of such a flow of health services, on suppliers of goods and services to the health sector, and to the economy in general. As indicated, Medicaid not only impacts beneficiaries and providers participating in the program, but also the larger state economy. As the federal government injects dollars into the state's economy through the Medicaid program, these dollars trickle down to other individuals and organizations within the state, multiplying the initial inflow of dollars.

FIGURE 1: FLOW OF MEDICAID DOLLARS THROUGH A STATE ECONOMY



As illustrated, health care providers are directly impacted by the Medicaid payments they receive from the state, using the revenue generated to support jobs, generate income, and purchase goods and services associated with the provision of care. Through the *multiplier effect*, new state Medicaid spending creates even larger impacts with the flow of additional federal dollars into the state. A multiplier effect describes how an increase (or decrease) in an activity starts a chain reaction that generates more activities over time than the original increase (or decrease). In addition to the direct effect, these changes *indirectly* impact other businesses and industries supplying goods and services to Medicaid providers. Finally, these direct and indirect effects create changes in household incomes, inducing additional changes in household consumption and tax collections (Kaiser Commission on Medicaid and the Uninsured, 2009). In this study, we used the three hospital sector multipliers developed by the Community Policy Analysis Center for the Workforce Investment Areas:

- The output multiplier of the hospital sector, which measures the increase in total output generated in an economy for each dollar earned from Medicaid expenditures to hospitals (1.83 statewide);
- The employment multiplier of the hospital sector, which measures the number of jobs impacted in all industries for each job in the hospital industry (1.80 statewide); and
- The value-added multiplier of the hospital sector, which is the additional indirect and induced dollars added in the economy per dollar of value added in the hospital industry (1.94 statewide).

A reduction in Medicaid spending will lead to declines in federal Medicaid dollars, a decrease in the flow of monies to health care providers, and, consequently, a decline in economic activity at the state level. The size of the decline will depend, in large part, on the size of the federal match to the state. For example, if a state has a federal matching rate of 60 percent, for the state to save $1 of its budget, then overall Medicaid spending would need to be cut by $2.50, reflecting a $1 reduction in state spending and an additional $1.50 in foregone federal matching monies.

FOCUS OF REPORT

The focus of this report is on modeling the effect of the proposed federal reduction in the allowable provider tax as applied to hospitals from 6.0 percent in 2011 to 3.5 percent in 2017 on the privately insured, the Missouri hospital industry, local communities, the overall economy of the state, on employment in the hospital industry and in communities, and upon the beneficiaries served by the Medicaid program. In SFY 2011, the effective federal match rate for Missouri was 63.595 percent, resulting in the state match requirement of 36.405 percent. Consequently, for every dollar of state monies paid to Medicaid providers in SFY 2011, the federal government contributed another $1.75, resulting in a total of $2.75 paid to providers for the provision of Medicaid services.

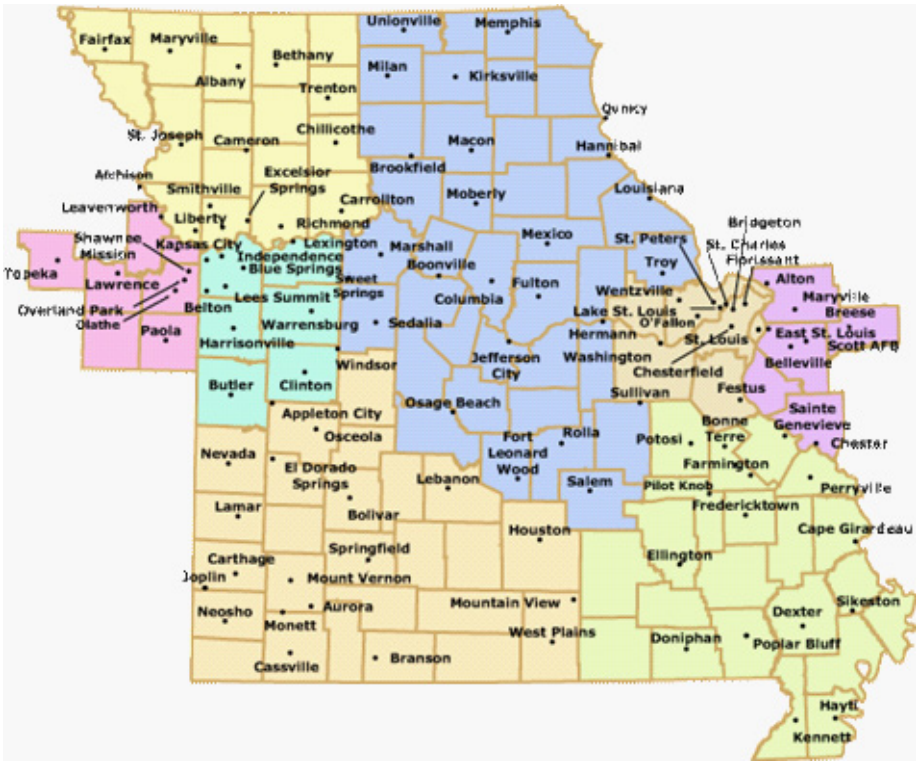
In SFY 2012, the effective federal match rate for Missouri is 63.41 percent (state match requirement of 36.59 percent). So, in SFY 2012, for each dollar of state revenue that is spent on Medicaid services, Missouri will be able to provide a total of $2.73 worth of services to its Medicaid population. Table 2 provides an illustration of the results of the federal matching program for Missouri from 2008 – 2012.

Table 2: Federal Match Amounts Blended to Coincide with State Fiscal Year				
State Fiscal Year	Federal Match Rate	State Contribution Rate	Federal $ Generated with $1 State	Total Medicaid Spending
2008	62.270%	37.780%	$1.65	$2.65
2009	63.000%	37.000%	$1.70	$2.70
2010	64.180%	35.820%	$1.79	$2.79
2011	63.595%	36.405%	$1.75	$2.75
2012	63.410%	36.590%	$1.73	$2.73

Receiving federal dollars to help support the state's Medicaid program is critical for the overall fiscal condition of Missouri's state budget. In 2011, Medicaid covered approximately 1 in 7 Missourians. During a downturn of the economy, enrollment in Medicaid increases, placing even greater strain on a stressed state budget. During 2009-10, the number of Medicaid enrollees increased 6.3 percent, resulting in about one in seven Missourians being enrolled in Medicaid.

The Missouri provider taxes are levied against hospitals, nursing homes, pharmacies, and ambulance providers and intermediate care facilities for the mentally retarded. However, by far, the largest share of the revenue from the assessment (~75%) is paid by the hospital industry. Therefore, the analysis that follows will focus on hospitals. Figure 2 shows the location of Missouri hospitals, as well as hospitals in Kansas and Illinois included in the metropolitan areas of Kansas City and St. Louis, which becomes important in analyzing the regional impact of the proposed provider tax reductions.

FIGURE 2: MISSOURI HOSPITALS



ASSUMPTIONS IN MODEL

As we develop the model to estimate the impact of the proposed changes in the provider tax assessed on hospitals, a number of assumptions are made. The first assumption made is that the SFY 2012 federal-state match rates for Missouri (63.41-36.59) will remain constant through SFY 2018. This means that for every dollar of state monies that are spent in the Medicaid program, the federal government will infuse $1.73 into the state economy, resulting in $2.73 for the Medicaid program. As the data presented in Table 2 illustrate, Missouri has experienced some variation in the federal match rate over the years, but the variations have been relatively small. These small variations reflect changes in the relative per capita income in Missouri as changes in the overall national economy have impacted states differently. But, Missouri's position among the states is relatively stable and, therefore, the federal match rate has also remained relatively stable. As a result, an assumption of a stable match rate into the future is not unreasonable for the projections performed.

A second assumption made was that the revenues of hospitals to which the assessment rate is applied would increase at an annual rate of 4 percent between SFY 2011 and SFY 2013. Then, because of other anticipated changes in the hospital environment and financing programs, the annual rate of increase in revenues to which the assessment rate is applied would be 3 percent between SFY 2014 and SFY 2018.

A third assumption made was that the multipliers developed by the Community Policy Analysis Center for the Workforce Investment Areas in 2009 could be applied to the hospital sector throughout the period of the study, SFY 2011 through SFY 2018. These multipliers were developed using IMPLAN, and applied to Missouri Hospital Association 2009 Annual Survey data.

Based on a recent analysis by the Tripp Umbach firm cited by the American Hospital Association, it was assumed that their findings (that a 2 percent reduction in provider payment could cause a 194,000 reduction in hospital employment nationally) could be adapted and applied in this study. The employment impact of a change in income was converted to a cost per employee in the hospital sector, and that value ($78,255) was then used to estimate the change in employment resulting from changes in total Medicaid dollars available in Missouri. This impact rate of change in revenue resulting in changes in hospital employment was held constant throughout the timeframe of the study, to estimate the impact of the reduction in hospital revenues on employment in hospitals in Missouri. The change in the employment in hospitals caused by the changes in Medicaid revenue to hospitals was then used as the base for the employment multiplier applied in the study.

The fifth assumption made in the study was that the 2008 level of Medicaid expenditures per enrolled beneficiary, $6,454.49, would remain constant throughout the timeframe of the study. The cost per enrolled beneficiary was then used to estimate the number of Medicaid beneficiaries that would be impacted by the reduction in federal monies infused in the state. Included in this estimate is the assumption that the state would decrease state dollars in Medicaid equal to the decrease in the hospital assessment amounts rather than raising taxes in Missouri or transferring revenues from other sources to Medicaid to cover the reduced monies available for Medicaid.

A sixth assumption involved the issue of cost shifting by hospitals. Cost shifting is expected to occur when the payment received by hospitals from Medicaid is less than the cost of providing care and the difference is passed on to private payers. In turn, as private payer costs are increased, these increases in costs would be passed on to employers and individuals in the form of higher health insurance premiums. In calculating the impact of cost shifting on private payers, it was assumed only the federal match costs would be lost to the hospitals since the

amount they would have been assessed by the provider tax would be retained by the hospital. The impact was estimated by dividing the total federal match lost between SFY 2015 and SFY 2018 with the proposed reduced rate by the number of individuals under age 65 that were covered by employer-based or individual insurance. The result is an estimated increase in premiums per privately covered individual in Missouri.

When developing the estimates of the impact at the Workforce Investment Area level, the average amount of Medicaid dollars received by the hospitals in the WIA for the years SFY 2008 – SFY 2010 were used to reallocate the total Medicaid program dollars available. The average amount of Medicaid dollars received by the hospitals in each WIA were divided by total revenue available to get the proportion of total Medicaid revenue allocated to each WIA. This proportion was then applied to the projected revenues for the study timeframe to obtain the base for calculating the impact on employment and the impact of the multipliers on the ten WIAs in Missouri.

RESULTS

The results of the study are presented in five major sections, keeping in mind that only the hospital sector of the Medicaid program was analyzed and included in the estimates. The first section presents the results of the projected impact of the proposed changes in the provider tax rates on the total amount of resources available for Medicaid in Missouri, including the amount of federal dollars infused into the state budget over the study timeframe. The second section includes the resources available for Medicaid in the Workforce Investment Areas of Missouri, including the amount of federal dollars infused in each regional budget for the study years. The third section provides the projected impact on hospital employment given the changes in hospital revenues over the eight years. The fourth section provides the projected impact on the number of beneficiaries resulting from the changes in the Medicaid funding, assuming additional state dollars are not found to replace the reduction in federal dollars. The fifth section is divided into four sub-sections, and provides projections of the impact of the four multiplier effects on hospitals, employment, and the general economy.

Impact on Medicaid Revenue

In 2010, the provider tax levied on Missouri hospitals generated $885.1 million dollars for the state to use for Medicaid services. This amount surpasses all but the two largest sources of general revenue — the state sales tax and individual income tax. This amount resulted in a federal match of $1.586 billion to Medicaid. As a result, the total available to be spent on Medicaid from the assessment was $2.471 billion in 2010. Table 3 provides information on the changes projected in monies available for Medicaid for the years SFY 2011 through SFY 2018, based on the state's fiscal year and the proposed changes in the allowable provider tax rate.

Table 3: Projected Changes in Hospital Assessment Revenues and Medicaid Dollars				
State Fiscal Year	Assessment based on projected revenue increases only	Assessment change based on projected revenue increase and proposed tax rate change	Federal match amount for hospital assessed revenue	Total amount available for Medicaid program
2011	$905,826,643	$917,503,966	$1,603,111,326	$2,520,615,293
2012	$942,059,709	$1,020,130,956	$1,767,873,842	$2,788,004,798
2013	$979,742,097	$1,082,587,953	$1,876,111,016	$2,958,698,969
2014	$1,009,134,360	$1,115,065,591	$1,932,394,347	$3,047,459,938
2015	$1,039,408,391	$934,127,615	$1,618,831,158	$2,552,958,772
2016	$1,070,590,643	$814,279,808	$1,411,136,447	$2,225,416,255
2017	$1,102,708,362	$737,169,679	$1,277,505,584	$2,014,675,262
2018	$1,135,789,613	$732,092,752	$1,268,707,336	$2,000,800,089

The first column of projected assessment revenues from hospitals is based upon a projected increase in the revenues of the hospitals only, and does not include any changes in the provider tax rate. The second column includes not only the projected increase in hospital revenues to impact the base against which the provider tax is levied, but it also includes the potential changes in the provider tax rate that will be levied against the hospital. These potential changes in the tax rate are the same as the changes presented in Table 1 reflecting the potential schedule of tax rate changes that incorporate the state's fiscal year cycles. The third column is the federal match dollars based on hospital revenues estimated in the second column. The fourth column is the total amount of monies available for the Medicaid program.

As shown in Table 3, in SFY 2014, when the state is able to levy a 6.0 percent tax assessment against hospitals, it will generate $1,115,065,591 from the tax, which can, in turn, generate $1,932,394,347 of federal match dollars, creating a Medicaid program budget from the hospital assessment tax of $3,047,459,938. By SFY 2018, when the full reduction in the provider tax rate reaches 3.5 percent, the provider tax assessment against hospitals will generate only $732,092,752. As a result, Missouri would receive only $1,268,707,336 in federal match dollars that year, reducing the Medicaid total budget available to $2,000,800,089. During the period SFY 2011 to SFY 2018, it is projected that the hospital's portion of the provider tax assessment would generate $7.353 billion for the state, resulting in an infusion of $12.756 billion in federal dollars, and the Medicaid program would total $20.109 billion during that period.

Figure 3, Projected Changes in Hospital Assessment Revenues and Medicaid Dollars, provides a graphical illustration of the data; the lines in the Figure 3 correspond to the data presented in Table 3, illustrating the substantial decline in Medicaid revenue when the provider tax rate reductions occur, beginning in SFY 2015.

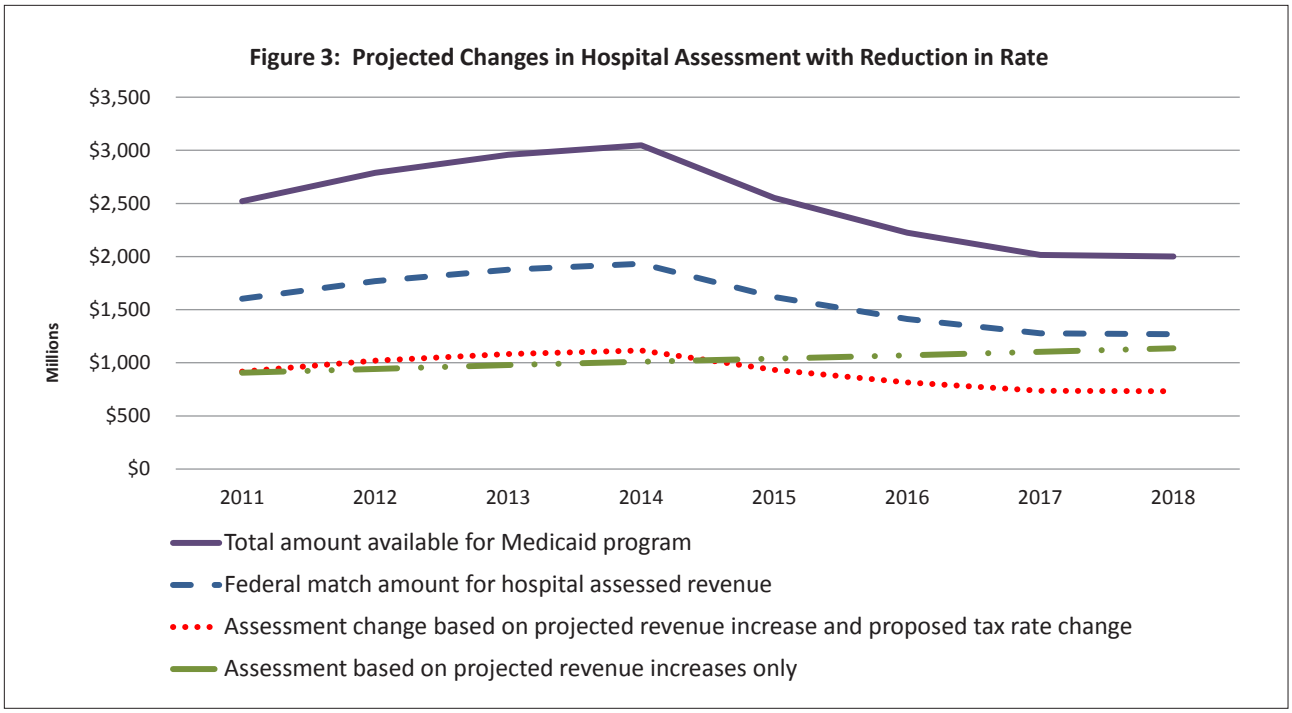


Table 4 provides estimates for the Medicaid program without the proposed reduction in the provider tax rate. The data beginning in SFY 2015 reflect the current rate of 6.0 percent rather than the proposed reductions to 3.5 percent by SFY 2018. If the proposed rate changes do not occur, and Missouri can continue to levy a 6.0 percent assessment against hospitals during the period SFY 2015 – SFY 2018, then Missouri could expect to receive an additional $2.4 billion in federal match funds during that time, and the Medicaid program would have an additional $3.8 billion available to it.

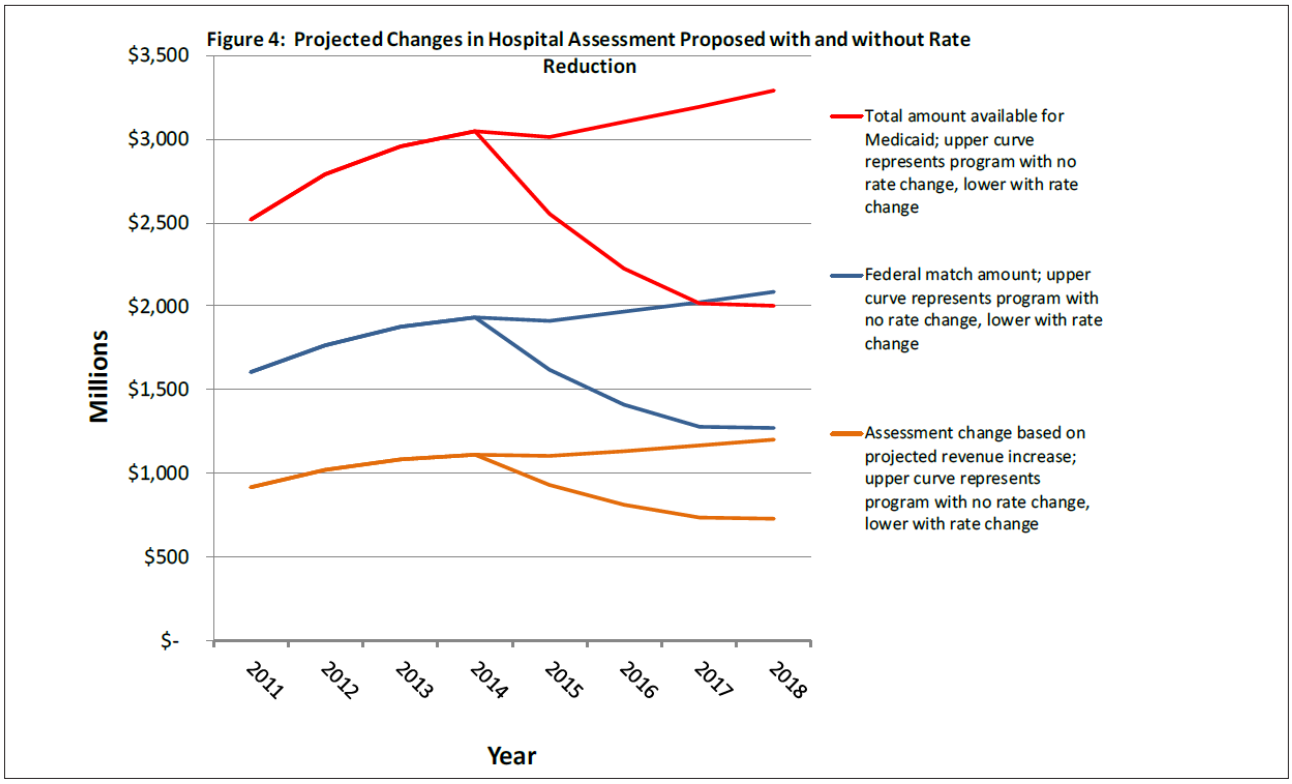
These estimates include the same assumption made in Table 3 that hospital revenues will increase at a rate of 4 percent during the first 4 years of the period and then, given anticipated changes in the hospital environment and financing methods, hospital revenues will increase at a rate of only 3 percent during the final four years of the time period. The data for SFY 2011 – SFY 2014 are the same for both sets of assumptions, since the proposed reduction in the assessment rate does not begin until 2015, and, consequently, they are provided as italicized in the table to call attention to the fact that they are the same in both tables.

Table 4: Projected Changes in Hospital Assessment Revenues and Medicaid Dollar Assuming No Reduction in Hospital Tax Rates

State Fiscal Year	Assessment based on projected revenue increases only	Assessment change based on projected revenue increase and no proposed tax rate change	Federal match amount for hospital assessed revenue with no rate change	Total amount available for Medicaid program with no rate change
2011	$905,826,643	$917,503,966	$1,603,111,326	$2,520,615,293
2012	$942,059,709	$ 1,020,130,956	$1,767,873,842	$2,788,004,798
2013	$979,742,097	$1,082,587,953	$1,876,111,016	$2,958,698,969
2014	$1,009,134,360	$1,115,065,591	$1,932,394,347	$3,047,459,938
2015	$1,039,408,391	$1,101,772,895	$1,909,358,274	$3,011,131,169
2016	$1,070,590,643	$1,134,826,081	$1,966,639,022	$3,101,465,104
2017	$1,102,708,362	$1,168,870,864	$2,025,638,193	$3,194,509,057
2018	$1,135,789,613	$1,203,936,990	$2,086,407,339	$3,290,344,328

Between SFY 2015 and SFY 2018, it is estimated that the state would lose a total of $2,411,862,303 in federal matching funds due to the reduction in provider taxes available to fund the state's share of Medicaid costs. This reduction in federal funds to pay hospitals for services to Medicaid beneficiaries could be cost shifted to private payers. When public payers underpay hospitals relative to the costs of providing care, these costs incurred by the hospital may be shifted to private payers of care. To the extent this cost shifting takes place, these increased costs to private payers, in turn, are passed on in the form of higher premiums. In calculating the impact of cost shifting on Missourians, it was assumed only the federal match costs would be lost to the hospitals, since the hospitals would not pay the provider tax. The $2.4 billion reduction in federal dollars translates into an estimated increase of $715 per insured individual over the period.

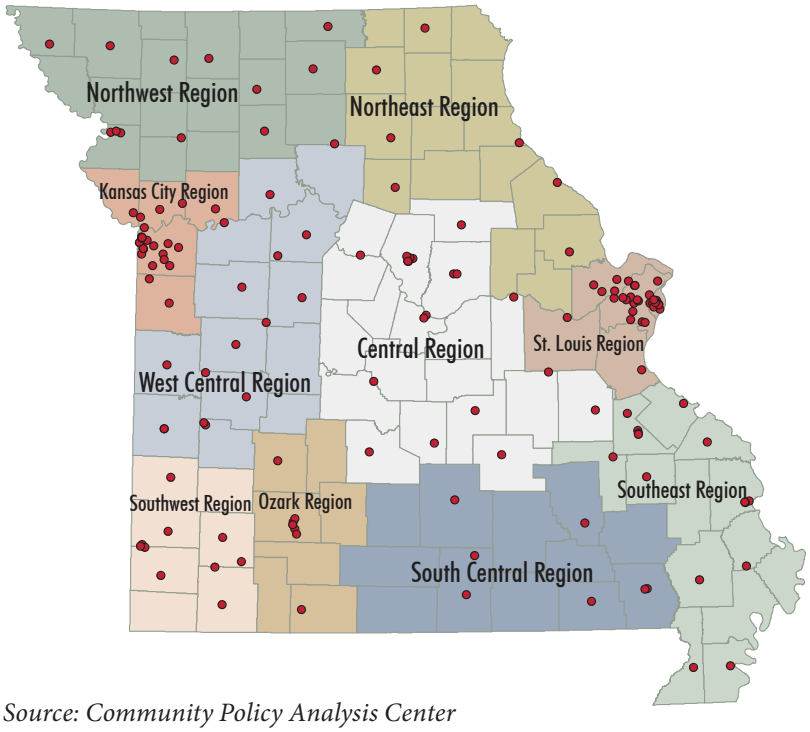
Figure 4, Projected Changes in Hospital Assessment Proposed with and without Rate Reduction, provides a graphical illustration of the data presented in Tables 3 and 4. The proposed rate change is not intended to begin to take effect until 2015, and so the lines do not begin to diverge until after that. As can be seen in the graph, the divergence becomes greater the longer the time line, until 2018, when the lines reflecting the change in potential reduction become almost flat, since the proposed rate reduction ends when it reaches 3.5 percent.



Impact on Workforce Investment Areas

To conduct an analysis at the regional level, the ten Workforce Investment Areas (WIAs) contained in the report by the Community Policy Analysis Center were used for analysis. Figure 5 is a map showing the geographical locations of the WIAs used in this report, as well as the location of the hospitals contained in each of the regions. This graph simply provides a visual of the locations of the different areas of the state analyzed, which can then be used to provide some context as to the impact of the results obtained.

FIGURE 5: WORKFORCE INVESTMENT AREAS



Source: Community Policy Analysis Center

As the map indicates, there is a substantial variation in the number of hospitals located in each of the WIAs. In addition to the variation in the number of hospitals in the areas, there is also variation in the number of licensed beds in the hospitals and the amount of revenue generated. As a result, there is substantial variation in the magnitude of the impact that a reduction in the hospital tax assessment rate will have on the different regions.

The data in Table 5 only include data for selected years of the period analyzed, but show the distribution of the assessment values impact on the different regions for the current amount, the amount immediately prior to the beginning of the reduction in rates, the amount immediately after the reductions begin, and the amount once the rate becomes the 3.5 percent in SFY 2018. These data are based on the total Medicaid dollars projected for the hospitals in the region based on the current distribution of Medicaid dollars to the hospitals in the WIAs, and do not reflect the Medicaid dollars that are available in the various WIAs through the dispersion of the assessments collected.

Table 5: Total Medicaid Dollars Available by WIA for Selected Years

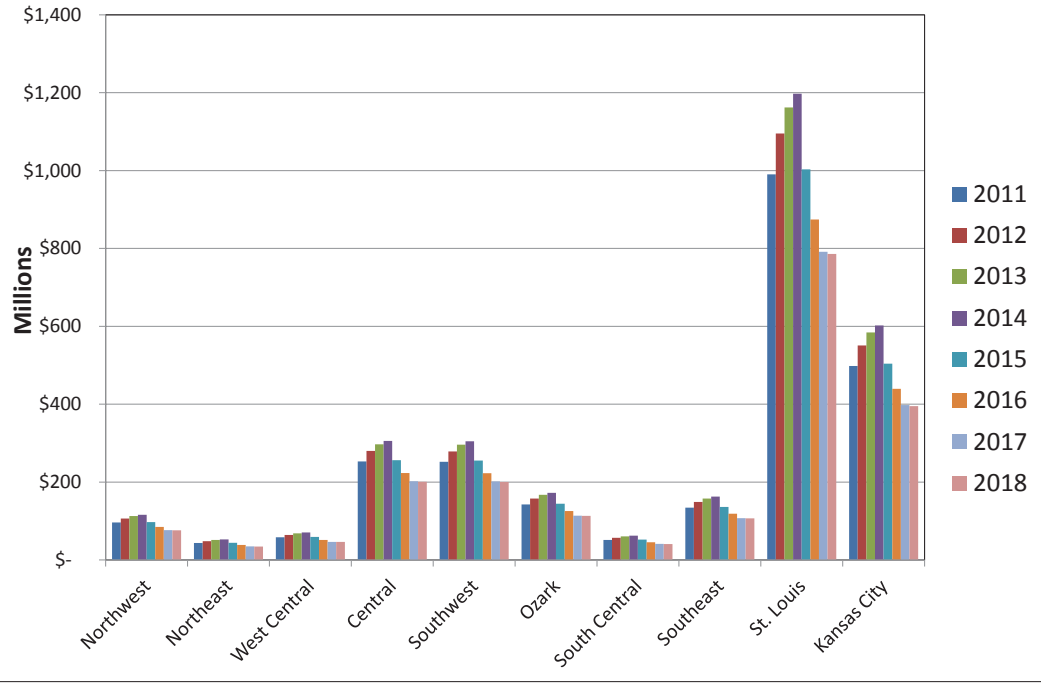
WIA	2011	2014	2015	2018
Northwest	$96,206,369.95	$116,314,877.21	$97,440,850	$76,366,161.10
Northeast	$43,814,944.75	$52,972,894.84	$44,377,160	$34,779,184.91
West Central	$58,339,438.13	$70,533,215.07	$59,088,025	$46,308,357.06
Central	$253,078,950.54	$305,976,070.73	$256,326,354	$200,887,611.90
Southwest	$252,196,426.03	$304,909,085.97	$255,432,505	$200,187,086.47

continued

Table 5: Total Medicaid Dollars Available by WIA for Selected Years				
WIA	2011	2014	2015	2018
Ozark	$142,630,560.42	$172,442,387.45	$144,460,736	$113,216,498.67
South Central	$51,583,264.75	$62,364,904.83	$52,245,160	$40,945,479.06
Southeast	$134,627,041.74	$162,766,018.90	$136,354,520	$106,863,509.81
St. Louis	$990,155,719.50	$1,197,112,426.06	$1,002,860,983	$785,960,339.55
Kansas City	$497,982,576.73	$602,068,057.40	$504,372,481	$395,285,859.98
State Total	**$2,520,615,292.55**	**$3,047,459,938.46**	**$2,552,958,772.45**	**$2,000,800,088.50**

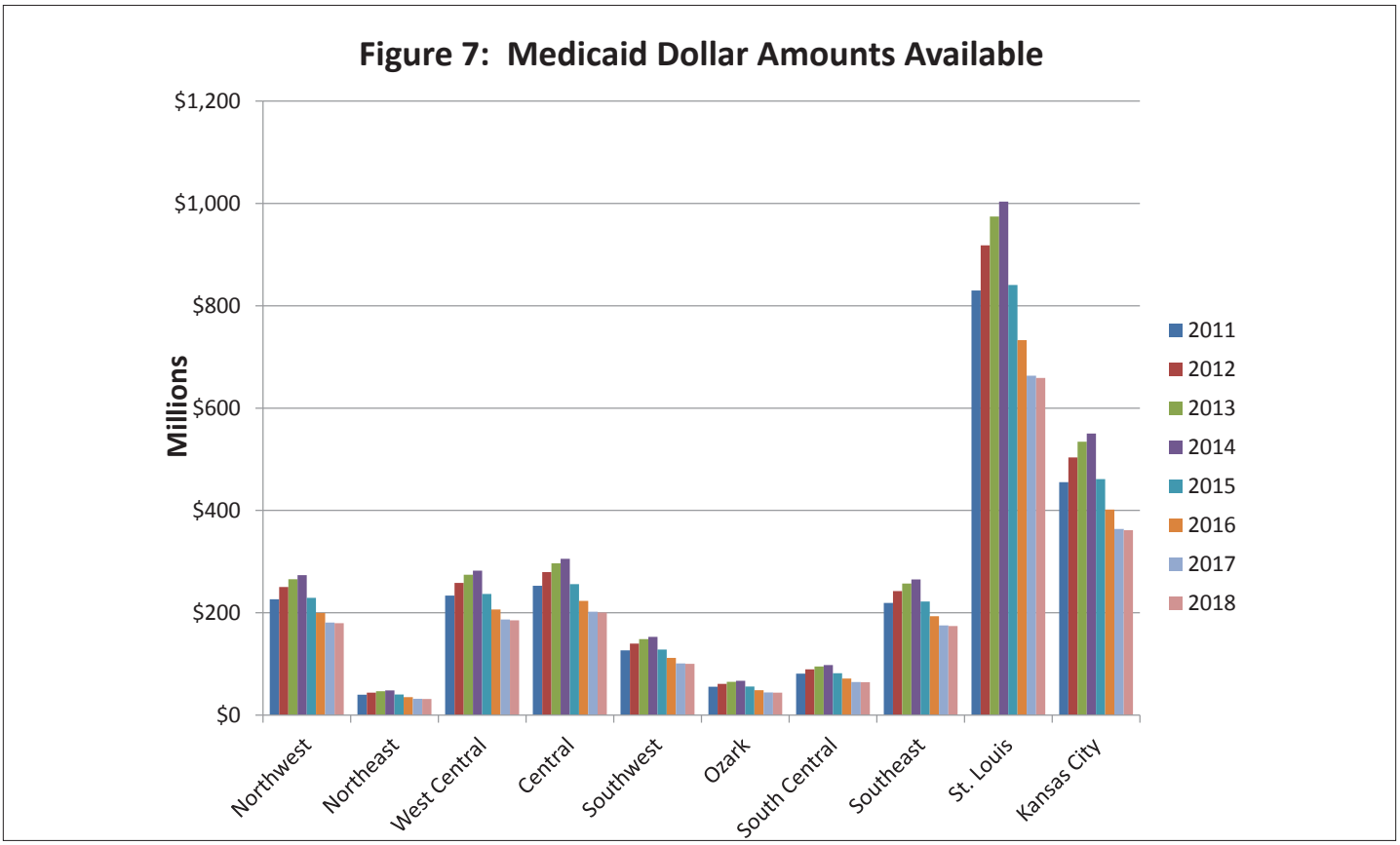
Figure 6 provides a graphical illustration of the magnitude of the hospital tax assessments in each of the WIAs and of the changes that occur over time as the provider tax rate is reduced. As indicated, the two major metropolitan areas of St. Louis and Kansas City dominate the impact of the hospital assessment.

Figure 6: Medicaid Assessment Amounts Available



Impact on Employment

In order to estimate the impact of the reductions in hospital tax assessment, and, therefore, the impact on the Medicaid revenues available to hospitals, the focus shifts to establishing the current employment at the hospitals in each of the WIAs, and then projecting changes in the Medicaid revenue that will be available in the different WIAs after the hospital assessment tax reduction begins to occur and has an impact on the total Medicaid budget. Since the impact on employment calculations are driven by the change in hospital revenues after the reduction in the assessment rate occurs, the impact on employment is calculated only for the SFY 2015 – 2018. To obtain the allocation of Medicaid dollars in the WIAs, the total Medicaid dollars in the state were allocated to WIAs based on the proportion of total Medicaid revenues currently accounted for by the hospitals in the region. Once the total amount of Medicaid revenue has been calculated for the WIAs, then the changes in that amount can be used to calculate the projected changes in the hospital employment in the WIAs. Figure 7 reflects the estimated Medicaid disbursement amounts in the various WIAs.



Changes in Medicaid revenues for each WIA were then calculated for the years between SFY 2015 and SFY 2018, Table 6 provides data on the projected changes in hospital revenue from Medicaid by WIA for the years in which the rate reductions occur.

Table 6: Change in Medicaid Dollars from Reduction in Rate, by WIA

	2015	2016	2017	2018
Northwest	-$41,147,658	-$78,676,407	-$105,958,799	-$115,811,702
Northeast	-$7,274,562	-$13,909,331	-$18,732,630	-$20,474,541
West Central	-$42,490,912	-$81,244,779	-$109,417,797	-$119,592,345
Central	-$45,952,767	-$87,864,020	-$118,332,374	-$129,335,870
Southwest	-$23,010,358	-$43,996,970	-$59,253,673	-$64,763,557
Ozark	-$10,091,546	-$19,295,547	-$25,986,608	-$28,403,052
South Central	-$14,744,624	-$28,192,469	-$37,968,691	-$41,499,326
Southeast	-$39,857,307	-$76,209,192	-$102,636,035	-$112,179,959
St. Louis	-$150,849,113	-$288,431,152	-$388,449,595	-$424,570,766
Kansas City	-$82,753,550	-$158,228,982	-$213,097,592	-$232,913,122
Total	**-$458,172,397**	**-$876,048,849**	**-$1,179,833,795**	**-$1,289,544,239**

Based on the changes projected to occur in the Medicaid revenue received by hospitals with the introduction of the proposed rate reduction, estimates of the impact of these reductions on employment in the hospital sector were made. Table 7 provides data on the projected number of jobs lost in each WIA from the reductions.

Table 7: Change in Hospital Employment from Reduction in Rate by WIA				
WIA	2015	2016	2017	2018
Northwest	(526)	(1,005)	(1,354)	(1,480)
Northeast	(93)	(178)	(239)	(262)
West Central	(543)	(1,038)	(1,398)	(1,528)
Central	(587)	(1,123)	(1,512)	(1,653)
Southwest	(294)	(562)	(757)	(828)
Ozark	(129)	(247)	(332)	(363)
South Central	(188)	(360)	(485)	(530)
Southeast	(509)	(974)	(1,312)	(1,434)
St. Louis	(1,928)	(3,686)	(4,964)	(5,425)
Kansas City	(1,057)	(2,022)	(2,723)	(2,976)
Total	**(5,855)**	**(11,195)**	**(15,077)**	**(16,479)**

As can be seen by the data in Table 7, the impact of the reduction in hospital revenues in the state would have a substantial impact on unemployment; the number of individuals projected to lose their jobs in the hospital sector of as many as 16,479[1]. These reductions in jobs would, in turn, create even more pressure on the sluggish economy and on the need for additional coverage of individuals under Medicaid, even as the ability of the Medicaid program to provide coverage is declining.

Impact on Medicaid Beneficiaries

In addition to impacts on the hospital industry and employment in that industry, the proposed reduction in the hospital tax assessment program will also have a negative impact on individuals who depend upon the health insurance coverage provided by Medicaid. If the hospital assessment rate is reduced, then federal monies to support Medicaid will also be reduced; unless the state can replace the lost federal dollars with state dollars, it will be necessary to cut the Medicaid budget. Finding additional monies in the state budget would be difficult, especially in times of economic downturns and recessions.

With a reduction in the federal matching monies, the state would have to do one of three things, or employ a combination of these three options: 1) increase state appropriations going to the Medicaid program, which would require either an increase in taxes or a reallocation of monies from other state supported programs, such as education or transportation; 2) reduce payments to health care providers for services provided, which has been shown, historically, to result in a reduction in the number of providers willing to serve the Medicaid population, thereby decreasing access to health care services; or 3) reduce the number of individuals who receive Medicaid benefits.

Each of the proposed solutions to the reduction in federal revenue to Missouri has limitations and consequences. Given the political climate and the economic situation, it will be very difficult for the state to be able to raise taxes to increase revenue to replace the federal dollars. In terms of reducing payment to providers, states are limited in the amount by which they can reduce payments to providers. The Centers for Medicare & Medicaid Services (CMS) requires payments to be adequate to avoid provider withdrawal from participating in the program, thereby reducing beneficiaries' access to care. However this is a loose standard and is difficult to enforce. Modifying eligibility requirements to reduce the number of individuals enrolled in Medicaid is also restricted. Since the healthy adults covered by Medicaid are already at the federal poverty level (FPL) minimum, the resulting cuts in Medicaid would be at the expense of vulnerable Missouri populations—children, the elderly, blind, and disabled beneficiaries.

In SFY 2010, the Missouri Medicaid program (MO HealthNet) covered 878,200 individuals. Among those covered were 530,000 low income children; approximately 110,200 low income adults in families with children; about 77,500 elderly, and 160,500 individuals due to physical or mental impairment, disease, or loss. These last two categories of individuals (the elderly and the blind and disabled) account for over 25 percent of Medicaid beneficiaries, and consume a substantial amount of Medicaid resources. They also represent the most vulnerable populations.

Table 8 provides an estimate of the number of Medicaid beneficiaries in each WIA impacted by the reduction in the Medicaid program, assuming that the reduction in revenue would be accompanied by a reduction in the number of individuals receiving Medicaid coverage. As noted, the biggest loss in coverage would occur in 2015, when the assessment rate encounters its largest drop. The net loss in coverage is expected to impact 199,790 beneficiaries by SFY 2018.

Table 8: Change in Medicaid Beneficiaries with Reduction in Rate, by WIA

	2015	2016	2017	2018
Northwest	(6,375)	(12,189)	(16,416)	(17,943)
Northeast	(1,127)	(2,155)	(2,902)	(3,172)
West Central	(6,583)	(12,587)	(16,952)	(18,529)
Central	(7,119)	(13,613)	(18,333)	(20,038)
Southwest	(3,565)	(6,816)	(9,180)	(10,034)
Ozark	(1,563)	(2,989)	(4,026)	(4,401)
South Central	(2,284)	(4,368)	(5,883)	(6,430)
Southeast	(6,175)	(11,807)	(15,901)	(17,380)
St. Louis	(23,371)	(44,687)	(60,183)	(65,779)
Kansas City	(12,821)	(24,515)	(33,015)	(36,085)
Total	**(70,985)**	**(135,727)**	**(182,793)**	**(199,790)**

Impact of Multipliers on Results

As briefly introduced earlier, a multiplier effect reflects the total changes that occur as the result of an activity—the overall effect is a multiple of the original change that occurred in the market. The multiplier is a measure of the results of a chain reaction that generates more activity than the original change. The chain reaction does not occur into perpetuity, however, because of the "leakage" that occurs with each exchange in the market. This "leakage" reflects the fact that some goods and services will not be able to be supplied by local firms and business and will have to be purchased from outside the local area, resulting in monies leaving the local economy. In addition, not all income generated will be spent; some of it will be saved by participants in the area, removing it from circulation. Table 9 provides the values of the WIA and state multipliers used in this study. As seen by the data in the table, there are variations among the WIAs in terms of the values of the multipliers, reflecting how quickly the resources are removed from local circulation—the larger the value, the slower the resources are removed from local circulation. As would be expected, the St. Louis WIA has the largest multiplier effects since, as a large metropolitan area with a wide array of businesses and services, there is little initial leakage from the area.

Table 9: Multipliers Used in Study				
Region	WIA	Output Multiplier of Hospital Sector	Employment Multiplier of Hospital Sector	Value-Added Multiplier of Hospital Sector
Northwest	1	1.46	1.59	1.48
Northeast	2	1.39	1.41	1.47
West Central	3	1.38	1.43	1.46
Central	4	1.51	1.56	1.58
Southwest	5	1.40	1.49	1.44
Ozark	6	1.77	1.80	1.94
South Central	7	1.37	1.45	1.43
Southeast	8	1.47	1.53	1.52
St. Louis	9	2.00	1.90	2.15
Kansas City	10	1.78	1.77	1.88
Missouri Total		**1.83**	**1.80**	**1.94**

Source: Community Policy Analysis Center

The output multiplier is applied to the change in hospital revenues generated by the hospital sector in the following discussion; the employment multiplier is applied to the changes in employment in the hospital sector, and the value-added multiplier is also applied to the changes in the hospital sector revenue, reflecting the induced effects of changes in the hospital sector on other sectors of the economy, such as incomes and taxes.

Total Output Multiplier Effect

The total output multiplier effect reflects all direct effects generated in the regional economies by a change in the revenues of the hospitals in that region. The statewide multiplier effect of 1.83 means that for every dollar of revenue generated for the hospital, another $0.83 is generated in the region. Table 10 shows the direct multiplier effects of the changes in the WIAs' hospitals revenues due to the reduction in the Medicaid dollars available. While the change in Medicaid revenues is projected to decrease by almost $1.3 billion during that time, the total direct change in the regions is projected to decrease by almost $2.2 billion.

Table 10 : Direct Economic Effects of Hospital Tax Reduction, by WIA				
	2015	2016	2017	2018
Northwest	-$60,075,580	-$114,867,555	-$154,699,847	-$169,085,084
Northeast	-$10,111,641	-$19,333,970	-$26,038,355	-$28,459,611
West Central	-$58,637,459	-$112,117,795	-$150,996,560	-$165,037,436
Central	-$69,388,678	-$132,674,670	-$178,681,884	-$195,297,164
Southwest	-$32,214,501	-$61,595,758	-$82,955,143	-$90,668,980
Ozark	-$17,862,036	-$34,153,118	-$45,996,297	-$50,273,403
South Central	-$20,200,135	-$38,623,683	-$52,017,107	-$56,854,076
Southeast	-$58,590,241	-$112,027,512	-$150,874,971	-$164,904,540
St. Louis	-$301,698,227	-$576,862,304	-$776,899,190	-$849,141,531
Kansas City	-$147,301,318	-$281,647,588	-$379,313,714	-$414,585,357
Total	**-$776,079,817**	**-$1,483,903,953**	**-$1,998,473,068**	**-$2,184,307,183**

This $2.2 billion reflects the additional direct economic effect that the revenues to the hospitals will generate within the communities they serve. The values reflect the goods and services the hospitals purchases within the community, and the goods and services that the employees of the hospital purchase in the community served.

Value-Added Multiplier Effect

The value-added multiplier reflects the indirect and induced impact on the economy per dollar of value added by the hospital sector. The statewide value added multiplier of 1.94 means that for every dollar of revenue the hospital industry adds to the economy, another $0.94 is generated by the indirect and induced activities resulting from the activities in the hospital sector. Table 11 shows these indirect and induced effects resulting from the changes in the WIAs' hospitals revenues during select years of the eight years under consideration. While the change in hospital revenues is projected to decrease by $1.3 billion during that time, the indirect and induced changes in the regions are projected to decrease by almost $2.3 billion. These indirect and induced activities reflect the retention of the monies in the community and include the incomes of businesses and individuals consuming and supplying goods and services within the region and the taxes that are generated by these purchases and incomes.

Table 11 : Indirect and Induced Economic Effects of Hospital Tax Reduction, by WIA

	2015	2016	2017	2018
Northwest	-$60,898,533	-$116,441,083	-$156,819,023	-$171,401,318
Northeast	-$10,693,606	-$20,446,717	-$27,536,966	-$30,097,575
West Central	-$62,036,732	-$118,617,377	-$159,749,984	-$174,604,824
Central	-$72,605,372	-$138,825,151	-$186,965,150	-$204,350,675
Southwest	-$33,134,915	-$63,355,637	-$85,325,290	-$93,259,522
Ozark	-$19,577,599	-$37,433,361	-$50,414,020	-$55,101,922
South Central	-$21,084,813	-$40,315,231	-$54,295,228	-$59,344,036
Southeast	-$60,583,107	-$115,837,972	-$156,006,772	-$170,513,538
St. Louis	-$324,325,594	-$620,126,977	-$835,166,629	-$912,827,146
Kansas City	-$155,576,673	-$297,470,486	-$400,623,473	-$437,876,669
Total	**-$820,516,943**	**-$1,568,869,992**	**-$2,112,902,536**	**-$2,309,377,225**

Total Economic Effects of Multipliers

To obtain the total economic effects of the multipliers on the WIAs, the impacts of the output (direct effects) and the value-added (indirect and induced effects) multiplier effects were summed. As can be seen in Table 12, the overall effect of the decrease in projected revenues from the proposed reduction in the hospital tax assessment rate is tremendous. As indicated, the $1.3 billion reduction in Medicaid resources results in a $4.5 billion economic impact on the state of Missouri.

Table 12 : Total Economic Effect of Hospital Tax Reduction, by WIA				
	2015	2016	2017	2018
Northwest	-$120,974,113	-$231,308,638	-$311,518,870	-$340,486,403
Northeast	-$20,805,247	-$39,780,687	-$53,575,321	-$58,557,186
West Central	-$120,674,191	-$230,735,171	-$310,746,545	-$339,642,260
Central	-$141,994,049	-$271,499,821	-$365,647,035	-$399,647,840
Southwest	-$65,349,416	-$124,951,396	-$168,280,432	-$183,928,502
Ozark	-$37,439,635	-$71,586,479	-$96,410,317	-$105,375,325
South Central	-$41,284,948	-$78,938,914	-$106,312,335	-$116,198,112
Southeast	-$119,173,348	-$227,865,483	-$306,881,743	-$335,418,078
St. Louis	-$626,023,821	-$1,196,989,282	-$1,612,065,819	-$1,761,968,678
Kansas City	-$302,877,991	-$579,118,074	-$779,937,187	-$852,462,026
Total	**-$1,596,596,760**	**-$3,052,773,945**	**-$4,111,375,604**	**-$4,493,684,408**

Employment Multiplier Effect

In addition to the monetary impact that hospitals have on a regional economy, hospitals also have an impact on employment in the region. This employment impact is not just the number of individuals that are employed in the hospital, but also includes the impact on employment in those industries that directly supply goods and services to the hospital and the induced effect those employment effects have on other businesses in the region. As indicated earlier, employment in the hospital sector was projected to decline by as many as 16,479[1] if the proposed changes in the hospital tax assessment program occurred. The total effect on employment in the state, however, is projected to cause a decrease of 27,911 jobs by SFY 2018 because of the employment multiplier effect. The statewide employment multiplier effect is 1.80, indicating that for every one job lost in the hospital industry another .8 jobs will be lost in other industries supported by the hospital. Table 13 provides total employment effects caused by the tax reduction in the WIAs.

Table 13 : Total Employment Effect of Hospital Tax Reduction, by WIA				
	2015	2016	2017	2018
Northwest	(768)	(1,599)	(2,153)	(2,353)
Northeast	(129)	(251)	(338)	(369)
West Central	(749)	(1,485)	(1,999)	(2,185)
Central	(887)	(1,752)	(2,359)	(2,578)
Southwest	(412)	(838)	(1,128)	(1,233)
Ozark	(228)	(444)	(598)	(653)
South Central	(258)	(522)	(704)	(769)
Southeast	(749)	(1,490)	(2,007)	(2,193)
St. Louis	(3,855)	(7,003)	(9,431)	(10,308)
Kansas City	(1,882)	(3,579)	(4,820)	(5,268)
Total	**(9,917)**	**(18,961)**	**(25,536)**	**(27,911)**

DISCUSSION AND CONCLUSIONS

As the information provided in this study indicates, the proposed change in the hospital tax assessment program will have profound effects on hospitals, on communities, on Medicaid beneficiaries, and on the state. With the current federal matching rate of 63.4% in Missouri, it means that for every $1 of state money used in the Medicaid program, the federal government will contribute another $1.73, enabling the Medicaid program to have $2.73 to provide services to beneficiaries. With the proposed change in the ability of the state to levy a hospital tax assessment at the rate of 6.0 percent to only 3.5 percent, much less federal monies will flow to the state, unless the state raises taxes or diverts state monies from other uses to the Medicaid program.

If the proposed provider tax rate changes do not occur, and Missouri can continue to levy a 6.0 percent assessment against hospitals during the period SFY 2015 – SFY 2018, then Missouri could expect to receive an additional $2.4 billion in federal match funds during that time, and the Medicaid program would have an additional $3.8 billion available to it.

The impact of the reduction in the hospital tax assessment program would also have an impact on employment in the hospital industry. With revenues declining, the hospital would need, and be able to afford, fewer employees. The number of individuals projected to lose their jobs in the hospital sector is 16,479; the total impact on jobs lost is projected to be 27,911. These reductions in jobs would, in turn, create even more pressure on the sluggish economy and on the need for additional coverage of individuals under Medicaid, even as the ability of the Medicaid program to provide coverage is declining.

The cap on provide taxes may also shift costs to the private sector. The $2.4 billion reduction in federal revenue is estimated to increase premiums by $715 per privately insured individual by SFY 2018. This will have a significant effect on Missouri citizens and businesses.

With less revenue available to provide the Medicaid program, fewer beneficiaries would be able to receive health insurance coverage under Medicaid. If the proposed reduction occurs, the net loss in coverage is expected to impact 199,790 beneficiaries by SFY 2018.

These effects of the proposed reduction in the hospital tax assessment rate reflect only the impact of the reductions on Medicaid dollars. When the indirect and induced effects are also considered through the use of multipliers, the effects are even more severe. For example, while the change in Medicaid revenues is projected to decrease by $1.3 billion, when the output (direct effect) and the value-added (indirect and induced effect) are considered, then the total effect on the state is projected to be a decrease of $4.5 million, because of the trickle-down effect on other industries and businesses. While the direct effect on employment is projected to be a loss of 16,479 jobs, the total effect of the decrease in state revenues is expected to cause a loss of 27,911 jobs. While the direct projected impact on the number of beneficiaries that would be eliminated from the Medicaid program is 199,790, this number does not include the additional individuals and families that would need assistance because of the loss of jobs and the subsequent loss of health insurance through place of employment.

In summary, the impact of the proposed reduction in the provider tax assessment rate from 6.0% of net revenues to 3.5% would be significant for Missouri. The analysis performed in this study has only evaluated the impact on the hospital sector, but the impact on other provider sectors could be expected to have similar results. The reduction in the provider tax rate would seriously impact Medicaid beneficiaries, especially the most vulnerable populations, negatively impact Missouri's economy, and shift substantial costs to individuals through higher insurance premiums.

FOOTNOTE

[1] A preliminary analysis conducted by the Missouri Hospital Association showed 8,735 jobs could be lost as a result of the cap on provider taxes.

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